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Status Report

ILLINOIS STATE GEOLOGICAL SURVEY
PRAIRIE RESEARCH INSTITUTE

Total Records: 5940

Top 3 County Records		Top 3 Log Type Records		Top 3 Coal Records		Top 3 Member Records	
Saline	5940	Drillers Log	1990	HERRIN	2568	HERRIN COAL	2568
		Electric Log	1346	SPRINGFIELD	1919	SPRINGFIELD COAL	1919
		Company map	763	HOUCHIN CREEK	1069	BRERETON LIMESTONE	1817

Data Summary

Cross-tabulation of all selected logs, individual logs will vary.
Tabulation of logged intervals only, invidual logs will vary.

Depth and Thickness measurements in feet

Member	Lithology	Avg. Depth	Min. Depth	Max. Depth	Avg. Thk	Min. Thk	Max. Thk
SURVANT - UPPER		**295.9**	130.2	644.3	**1.0**	0.2	1.4
SURVANT - LOWER		**304.7**	137.0	659.3	**1.3**	0.4	5.0
MT. CARMEL	SANDSTONE	**97.3**	40.0	195.0	**15.5**	5.0	25.0
CARTHAGE	LIMESTONE	**146.1**	62.0	254.0	**10.9**	1.0	32.0
NEW HAVEN	COAL	**85.3**	44.5	107.5	**0.8**	0.4	1.5
MACOUPIN	LIMESTONE	**270.0**	270.0	270.0	**6.0**	6.0	6.0
WOMAC	COAL	**174.3**	51.0	296.0	**1.4**	0.5	2.5
MOUND CITY	SHALE	**170.6**	85.0	353.0	**2.4**	0.8	6.2
CHAPEL	COAL	**187.8**	40.0	399.5	**1.5**	0.3	7.0
TRIVOLI	SANDSTONE	**217.2**	29.0	377.9	**33.5**	4.0	68.0
POND CREEK	COAL	**256.9**	24.0	418.0	**1.3**	0.2	4.0
DEGRAFF	COAL	**125.6**	46.0	419.0	**0.8**	0.5	1.0
PIASA	LIMESTONE	**228.3**	14.0	631.0	**4.0**	0.1	18.0
FARMINGTON	SHALE	**440.0**	440.0	440.0	**13.0**	13.0	13.0
DANVILLE	COAL	**191.9**	10.0	653.0	**1.8**	0.0	9.0
GALUM	LIMESTONE	**241.3**	18.0	587.0	**3.8**	0.7	12.0
"Allenby rider"	SHALE	**158.7**	40.9	294.5	**0.4**	0.1	3.5
ALLENBY	COAL	**141.3**	8.3	613.5	**0.9**	0.1	4.8
SS BELOW NO. 7	SANDSTONE	**263.7**	9.0	736.0	**9.1**	1.0	43.0
BANKSTON FORK	LIMESTONE	**193.5**	9.0	679.0	**5.8**	0.3	17.7
ANVIL ROCK	SANDSTONE	**167.1**	4.0	696.0	**25.6**	1.5	92.0
LAWSON	SHALE	**268.7**	8.0	683.0	**34.5**	5.0	99.0
CONANT	LIMESTONE	**177.8**	39.7	527.0	**1.1**	0.1	6.6
JAMESTOWN	COAL	**213.9**	25.8	710.0	**0.5**	0.1	8.5
BRERETON	LIMESTONE	**272.0**	7.7	717.0	**5.0**	0.2	15.4
ANNA	SHALE	**183.6**	9.6	718.0	**2.2**	0.1	24.4
ENERGY	SHALE	**144.5**	34.0	614.0	**5.3**	0.2	24.0
HERRIN	COAL	**197.5**	5.3	719.0	**4.9**	0.3	10.1
HIGGINSVILLE	LIMESTONE	**96.3**	58.1	213.1	**1.1**	0.3	2.5
VERMILIONVILLE	SANDSTONE	**267.8**	38.0	722.0	**18.5**	3.0	70.0

BRIAR HILL	COAL	**252.5**	7.5	720.0	**1.6**	0.1	18.0
CANTON	SHALE	**336.2**	98.0	774.0	**21.6**	0.1	95.0
ST. DAVID	LIMESTONE	**226.7**	30.0	685.3	**2.2**	0.1	58.8
TURNER MINE	SHALE	**207.9**	40.0	686.0	**3.2**	0.1	12.0
DYKERSBURG	SHALE	**225.5**	8.0	699.5	**61.0**	1.0	402.9
SPRINGFIELD	COAL	**309.2**	4.0	870.0	**5.5**	0.1	56.5
SS BELOW NO. 5	SANDSTONE	**517.0**	256.0	888.0	**25.1**	4.0	72.0
HANOVER	LIMESTONE	**367.8**	107.0	851.0	**2.8**	0.7	8.0
EXCELLO	SHALE	**283.4**	33.0	856.0	**4.5**	1.0	8.0
HOUCHIN CREEK	COAL	**506.5**	14.0	4444.0	**2.1**	0.4	5.0
KERTON CREEK	COAL	**269.0**	269.0	269.0	**4.0**	4.0	4.0
SURVANT	COAL	**518.8**	16.0	938.0	**1.2**	0.1	5.0
MECCA QUARRY	SHALE	**249.5**	47.0	929.5	**4.3**	1.0	28.0
COLCHESTER	COAL	**581.5**	23.5	1010.0	**0.7**	0.2	4.0
PALZO	SANDSTONE	**8.0**	8.0	8.0	**10.3**	10.3	10.3
DEKOVEN	COAL	**561.5**	12.6	1047.0	**2.8**	0.1	5.0
LOWER DEKOVEN	COAL	**610.9**	36.1	1075.0	**1.7**	0.1	4.0
DAVIS	COAL	**612.9**	4.3	1112.0	**4.0**	0.8	11.7
CARRIER MILLS	SHALE	**331.1**	41.1	621.0	**6.2**	2.3	10.2
SEAHORNE LS	LIMESTONE	**730.7**	71.5	1180.0	**0.6**	0.2	4.0
STONEFORT	LIMESTONE	**697.8**	60.7	959.0	**3.0**	0.4	6.0
WISE RIDGE	COAL	**299.4**	68.1	645.2	**0.7**	0.6	0.8
MT. RORAH	COAL	**772.3**	92.5	1170.0	**1.4**	0.5	4.5
CREAL SPRING	LIMESTONE	**722.0**	722.0	722.0	**2.0**	2.0	2.0
MURPHYSBORO	COAL	**492.0**	229.0	755.0	**7.0**	0.4	26.0
DELWOOD	COAL	**99.9**	23.9	204.1	**3.5**	1.9	5.2
CURLEW	LIMESTONE	**225.0**	225.0	225.0	**34.5**	34.5	34.5
MURRAY BLUFF	SANDSTONE	**148.0**	85.1	257.3	**66.5**	42.7	109.0
WILLIS	COAL	**29.0**	28.0	30.0	**2.0**	1.0	3.0
KINKAID	LIMESTONE	**716.5**	695.0	738.0	**140.5**	128.0	153.0
BASE L KINKAID	LIMESTONE	**1786.8**	891.0	2120.0	**-**	-	-
DEGONIA	SANDSTONE	**857.0**	823.0	891.0	**33.0**	21.0	45.0
CLORE	SANDSTONE	**890.0**	844.0	936.0	**101.5**	94.0	109.0
PALESTINE	SANDSTONE	**991.5**	953.0	1030.0	**56.5**	36.0	77.0
MENARD	LIMESTONE	**715.3**	50.0	1066.0	**96.7**	88.0	106.0
BASE L. MENARD	LIMESTONE	**3.0**	3.0	3.0	**-**	-	-
WALTERSBURG	SANDSTONE	**812.0**	138.0	1172.0	**46.0**	33.0	57.0
VIENNA	LIMESTONE	**858.0**	195.0	1220.0	**26.7**	8.0	50.0
TAR SPRINGS	SANDSTONE	**884.7**	203.0	1270.0	**72.3**	67.0	77.0
HARDINSBURG	SANDSTONE	**782.5**	59.0	1392.0	**91.8**	86.0	98.0
HANEY	LIMESTONE	**874.3**	150.0	1484.0	**109.0**	56.0	133.0
FRAILEYS	SHALE	**1473.0**	1473.0	1473.0	**-**	-	-
BEECH CREEK	LIMESTONE	**993.8**	280.0	1617.0	**9.8**	4.0	25.0
BASE BARLOW	LIMESTONE	**2562.7**	501.0	2916.0	**-**	-	-
WEST BADEN GROUP		**824.7**	285.0	1621.0	**237.0**	225.0	247.0
CYPRESS	SANDSTONE	**1540.0**	1540.0	1540.0	**70.0**	70.0	70.0
SPRINGVILLE	SHALE	**2427.0**	2427.0	2427.0	**16.0**	16.0	16.0
GRAND TOWER	LIMESTONE	**2866.0**	2866.0	2866.0	**207.0**	207.0	207.0
DUTCH CREEK	SANDSTONE	**3073.0**	3073.0	3073.0	**72.0**	72.0	72.0
				Net Coal	**52.0**		

Coal Logs

This report contains non-confidential coal log descriptions from the Coal Section's stratigraphic database in the county listed. Coal logs are sorted by township/range and section. For each log, North American Datum 1983 (NAD83) Longitude/Latitude coordinates in decimal degrees are provided as well as a legal description which uses the Public Land Survey System (PLSS). The following are two examples of coal log locations:

Example location 1: COUNTY: SALINE TWP/RNG: 7S 5E SECTION: 19 QUARTERS/FOOTAGES: 330'S line, 330'W line of SE NE LONGITUDE: -88.691911 LATITUDE: 37.900435

This log is from a borehole located in Saline County, Township 7 South, Range 5 East, 330 feet from the south line and 330 feet from the west line of the southeast quarter of the northeast quarter of section 19.

Example location 2: COUNTY: SALINE TWP/RNG: 9S 5E SECTION: 36 QUARTERS/FOOTAGES: 530'N, 530'W, SE/c NE NW LONGITUDE: -88.60834 LATITUDE: 37.700006

This log is from a borehole located in Saline County, Township 9 South, Range 5 East, 530 feet north and 530 feet west of the southeast corner of the northeast quarter of the northwest quarter of section 36.

Beneath the header is geology information for that data point. The Coal Section stratigraphic database from which this .PDF file is derived is a multi-project database which contains drill hole and outcrop descriptions of Pennsylvanian stratigraphy in Illinois. Consequently, the level of detail and accuracy in the data and their interpretation vary (sometimes widely) with the geologist, project type, or original data source. Multiple descriptions of a particular location may be present. Note that both the coal stratigraphic database and this .PDF listing are only a subset of the total amount of data available from the ISGS Geologic Records Library archives, and reflect only coal-specific data and interpretations of past and present Coal Section geologists. They are not a comprehensive listing of all data that may be available from the ISGS.

MAPID: 16590093000C **VERSION:** 1 **PROJECT:** GALATIA
COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.556259 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762717 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 157.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. W-435 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	157.0		NO COAL REPORTED

MAPID: 16590114000C **VERSION:** 1 **PROJECT:** GALATIA
COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.591795 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76489 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.1 **LOGGED (FT.):** 74.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. P-469 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	74.0	

MAPID: 16590144000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608451 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770393 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.9 **LOGGED (FT.):** 198.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. P-537 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
187.9	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	196.0	
187.9	CARBONDALE	BRIAR HILL	COAL	2.0	196.0	

MAPID: 16590157000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.604986 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.750829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 270.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
258.0	CARBONDALE	HERRIN	COAL	5.7	112.0	
106.0	CARBONDALE	SPRINGFIELD	COAL	6.1	264.0	

MAPID: 16590160000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600481 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746285 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.2 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. P-215B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
211.2	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590163000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.622025 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 291.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.0	CARBONDALE	HERRIN	COAL	5.4	170.0	
95.0	CARBONDALE	SPRINGFIELD	COAL	6.3	285.0	

MAPID: 16590165000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.633088 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771814 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 278.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5	273.0	

MAPID: 16590167000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614252 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775228 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 164.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
221.0	CARBONDALE	HERRIN	COAL	5.0	159.0	CALLED #5 COAL BY AMAX; APPEARS TO BE #6

MAPID: 16590182000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638655 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768681 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 115.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-473JC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
273.5	CARBONDALE	HERRIN	COAL	5.6	110.0	

MAPID: 16590183000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766407 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.1 **LOGGED (FT.):** 116.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-498 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.1	CARBONDALE	HERRIN	COAL	5.7	111.0	

MAPID: 16590185000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624003 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766138 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 188.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
273.0	CARBONDALE	HERRIN	COAL	5.3	117.0	
207.0	CARBONDALE	SPRINGFIELD	COAL	5.5	183.0	

MAPID: 16590186000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615933 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766609 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 111.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.6	106.0	

MAPID: 16590194000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.636555 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.9 **LOGGED (FT.):** 131.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-474 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
280.9	CARBONDALE	HERRIN	COAL	5.6	126.0	

MAPID: 16590195000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638757 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.765146 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.5 **LOGGED (FT.):** 115.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-473JC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.5	CARBONDALE	HERRIN	COAL	5.6	110.0	

MAPID: 16590196000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638753 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.8 **LOGGED (FT.):** 118.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-473 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.8	CARBONDALE	HERRIN	COAL	5.4	113.0	

MAPID: 16590197000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638848 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762758 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.1 **LOGGED (FT.):** 102.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-448 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
294.1	CARBONDALE	HERRIN	COAL	5.5	97.0	

MAPID: 16590198000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.63652 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763986 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 234.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.0	CARBONDALE	HERRIN	COAL	5.2	111.0	
170.0	CARBONDALE	SPRINGFIELD	COAL	4.8	230.0	

MAPID: 16590199000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.636441 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762765 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.1 **LOGGED (FT.):** 103.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-449 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.1	CARBONDALE	HERRIN	COAL	5.1	98.0	

MAPID: 16590208000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.63665 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761014 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.6 **LOGGED (FT.):** 88.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-424 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.6	CARBONDALE	HERRIN	COAL	5.2	83.0	

MAPID: 16590209000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638959 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760992 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.2 **LOGGED (FT.):** 89.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-423 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
312.2	CARBONDALE	HERRIN	COAL	5.4	84.0	

MAPID: 16590210000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.63896 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759143 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.8 **LOGGED (FT.):** 90.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-398 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
314.8	CARBONDALE	HERRIN	COAL	5.4	85.0	

MAPID: 16590211000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638942 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757147 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.2 **LOGGED (FT.):** 89.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-373 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.2	CARBONDALE	DANVILLE	COAL	1.5	12.0	
322.2	CARBONDALE	HERRIN	COAL	5.3	84.0	

MAPID: 16590263000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638675 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749821 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.2 **LOGGED (FT.):** 174.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-273 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.2	CARBONDALE	HERRIN	COAL	5.0	46.0	
235.2	CARBONDALE	SPRINGFIELD	COAL	5.3	169.0	

MAPID: 16590264000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638669 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747985 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.1 **LOGGED (FT.):** 107.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-248 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.1	CARBONDALE	HERRIN	COAL	5.1	102.0	

MAPID: 16590275000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63862 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.8 **LOGGED (FT.):** 128.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-223 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
288.8	CARBONDALE	HERRIN	COAL	3.0	125.0	

MAPID: 16590276000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63868 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744159 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 134.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-198 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0	CARBONDALE	DANVILLE	COAL	1.8	57.0	
296.0	CARBONDALE	HERRIN	COAL	5.3	129.0	

MAPID: 16590277000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636365 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744141 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.7 **LOGGED (FT.):** 117.9 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-199 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.7	CARBONDALE	DANVILLE	COAL	1.8	44.0	
308.7	CARBONDALE	HERRIN	COAL	4.9	113.0	

MAPID: 16590284000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.607841 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.739541 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 83.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	78.0	

MAPID: 16590293000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63648 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742386 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.7 **LOGGED (FT.):** 113.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-174 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.7	CARBONDALE	DANVILLE	COAL	1.0	36.0	
308.7	CARBONDALE	HERRIN	COAL	5.4	108.0	

MAPID: 16590294000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638549 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742366 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.2 **LOGGED (FT.):** 140.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-173 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.2	CARBONDALE	HERRIN	COAL	5.3	135.0	

MAPID: 16590295000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.642074 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.737926 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	279.0	

MAPID: 16590296000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.640766 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.740928 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 266.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.0	CARBONDALE	HERRIN	COAL	5.5	113.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	7.2	259.0	

MAPID: 16590297000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.647186 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.738958 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 287.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	SPRINGFIELD	COAL	7.3	280.0	

MAPID: 16590298000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.647766 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.741405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.7 **LOGGED (FT.):** 131.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-144C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
269.7	CARBONDALE	HERRIN	COAL	5.2	126.0	

MAPID: 16590299000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652826 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.739405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 334.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.0	CARBONDALE	HERRIN	COAL	6.5	203.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	5.1	329.0	

MAPID: 16590300000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659561 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.739602 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 317.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
269.0	CARBONDALE	HERRIN	COAL	5.0	171.0	
129.0	CARBONDALE	SPRINGFIELD	COAL	6.2	311.0	

MAPID: 16590301000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684529 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.739832 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 271.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.0	CARBONDALE	HERRIN	COAL	4.9	141.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	4.3	267.0	

MAPID: 16590302000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679677 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742519 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 275.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.0	CARBONDALE	HERRIN	COAL	5.2	136.0	
148.0	CARBONDALE	SPRINGFIELD	COAL	4.3	271.0	

MAPID: 16590303000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675474 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742508 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.8 **LOGGED (FT.):** 152.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-157 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
329.8	CARBONDALE	DANVILLE	COAL	2.0	73.0	
255.8	CARBONDALE	HERRIN	COAL	5.4	147.0	

MAPID: 16590304000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670871 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74218 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 185.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-134D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	MODESTO		COAL	1.0	41.0	
321.0	CARBONDALE	DANVILLE	COAL	2.0	112.0	
253.0	CARBONDALE	HERRIN	COAL	5.2	180.0	

MAPID: 16590305000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661753 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742453 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.7 **LOGGED (FT.):** 198.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-163 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.7	MODESTO		COAL	1.2	59.0	
330.7	MODESTO		COAL	1.5	123.0	
314.7	CARBONDALE	DANVILLE	COAL	1.6	139.0	
260.7	CARBONDALE	HERRIN	COAL	5.3	193.0	

MAPID: 16590306000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657171 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742425 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 466.1 **LOGGED (FT.):** 184.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-165 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.1	CARBONDALE	HERRIN	COAL	5.7	179.0	

MAPID: 16590307000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.655672 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742215 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 321.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.0	CARBONDALE	HERRIN	COAL	5.3	173.0	
154.0	CARBONDALE	SPRINGFIELD	COAL	5.4	316.0	

MAPID: 16590308000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652604 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74233 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.1 **LOGGED (FT.):** 120.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-167 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.1	CARBONDALE	DANVILLE	COAL	2.3	50.0	
346.1	CARBONDALE	ALLENBY	COAL	1.3	68.0	
299.1	CARBONDALE	HERRIN	COAL	5.3	115.0	

MAPID: 16590309000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653449 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.743198 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 231.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
306.0	CARBONDALE	HERRIN	COAL	5.5	114.0	
194.0	CARBONDALE	SPRINGFIELD	COAL	5.0	226.0	

MAPID: 16590310000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657094 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744235 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.5 **LOGGED (FT.):** 127.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-190 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.5	CARBONDALE	DANVILLE	COAL	1.8	55.0	
318.5	CARBONDALE	HERRIN	COAL	5.1	122.0	

MAPID: 16590311000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68114 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 180.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.4	175.0	

MAPID: 16590312000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675035 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746536 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 310.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.0	CARBONDALE	HERRIN	COAL	5.3	165.0	
105.0	CARBONDALE	SPRINGFIELD	COAL	5.3	305.0	

MAPID: 16590313000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670866 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.2 **LOGGED (FT.):** 126.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-234 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
310.2	CARBONDALE	HERRIN	COAL	5.2	121.0	

MAPID: 16590314000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.667075 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746116 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 488.7 **LOGGED (FT.):** 204.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-210P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.7	MODESTO		COAL	1.0	64.0	
357.7	CARBONDALE	DANVILLE	COAL	2.2	131.0	
340.7	CARBONDALE	ALLENBY	COAL	0.5	148.0	
289.7	CARBONDALE	HERRIN	COAL	5.0	199.0	

MAPID: 16590315000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66396 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746091 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.6 **LOGGED (FT.):** 148.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-212 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.6	CARBONDALE	DANVILLE	COAL	2.2	67.0	
303.6	CARBONDALE	HERRIN	COAL	5.3	143.0	

MAPID: 16590316000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661638 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.3 **LOGGED (FT.):** 132.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-213 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.3	CARBONDALE	DANVILLE	COAL	1.7	60.0	
325.3	CARBONDALE	HERRIN	COAL	5.5	127.0	

MAPID: 16590317000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657202 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746027 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.2 **LOGGED (FT.):** 62.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-215 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.2	CARBONDALE	HERRIN	COAL	5.3	57.0	

MAPID: 16590318000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652585 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746024 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.1 **LOGGED (FT.):** 92.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-217 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
328.1	CARBONDALE	HERRIN	COAL	5.3	87.0	

MAPID: 16590319000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650872 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.745983 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.2 **LOGGED (FT.):** 102.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-217P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.2	CARBONDALE	DANVILLE	COAL	0.5	28.0	
371.2	CARBONDALE	ALLENBY	COAL	1.0	46.0	
321.2	CARBONDALE	HERRIN	COAL	1.5	96.0	
319.7	CARBONDALE	HERRIN	SHALE	1.0	97.5	
318.7	CARBONDALE	HERRIN	COAL	3.5	98.5	

MAPID: 16590320000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646998 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746937 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.6 **LOGGED (FT.):** 162.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-219HB **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.6	CARBONDALE	HERRIN	COAL	5.0	157.0	

MAPID: 16590321000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.640938 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.4 **LOGGED (FT.):** 148.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-222C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.4	CARBONDALE	HERRIN	COAL	5.3	143.0	

MAPID: 16590322000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.643341 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749869 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.3 **LOGGED (FT.):** 103.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-271 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.3	CARBONDALE	DANVILLE	COAL	1.5	26.0	
350.3	CARBONDALE	HERRIN	COAL	5.3	98.0	

MAPID: 16590323000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.645684 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749881 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.7 **LOGGED (FT.):** 119.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-270 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.7	CARBONDALE	DANVILLE	COAL	2.3	38.0	
398.7	CARBONDALE	ALLENBY	COAL	1.0	60.0	
344.7	CARBONDALE	HERRIN	COAL	5.4	114.0	

MAPID: 16590324000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.647926 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749901 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.6 **LOGGED (FT.):** 104.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-269 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.6	CARBONDALE	DANVILLE	COAL	1.9	29.0	
352.6	CARBONDALE	HERRIN	COAL	5.0	99.0	

MAPID: 16590325000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650183 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749863 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.2 **LOGGED (FT.):** 105.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-268 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.2	CARBONDALE	DANVILLE	COAL	1.8	32.0	
372.2	CARBONDALE	HERRIN	COAL	5.4	100.0	

MAPID: 16590326000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652613 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749864 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 82.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-267 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0	CARBONDALE	HERRIN	COAL	6.2	76.0	

MAPID: 16590327000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.647927 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.748015 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.5 **LOGGED (FT.):** 78.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-244 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.5	CARBONDALE	HERRIN	COAL	5.5	73.0	

MAPID: 16590328000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650307 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747856 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.8 **LOGGED (FT.):** 68.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-243 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.8	CARBONDALE	HERRIN	COAL	5.5	63.0	

MAPID: 16590329000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652611 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.9 **LOGGED (FT.):** 50.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-242 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.9	CARBONDALE	HERRIN	COAL	5.5	45.0	

MAPID: 16590330000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657251 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749865 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.2 **LOGGED (FT.):** 80.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-265 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.2	CARBONDALE	HERRIN	COAL	6.3	74.0	

MAPID: 16590331000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659387 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.4 **LOGGED (FT.):** 62.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-239 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.4	CARBONDALE	HERRIN	COAL	5.0	57.0	

MAPID: 16590332000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661862 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749827 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.4 **LOGGED (FT.):** 65.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-263 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.4	CARBONDALE	HERRIN	COAL	5.5	60.0	

MAPID: 16590333000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661777 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.7479 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.3 **LOGGED (FT.):** 40.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-238 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.3	CARBONDALE	HERRIN	COAL	3.5	37.0	

MAPID: 16590334000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66413 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749756 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 485.1 **LOGGED (FT.):** 97.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-262 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.1	CARBONDALE	HERRIN	COAL	5.2	92.0	

MAPID: 16590335000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.664148 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.7 **LOGGED (FT.):** 77.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-237 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.7	CARBONDALE	HERRIN	COAL	5.3	72.0	

MAPID: 16590336000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.666584 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749738 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 487.2 **LOGGED (FT.):** 71.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-261 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.2	CARBONDALE	HERRIN	COAL	5.5	66.0	

MAPID: 16590337000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.666481 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747837 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 468.1 **LOGGED (FT.):** 126.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-236 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
347.1	CARBONDALE	HERRIN	COAL	5.3	121.0	

MAPID: 16590338000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.668479 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749751 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 483.2 **LOGGED (FT.):** 70.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-260 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.2	CARBONDALE	HERRIN	COAL	5.3	65.0	

MAPID: 16590340000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67092 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749766 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.2 **LOGGED (FT.):** 62.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-259 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.2	CARBONDALE	HERRIN	COAL	5.5	57.0	

MAPID: 16590341000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675296 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749569 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 278.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.0	CARBONDALE	HERRIN	COAL	5.3	149.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	4.2	274.0	

MAPID: 16590342000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67886 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749826 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.5 **LOGGED (FT.):** 117.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-255B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.5	CARBONDALE	DANVILLE	COAL	0.8	44.0	
303.5	CARBONDALE	HERRIN	COAL	5.5	112.0	

MAPID: 16590343000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684631 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.3 **LOGGED (FT.):** 61.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-253 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.3	CARBONDALE	DANVILLE	COAL	2.0	59.0	

MAPID: 16590344000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.688727 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753549 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.3 **LOGGED (FT.):** 331.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 73 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
239.3	CARBONDALE	HERRIN	COAL	5.0	199.0	
111.3	CARBONDALE	SPRINGFIELD	COAL	4.6	327.0	

MAPID: 16590345000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.686916 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751678 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.4 **LOGGED (FT.):** 148.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-277 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	148.0	

MAPID: 16590346000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684656 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753498 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 119.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-303 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
315.0	CARBONDALE	HERRIN	COAL	5.3	114.0	

MAPID: 16590347000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684607 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.752612 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.5 **LOGGED (FT.):** 148.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-278C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
288.5	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	148.0	

MAPID: 16590348000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684602 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.7518 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.7 **LOGGED (FT.):** 350.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 77 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
224.7	CARBONDALE	HERRIN	COAL	4.9	234.0	
112.7	CARBONDALE	SPRINGFIELD	COAL	4.1	346.0	

MAPID: 16590349000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675545 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753629 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.7 **LOGGED (FT.):** 47.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-307Z **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.7	CARBONDALE	HERRIN	COAL	5.3	42.0	

MAPID: 16590350000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.673073 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75114 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 68.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-258D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.0	CARBONDALE	HERRIN	COAL	4.5	64.0	

MAPID: 16590351000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.671647 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75455 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 189.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.0	CARBONDALE	HERRIN	COAL	5.2	71.0	
275.0	CARBONDALE	SPRINGFIELD	COAL	4.1	185.0	

MAPID: 16590352000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668774 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755247 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 484.0 **LOGGED (FT.):** 125.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-335 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0	CARBONDALE	HERRIN	COAL	5.3	120.0	

MAPID: 16590353000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666278 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.754583 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 243.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0	CARBONDALE	HERRIN	COAL	7.0	113.0	
233.0	CARBONDALE	SPRINGFIELD	COAL	6.4	237.0	

MAPID: 16590354000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666458 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753425 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.3 **LOGGED (FT.):** 113.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-311 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.3	CARBONDALE	HERRIN	COAL	5.3	108.0	

MAPID: 16590355000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661948 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753505 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.1 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-313 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.1	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590356000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657267 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 474.1 **LOGGED (FT.):** 117.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-315 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.1	CARBONDALE	HERRIN	COAL	5.3	112.0	

MAPID: 16590357000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657209 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751703 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 492.0 **LOGGED (FT.):** 122.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-290 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	CARBONDALE	HERRIN	COAL	5.3	117.0	

MAPID: 16590358000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652314 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.752876 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 490.9 **LOGGED (FT.):** 240.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. N-13-8 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.9	CARBONDALE	HERRIN	COAL	5.4	124.0	
254.9	CARBONDALE	SPRINGFIELD	COAL	4.5	236.0	

MAPID: 16590359000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652643 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751788 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 490.1 **LOGGED (FT.):** 125.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-292 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.1	CARBONDALE	HERRIN	COAL	5.5	120.0	

MAPID: 16590360000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647998 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.9 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-344 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.9	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590361000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648008 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753579 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.9 **LOGGED (FT.):** 106.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-319 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.9	CARBONDALE	DANVILLE	COAL	1.3	31.0	
353.9	CARBONDALE	HERRIN	COAL	5.5	101.0	

MAPID: 16590362000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648004 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.7 **LOGGED (FT.):** 101.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-294 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.7	CARBONDALE	DANVILLE	COAL	1.5	28.0	
403.7	CARBONDALE	ALLENBY	COAL	1.0	47.0	
354.7	CARBONDALE	HERRIN	COAL	5.5	96.0	

MAPID: 16590363000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645783 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755312 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 463.1 **LOGGED (FT.):** 122.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-345 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.1	CARBONDALE	DANVILLE	COAL	1.7	47.0	
346.1	CARBONDALE	HERRIN	COAL	5.4	117.0	

MAPID: 16590364000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645733 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.2 **LOGGED (FT.):** 124.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-320 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.2	CARBONDALE	DANVILLE	COAL	1.5	43.0	
343.2	CARBONDALE	HERRIN	COAL	5.3	119.0	

MAPID: 16590365000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64573 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751881 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 463.6 **LOGGED (FT.):** 127.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-295 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.6	CARBONDALE	HERRIN	COAL	4.8	123.0	

MAPID: 16590366000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643442 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755339 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.8 **LOGGED (FT.):** 104.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-346 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.8	CARBONDALE	DANVILLE	COAL	2.0	29.0	
332.8	CARBONDALE	HERRIN	COAL	5.3	99.0	

MAPID: 16590367000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643389 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751913 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.8 **LOGGED (FT.):** 106.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-296 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.8	CARBONDALE	DANVILLE	COAL	1.6	26.0	
349.8	CARBONDALE	HERRIN	COAL	5.3	101.0	

MAPID: 16590368000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641186 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755336 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.1 **LOGGED (FT.):** 116.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-347 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.1	CARBONDALE	DANVILLE	COAL	1.5	40.0	
325.1	CARBONDALE	HERRIN	COAL	5.0	111.0	

MAPID: 16590369000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64123 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753666 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.5 **LOGGED (FT.):** 134.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-322 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.5	CARBONDALE	DANVILLE	COAL	1.8	58.0	
329.5	CARBONDALE	HERRIN	COAL	5.3	129.0	

MAPID: 16590370000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638964 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755341 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.4 **LOGGED (FT.):** 101.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-348 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.4	CARBONDALE	DANVILLE	COAL	2.0	24.0	
337.4	CARBONDALE	HERRIN	COAL	5.4	96.0	

MAPID: 16590371000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.639805 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753956 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.5 **LOGGED (FT.):** 119.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-322M **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.5	CARBONDALE	DANVILLE	COAL	2.0	43.0	
385.5	CARBONDALE	ALLENBY	COAL	1.2	62.0	
332.5	CARBONDALE	HERRIN	COAL	4.7	115.0	

MAPID: 16590372000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641301 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759144 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 115.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-397 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	CARBONDALE	DANVILLE	COAL	1.7	36.0	
318.0	CARBONDALE	HERRIN	COAL	5.3	110.0	

MAPID: 16590373000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641168 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.8 **LOGGED (FT.):** 107.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-372 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.8	CARBONDALE	DANVILLE	COAL	1.4	29.0	
321.8	CARBONDALE	HERRIN	COAL	5.4	102.0	

MAPID: 16590374000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643443 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759088 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.8 **LOGGED (FT.):** 90.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-396 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
322.8	CARBONDALE	HERRIN	COAL	5.5	85.0	

MAPID: 16590375000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643418 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757131 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.3 **LOGGED (FT.):** 94.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-371 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.3	CARBONDALE	DANVILLE	COAL	2.0	21.0	
330.3	CARBONDALE	HERRIN	COAL	5.3	89.0	

MAPID: 16590376000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645822 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75904 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.3 **LOGGED (FT.):** 89.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-395 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
324.3	CARBONDALE	HERRIN	COAL	5.1	84.0	

MAPID: 16590377000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645768 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 122.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-370 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
334.0	CARBONDALE	HERRIN	COAL	5.5	117.0	

MAPID: 16590378000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648027 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759051 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.2 **LOGGED (FT.):** 99.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-394 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.2	CARBONDALE	HERRIN	COAL	5.5	94.0	

MAPID: 16590379000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757074 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.2 **LOGGED (FT.):** 89.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-369 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
329.2	CARBONDALE	HERRIN	COAL	4.3	85.0	

MAPID: 16590380000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.651676 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760049 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 238.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
302.0	CARBONDALE	HERRIN	COAL	6.0	108.0	
176.0	CARBONDALE	SPRINGFIELD	COAL	4.7	234.0	

MAPID: 16590381000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652927 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756881 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.3 **LOGGED (FT.):** 220.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. N-13-7 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.3	CARBONDALE	HERRIN	COAL	5.2	96.0	
222.3	CARBONDALE	SPRINGFIELD	COAL	4.8	216.0	

MAPID: 16590382000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657369 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 210.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.0	CARBONDALE	DANVILLE	COAL	3.0	11.0	
351.0	CARBONDALE	HERRIN	COAL	5.0	87.0	
232.0	CARBONDALE	SPRINGFIELD	COAL	4.5	206.0	

MAPID: 16590383000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661938 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75883 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 489.8 **LOGGED (FT.):** 141.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-388 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
353.8	CARBONDALE	HERRIN	COAL	5.2	136.0	

MAPID: 16590384000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.662273 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756942 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.4 **LOGGED (FT.):** 119.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-362PB **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.4	CARBONDALE	DANVILLE	COAL	1.6	36.0	
359.4	CARBONDALE	HERRIN	COAL	5.7	114.0	

MAPID: 16590385000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666425 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756939 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 529.7 **LOGGED (FT.):** 177.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-361 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.7	CARBONDALE	HERRIN	COAL	5.4	172.0	

MAPID: 16590386000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677109 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759805 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.8 **LOGGED (FT.):** 220.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.8	CARBONDALE	HERRIN	COAL	6.1	100.0	
240.8	CARBONDALE	SPRINGFIELD	COAL	4.1	216.0	

MAPID: 16590387000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677206 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.758905 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.8 **LOGGED (FT.):** 207.9 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 53 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.8	CARBONDALE	SPRINGFIELD	COAL	3.9	204.0	

MAPID: 16590388000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.676029 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756931 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.2 **LOGGED (FT.):** 123.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 4356P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.2	CARBONDALE	DANVILLE	COAL	1.7	49.0	
357.2	CARBONDALE	HERRIN	COAL	5.3	118.0	

MAPID: 16590389000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.678801 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757139 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.9 **LOGGED (FT.):** 202.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 56 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.9	CARBONDALE	HERRIN	COAL	6.3	81.0	
245.9	CARBONDALE	SPRINGFIELD	COAL	4.3	198.0	

MAPID: 16590390000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.680138 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75698 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.2 **LOGGED (FT.):** 70.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-355 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.2	CARBONDALE	DANVILLE	COAL	0.5	10.0	
406.2	CARBONDALE	ALLENBY	COAL	1.2	27.0	
368.2	CARBONDALE	HERRIN	COAL	5.3	65.0	

MAPID: 16590391000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.682612 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756832 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.1 **LOGGED (FT.):** 173.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 78 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.1	CARBONDALE	SPRINGFIELD	COAL	4.3	169.0	

MAPID: 16590392000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684583 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755052 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.4 **LOGGED (FT.):** 224.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 76 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
334.4	CARBONDALE	HERRIN	COAL	5.0	97.0	
211.4	CARBONDALE	SPRINGFIELD	COAL	4.3	220.0	

MAPID: 16590393000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684591 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757067 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.9 **LOGGED (FT.):** 300.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 80 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.9	CARBONDALE	SPRINGFIELD	COAL	2.2	298.0	

MAPID: 16590394000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.686474 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756896 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.9 **LOGGED (FT.):** 278.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 79 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.9	CARBONDALE	HERRIN	COAL	5.1	148.0	
185.9	CARBONDALE	SPRINGFIELD	COAL	4.3	274.0	

MAPID: 16590395000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693667 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764237 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 508.5 **LOGGED (FT.):** 305.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 58 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.5	CARBONDALE	DANVILLE	COAL	2.0	102.0	
330.5	CARBONDALE	HERRIN	COAL	5.9	178.0	
207.5	CARBONDALE	SPRINGFIELD	COAL	4.5	301.0	

MAPID: 16590396000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693647 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763208 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 251.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 86 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.0	CARBONDALE	HERRIN	COAL	5.0	131.0	
233.0	CARBONDALE	SPRINGFIELD	COAL	4.8	247.0	

MAPID: 16590397000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.69371 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762568 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 381.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 87 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
255.0	CARBONDALE	HERRIN	COAL	5.6	245.0	
120.0	CARBONDALE	SPRINGFIELD	COAL	1.2	380.0	

MAPID: 16590398000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693726 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762032 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 500.6 **LOGGED (FT.):** 388.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 85 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
233.6	CARBONDALE	HERRIN	COAL	5.5	267.0	
116.6	CARBONDALE	SPRINGFIELD	COAL	4.7	384.0	

MAPID: 16590399000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.691463 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764164 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 513.8 **LOGGED (FT.):** 192.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-474 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
326.8	CARBONDALE	HERRIN	COAL	5.3	187.0	

MAPID: 16590400000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.68909 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764219 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 519.8 **LOGGED (FT.):** 194.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-475 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.8	CARBONDALE	DANVILLE	COAL	2.5	112.0	
330.8	CARBONDALE	HERRIN	COAL	5.5	189.0	

MAPID: 16590401000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689434 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761532 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 479.8 **LOGGED (FT.):** 278.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 84 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.8	CARBONDALE	HERRIN	COAL	4.7	170.0	
206.8	CARBONDALE	SPRINGFIELD	COAL	5.3	273.0	

MAPID: 16590402000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.688328 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761776 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 493.1 **LOGGED (FT.):** 269.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 81 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
344.1	CARBONDALE	HERRIN	COAL	5.1	149.0	
228.1	CARBONDALE	SPRINGFIELD	COAL	4.6	265.0	

MAPID: 16590403000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689015 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760392 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 493.3 **LOGGED (FT.):** 330.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 83 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
273.3	CARBONDALE	HERRIN	COAL	5.7	220.0	
167.3	CARBONDALE	SPRINGFIELD	COAL	4.1	326.0	

MAPID: 16590404000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684685 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764179 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 552.2 **LOGGED (FT.):** 149.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-453 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.2	CARBONDALE	DANVILLE	COAL	1.0	134.0	
403.2	CARBONDALE	ALLENBY	COAL	0.7	149.0	

MAPID: 16590405000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.678375 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762199 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 498.4 **LOGGED (FT.):** 277.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 52 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.4	CARBONDALE	HERRIN	COAL	6.2	148.0	
226.4	CARBONDALE	SPRINGFIELD	COAL	5.3	272.0	

MAPID: 16590406000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.678277 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761025 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 494.8 **LOGGED (FT.):** 255.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 55 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.8	CARBONDALE	HERRIN	COAL	6.5	136.0	
243.8	CARBONDALE	SPRINGFIELD	COAL	4.3	251.0	

MAPID: 16590407000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.6755 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764213 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.1 **LOGGED (FT.):** 117.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-457 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.1	CARBONDALE	DANVILLE	COAL	2.1	36.0	
349.1	CARBONDALE	HERRIN	COAL	6.4	111.0	

MAPID: 16590408000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675478 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761593 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 519.4 **LOGGED (FT.):** 175.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-407C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.4	CARBONDALE	DANVILLE	COAL	1.5	97.0	
349.4	CARBONDALE	HERRIN	COAL	5.5	170.0	

MAPID: 16590409000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.671052 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764291 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.3 **LOGGED (FT.):** 145.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-459 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.3	CARBONDALE	DANVILLE	COAL	2.0	65.0	
354.3	CARBONDALE	ALLENBY	COAL	1.0	100.0	
314.3	CARBONDALE	HERRIN	COAL	5.6	140.0	

MAPID: 16590410000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670993 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760917 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 548.4 **LOGGED (FT.):** 203.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-409Z **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
484.4	MODESTO		COAL	1.0	64.0	
422.4	CARBONDALE	DANVILLE	COAL	1.8	126.0	
350.4	CARBONDALE	HERRIN	COAL	5.5	198.0	

MAPID: 16590411000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668047 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.6 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-460N **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.6	CARBONDALE	DANVILLE	COAL	1.5	28.0	
340.6	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590412000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668748 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763579 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 247.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
343.0	CARBONDALE	HERRIN	COAL	5.2	117.0	
218.0	CARBONDALE	SPRINGFIELD	COAL	5.2	242.0	

MAPID: 16590413000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666353 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764359 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.9 **LOGGED (FT.):** 123.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-461 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.9	CARBONDALE	DANVILLE	COAL	1.7	46.0	
344.9	CARBONDALE	HERRIN	COAL	5.3	118.0	

MAPID: 16590414000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666412 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762537 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.1 **LOGGED (FT.):** 129.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-436 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.1	CARBONDALE	DANVILLE	COAL	1.7	50.0	
340.1	CARBONDALE	HERRIN	COAL	5.2	124.0	

MAPID: 16590415000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666395 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760713 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 485.1 **LOGGED (FT.):** 143.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-411 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.1	CARBONDALE	DANVILLE	COAL	2.3	69.0	
347.1	CARBONDALE	HERRIN	COAL	5.0	138.0	

MAPID: 16590416000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.663971 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764361 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.5 **LOGGED (FT.):** 108.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-462 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.5	CARBONDALE	DANVILLE	COAL	1.7	30.0	
339.5	CARBONDALE	HERRIN	COAL	5.4	103.0	

MAPID: 16590417000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664089 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762283 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.7 **LOGGED (FT.):** 120.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-437 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.7	CARBONDALE	DANVILLE	COAL	2.1	37.0	
331.7	CARBONDALE	HERRIN	COAL	5.4	115.0	

MAPID: 16590418000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664166 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760735 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.8 **LOGGED (FT.):** 129.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-412 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.8	CARBONDALE	HERRIN	COAL	5.4	124.0	

MAPID: 16590419000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661772 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764425 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.4 **LOGGED (FT.):** 151.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-463 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.4	CARBONDALE	DANVILLE	COAL	1.9	65.0	
327.4	CARBONDALE	HERRIN	COAL	5.5	146.0	

MAPID: 16590420000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661825 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760773 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 481.5 **LOGGED (FT.):** 144.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-413 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.5	CARBONDALE	HERRIN	COAL	5.2	139.0	

MAPID: 16590421000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659439 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764447 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.6 **LOGGED (FT.):** 132.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-464 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.6	CARBONDALE	DANVILLE	COAL	1.0	65.0	
321.6	CARBONDALE	HERRIN	COAL	5.7	127.0	

MAPID: 16590422000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659491 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762625 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.2 **LOGGED (FT.):** 131.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-439 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.2	CARBONDALE	DANVILLE	COAL	2.2	52.0	
337.2	CARBONDALE	HERRIN	COAL	4.8	127.0	

MAPID: 16590423000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659547 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 486.4 **LOGGED (FT.):** 145.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-414 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
346.4	CARBONDALE	HERRIN	COAL	5.0	140.0	

MAPID: 16590424000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657178 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764444 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.6 **LOGGED (FT.):** 128.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-465 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
334.6	CARBONDALE	HERRIN	COAL	5.5	123.0	

MAPID: 16590425000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657277 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760789 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 481.7 **LOGGED (FT.):** 142.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-415 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.7	CARBONDALE	DANVILLE	COAL	2.1	56.0	
344.7	CARBONDALE	HERRIN	COAL	5.4	137.0	

MAPID: 16590426000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654953 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760891 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 469.8 **LOGGED (FT.):** 132.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-416 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.8	CARBONDALE	HERRIN	COAL	5.3	127.0	

MAPID: 16590427000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652602 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763805 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.3 **LOGGED (FT.):** 110.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-442CC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.3	CARBONDALE	DANVILLE	COAL	1.5	26.0	
319.3	CARBONDALE	HERRIN	COAL	5.2	105.0	

MAPID: 16590428000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652644 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.7 **LOGGED (FT.):** 121.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-417 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.7	CARBONDALE	DANVILLE	COAL	1.9	39.0	
323.7	CARBONDALE	HERRIN	COAL	5.5	116.0	

MAPID: 16590429000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650292 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764511 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.8 **LOGGED (FT.):** 136.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-468 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.8	CARBONDALE	DANVILLE	COAL	1.6	41.0	
355.8	CARBONDALE	ALLENBY	COAL	1.0	77.0	
301.8	CARBONDALE	HERRIN	COAL	5.3	131.0	

MAPID: 16590430000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762684 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.4 **LOGGED (FT.):** 108.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-443 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.4	CARBONDALE	DANVILLE	COAL	2.2	28.0	
319.4	CARBONDALE	HERRIN	COAL	5.3	103.0	

MAPID: 16590431000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647969 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76453 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.5 **LOGGED (FT.):** 124.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-469 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.5	CARBONDALE	DANVILLE	COAL	1.6	46.0	
310.5	CARBONDALE	HERRIN	COAL	5.3	119.0	

MAPID: 16590432000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648001 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762656 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.4 **LOGGED (FT.):** 99.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-444 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.4	CARBONDALE	DANVILLE	COAL	1.7	21.0	
314.4	CARBONDALE	HERRIN	COAL	5.1	94.0	

MAPID: 16590433000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648022 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760955 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.9 **LOGGED (FT.):** 96.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-419 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
314.9	CARBONDALE	HERRIN	COAL	5.5	91.0	

MAPID: 16590434000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645099 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76315 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 215.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.0	CARBONDALE	HERRIN	COAL	5.3	89.0	
189.0	CARBONDALE	SPRINGFIELD	COAL	4.8	211.0	

MAPID: 16590435000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645807 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.9 **LOGGED (FT.):** 90.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-420 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
315.9	CARBONDALE	HERRIN	COAL	5.0	85.0	

MAPID: 16590436000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643076 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.4 **LOGGED (FT.):** 114.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-471X **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.4	CARBONDALE	HERRIN	COAL	5.2	109.0	

MAPID: 16590437000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643344 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.6 **LOGGED (FT.):** 101.9 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-446 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.6	CARBONDALE	HERRIN	COAL	5.9	96.0	

MAPID: 16590438000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64348 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76099 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 90.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-421 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
315.2	CARBONDALE	HERRIN	COAL	5.3	85.0	

MAPID: 16590439000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641066 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764542 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.2 **LOGGED (FT.):** 110.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-472 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.2	CARBONDALE	HERRIN	COAL	5.4	105.0	

MAPID: 16590440000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641153 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762762 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.2 **LOGGED (FT.):** 104.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-447 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.2	CARBONDALE	HERRIN	COAL	6.0	98.0	

MAPID: 16590441000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641212 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761009 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.3 **LOGGED (FT.):** 97.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-422 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.3	CARBONDALE	DANVILLE	COAL	1.5	20.0	
311.3	CARBONDALE	HERRIN	COAL	5.3	92.0	

MAPID: 16590442000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643082 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771911 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.1 **LOGGED (FT.):** 145.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-571 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
259.1	CARBONDALE	HERRIN	COAL	6.0	139.0	

MAPID: 16590443000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647878 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769885 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.8 **LOGGED (FT.):** 132.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-544 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.8	CARBONDALE	DANVILLE	COAL	1.3	43.0	
307.8	CARBONDALE	HERRIN	COAL	5.3	127.0	

MAPID: 16590444000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647909 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768138 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.5 **LOGGED (FT.):** 132.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-519 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.5	CARBONDALE	DANVILLE	COAL	1.8	47.0	
307.5	CARBONDALE	HERRIN	COAL	5.0	127.0	

MAPID: 16590445000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647924 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766288 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.7 **LOGGED (FT.):** 117.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-494 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.7	CARBONDALE	DANVILLE	COAL	1.8	36.0	
307.7	CARBONDALE	HERRIN	COAL	5.3	112.0	

MAPID: 16590446000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.649036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766355 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 248.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.1	129.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.8	244.0	

MAPID: 16590447000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650241 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766201 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.2 **LOGGED (FT.):** 117.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-493 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.2	CARBONDALE	DANVILLE	COAL	1.7	33.0	
311.2	CARBONDALE	HERRIN	COAL	5.3	112.0	

MAPID: 16590448000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650145 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.768113 **DATE COLLECTED:** 3 / 31 / 1973
SURFACE ELEVATION (FT.): 449.8 **LOGGED (FT.):** 141.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX H518 **WELL TYPE:** Coal Test
COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.8	PLEISTOCENE		SILT	3.0	0.0	
446.8	PLEISTOCENE		CLAY	7.0	3.0	
439.8	MODESTO		SANDSTONE	35.0	10.0	
404.8	MODESTO		GRAY SHALE	5.0	45.0	
399.8	MODESTO		BLACK SHALE	2.0	50.0	
397.8	CARBONDALE	DANVILLE	COAL	1.8	52.0	
396.0	CARBONDALE		UNDERCLAY	1.2	53.8	
394.8	CARBONDALE		CALCAREOUS SHALE	12.0	55.0	
382.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	67.0	
379.8	CARBONDALE		SANDY SHALE	36.0	70.0	
343.8	CARBONDALE		GRAY SHALE	18.0	106.0	
325.8	CARBONDALE		BLACK SHALE	4.0	124.0	
321.8	CARBONDALE	BRERETON	LIMESTONE	4.5	128.0	
317.2	CARBONDALE	ANNA	BLACK SHALE	1.5	132.6	
315.8	CARBONDALE	HERRIN	COAL	5.3	134.0	
310.5	CARBONDALE		UNDERCLAY	1.8	139.3	

MAPID: 16590448000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650145 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768113 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.8 **LOGGED (FT.):** 139.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-518 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.8	CARBONDALE	DANVILLE	COAL	1.8	52.0	
315.8	CARBONDALE	HERRIN	COAL	5.3	134.0	

MAPID: 16590449000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648906 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 136.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-543B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0	CARBONDALE	DANVILLE	COAL	2.3	43.0	
309.0	CARBONDALE	HERRIN	COAL	5.5	131.0	

MAPID: 16590450000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650114 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.4 **LOGGED (FT.):** 137.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-543 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.4	CARBONDALE	DANVILLE	COAL	1.0	49.0	
310.4	CARBONDALE	HERRIN	COAL	5.1	132.0	

MAPID: 16590451000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652566 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.768128 **DATE COLLECTED:** 11 / 28 / 1972
SURFACE ELEVATION (FT.): 440.5 **LOGGED (FT.):** 128.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX H517 **WELL TYPE:** Coal Test
COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.5	PLEISTOCENE		SILT	3.0	0.0	
437.5	MODESTO		SANDSTONE	25.0	3.0	
412.5	MODESTO		GRAY SHALE	2.0	28.0	
410.5	MODESTO	PIASA	LIMESTONE	2.0	30.0	
408.5	MODESTO		BLACK SHALE	3.0	32.0	
405.5	MODESTO		GRAY SHALE	5.0	35.0	
400.5	CARBONDALE	DANVILLE	COAL	1.8	40.0	
398.7	CARBONDALE		UNDERCLAY	1.2	41.8	
397.5	CARBONDALE		GRAY SHALE	9.0	43.0	
388.5	CARBONDALE		SANDSTONE	6.0	52.0	
382.5	CARBONDALE		GRAY SHALE	4.0	58.0	
378.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	62.0	
376.5	CARBONDALE		CALCAREOUS SHALE	4.0	64.0	
372.5	CARBONDALE		GRAY SHALE	6.0	68.0	
366.5	CARBONDALE		SANDY SHALE	16.0	74.0	
350.5	CARBONDALE		SANDY DARK SHALE	18.0	90.0	
332.5	CARBONDALE		DARK SHALE	7.0	108.0	
325.5	CARBONDALE	BRERETON	LIMESTONE	6.0	115.0	
319.5	CARBONDALE	HERRIN	COAL	5.7	121.0	
313.8	CARBONDALE		UNDERCLAY	1.3	126.7	

MAPID: 16590451000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652566 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768128 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.5 **LOGGED (FT.):** 126.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-517 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.5	CARBONDALE	DANVILLE	COAL	1.8	40.0	
319.5	CARBONDALE	HERRIN	COAL	5.7	121.0	

MAPID: 16590452000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652613 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766204 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.3 **LOGGED (FT.):** 132.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-492 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.3	CARBONDALE	DANVILLE	COAL	1.9	48.0	
323.3	CARBONDALE	HERRIN	COAL	5.4	127.0	

MAPID: 16590453000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654834 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766273 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.6 **LOGGED (FT.):** 132.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-491 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.6	CARBONDALE	DANVILLE	COAL	1.9	50.0	
332.6	CARBONDALE	HERRIN	COAL	5.5	127.0	

MAPID: 16590454000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654687 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769916 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.1 **LOGGED (FT.):** 128.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-541 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.1	CARBONDALE	DANVILLE	COAL	1.7	44.0	
341.1	CARBONDALE	HERRIN	COAL	5.4	123.0	

MAPID: 16590455000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657017 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769936 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.9 **LOGGED (FT.):** 104.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-540 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.9	CARBONDALE	DANVILLE	COAL	1.3	34.0	
344.9	CARBONDALE	HERRIN	COAL	5.3	99.0	

MAPID: 16590456000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657073 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768095 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.8 **LOGGED (FT.):** 108.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-515 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.8	CARBONDALE	DANVILLE	COAL	1.6	23.0	
338.8	CARBONDALE	HERRIN	COAL	5.3	103.0	

MAPID: 16590457000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657133 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766257 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.7 **LOGGED (FT.):** 127.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-490 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.7	CARBONDALE	DANVILLE	COAL	1.5	47.0	
336.7	CARBONDALE	HERRIN	COAL	5.2	122.0	

MAPID: 16590458000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659432 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766188 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.2 **LOGGED (FT.):** 141.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-489 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
328.2	CARBONDALE	HERRIN	COAL	5.2	136.0	

MAPID: 16590459000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659397 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768043 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.3 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-514 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.3	CARBONDALE	DANVILLE	COAL	2.2	22.0	
336.3	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590460000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659346 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769978 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.4 **LOGGED (FT.):** 93.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-539 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.4	CARBONDALE	DANVILLE	COAL	1.0	23.0	
360.4	CARBONDALE	HERRIN	COAL	5.5	88.0	

MAPID: 16590461000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.66168 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.3 **LOGGED (FT.):** 92.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-538 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.3	CARBONDALE	DANVILLE	COAL	2.2	15.0	
362.3	CARBONDALE	HERRIN	COAL	5.0	87.0	

MAPID: 16590462000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661688 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768068 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.5 **LOGGED (FT.):** 128.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-513 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.5	CARBONDALE	DANVILLE	COAL	2.1	47.0	
349.5	CARBONDALE	HERRIN	COAL	5.3	123.0	

MAPID: 16590463000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766236 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.2 **LOGGED (FT.):** 100.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-487 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.2	CARBONDALE	DANVILLE	COAL	1.3	22.0	
344.2	CARBONDALE	HERRIN	COAL	4.8	96.0	

MAPID: 16590464000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664047 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768011 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.8 **LOGGED (FT.):** 93.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-512 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.8	CARBONDALE	DANVILLE	COAL	1.8	14.0	
356.8	CARBONDALE	HERRIN	COAL	5.4	88.0	

MAPID: 16590465000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664175 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769865 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.2 **LOGGED (FT.):** 83.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-537 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.2	CARBONDALE	DANVILLE	COAL	1.3	37.0	
366.2	CARBONDALE	HERRIN	COAL	5.7	78.0	

MAPID: 16590466000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666377 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769842 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.1 **LOGGED (FT.):** 77.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-536 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.1	CARBONDALE	HERRIN	COAL	5.8	72.0	

MAPID: 16590467000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.66636 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767989 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.8 **LOGGED (FT.):** 72.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-511 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.8	CARBONDALE	HERRIN	COAL	5.4	67.0	

MAPID: 16590468000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666412 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766157 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.5 **LOGGED (FT.):** 90.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-486 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.5	CARBONDALE	DANVILLE	COAL	2.0	16.0	
396.5	CARBONDALE	ALLENBY	COAL	1.0	42.0	
353.5	CARBONDALE	HERRIN	COAL	5.3	85.0	

MAPID: 16590469000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668869 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.765979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.4 **LOGGED (FT.):** 226.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 89 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
341.4	CARBONDALE	HERRIN	COAL	6.4	103.0	
222.4	CARBONDALE	SPRINGFIELD	COAL	4.8	222.0	

MAPID: 16590470000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.669302 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.1 **LOGGED (FT.):** 99.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-484M **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.1	CARBONDALE	DANVILLE	COAL	1.4	21.0	
347.1	CARBONDALE	HERRIN	COAL	5.7	94.0	

MAPID: 16590471000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670944 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770019 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.5 **LOGGED (FT.):** 97.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-534 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.5	CARBONDALE	HERRIN	COAL	6.1	91.0	

MAPID: 16590472000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670975 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767984 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.8 **LOGGED (FT.):** 84.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-509 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.8	CARBONDALE	HERRIN	COAL	5.3	79.0	

MAPID: 16590473000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.671035 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766047 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 466.7 **LOGGED (FT.):** 128.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-484 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.7	CARBONDALE	DANVILLE	COAL	2.0	52.0	
382.7	CARBONDALE	ALLENBY	COAL	1.1	84.0	
343.7	CARBONDALE	HERRIN	COAL	5.7	123.0	

MAPID: 16590474000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.673375 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.4 **LOGGED (FT.):** 119.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-483 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.4	CARBONDALE	DANVILLE	COAL	2.1	40.0	
343.4	CARBONDALE	HERRIN	COAL	5.1	114.0	

MAPID: 16590475000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.673211 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767923 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.3 **LOGGED (FT.):** 105.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-508 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.3	CARBONDALE	DANVILLE	COAL	1.3	27.0	
388.3	CARBONDALE	ALLENBY	COAL	1.5	60.0	
348.3	CARBONDALE	HERRIN	COAL	5.7	100.0	

MAPID: 16590476000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.673633 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769966 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.1 **LOGGED (FT.):** 97.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-532P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.1	CARBONDALE	HERRIN	COAL	5.3	92.0	

MAPID: 16590477000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675562 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769768 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.5 **LOGGED (FT.):** 115.9 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. N-532 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
335.5	CARBONDALE	HERRIN	COAL	5.9	110.0	

MAPID: 16590478000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675396 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767851 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.8 **LOGGED (FT.):** 114.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-507 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.8	CARBONDALE	DANVILLE	COAL	1.3	36.0	
347.8	CARBONDALE	HERRIN	COAL	5.7	109.0	

MAPID: 16590479000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675549 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766016 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 478.5 **LOGGED (FT.):** 134.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-482 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.5	CARBONDALE	DANVILLE	COAL	1.4	45.0	
421.5	CARBONDALE	ALLENBY	COAL	1.5	57.0	
349.5	CARBONDALE	HERRIN	COAL	5.7	129.0	

MAPID: 16590480000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677896 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769754 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.5 **LOGGED (FT.):** 136.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-531 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
326.5	CARBONDALE	HERRIN	COAL	5.1	131.0	

MAPID: 16590481000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677844 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767923 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 479.1 **LOGGED (FT.):** 140.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-506 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
344.1	CARBONDALE	HERRIN	COAL	5.2	135.0	

MAPID: 16590482000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.680167 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769724 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.8 **LOGGED (FT.):** 129.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-530 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
322.8	CARBONDALE	HERRIN	COAL	5.3	124.0	

MAPID: 16590483000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.680171 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767902 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.1 **LOGGED (FT.):** 145.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-505 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.1	CARBONDALE	HERRIN	COAL	5.5	140.0	

MAPID: 16590484000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.687022 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764193 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 529.4 **LOGGED (FT.):** 202.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-452 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
332.4	CARBONDALE	HERRIN	COAL	5.3	197.0	

MAPID: 16590485000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.68923 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773772 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 90 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	SPRINGFIELD	COAL	4.2	315.0	

MAPID: 16590486000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.691375 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766076 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 523.3 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-499 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.3	CARBONDALE	HERRIN	COAL	5.4	214.0	

MAPID: 16590487000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693674 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 495.7 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 60 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.7	CARBONDALE	HERRIN	COAL	5.3	208.0	
180.7	CARBONDALE	SPRINGFIELD	COAL	4.3	315.0	

MAPID: 16590488000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693399 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769812 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.7 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 62 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.7	CARBONDALE	HERRIN	COAL	2.2	211.0	
165.7	CARBONDALE	SPRINGFIELD	COAL	3.0	311.0	

MAPID: 16590489000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.693526 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770912 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.6 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 61 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.6	CARBONDALE	SPRINGFIELD	COAL	4.6	300.0	

MAPID: 16590490000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689931 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771695 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.8 **LOGGED (FT.):** 262.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 63 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
282.8	CARBONDALE	HERRIN	COAL	4.4	150.0	
174.8	CARBONDALE	SPRINGFIELD	COAL	4.4	258.0	

MAPID: 16590491000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689562 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.3 **LOGGED (FT.):** 288.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 64 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.3	CARBONDALE	HERRIN	COAL	2.5	270.0	
138.3	CARBONDALE		COAL	1.3	287.0	

MAPID: 16590492000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.688959 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775614 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.1 **LOGGED (FT.):** 237.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-623 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.1	CARBONDALE	HERRIN	COAL	5.0	232.0	

MAPID: 16590493000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.6886 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775623 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.8 **LOGGED (FT.):** 154.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.8	CARBONDALE	HERRIN	COAL	5.6	149.0	

MAPID: 16590494000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.687077 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.773503 **DATE COLLECTED:** 4 / 6 / 1967
SURFACE ELEVATION (FT.): 434.5 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO H519 **WELL TYPE:** Coal Test
COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.5	PLEISTOCENE		CLAY	15.0	0.0	
419.5	MODESTO		SANDSTONE	4.0	15.0	BROWN
415.5	MODESTO		SANDY SHALE	9.0	19.0	
406.5	MODESTO		SANDSTONE	2.8	28.0	
403.7	MODESTO		GRAY SHALE	4.3	30.8	
399.5	MODESTO	PIASA	LIMESTONE	3.0	35.0	GRAY
396.5	MODESTO		GRAY SHALE	0.5	38.0	
396.0	MODESTO		DARK GRAY SHALE	8.5	38.5	
387.5	CARBONDALE	DANVILLE	COAL	1.3	47.0	
386.2	CARBONDALE		UNDERCLAY	3.8	48.3	
382.5	CARBONDALE		SANDY SHALE	26.0	52.0	
356.5	CARBONDALE		SANDSTONE	23.0	78.0	
333.5	CARBONDALE	ALLENBY	COAL	0.3	101.0	
333.2	CARBONDALE		UNDERCLAY	0.7	101.3	
332.5	CARBONDALE		SANDY SHALE	1.0	102.0	
331.5	CARBONDALE		SANDSTONE	10.0	103.0	
321.5	CARBONDALE		GRAY SHALE	7.0	113.0	
314.5	CARBONDALE		BLACK SHALE	0.7	120.0	
313.8	CARBONDALE	JAMESTOWN	COAL	0.3	120.7	
313.5	CARBONDALE		UNDERCLAY	0.7	121.0	
312.8	CARBONDALE	BRERETON	LIMESTONE	4.8	121.7	DARK GRAY
308.1	CARBONDALE	ENERGY	GRAY SHALE	0.6	126.4	
307.5	CARBONDALE	HERRIN	COAL	5.0	127.0	
302.5	CARBONDALE		UNDERCLAY	3.0	132.0	

MAPID: 16590494000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.687077 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773503 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.4 **LOGGED (FT.):** 151.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-579 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
301.4	CARBONDALE	HERRIN	COAL	5.3	146.0	

MAPID: 16590495000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.686467 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775403 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.9 **LOGGED (FT.):** 288.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-557GA **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.9	CARBONDALE	SPRINGFIELD	COAL	4.0	284.0	

MAPID: 16590496000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.685681 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774798 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.8 **LOGGED (FT.):** 221.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 66 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
323.8	CARBONDALE	HERRIN	COAL	5.8	113.0	
218.8	CARBONDALE	SPRINGFIELD	COAL	3.4	218.0	

MAPID: 16590497000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.68403 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775642 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.3 **LOGGED (FT.):** 148.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-603 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
282.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	148.0	

MAPID: 16590498000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.682469 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.8 **LOGGED (FT.):** 115.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-604 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
299.8	CARBONDALE	DANVILLE	COAL	2.0	113.0	

MAPID: 16590499000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.680211 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775618 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.4 **LOGGED (FT.):** 124.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-605 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.4	CARBONDALE	HERRIN	COAL	6.2	118.0	

MAPID: 16590500000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.67946 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775626 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.4 **LOGGED (FT.):** 231.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 45 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.4	CARBONDALE	HERRIN	COAL	6.5	109.0	
182.4	CARBONDALE	SPRINGFIELD	COAL	4.8	227.0	

MAPID: 16590501000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77354 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 249.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 46 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
314.0	CARBONDALE	HERRIN	COAL	6.2	126.0	
195.0	CARBONDALE	SPRINGFIELD	COAL	4.7	245.0	

MAPID: 16590502000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679789 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773028 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	6.4		
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16590503000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.67991 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772496 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.5 **LOGGED (FT.):** 253.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 47 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.5	CARBONDALE	HERRIN	COAL	6.8	141.0	
201.5	CARBONDALE	SPRINGFIELD	COAL	4.8	249.0	

MAPID: 16590504000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.680162 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771733 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.7 **LOGGED (FT.):** 145.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-555 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
310.7	CARBONDALE	HERRIN	COAL	6.5	139.0	

MAPID: 16590505000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677883 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771797 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.3 **LOGGED (FT.):** 115.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-556 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
321.3	CARBONDALE	HERRIN	COAL	5.8	110.0	

MAPID: 16590506000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677918 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773586 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.6 **LOGGED (FT.):** 162.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-581 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.6	CARBONDALE	HERRIN	COAL	5.3	157.0	

MAPID: 16590507000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677853 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775648 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.4 **LOGGED (FT.):** 129.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-606 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.4	CARBONDALE	HERRIN	COAL	5.6	124.0	

MAPID: 16590508000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675512 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775656 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 142.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-607 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	CARBONDALE	DANVILLE	COAL	2.0	69.0	
272.0	CARBONDALE	HERRIN	COAL	5.5	137.0	

MAPID: 16590509000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675819 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.4 **LOGGED (FT.):** 258.9 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 50 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.4	CARBONDALE	HERRIN	COAL	6.5	141.0	
172.4	CARBONDALE	SPRINGFIELD	COAL	3.9	255.0	

MAPID: 16590510000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675757 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77248 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.9 **LOGGED (FT.):** 222.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 51 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.9	CARBONDALE	HERRIN	COAL	6.3	107.0	
207.9	CARBONDALE	SPRINGFIELD	COAL	4.3	218.0	

MAPID: 16590511000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675561 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771697 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.3 **LOGGED (FT.):** 98.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-557 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.3	CARBONDALE	DANVILLE	COAL	1.1	35.0	
327.3	CARBONDALE	HERRIN	COAL	5.5	93.0	

MAPID: 16590512000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.671021 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771805 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.8 **LOGGED (FT.):** 75.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-559 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
343.8	CARBONDALE	HERRIN	COAL	5.7	70.0	

MAPID: 16590513000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670978 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773757 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.7 **LOGGED (FT.):** 78.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-H584 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
332.7	CARBONDALE	HERRIN	COAL	5.6	73.0	

MAPID: 16590514000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670761 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775713 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.3 **LOGGED (FT.):** 101.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-6094 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
312.3	CARBONDALE	HERRIN	COAL	6.0	95.0	

MAPID: 16590515000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668598 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775683 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.2 **LOGGED (FT.):** 81.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-610 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.2	CARBONDALE	HERRIN	COAL	5.3	76.0	

MAPID: 16590516000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.669408 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.0	CARBONDALE	HERRIN	COAL	5.5	90.0	
217.0	CARBONDALE	SPRINGFIELD	COAL	5.0	193.0	

MAPID: 16590517000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668743 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771783 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.2 **LOGGED (FT.):** 73.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-560 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.2	CARBONDALE	HERRIN	COAL	5.5	68.0	

MAPID: 16590518000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666344 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.5 **LOGGED (FT.):** 80.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-561 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.5	CARBONDALE	ALLENBY	COAL	1.0	34.0	
358.5	CARBONDALE	HERRIN	COAL	5.3	75.0	

MAPID: 16590519000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666244 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773753 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.4 **LOGGED (FT.):** 61.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-586 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.4	CARBONDALE	HERRIN	COAL	5.2	56.0	

MAPID: 16590520000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666229 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775705 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.4 **LOGGED (FT.):** 83.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-611 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.4	CARBONDALE	ALLENBY	COAL	1.2	69.0	
346.4	CARBONDALE	HERRIN	COAL	5.4	78.0	

MAPID: 16590521000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.663895 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775732 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 96.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-612 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
339.0	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	96.0	HOLE NOT DEEP ENOUGH TO REACH HERRIN

MAPID: 16590522000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.663934 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773822 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 62.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-587 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	CARBONDALE	HERRIN	COAL	5.4	57.0	

MAPID: 16590523000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.664065 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.3 **LOGGED (FT.):** 79.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-562 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.3	CARBONDALE	HERRIN	COAL	5.7	74.0	

MAPID: 16590524000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.662083 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.7715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.9 **LOGGED (FT.):** 72.4 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-537GA **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.9	CARBONDALE	HERRIN	COAL	5.4	67.0	

MAPID: 16590525000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661586 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775709 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.6 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-613 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
323.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	HOLE NOT DEEP ENOUGH TO REACH HERRIN

MAPID: 16590526000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661153 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776692 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.3 **LOGGED (FT.):** 94.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-13C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
328.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	94.0	HOLE NOT DEEP ENOUGH TO REACH HERRIN

MAPID: 16590527000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.658388 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77727 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.5 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-14DA **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.5	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	HOLE NOT DEEP ENOUGH TO REACH HERRIN

MAPID: 16590528000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659105 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775735 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.6 **LOGGED (FT.):** 41.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-614 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.6	CARBONDALE	DANVILLE	COAL	2.3	39.0	

MAPID: 16590529000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.65657 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776879 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.9 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-15CC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.9	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	HOLE NOT DEEP ENOUGH TO REACH HERRIN

MAPID: 16590530000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.65674 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.9 **LOGGED (FT.):** 127.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-615 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.9	CARBONDALE	DANVILLE	COAL	3.6	37.0	
277.9	CARBONDALE	HERRIN	COAL	5.3	122.0	

MAPID: 16590531000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.656885 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77377 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.7 **LOGGED (FT.):** 48.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-590 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.7	CARBONDALE	HERRIN	COAL	5.7	43.0	

MAPID: 16590532000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.656967 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.6 **LOGGED (FT.):** 60.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-565 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.6	CARBONDALE	HERRIN	COAL	5.3	55.0	

MAPID: 16590533000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654577 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775752 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.3 **LOGGED (FT.):** 163.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-616 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
269.3	CARBONDALE	HERRIN	COAL	5.8	158.0	

MAPID: 16590534000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654607 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77375 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.8 **LOGGED (FT.):** 143.7 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-591 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.8	CARBONDALE	DANVILLE	COAL	1.8	55.0	
305.8	CARBONDALE	HERRIN	COAL	5.7	138.0	

MAPID: 16590535000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654569 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.9 **LOGGED (FT.):** 80.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-566C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.9	CARBONDALE	HERRIN	COAL	5.5	75.0	

MAPID: 16590536000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654584 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771845 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 33.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-566 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.0	CARBONDALE	HERRIN	COAL	5.0	28.0	

MAPID: 16590537000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654651 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770904 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.8 **LOGGED (FT.):** 113.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-541C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.8	CARBONDALE	DANVILLE	COAL	2.3	26.0	
349.8	CARBONDALE	HERRIN	COAL	5.5	108.0	

MAPID: 16590538000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652306 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.8 **LOGGED (FT.):** 125.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-567 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.8	MODESTO		COAL	2.0	34.0	
424.8	CARBONDALE	DANVILLE	COAL	2.0	34.0	
338.8	CARBONDALE	HERRIN	COAL	5.8	120.0	

MAPID: 16590539000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652137 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773826 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.6 **LOGGED (FT.):** 131.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-592 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
288.6	CARBONDALE	HERRIN	COAL	5.5	126.0	

MAPID: 16590540000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652751 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775713 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.2 **LOGGED (FT.):** 151.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-616P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
343.2	CARBONDALE	DANVILLE	COAL	1.2	61.0	
258.2	CARBONDALE	HERRIN	COAL	5.5	146.0	

MAPID: 16590541000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64995 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.1 **LOGGED (FT.):** 127.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-593 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.1	CARBONDALE	DANVILLE	COAL	1.8	46.0	
296.1	CARBONDALE	HERRIN	COAL	5.0	122.0	

MAPID: 16590542000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.650115 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771851 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.4 **LOGGED (FT.):** 102.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-568 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.4	CARBONDALE	ALLENBY	COAL	1.0	76.0	
350.4	CARBONDALE	HERRIN	COAL	5.5	97.0	

MAPID: 16590543000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64769 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.9 **LOGGED (FT.):** 75.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-569 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.9	CARBONDALE	HERRIN	COAL	5.5	70.0	

MAPID: 16590544000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647638 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 94.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-569C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0	CARBONDALE	DANVILLE	COAL	1.0	29.0	
308.0	CARBONDALE	HERRIN	COAL	5.3	89.0	

MAPID: 16590545000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647646 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773875 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.3 **LOGGED (FT.):** 130.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-594 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
269.3	CARBONDALE	HERRIN	COAL	5.5	125.0	

MAPID: 16590546000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.646901 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775728 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.4 **LOGGED (FT.):** 173.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-619N **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
244.4	CARBONDALE	HERRIN	COAL	5.5	168.0	

MAPID: 16590547000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.661121 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.783383 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.2 **LOGGED (FT.):** 223.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-113J **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.2	CARBONDALE	HERRIN	COAL	5.5	218.0	

MAPID: 16590548000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670389 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.779252 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 156.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-59 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
337.3	CARBONDALE	DANVILLE	COAL	1.6	75.0	
262.3	CARBONDALE	HERRIN	COAL	6.0	150.0	

MAPID: 16590549000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.674944 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.779765 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.3 **LOGGED (FT.):** 178.6 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-57JC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.3	CARBONDALE	HERRIN	COAL	5.6	173.0	

MAPID: 16590550000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679437 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.781026 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.4 **LOGGED (FT.):** 196.8 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-80 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.4	CARBONDALE	HERRIN	COAL	5.8	191.0	

MAPID: 16590551000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679477 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.781774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 338.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	CARBONDALE	HERRIN	COAL	5.7	227.0	
91.0	CARBONDALE	SPRINGFIELD	COAL	4.0	334.0	

MAPID: 16590552000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.688589 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.778794 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.1 **LOGGED (FT.):** 161.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. J-26D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
259.1	CARBONDALE	HERRIN	COAL	5.1	156.0	

MAPID: 16590553000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689023 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.790045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 479.2 **LOGGED (FT.):** 382.1 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 39 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
201.2	CARBONDALE	HERRIN	COAL	5.3	278.0	
100.2	CARBONDALE	SPRINGFIELD	COAL	3.1	379.0	

MAPID: 16590554000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675587 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.789808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 294.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	6.0	288.0	

MAPID: 16590556000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.642742 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76983 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 162.5 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-522EC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.0	CARBONDALE	DANVILLE	COAL	2.0	87.0	
241.0	CARBONDALE	HERRIN	COAL	5.5	157.0	

MAPID: 16590557000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643348 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.768256 **DATE COLLECTED:** 10 / 31 / 1972
SURFACE ELEVATION (FT.): 427.4 **LOGGED (FT.):** 151.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO H521 **WELL TYPE:** Coal Test
COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.4	PLEISTOCENE		SILT	3.0	0.0	
424.4	PLEISTOCENE		CLAY	7.0	3.0	
417.4	MODESTO		SANDSTONE	20.0	10.0	
397.4	MODESTO		SANDSTONE	4.0	30.0	
393.4	MODESTO		GRAY SHALE	27.0	34.0	
366.4	MODESTO		BLACK SHALE	1.0	61.0	
365.4	MODESTO		DARK GRAY SHALE	7.0	62.0	
358.4	CARBONDALE	DANVILLE	COAL	1.5	69.0	
356.9	CARBONDALE		UNDERCLAY	1.5	70.5	
355.4	CARBONDALE		SANDY SHALE	11.0	72.0	
344.4	CARBONDALE		CALCAREOUS SHALE	5.0	83.0	
339.4	CARBONDALE	ALLENBY	COAL	0.5	88.0	
338.9	CARBONDALE		DARK SHALE	2.5	88.5	
336.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	91.0	
330.4	CARBONDALE		GRAY SHALE	6.0	97.0	
324.4	CARBONDALE		DARK GRAY SHALE	34.0	103.0	
290.4	CARBONDALE	BRERETON	LIMESTONE	6.5	137.0	
283.9	CARBONDALE	ANNA	BLACK SHALE	0.5	143.5	
283.4	CARBONDALE	HERRIN	COAL	5.3	144.0	
278.1	CARBONDALE		UNDERCLAY	1.8	149.3	

MAPID: 16590557000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643348 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768256 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.4 **LOGGED (FT.):** 149.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. H-521 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.4	CARBONDALE	HERRIN	COAL	5.3	144.0	

MAPID: 16590558000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.702087 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.790214 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 463.4 **LOGGED (FT.):** 366.3 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 42 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.4	CARBONDALE	HERRIN	COAL	5.5	265.0	
101.4	CARBONDALE	SPRINGFIELD	COAL	4.3	362.0	

MAPID: 16590559000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.702266 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.788768 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.9 **LOGGED (FT.):** 340.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 41 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.9	CARBONDALE	HERRIN	COAL	5.3	243.0	
111.9	CARBONDALE	SPRINGFIELD	COAL	4.0	336.0	

MAPID: 16590560000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.70612 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.789466 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.6 **LOGGED (FT.):** 329.2 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 71 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.6	CARBONDALE	HERRIN	COAL	5.3	231.0	
114.6	CARBONDALE	SPRINGFIELD	COAL	4.2	325.0	

MAPID: 16590567000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.698331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767909 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 497.4 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-521 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.4	CARBONDALE	HERRIN	COAL	5.4	218.0	

MAPID: 16590568000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.702729 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767962 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 499.8 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-519 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.8	CARBONDALE	DANVILLE	COAL	1.5	154.0	

MAPID: 16590569000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.698389 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764215 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 503.5 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. C-471 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.5	CARBONDALE	HERRIN	COAL	5.3	178.0	

MAPID: 16590570000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.696747 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 68 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
331.0	CARBONDALE	HERRIN	COAL	6.1	169.0	
220.0	CARBONDALE	SPRINGFIELD	COAL	4.4	280.0	

MAPID: 16590571000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.698433 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763371 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 505.6 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 91 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
254.6	CARBONDALE	HERRIN	COAL	4.4	251.0	

MAPID: 16590572000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.698599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760639 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.8 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX COAL CO. 92 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.8	CARBONDALE	HERRIN	COAL	5.3	243.0	

MAPID: 16590626000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.669366 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863283 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.6		

MAPID: 16590631000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.686562 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.877688 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16590632000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.684286 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.891721 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.4		

MAPID: 16590633000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.684348 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.893897 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590634000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.669159 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.904215 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.4		

MAPID: 16590635000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.665226 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.867764 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.8		0.62% SULFUR

MAPID: 16590636000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.665498 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.877337 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.4		

MAPID: 16590637000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.655121 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.885458 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	0.1		

MAPID: 16590638000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641109 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.869596 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.7		1.00% SULFUR

MAPID: 16590639000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.639996 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.886621 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.1		

MAPID: 16590640000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.625084 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.884628 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	0.3		

MAPID: 16590641000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.616569 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.890473 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.6		

MAPID: 16590642000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.633098 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.899475 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.5		SHALEY

MAPID: 16590643000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: AKIN **LONGITUDE:** -88.625675 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.906556 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		0.67% SULFUR

MAPID: 16590644000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.60139 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.864021 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	11.3		SPLIT (DATA FROM CORE)

MAPID: 16590645000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.605008 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.886701 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.9		1.11% SULFUR

MAPID: 16590646000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.604436 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.899357 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.2		0.82% SULFUR

MAPID: 16501122000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691911 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.900435 **DATE COLLECTED:** 10 / 0 / 1946
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 1834.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-510.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	935.0	
-577.0	SPOON	DAVIS	UNCLASSIFIED	-	1002.0	
-1409.0	BASE OF PENN.		UNCLASSIFIED	-	1834.0	

MAPID: 16501122000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691911 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.900435 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 3338.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-162.0	CARBONDALE	DANVILLE	COAL	-	587.0	
-185.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	610.0	
-197.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	622.0	
-202.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	627.0	
-241.0	CARBONDALE	HERRIN	COAL	5.0	666.0	
-352.0	CARBONDALE	SPRINGFIELD	COAL	6.0	777.0	
-379.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	22.0	804.0	
-407.0	CARBONDALE	HOUCHIN CREEK	COAL	-	832.0	

MAPID: 16501355000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 131' N line, 131' E line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.688956 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.906392 **DATE COLLECTED:** 12 / 0 / 1946
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2840.0 **LOG TYPE:** Electric Log
SOURCE: MENHALL, J. W. & CO., FISHER BEND SCH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-416.6	CARBONDALE	HOUCHIN CREEK	COAL	0.6	856.6	
-450.0	CARBONDALE	SURVANT	COAL	0.0	890.0	
-484.0	CARBONDALE	COLCHESTER	COAL	0.6	924.0	
-562.0	CARBONDALE	DEKOVEN	COAL	5.0	1002.0	

MAPID: 16501355000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 131' N line, 131' E line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.688956 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.906392 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 2840.0 **LOG TYPE:**
SOURCE: MENHALL, J. W. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-230.0	CARBONDALE	BRERETON	LIMESTONE	-	674.0	
-1598.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2042.0	
-1996.0			LIMESTONE	-	2440.0	
-2396.0		BASE BARLOW	LIMESTONE	-	2840.0	

MAPID: 16501356000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.696467 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896807 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 2841.0 **LOG TYPE:**
SOURCE: MENHALL, J. W. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-236.0	CARBONDALE	BRERETON	LIMESTONE	-	690.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2040.0	
-1980.0			LIMESTONE	-	2434.0	
-2387.0		BASE BARLOW	LIMESTONE	-	2841.0	

MAPID: 16501357000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 410' W line of NE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.69162 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.90405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2818.0 **LOG TYPE:**
SOURCE: FOX, FRANK G & FOX, W J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-234.0	CARBONDALE	BRERETON	LIMESTONE	-	666.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2020.0	
-1979.0			LIMESTONE	-	2411.0	
-2386.0		BASE BARLOW	LIMESTONE	-	2818.0	

MAPID: 16501358000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.689655 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:**
SOURCE: BARTMES, ROSS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-229.0	CARBONDALE	BRERETON	LIMESTONE	-	658.0	
-1595.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2024.0	
-1981.0			LIMESTONE	-	2410.0	
-2381.0		BASE BARLOW	LIMESTONE	-	2810.0	

MAPID: 16501359000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.694198 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904043 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2818.0 **LOG TYPE:**
SOURCE: FOX, FRANK G & FOX, W J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-232.0	CARBONDALE	BRERETON	LIMESTONE	-	673.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2028.0	
-1975.0			LIMESTONE	-	2416.0	
-2377.0		BASE BARLOW	LIMESTONE	-	2818.0	

MAPID: 16501360000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691905 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902227 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-223.0	CARBONDALE	BRERETON	LIMESTONE	-	652.0	
-1585.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2014.0	
-1967.0			LIMESTONE	-	2396.0	
-2379.0		BASE BARLOW	LIMESTONE	-	2808.0	

MAPID: 16501418000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.689661 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902231 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2780.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1584.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2014.0	
-1983.0			LIMESTONE	-	2413.0	
-2350.0		BASE BARLOW	LIMESTONE	-	2780.0	

MAPID: 16502157000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.700998 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.900405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 2829.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-236.0	CARBONDALE	BRERETON	LIMESTONE	-	689.0	
-1582.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2035.0	
-1977.0			LIMESTONE	-	2430.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2829.0	

MAPID: 16502158000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.703288 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902196 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2811.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-225.0	CARBONDALE	BRERETON	LIMESTONE	-	680.0	
-1590.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2045.0	
-1970.0			LIMESTONE	-	2425.0	
-2356.0		BASE BARLOW	LIMESTONE	-	2811.0	

MAPID: 16502639000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.701026 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893167 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., HALL IBER V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-404.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	885.0	
-444.0	CARBONDALE	SURVANT	COAL	1.5	925.0	
-515.0	CARBONDALE	COLCHESTER	COAL	0.5	996.0	
-549.0	CARBONDALE	DEKOVEN	COAL	3.0	1030.0	
-559.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1040.0	
-566.0	CARBONDALE	DAVIS	COAL	3.5	1047.0	
-604.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1085.0	

MAPID: 16502639000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.701026 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893167 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 2851.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-219.0	CARBONDALE	BRERETON	LIMESTONE	-	700.0	
-1569.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2050.0	
-1969.0			LIMESTONE	-	2450.0	
-2370.0		BASE BARLOW	LIMESTONE	-	2851.0	

MAPID: 16502661000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 477' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.694704 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905833 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:**
SOURCE: BRYANT, G. & M. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-242.0	CARBONDALE	BRERETON	LIMESTONE	-	685.0	
-1597.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2040.0	
-1982.0			LIMESTONE	-	2425.0	
-2377.0		BASE BARLOW	LIMESTONE	-	2820.0	

MAPID: 16502669000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.70101 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896786 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DELWOOD OIL CO, KEATON 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-413.0	CARBONDALE	HOUCHIN CREEK	COAL	1.6	886.0	
-457.0	CARBONDALE	SURVANT	COAL	1.0	930.0	
-527.0	CARBONDALE	COLCHESTER	COAL	0.5	1000.0	
-552.0	CARBONDALE	DEKOVEN	COAL	3.5	1025.0	
-562.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	1035.0	
-567.0	CARBONDALE	DAVIS	COAL	3.0	1040.0	
-607.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1080.0	

MAPID: 16502669000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.70101 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896786 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 2817.0 **LOG TYPE:**
SOURCE: DELWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	BRERETON	LIMESTONE	-	700.0	
-1565.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2038.0	
-1970.0			LIMESTONE	-	2443.0	
-2344.0		BASE BARLOW	LIMESTONE	-	2817.0	

MAPID: 16502670000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705569 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893143 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: FOX & STRICKLAND, HENDERSON-JONE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-405.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	880.0	
-445.0	CARBONDALE	SURVANT	COAL	1.0	920.0	
-500.0	CARBONDALE	COLCHESTER	COAL	0.5	975.0	
-555.0	CARBONDALE	DEKOVEN	COAL	4.0	1030.0	
-564.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1039.0	
-575.0	CARBONDALE	DAVIS	COAL	4.0	1050.0	
-570.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1045.0	

MAPID: 16502670000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705569 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893143 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2850.0 **LOG TYPE:**
SOURCE: FOX & STRICKLAND **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-221.0	CARBONDALE	BRERETON	LIMESTONE	-	696.0	
-1580.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2055.0	
-1969.0			LIMESTONE	-	2444.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2850.0	

MAPID: 16502671000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.703325 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893155 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2854.0 **LOG TYPE:**
SOURCE: STRICKLAND, FRANK L. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-225.0	CARBONDALE	BRERETON	LIMESTONE	-	700.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2054.0	
-1975.0			LIMESTONE	-	2450.0	
-2379.0		BASE BARLOW	LIMESTONE	-	2854.0	

MAPID: 16502702000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW

QUADRANGLE: AKIN **LONGITUDE:** -88.705554 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896746 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: STRICKLAND, FRANK L., JONES J P **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-409.0	CARBONDALE	HOUCHIN CREEK	COAL	1.6	884.0	
-450.0	CARBONDALE	SURVANT	COAL	1.0	925.0	
-525.0	CARBONDALE	COLCHESTER	COAL	0.5	1000.0	
-547.0	CARBONDALE	DEKOVEN	COAL	4.0	1022.0	
-565.0	CARBONDALE	DAVIS	COAL	3.0	1040.0	
-600.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1075.0	

MAPID: 16502702000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW

QUADRANGLE: AKIN **LONGITUDE:** -88.705554 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.896746 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2825.0 **LOG TYPE:**

SOURCE: STRICKLAND, FRANK L. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-226.0	CARBONDALE	BRERETON	LIMESTONE	-	701.0	
-1572.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2047.0	
-1978.0			LIMESTONE	-	2453.0	
-2350.0		BASE BARLOW	LIMESTONE	-	2825.0	

MAPID: 16502806000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: AKIN **LONGITUDE:** -88.696483 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.89319 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., HALL IBER V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-392.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	856.0	
-431.0	CARBONDALE	SURVANT	COAL	2.0	895.0	
-494.0	CARBONDALE	COLCHESTER	COAL	0.5	958.0	
-539.0	CARBONDALE	DEKOVEN	COAL	2.0	1003.0	
-550.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1014.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-558.0	CARBONDALE	DAVIS	COAL	4.0	1022.0	
-591.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1055.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502806000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: AKIN **LONGITUDE:** -88.696483 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89319 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-208.0	CARBONDALE	BRERETON	LIMESTONE	-	672.0	
-1571.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2035.0	
-1960.0			LIMESTONE	-	2424.0	
-2371.0		BASE BARLOW	LIMESTONE	-	2835.0	

MAPID: 16502956000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.69194 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893214 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2809.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-205.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1554.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1979.0	
-1965.0			LIMESTONE	-	2390.0	
-2384.0		BASE BARLOW	LIMESTONE	-	2809.0	

MAPID: 16502990000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694239 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893202 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2812.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-206.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1569.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2008.0	
-1961.0			LIMESTONE	-	2400.0	
-2373.0		BASE BARLOW	LIMESTONE	-	2812.0	

MAPID: 16502990000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694239 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.893202 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 663.5 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	MODESTO	PIASA	LIMESTONE	6.0	567.0	
-134.0	MODESTO		SHALE	11.0	573.0	
-145.0	CARBONDALE	DANVILLE	COAL	2.0	584.0	
-147.0	CARBONDALE		SHALE	18.0	586.0	
-165.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.0	604.0	
-170.0	CARBONDALE	LAWSON	SILTY SHALE	15.0	609.0	
-185.0	CARBONDALE	LAWSON	SANDSTONE	6.0	624.0	
-191.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	630.0	
-201.0	CARBONDALE	LAWSON	DARK GRAY SHALE	6.0	640.0	
-207.0	CARBONDALE	JAMESTOWN	COAL	0.5	646.0	
-207.5	CARBONDALE		CALCAREOUS SHALE	3.5	646.5	
-211.0	CARBONDALE	BRERETON	LIMESTONE	8.0	650.0	
-219.0	CARBONDALE	ANNA	BLACK SHALE	2.0	658.0	
-221.0	CARBONDALE	HERRIN	COAL	3.5	660.0	

MAPID: 16502990000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694239 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893202 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 663.5 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., HALL IBER V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-388.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	827.0	
-429.0	CARBONDALE	SURVANT	COAL	2.0	868.0	
-491.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-534.0	CARBONDALE	DEKOVEN	COAL	3.0	973.0	
-546.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	985.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-553.0	CARBONDALE	DAVIS	COAL	4.0	992.0	
-587.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1026.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503001000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.691934 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.895002 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 2792.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., SPRINGS VERL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-395.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	840.0	
-435.0	CARBONDALE	SURVANT	COAL	1.0	880.0	
-500.0	CARBONDALE	COLCHESTER	COAL	0.5	945.0	
-549.0	CARBONDALE	DEKOVEN	COAL	2.0	994.0	
-561.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1006.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-567.0	CARBONDALE	DAVIS	COAL	4.0	1012.0	
-603.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1048.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503001000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.691934 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.895002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 2792.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	BRERETON	LIMESTONE	-	655.0	
-1561.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2006.0	
-1965.0			LIMESTONE	-	2410.0	
-2347.0		BASE BARLOW	LIMESTONE	-	2792.0	

MAPID: 16503012000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694233 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.894994 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2821.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	BRERETON	LIMESTONE	-	657.0	
-1573.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2019.0	
-1965.0			LIMESTONE	-	2411.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2821.0	

MAPID: 16503013000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.691924 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896824 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-409.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	848.0	
-463.0	CARBONDALE	SURVANT	COAL	1.0	902.0	
-521.0	CARBONDALE	COLCHESTER	COAL	0.5	960.0	
-555.0	CARBONDALE	DEKOVEN	COAL	2.0	994.0	
-568.0	CARBONDALE	LOWER DEKOVEN	COAL	0.2	1007.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-574.0	CARBONDALE	DAVIS	COAL	4.0	1013.0	
-610.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1049.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503013000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.691924 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-226.0	CARBONDALE	BRERETON	LIMESTONE	-	665.0	
-1561.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1931.0			LIMESTONE	-	2370.0	
-2369.0		BASE BARLOW	LIMESTONE	-	2808.0	

MAPID: 16503024000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694223 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896816 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2788.0 **LOG TYPE:** Electric Log
SOURCE: KEYSTONE OIL CO, KEATON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-409.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	858.0	
-446.0	CARBONDALE	SURVANT	COAL	1.0	895.0	
-513.0	CARBONDALE	COLCHESTER	COAL	0.5	962.0	
-556.0	CARBONDALE	DEKOVEN	COAL	2.0	1005.0	
-569.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	1018.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-576.0	CARBONDALE	DAVIS	COAL	4.0	1025.0	
-611.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1060.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503024000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694223 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2788.0 **LOG TYPE:**
SOURCE: KEYSTONE OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-230.0	CARBONDALE	BRERETON	LIMESTONE	-	679.0	
-1581.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2030.0	
-1966.0			LIMESTONE	-	2415.0	
-2339.0		BASE BARLOW	LIMESTONE	-	2788.0	

MAPID: 16503030000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.694217 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.898607 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log
SOURCE: KEYSTONE OIL CO, JOHNSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-421.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	848.0	
-461.0	CARBONDALE	SURVANT	COAL	1.0	888.0	
-531.0	CARBONDALE	COLCHESTER	COAL	1.0	958.0	
-567.0	CARBONDALE	DEKOVEN	COAL	2.5	994.0	
-582.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	1009.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-587.0	CARBONDALE	DAVIS	COAL	3.5	1014.0	
-621.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1048.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503030000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.694217 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898607 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**

SOURCE: KEYSTONE OIL CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-243.0	CARBONDALE	BRERETON	LIMESTONE	-	670.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2006.0	
-1965.0			LIMESTONE	-	2392.0	
-2373.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503039000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: AKIN **LONGITUDE:** -88.68968 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896833 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-403.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	828.0	
-440.0	CARBONDALE	SURVANT	COAL	1.0	865.0	
-510.0	CARBONDALE	COLCHESTER	COAL	0.5	935.0	
-545.0	CARBONDALE	DEKOVEN	COAL	2.0	970.0	
-558.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	983.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-563.0	CARBONDALE	DAVIS	COAL	3.5	988.0	
-597.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1022.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503039000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: AKIN **LONGITUDE:** -88.68968 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.896833 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-215.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1562.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1987.0	
-1972.0			LIMESTONE	-	2397.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503040000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.689674 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898622 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2803.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-401.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	824.0	
-437.0	CARBONDALE	SURVANT	COAL	1.0	860.0	
-497.0	CARBONDALE	COLCHESTER	COAL	0.5	920.0	
-552.0	CARBONDALE	DEKOVEN	COAL	2.0	975.0	
-567.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	990.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-572.0	CARBONDALE	DAVIS	COAL	2.0	995.0	
-605.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1028.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503040000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.689674 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898622 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2803.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	BRERETON	LIMESTONE	-	650.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1999.0	
-1981.0			LIMESTONE	-	2404.0	
-2380.0		BASE BARLOW	LIMESTONE	-	2803.0	

MAPID: 16503041000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: AKIN **LONGITUDE:** -88.689687 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.895011 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., SPRINGS VERL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-391.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	815.0	
-430.0	CARBONDALE	SURVANT	COAL	1.0	854.0	
-494.0	CARBONDALE	COLCHESTER	COAL	0.5	918.0	
-541.0	CARBONDALE	DEKOVEN	COAL	1.8	965.0	
-555.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	979.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-559.0	CARBONDALE	DAVIS	COAL	3.0	983.0	
-595.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1019.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503041000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.689687 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.895011 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-208.0	CARBONDALE	BRERETON	LIMESTONE	-	632.0	
-1557.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1981.0	
-1978.0			LIMESTONE	-	2402.0	
-2380.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16503042000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: AKIN **LONGITUDE:** -88.689693 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893223 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., SPRINGS VERL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-386.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	810.0	
-426.0	CARBONDALE	SURVANT	COAL	1.0	850.0	
-495.0	CARBONDALE	COLCHESTER	COAL	0.5	919.0	
-531.0	CARBONDALE	DEKOVEN	COAL	2.0	955.0	
-545.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	969.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-550.0	CARBONDALE	DAVIS	COAL	4.0	974.0	
-586.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1010.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503042000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: AKIN **LONGITUDE:** -88.689693 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893223 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	BRERETON	LIMESTONE	-	625.0	
-1571.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1995.0	
-1966.0			LIMESTONE	-	2390.0	
-2383.0		BASE BARLOW	LIMESTONE	-	2807.0	

MAPID: 16503277000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.700973 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905822 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2814.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-226.0	CARBONDALE	BRERETON	LIMESTONE	-	682.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2043.0	
-1968.0			LIMESTONE	-	2424.0	
-2358.0		BASE BARLOW	LIMESTONE	-	2814.0	

MAPID: 16503507000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.705522 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904015 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 2834.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-213.0	CARBONDALE	BRERETON	LIMESTONE	-	678.0	
-1592.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2057.0	
-1975.0			LIMESTONE	-	2440.0	
-2369.0		BASE BARLOW	LIMESTONE	-	2834.0	

MAPID: 16500010000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.685633 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.892749 **DATE COLLECTED:** 6 / 0 / 1908
SURFACE ELEVATION (FT.): 419.6 **LOGGED (FT.):** 1123.0 **LOG TYPE:** Drillers Log
SOURCE: COLP BRUSH CO. WEBBER 1 **WELL TYPE:** Coal Test
COMMENT: THICKNESSES ARE NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-217.4	CARBONDALE	HERRIN	COAL	6.0	637.0	APPROXIMATE THICKNESS
-335.4	CARBONDALE	SPRINGFIELD	COAL	4.0	755.0	APPROXIMATE THICKNESS
-612.4	CARBONDALE		COAL	5.0	1032.0	APPROXIMATE THICKNESS

MAPID: 16500855000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of NE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.682716 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.897725 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: MASSEY & DIGGS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	627.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2018.0	
-1978.0			LIMESTONE	-	2410.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16501131000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.670989 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904074 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 468.0 **LOGGED (FT.):** 2891.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-218.0	CARBONDALE	BRERETON	LIMESTONE	-	686.0	
-1626.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2094.0	
-1997.0			LIMESTONE	-	2465.0	
-2423.0		BASE BARLOW	LIMESTONE	-	2891.0	

MAPID: 16501159000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.682683 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905867 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2822.0 **LOG TYPE:**
SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-203.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1592.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2029.0	
-1979.0			LIMESTONE	-	2416.0	
-2385.0		BASE BARLOW	LIMESTONE	-	2822.0	

MAPID: 16501361000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.687358 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904058 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 2827.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-208.0	CARBONDALE	BRERETON	LIMESTONE	-	653.0	
-1594.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2039.0	
-2000.0			LIMESTONE	-	2445.0	
-2382.0		BASE BARLOW	LIMESTONE	-	2827.0	

MAPID: 16501362000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 250' W line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687653 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898625 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: MENHALL, J. W. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-222.0	CARBONDALE	BRERETON	LIMESTONE	-	650.0	
-1566.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1994.0	
-1986.0			LIMESTONE	-	2414.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16501363000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.687362 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.902236 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:**

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	BRERETON	LIMESTONE	-	650.0	
-1582.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2023.0	
-1981.0			LIMESTONE	-	2422.0	
-2374.0		BASE BARLOW	LIMESTONE	-	2815.0	

MAPID: 16501363000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.687362 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.902236 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 3140.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	DANVILLE	COAL	-	589.0	
-168.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	609.0	
-189.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	630.0	
-193.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	634.0	
-219.0	CARBONDALE	HERRIN	COAL	5.0	660.0	
-329.0	CARBONDALE	SPRINGFIELD	COAL	5.0	770.0	
-359.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	24.0	800.0	
-387.0	CARBONDALE	HOUCHIN CREEK	COAL	-	828.0	

MAPID: 16502422000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.684983 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905855 **DATE COLLECTED:** 4 / 0 / 1945

SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 2824.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., BUNNE LL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-375.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	871.0	
-495.0	CARBONDALE	DEKOVEN	COAL	1.6	991.0	
-507.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	1003.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-513.0	CARBONDALE	DAVIS	COAL	3.0	1009.0	
-544.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1040.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502422000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.684983 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.905855 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2824.0 **LOG TYPE:**

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-217.0	CARBONDALE	BRERETON	LIMESTONE	-	657.0	
-1594.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2034.0	
-1992.0			LIMESTONE	-	2432.0	
-2384.0		BASE BARLOW	LIMESTONE	-	2824.0	

MAPID: 16503031000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687384 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896834 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2806.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R "B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-394.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	818.0	
-434.0	CARBONDALE	SURVANT	COAL	1.0	858.0	
-505.0	CARBONDALE	COLCHESTER	COAL	0.5	929.0	
-538.0	CARBONDALE	DEKOVEN	COAL	2.0	962.0	
-550.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	974.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-558.0	CARBONDALE	DAVIS	COAL	4.0	982.0	
-595.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1019.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503031000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687384 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2806.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	BRERETON	LIMESTONE	-	635.0	
-1572.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1996.0	
-1976.0			LIMESTONE	-	2400.0	
-2382.0		BASE BARLOW	LIMESTONE	-	2806.0	

MAPID: 16503043000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687387 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.895012 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R "A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-390.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	815.0	
-425.0	CARBONDALE	SURVANT	COAL	1.0	850.0	
-505.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-532.0	CARBONDALE	DEKOVEN	COAL	2.0	957.0	
-544.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	969.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-551.0	CARBONDALE	DAVIS	COAL	3.5	976.0	
-587.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1012.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503043000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687387 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.895012 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-207.0	CARBONDALE	BRERETON	LIMESTONE	-	632.0	
-1583.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2008.0	
-1970.0			LIMESTONE	-	2395.0	
-2379.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16503044000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.687397 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893223 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., JOHNSON G R "A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-383.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	805.0	
-423.0	CARBONDALE	SURVANT	COAL	1.0	845.0	
-487.0	CARBONDALE	COLCHESTER	COAL	0.5	909.0	
-530.0	CARBONDALE	DEKOVEN	COAL	2.5	952.0	
-544.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	966.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-550.0	CARBONDALE	DAVIS	COAL	4.0	972.0	
-588.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1010.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503044000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.687397 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893223 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-198.0	CARBONDALE	BRERETON	LIMESTONE	-	620.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1973.0			LIMESTONE	-	2395.0	
-2386.0		BASE BARLOW	LIMESTONE	-	2808.0	

MAPID: 16503064000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.675683 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898603 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 2805.0 **LOG TYPE:**
SOURCE: STARR J CURTIS ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1610.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2044.0	
-1970.0			LIMESTONE	-	2404.0	
-2371.0		BASE BARLOW	LIMESTONE	-	2805.0	

MAPID: 16503132000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.678072 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.893156 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1591.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2016.0	
-1959.0			LIMESTONE	-	2384.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503139000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: AKIN **LONGITUDE:** -88.680371 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893173 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2795.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., HOLMES NELLIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-389.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	808.0	
-429.0	CARBONDALE	SURVANT	COAL	1.0	848.0	
-490.0	CARBONDALE	COLCHESTER	COAL	0.5	909.0	
-536.0	CARBONDALE	DEKOVEN	COAL	2.0	955.0	
-553.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	972.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-559.0	CARBONDALE	DAVIS	COAL	3.3	978.0	
-596.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1015.0	
-633.0	TRADEWATER	MT. RORAH	COAL	2.0	1052.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503139000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.680371 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893173 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2795.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	BRERETON	LIMESTONE	-	620.0	
-1585.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2004.0	
-1966.0			LIMESTONE	-	2385.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2795.0	

MAPID: 16503144000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.682733 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89319 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-205.0	CARBONDALE	BRERETON	LIMESTONE	-	625.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1996.0	
-1970.0			LIMESTONE	-	2390.0	
-2380.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503164000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.678062 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-192.0	CARBONDALE	BRERETON	LIMESTONE	-	614.0	
-1602.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2024.0	
-1973.0			LIMESTONE	-	2395.0	
-2378.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503164000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.678062 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89497 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 632.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-116.0	MODESTO	PIASA	LIMESTONE	5.0	538.0	
-121.0	MODESTO		SHALE	10.0	543.0	
-131.0	CARBONDALE	DANVILLE	COAL	2.0	553.0	
-133.0	CARBONDALE		SILTY SHALE	15.0	555.0	
-148.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	6.0	570.0	
-154.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	576.0	
-174.0	CARBONDALE	LAWSON	SANDSTONE	5.0	596.0	
-179.0	CARBONDALE	LAWSON	SHALE	14.0	601.0	
-193.0	CARBONDALE	JAMESTOWN	COAL	0.5	615.0	
-193.5	CARBONDALE		CALCAREOUS SHALE	3.5	615.5	
-197.0	CARBONDALE	BRERETON	LIMESTONE	6.0	619.0	
-203.0	CARBONDALE	ANNA	BLACK SHALE	2.0	625.0	
-205.0	CARBONDALE	HERRIN	COAL	5.0	627.0	

MAPID: 16503164000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.678062 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89497 **DATE COLLECTED:** 1 / 0 / 1958

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 1897.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-485.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	907.0	
-552.0	SPOON	DAVIS	UNCLASSIFIED	-	974.0	
-1475.0	BASE OF PENN.		UNCLASSIFIED	-	1897.0	

MAPID: 16503164000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.678062 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.89497 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 632.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BARNFIELD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-382.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	804.0	
-423.0	CARBONDALE	SURVANT	COAL	1.8	845.0	
-481.0	CARBONDALE	COLCHESTER	COAL	0.5	903.0	
-528.0	CARBONDALE	DEKOVEN	COAL	2.3	950.0	
-543.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	965.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-550.0	CARBONDALE	DAVIS	COAL	4.0	972.0	
-587.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1009.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503198000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.685032 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893206 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-205.0	CARBONDALE	BRERETON	LIMESTONE	-	628.0	
-1582.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2005.0	
-1976.0			LIMESTONE	-	2399.0	
-2384.0		BASE BARLOW	LIMESTONE	-	2807.0	

MAPID: 16503227000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.684989 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.904036 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., WEST END UNIT **WELL TYPE:** Water Injection
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-384.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	815.0	
-419.0	CARBONDALE	SURVANT	COAL	1.0	850.0	
-477.0	CARBONDALE	COLCHESTER	COAL	0.5	908.0	
-537.0	CARBONDALE	DEKOVEN	COAL	0.0	968.0	
-547.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	978.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-553.0	CARBONDALE	DAVIS	COAL	4.0	984.0	
-584.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1015.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503227000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.684989 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.904036 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Water Injection
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-213.0	CARBONDALE	BRERETON	LIMESTONE	-	648.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2022.0	
-1981.0			LIMESTONE	-	2416.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2810.0	

MAPID: 16503255000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.673401 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.89495 **DATE COLLECTED:** 10 / 0 / 1958
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2805.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., WARWICK COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-397.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	828.0	
-437.0	CARBONDALE	SURVANT	COAL	1.0	868.0	
-499.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-548.0	CARBONDALE	DEKOVEN	COAL	3.0	979.0	
-567.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	998.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-575.0	CARBONDALE	DAVIS	COAL	3.0	1006.0	
-610.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1041.0	
-649.0	TRADEWATER	MT. RORAH	COAL	1.5	1080.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503255000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.673401 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89495 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2805.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1602.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2033.0	
-1981.0			LIMESTONE	-	2412.0	
-2374.0		BASE BARLOW	LIMESTONE	-	2805.0	

MAPID: 16501364000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.652385 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898607 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 498.0 **LOGGED (FT.):** 2914.0 **LOG TYPE:**

SOURCE: GARFIELD SAMUEL S **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-219.0	CARBONDALE	BRERETON	LIMESTONE	-	717.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2086.0	
-1971.0			LIMESTONE	-	2469.0	
-2416.0		BASE BARLOW	LIMESTONE	-	2914.0	

MAPID: 16501364000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.652385 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.898607 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 498.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:** Electric Log

SOURCE: GARFIELD SAMUEL S **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-147.0	CARBONDALE	DANVILLE	COAL	-	645.0	
-153.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	651.0	
-163.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	661.0	
-198.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	14.0	696.0	
-220.0	CARBONDALE	HERRIN	COAL	5.0	718.0	
-276.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	16.0	774.0	
-372.0	CARBONDALE	SPRINGFIELD	COAL	4.0	870.0	
-390.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	8.0	888.0	
-402.0	CARBONDALE	HOUCHIN CREEK	COAL	-	900.0	

MAPID: 16503151000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.666338 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.902262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 489.0 **LOGGED (FT.):** 2901.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-205.0	CARBONDALE	BRERETON	LIMESTONE	-	694.0	
-1609.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2098.0	
-1998.0			LIMESTONE	-	2487.0	
-2412.0		BASE BARLOW	LIMESTONE	-	2901.0	

MAPID: 16503151000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: AKIN **LONGITUDE:** -88.666338 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.902262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 489.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	MODESTO	PIASA	LIMESTONE	5.0	609.0	
-125.0	MODESTO		SHALE	11.0	614.0	
-136.0	CARBONDALE	DANVILLE	COAL	2.0	625.0	
-138.0	CARBONDALE		SILTY SHALE	13.0	627.0	
-151.0	CARBONDALE		CLAYSTONE	7.0	640.0	
-158.0	CARBONDALE	LAWSON	SILTY SHALE	31.0	647.0	
-189.0	CARBONDALE	LAWSON	DARK GRAY SHALE	16.0	678.0	
-205.0	CARBONDALE	HERRIN	COAL	6.0	694.0	

MAPID: 16503151000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.666338 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.902262 **DATE COLLECTED:** 12 / 0 / 1957
SURFACE ELEVATION (FT.): 489.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BURNETT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-388.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	877.0	
-417.0	CARBONDALE	SURVANT	COAL	2.5	906.0	
-486.0	CARBONDALE	COLCHESTER	COAL	0.5	975.0	
-537.0	CARBONDALE	DEKOVEN	COAL	3.0	1026.0	
-554.0	CARBONDALE	LOWER DEKOVEN	COAL	0.2	1043.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-558.0	CARBONDALE	DAVIS	COAL	3.5	1047.0	
-591.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1080.0	
-626.0	TRADEWATER	MT. RORAH	COAL	1.8	1115.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503222000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.668679 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.905918 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2904.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BURNETT-JOHNSO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-442.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	888.0	
-484.0	CARBONDALE	SURVANT	COAL	2.0	930.0	
-548.0	CARBONDALE	COLCHESTER	COAL	0.5	994.0	
-598.0	CARBONDALE	DEKOVEN	COAL	3.0	1044.0	
-611.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	1057.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-618.0	CARBONDALE	DAVIS	COAL	3.7	1064.0	
-653.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1099.0	
-694.0	TRADEWATER	MT. RORAH	COAL	2.0	1140.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503222000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.668679 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905918 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 2904.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-219.0	CARBONDALE	BRERETON	LIMESTONE	-	715.0	
-1612.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2108.0	
-1986.0			LIMESTONE	-	2482.0	
-2408.0		BASE BARLOW	LIMESTONE	-	2904.0	

MAPID: 16503256000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.661701 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.898601 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 1930.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-488.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	946.0	
-552.0	SPOON	DAVIS	UNCLASSIFIED	-	1010.0	
-1472.0	BASE OF PENN.		UNCLASSIFIED	-	1930.0	

MAPID: 16503256000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.661701 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 2859.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-200.0	CARBONDALE	BRERETON	LIMESTONE	-	658.0	
-1599.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2057.0	
-1984.0			LIMESTONE	-	2442.0	
-2401.0		BASE BARLOW	LIMESTONE	-	2859.0	

MAPID: 16503256000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.661701 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.898601 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 2859.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., ABNEY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-381.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	839.0	
-419.0	CARBONDALE	SURVANT	COAL	1.0	877.0	
-484.0	CARBONDALE	COLCHESTER	COAL	0.5	942.0	
-526.0	CARBONDALE	DEKOVEN	COAL	2.0	984.0	
-545.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1003.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-551.0	CARBONDALE	DAVIS	COAL	3.3	1009.0	
-584.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1042.0	
-625.0	TRADEWATER	MT. RORAH	COAL	2.0	1083.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503264000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.666316 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.905928 **DATE COLLECTED:** 11 / 0 / 1958
SURFACE ELEVATION (FT.): 511.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BURNETT-JOHNSO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-487.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	998.0	
-419.0	CARBONDALE	SURVANT	COAL	3.0	930.0	
-494.0	CARBONDALE	COLCHESTER	COAL	0.5	1005.0	
-534.0	CARBONDALE	DEKOVEN	COAL	3.0	1045.0	
-549.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1060.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-554.0	CARBONDALE	DAVIS	COAL	4.0	1065.0	
-579.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1090.0	
-624.0	TRADEWATER	MT. RORAH	COAL	0.5	1135.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503264000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.666316 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905928 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 511.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-206.0	CARBONDALE	BRERETON	LIMESTONE	-	717.0	
-1594.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2105.0	
-1984.0			LIMESTONE	-	2495.0	
-2389.0		BASE BARLOW	LIMESTONE	-	2900.0	

MAPID: 16500858000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: AKIN **LONGITUDE:** -88.633918 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898756 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 2916.0 **LOG TYPE:**
SOURCE: COMPTON & FOTIADES **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-228.0	CARBONDALE	BRERETON	LIMESTONE	-	710.0	
-1638.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2120.0	
-2038.0			LIMESTONE	-	2520.0	
-2434.0		BASE BARLOW	LIMESTONE	-	2916.0	

MAPID: 16500858000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.633918 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.898756 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 723.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-149.0	MODESTO	PIASA	LIMESTONE	5.0	631.0	
-154.0	MODESTO		SHALE	17.0	636.0	
-171.0	CARBONDALE	DANVILLE	COAL	2.0	653.0	
-173.0	CARBONDALE		SHALE & SANDSTONE	14.0	655.0	
-187.0	CARBONDALE		CLAYSTONE	10.0	669.0	
-197.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	679.0	
-201.0	CARBONDALE	LAWSON	SILTY SHALE	19.0	683.0	
-220.0	CARBONDALE	LAWSON	DARK GRAY SHALE	8.0	702.0	
-228.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	710.0	
-229.0	CARBONDALE	BRERETON	LIMESTONE	7.0	711.0	
-236.0	CARBONDALE	ANNA	BLACK SHALE	1.0	718.0	
-237.0	CARBONDALE	HERRIN	COAL	4.0	719.0	

MAPID: 16500858000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: AKIN **LONGITUDE:** -88.633918 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.898756 **DATE COLLECTED:** 7 / 0 / 1941

SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 1978.0 **LOG TYPE:** Electric Log

SOURCE: COMPTON & FOTIADES **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-528.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	1010.0	
-600.0	SPOON	DAVIS	UNCLASSIFIED	-	1082.0	
-1496.0	BASE OF PENN.		UNCLASSIFIED	-	1978.0	

MAPID: 16501516000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SW SW

QUADRANGLE: AKIN **LONGITUDE:** -88.631475 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.895104 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:** Electric Log

SOURCE: WILSON L F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-158.0	CARBONDALE	DANVILLE	COAL	-	628.0	
-174.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	3.0	644.0	
-193.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	663.0	
-203.0	CARBONDALE	ANVIL ROCK	SILTSTONE & SHALE	12.0	673.0	
-234.0	CARBONDALE	HERRIN	COAL	5.0	704.0	
-252.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	5.0	722.0	
-384.0	CARBONDALE	SPRINGFIELD	COAL	2.0	854.0	
-425.0	CARBONDALE	HOUCHIN CREEK	COAL	-	895.0	

MAPID: 16501516000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SW SW

QUADRANGLE: AKIN **LONGITUDE:** -88.631475 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.895104 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 708.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	MODESTO	PIASA	LIMESTONE	6.0	610.0	
-146.0	MODESTO		SHALE	14.0	616.0	
-160.0	CARBONDALE	DANVILLE	COAL	1.0	630.0	
-161.0	CARBONDALE		SILTY SHALE	15.0	631.0	
-176.0	CARBONDALE		CLAYSTONE	16.0	646.0	
-192.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	662.0	
-195.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	665.0	
-215.0	CARBONDALE	LAWSON	DARK GRAY SHALE	8.0	685.0	
-223.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	693.0	
-224.0	CARBONDALE	BRERETON	LIMESTONE	8.0	694.0	
-232.0	CARBONDALE	ANNA	BLACK SHALE	1.0	702.0	
-233.0	CARBONDALE	HERRIN	COAL	5.0	703.0	

MAPID: 16501516000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.631475 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.895104 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 2912.0 **LOG TYPE:**
SOURCE: WILSON L F **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-225.0	CARBONDALE	BRERETON	LIMESTONE	-	695.0	
-1636.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2106.0	
-2035.0			LIMESTONE	-	2505.0	
-2442.0		BASE BARLOW	LIMESTONE	-	2912.0	

MAPID: 16501516000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.631475 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.895104 **DATE COLLECTED:** 6 / 0 / 1954
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 708.0 **LOG TYPE:** Electric Log
SOURCE: WILSON L F, MANKER VIRGIL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-430.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	900.0	
-468.0	CARBONDALE	SURVANT	COAL	2.5	938.0	
-535.0	CARBONDALE	COLCHESTER	COAL	0.5	1005.0	
-577.0	CARBONDALE	DEKOVEN	COAL	1.8	1047.0	
-605.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	1075.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-615.0	CARBONDALE	DAVIS	COAL	4.0	1085.0	
-650.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1120.0	
-700.0	TRADEWATER	MT. RORAH	COAL	0.5	1170.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502460000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.622615 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.898874 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 1892.0 **LOG TYPE:** Electric Log
SOURCE: LESH, D. B. DRILLING **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-531.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	966.0	
-597.0	SPOON	DAVIS	UNCLASSIFIED	-	1032.0	
-1457.0	BASE OF PENN.		UNCLASSIFIED	-	1892.0	

MAPID: 16502460000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.622615 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898874 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2856.0 **LOG TYPE:**
SOURCE: LESH, D. B. DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-229.0	CARBONDALE	BRERETON	LIMESTONE	-	664.0	
-1623.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2058.0	
-2049.0			LIMESTONE	-	2484.0	
-2421.0		BASE BARLOW	LIMESTONE	-	2856.0	

MAPID: 16502460000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.622615 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.898874 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2856.0 **LOG TYPE:** Electric Log
SOURCE: LESH, D. B. DRILLING, MANKER VIRGIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-420.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	855.0	
-530.0	CARBONDALE	COLCHESTER	COAL	0.6	965.0	
-567.0	CARBONDALE	DEKOVEN	COAL	3.0	1002.0	
-595.0	CARBONDALE	DAVIS	COAL	4.0	1030.0	
-745.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1180.0	
-706.0	TRADEWATER	MT. RORAH	COAL	4.0	1141.0	

MAPID: 16503068000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.608983 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.897093 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 3363.0 **LOG TYPE:** Electric Log

SOURCE: LOUDON PIPELINE CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-225.0	CARBONDALE	HERRIN	COAL	6.0	652.0	
-340.0	CARBONDALE	SPRINGFIELD	COAL	7.0	767.0	
-401.0	CARBONDALE	HOUCHIN CREEK	COAL	-	828.0	

MAPID: 16503068000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.608983 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.897093 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 658.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-133.0	MODESTO	PIASA	LIMESTONE	6.0	560.0	
-139.0	MODESTO		SHALE	18.0	566.0	
-157.0	CARBONDALE	DANVILLE	COAL	2.0	584.0	
-159.0	CARBONDALE		SHALE	29.0	586.0	
-188.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	615.0	
-190.0	CARBONDALE	LAWSON	SHALE	3.0	617.0	
-193.0	CARBONDALE	LAWSON	SANDSTONE	14.0	620.0	
-207.0	CARBONDALE	LAWSON	SHALE	11.0	634.0	
-218.0	CARBONDALE	BRERETON	LIMESTONE	5.0	645.0	
-223.0	CARBONDALE	ANNA	BLACK SHALE	2.0	650.0	
-225.0	CARBONDALE	HERRIN	COAL	6.0	652.0	

MAPID: 16503068000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.608983 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.897093 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:**
SOURCE: LOUDON PIPELINE CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-218.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1595.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2022.0	
-2013.0			LIMESTONE	-	2440.0	
-2408.0		BASE BARLOW	LIMESTONE	-	2835.0	

MAPID: 16503068000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.608983 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.897093 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 1879.0 **LOG TYPE:** Electric Log
SOURCE: LOUDON PIPELINE CO **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-515.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	942.0	
-593.0	SPOON	DAVIS	UNCLASSIFIED	-	1020.0	
-1452.0	BASE OF PENN.		UNCLASSIFIED	-	1879.0	

MAPID: 16503068000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.608983 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.897093 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 658.0 **LOG TYPE:** Electric Log
SOURCE: LOUDON PIPELINE CO, VANTREASE W EST **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-403.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	830.0	
-446.0	CARBONDALE	SURVANT	COAL	1.0	873.0	
-508.0	CARBONDALE	COLCHESTER	COAL	0.6	935.0	
-560.0	CARBONDALE	DEKOVEN	COAL	3.0	987.0	
-591.0	CARBONDALE	DAVIS	COAL	4.0	1018.0	
-633.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1060.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-673.0	TRADEWATER	MT. RORAH	COAL	0.5	1100.0	

MAPID: 16503126000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.5975 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.87876 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 3386.0 **LOG TYPE:** Electric Log

SOURCE: GREAT LAKES CARBON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-166.0	CARBONDALE	HERRIN	COAL	4.0	642.0	
-294.0	CARBONDALE	SPRINGFIELD	COAL	5.0	770.0	
-349.0	CARBONDALE	HOUCHIN CREEK	COAL	-	825.0	

MAPID: 16503126000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.5975 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.87876 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 647.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-60.0	MODESTO	PIASA	LIMESTONE	4.0	536.0	
-64.0	MODESTO		SHALE	16.0	540.0	
-80.0	CARBONDALE	DANVILLE	COAL	1.0	556.0	
-81.0	CARBONDALE		SHALE	20.0	557.0	
-101.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	5.0	577.0	
-106.0	CARBONDALE	LAWSON	SILTY SHALE	6.0	582.0	
-112.0	CARBONDALE	LAWSON	SANDSTONE	45.0	588.0	
-157.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	633.0	
-158.0	CARBONDALE		CALCAREOUS SHALE	1.0	634.0	
-159.0	CARBONDALE	BRERETON	LIMESTONE	7.0	635.0	
-166.0	CARBONDALE	ANNA	BLACK SHALE	1.0	642.0	
-167.0	CARBONDALE	HERRIN	COAL	4.0	643.0	

MAPID: 16503126000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.5975 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.87876 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 2823.0 **LOG TYPE:**

SOURCE: GREAT LAKES CARBON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-158.0	CARBONDALE	BRERETON	LIMESTONE	-	634.0	
-1560.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2036.0	
-1945.0			LIMESTONE	-	2421.0	
-2347.0		BASE BARLOW	LIMESTONE	-	2823.0	

MAPID: 16503126000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.5975 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.87876 **DATE COLLECTED:** 7 / 0 / 1957

SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 1898.0 **LOG TYPE:** Electric Log

SOURCE: GREAT LAKES CARBON **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-466.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	942.0	
-544.0	SPOON	DAVIS	UNCLASSIFIED	-	1020.0	
-1422.0	BASE OF PENN.		UNCLASSIFIED	-	1898.0	

MAPID: 16503126000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.5975 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.87876 **DATE COLLECTED:** 7 / 0 / 1957
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 647.0 **LOG TYPE:** Electric Log
SOURCE: GREAT LAKES CARBON, RAGSDALE B F ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-359.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	835.0	
-397.0	CARBONDALE	SURVANT	COAL	1.0	873.0	
-461.0	CARBONDALE	COLCHESTER	COAL	0.6	937.0	
-504.0	CARBONDALE	DEKOVEN	COAL	3.0	980.0	
-534.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	1010.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-544.0	CARBONDALE	DAVIS	COAL	5.0	1020.0	
-582.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1058.0	
-622.0	TRADEWATER	MT. RORAH	COAL	1.6	1098.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500011000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.614838 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.881623 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 669.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	DANVILLE	COAL	1.5	569.0	
-107.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	589.0	
-117.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	55.0	599.0	
-180.0	CARBONDALE	HERRIN	COAL	5.5	662.0	

MAPID: 16500011000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.614838 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.881623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 667.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-68.0	MODESTO	PIASA	LIMESTONE	8.0	550.0	
-76.0	MODESTO		SHALE	11.0	558.0	
-87.0	CARBONDALE	DANVILLE	COAL	1.5	569.0	
-88.5	CARBONDALE		LIMESTONE W/ SHALE	18.5	570.5	
-107.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	589.0	
-117.0	CARBONDALE	LAWSON	SANDSTONE	49.0	599.0	
-166.0	CARBONDALE	LAWSON	SHALE	3.0	648.0	
-169.0	CARBONDALE	LAWSON	SANDSTONE	3.0	651.0	
-172.0	CARBONDALE	BRERETON	LIMESTONE	8.0	654.0	
-180.0	CARBONDALE	HERRIN	COAL	5.5	662.0	

MAPID: 16500011000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.614838 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.881623 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 482.1 **LOGGED (FT.):** 669.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC **WELL TYPE:** Coal Test

COMMENT: DATE OF 1917 UNCERTAIN AS IN DRLG LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
482.1			UNCONSOLIDATED	40.0	0.0	
442.1	BOND		COAL	0.5	40.0	
441.6	BOND		SHALE	3.5	40.5	
438.1	BOND		SANDSTONE	2.0	44.0	
436.1	BOND		SHALE	21.0	46.0	
415.1	BOND		COAL	0.5	67.0	
414.6	BOND		SHALE	21.5	67.5	
393.1	BOND		SANDSTONE	71.0	89.0	
322.1	BOND		SANDSTONE & CONGLOMERATE	2.0	160.0	CONG
320.1	BOND		SHALE	33.0	162.0	
287.1	BOND		COAL	0.5	195.0	
286.6	BOND		SHALE	11.5	195.5	
275.1	BOND		LIMESTONE	12.0	207.0	
263.1	BOND		SHALE	32.0	219.0	
231.1	BOND		BLACK SHALE	3.0	251.0	
228.1	BOND	CARTHAGE	LIMESTONE	32.0	254.0	
196.1	MODESTO	WOMAC	COAL	1.0	286.0	
195.1	MODESTO		SANDY SHALE	48.0	287.0	
147.1	MODESTO		SHALE	53.5	335.0	
93.6	MODESTO	CHAPEL	COAL	1.0	388.5	
92.6	MODESTO		LIMESTONE	9.5	389.5	
83.1	MODESTO		SANDSTONE	23.0	399.0	
60.1	MODESTO		SHALE	6.0	422.0	
54.1	MODESTO		SANDY SHALE	29.0	428.0	
25.1	MODESTO		SHALE	39.0	457.0	
-13.9	MODESTO		LIMESTONE	8.0	496.0	
-21.9	MODESTO		SHALE	8.0	504.0	
-29.9	MODESTO		BLACK SHALE	9.0	512.0	
-38.9	MODESTO		COAL	1.0	521.0	
-39.9	MODESTO		LIMESTONE	9.0	522.0	
-48.9	MODESTO		SHALE	19.0	531.0	
-67.9	MODESTO	PIASA	LIMESTONE	8.0	550.0	
-75.9	MODESTO		BLACK SHALE	2.0	558.0	
-77.9	MODESTO		SHALE	9.0	560.0	
-86.9	CARBONDALE	DANVILLE	COAL	1.5	569.0	
-88.4	CARBONDALE		LIMESTONE	4.5	570.5	
-92.9	CARBONDALE		SHALE	14.0	575.0	
-106.9	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	589.0	

-116.9	CARBONDALE	ANVIL ROCK	SANDSTONE	49.0	599.0
-165.9	CARBONDALE	ANVIL ROCK	SHALE	3.0	648.0
-168.9	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	651.0
-171.9	CARBONDALE	BRERETON	LIMESTONE	8.0	654.0
-179.9	CARBONDALE	HERRIN	COAL	5.5	662.0
-185.4	CARBONDALE		UNDERCLAY	1.5	667.5

MAPID: 16503080000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.62047 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.887917 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 2829.0 **LOG TYPE:**

SOURCE: GREAT LAKES CARBON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-188.0	CARBONDALE	BRERETON	LIMESTONE	-	684.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2072.0	
-2004.0			LIMESTONE	-	2500.0	
-2333.0		BASE BARLOW	LIMESTONE	-	2829.0	

MAPID: 16503080000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.62047 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.887917 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 3382.0 **LOG TYPE:** Electric Log

SOURCE: GREAT LAKES CARBON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	HERRIN	COAL	6.0	690.0	
-377.0	CARBONDALE	HOUCHIN CREEK	COAL	-	873.0	

MAPID: 16503080000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.62047 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.887917 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 1930.0 **LOG TYPE:** Electric Log
SOURCE: GREAT LAKES CARBON **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-494.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	990.0	
-570.0	SPOON	DAVIS	UNCLASSIFIED	-	1066.0	
-1434.0	BASE OF PENN.		UNCLASSIFIED	-	1930.0	

MAPID: 16503080000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.62047 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.887917 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 2829.0 **LOG TYPE:** Electric Log
SOURCE: GREAT LAKES CARBON, GILL HOMER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-382.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	878.0	
-419.0	CARBONDALE	SURVANT	COAL	1.0	915.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.6	985.0	
-534.0	CARBONDALE	DEKOVEN	COAL	2.0	1030.0	
-560.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	1056.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-569.0	CARBONDALE	DAVIS	COAL	4.0	1065.0	
-604.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1100.0	
-644.0	TRADEWATER	MT. RORAH	COAL	2.0	1140.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503491000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.625016 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.884216 **DATE COLLECTED:** 6 / 0 / 1965
SURFACE ELEVATION (FT.): 506.0 **LOGGED (FT.):** 2878.0 **LOG TYPE:** Electric Log
SOURCE: SAIL OIL CO., FINCH-WISE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-364.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	870.0	
-404.0	CARBONDALE	SURVANT	COAL	1.5	910.0	
-471.0	CARBONDALE	COLCHESTER	COAL	0.5	977.0	
-514.0	CARBONDALE	DEKOVEN	COAL	1.0	1020.0	
-546.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	1052.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-552.0	CARBONDALE	DAVIS	COAL	4.0	1058.0	
-584.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1090.0	
-624.0	TRADEWATER	MT. RORAH	COAL	1.3	1130.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503491000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.625016 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884216 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 506.0 **LOGGED (FT.):** 2878.0 **LOG TYPE:**
SOURCE: SAIL OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-88.0	CARBONDALE	BRERETON	LIMESTONE	-	594.0	
-1571.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2077.0	
-1997.0			LIMESTONE	-	2503.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2878.0	

MAPID: 16500012000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2428' N line, 2428' E line

QUADRANGLE: AKIN **LONGITUDE:** -88.641354 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.885532 **DATE COLLECTED:** 3 / 0 / 1920

SURFACE ELEVATION (FT.): 492.7 **LOGGED (FT.):** 890.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
492.7			UNCONSOLIDATED	22.5	0.0	
470.2	BOND		SANDSTONE/SHALE	197.5	22.5	
272.7			LIMESTONE	10.0	220.0	
262.7	MODESTO		SHALE	40.0	230.0	
222.7	MODESTO	MACOUPIN	LIMESTONE	6.0	270.0	UNCERTAIN CORRELATION
216.7	MODESTO		SHALE	20.0	276.0	
196.7	MODESTO	WOMAC	COAL	1.0	296.0	
195.7	MODESTO		SHALE	102.5	297.0	
93.2	MODESTO	CHAPEL	COAL	1.3	399.5	
91.9	MODESTO		LIMESTONE	4.3	400.8	
87.7	MODESTO		SANDSTONE	48.0	405.0	
39.7	MODESTO		SHALE	55.0	453.0	
-15.3	MODESTO		LIMESTONE	4.0	508.0	
-19.3	MODESTO		SHALE	6.0	512.0	
-25.3	MODESTO		BLACK SHALE	10.0	518.0	
-35.3	MODESTO		SHALE	7.5	528.0	
-42.8	MODESTO		COAL	0.9	535.5	
-43.7	MODESTO		LIMESTONE	7.6	536.4	
-51.3	MODESTO		SHALE	20.0	544.0	
-71.3	MODESTO		BLACK SHALE	4.0	564.0	
-75.3	MODESTO		COAL	0.3	568.0	
-75.6	MODESTO		SHALE	2.7	568.3	
-78.3	MODESTO		LIMESTONE	4.0	571.0	
-82.3	MODESTO		BLACK SHALE	9.0	575.0	
-91.3	MODESTO		SHALE	3.0	584.0	
-94.3	CARBONDALE	DANVILLE	COAL	1.6	587.0	
-95.9	CARBONDALE		SHALE	1.4	588.6	
-97.3	CARBONDALE		SANDSTONE	3.0	590.0	
-100.3	CARBONDALE		SHALE	4.0	593.0	
-104.3	CARBONDALE		SANDSTONE	6.0	597.0	
-110.3	CARBONDALE		LIMESTONE	10.0	603.0	
-120.3	CARBONDALE		SANDSTONE	49.0	613.0	
-169.3	CARBONDALE	BRERETON	LIMESTONE	3.0	662.0	
-172.3	CARBONDALE	ANNA	BLACK SHALE	3.8	665.0	
-176.1	CARBONDALE	HERRIN	COAL	6.3	668.8	
-182.5	CARBONDALE		UNDERCLAY	3.8	675.2	
-186.3	CARBONDALE		LIMESTONE	5.0	679.0	
-191.3	CARBONDALE		SHALE	9.0	684.0	
-200.3	CARBONDALE		SANDSTONE	9.0	693.0	

-209.3	CARBONDALE		SHALE	138.0	702.0	#5 COAL MISSING - GALATIA CHANNEL
-347.3	CARBONDALE		SANDSTONE	11.0	840.0	
-358.3	CARBONDALE	HANOVER	LIMESTONE	5.0	851.0	
-363.3	CARBONDALE	EXCELLO	BLACK SHALE	6.0	856.0	
-369.3	CARBONDALE	HOUCHIN CREEK	COAL	2.1	862.0	
-371.4	CARBONDALE		UNDERCLAY	3.9	864.1	
-375.3	CARBONDALE		SHALE	13.0	868.0	
-388.3	CARBONDALE		SANDSTONE	9.0	881.0	

MAPID: 16500012000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2428' N line, 2428' E line

QUADRANGLE: AKIN **LONGITUDE:** -88.641354 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 493.0 **LOGGED (FT.):** 675.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-78.0	MODESTO	PIASA	LIMESTONE	4.0	571.0	
-82.0	MODESTO		GRAY SHALE	12.0	575.0	
-94.0	CARBONDALE	DANVILLE	COAL	1.6	587.0	
-95.6	CARBONDALE		SHALE & SANDSTONE	14.4	588.6	
-110.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	603.0	
-120.0	CARBONDALE	LAWSON	SANDSTONE	49.0	613.0	
-169.0	CARBONDALE	BRERETON	LIMESTONE	3.0	662.0	
-172.0	CARBONDALE	ANNA	DARK GRAY SHALE	3.8	665.0	
-176.0	CARBONDALE	HERRIN	COAL	6.3	669.0	

MAPID: 16500012000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2428' N line, 2428' E line

QUADRANGLE: AKIN **LONGITUDE:** -88.641354 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.885532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 493.0 **LOGGED (FT.):** 890.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-94.0	CARBONDALE	DANVILLE	COAL	1.6	587.0	
-97.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	13.0	590.0	
-110.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	603.0	
-120.0	CARBONDALE	ANVIL ROCK		49.0	613.0	
-176.0	CARBONDALE	HERRIN	COAL	6.3	669.0	
-369.0	CARBONDALE	HOUCHIN CREEK	COAL	2.1	862.0	

MAPID: 16500012000C **VERSION:** 4 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2428' N line, 2428' E line

QUADRANGLE: AKIN **LONGITUDE:** -88.641354 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.885532 **DATE COLLECTED:** 3 / 0 / 1920

SURFACE ELEVATION (FT.): 492.7 **LOGGED (FT.):** 862.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: DEPTH ADJUSTED BY 28 FT IN UNIT 21 TO TD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
492.7			UNCONSOLIDATED	22.5	0.0	
470.2	BOND		SANDSTONE	7.5	22.5	
462.7	BOND		SANDY SHALE	3.0	30.0	
459.7	BOND		SHALE	25.0	33.0	
434.7	BOND		SHALE	45.0	58.0	
389.7	BOND		SANDSTONE	22.0	103.0	W/SH PARTING
367.7	BOND		SANDY SHALE	2.8	125.0	
364.9	BOND		SANDSTONE	84.2	127.8	
280.7	BOND		SHALE	8.0	212.0	
272.7	BOND	CARTHAGE	LIMESTONE	10.0	220.0	
262.7	MODESTO		SHALE	40.0	230.0	
222.7	MODESTO		LIMESTONE	6.0	270.0	
216.7	MODESTO		SHALE	4.0	276.0	
212.7	MODESTO		SANDY SHALE	16.0	280.0	
196.7	MODESTO	WOMAC	COAL	1.0	296.0	
195.7	MODESTO		SHALE	7.0	297.0	
188.7	MODESTO		SANDY SHALE	17.0	304.0	
171.7	MODESTO		SHALE	10.0	321.0	BLUE
161.7	MODESTO		SHALE	28.0	331.0	
133.7	MODESTO		SHALE	12.5	359.0	
121.2	MODESTO	CHAPEL	COAL	1.3	371.5	DEPTH ADJUSTED TO TD
119.9	MODESTO		LIMESTONE	4.3	372.8	
115.7	MODESTO		SANDSTONE	48.0	377.0	
67.7	MODESTO		SHALE	55.0	425.0	BLUE
12.7	MODESTO		LIMESTONE	4.0	480.0	
8.7	MODESTO		SANDY SHALE	6.0	484.0	
2.7	MODESTO		BLACK SHALE	10.0	490.0	
-7.3	MODESTO		SHALE	7.5	500.0	
-14.8	MODESTO		COAL	0.9	507.5	
-15.7	MODESTO		LIMESTONE	7.6	508.4	
-23.3	MODESTO		SHALE	20.0	516.0	
-43.3	MODESTO		BLACK SHALE	4.0	536.0	
-47.3	MODESTO		COAL	0.3	540.0	
-47.6	MODESTO		SHALE	2.8	540.3	
-50.3	MODESTO	PIASA	LIMESTONE	4.0	543.0	
-54.3	MODESTO		BLACK SHALE	9.0	547.0	
-63.3	MODESTO		SHALE	3.0	556.0	BLUE
-66.3	CARBONDALE	DANVILLE	COAL	1.6	559.0	
-67.9	CARBONDALE		SHALE	1.4	560.6	

-69.3	CARBONDALE		SANDSTONE	3.0	562.0	
-72.3	CARBONDALE		SHALE	4.0	565.0	
-76.3	CARBONDALE		SANDSTONE	6.0	569.0	
-82.3	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	575.0	
-92.3	CARBONDALE	ANVIL ROCK	SANDSTONE	49.0	585.0	
-141.3	CARBONDALE	BRERETON	LIMESTONE	3.0	634.0	
-144.3	CARBONDALE		SHALE	3.8	637.0	BLUE
-148.1	CARBONDALE	HERRIN	COAL	6.3	640.8	
-154.5	CARBONDALE		UNDERCLAY	3.8	647.2	
-158.3	CARBONDALE		LIMESTONE	5.0	651.0	
-163.3	CARBONDALE		SHALE	9.0	656.0	
-172.3	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	665.0	
-174.3	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	667.0	W/SH PARTING
-181.3	CARBONDALE	DYKERSBURG	SANDY SHALE	120.0	674.0	
-301.3	CARBONDALE	DYKERSBURG	SHALE	9.0	794.0	SPRINGFIELD COAL MISSING
-310.3	CARBONDALE		SHALE	9.0	803.0	BLUE
-319.3	CARBONDALE		SANDSTONE	11.0	812.0	
-330.3	CARBONDALE	HANOVER	LIMESTONE	5.0	823.0	
-335.3	CARBONDALE	EXCELLO	BLACK SHALE	6.0	828.0	
-341.3	CARBONDALE	HOUCHIN CREEK	COAL	2.1	834.0	
-343.4	CARBONDALE		UNDERCLAY	3.9	836.1	
-347.3	CARBONDALE		SANDY SHALE	13.0	840.0	
-360.3	CARBONDALE		SANDSTONE	9.0	853.0	

MAPID: 16502761000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: AKIN **LONGITUDE:** -88.634019 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.887749 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 515.0 **LOGGED (FT.):** 2916.0 **LOG TYPE:**

SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	BRERETON	LIMESTONE	-	705.0	
-1593.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2108.0	
-2005.0			LIMESTONE	-	2520.0	
-2401.0		BASE BARLOW	LIMESTONE	-	2916.0	

MAPID: 16502761000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.634019 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.887749 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 515.0 **LOGGED (FT.):** 3406.0 **LOG TYPE:** Electric Log
SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-191.0	CARBONDALE	HERRIN	COAL	6.0	706.0	
-337.0	CARBONDALE	SPRINGFIELD	COAL	-	852.0	
-379.0	CARBONDALE	HOUCHIN CREEK	COAL	-	894.0	

MAPID: 16502761000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.634019 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.887749 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 515.0 **LOGGED (FT.):** 2916.0 **LOG TYPE:** Electric Log
SOURCE: MCKELVY & SIPOHA DRLG., TATE N E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-385.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	900.0	
-420.0	CARBONDALE	SURVANT	COAL	2.0	935.0	
-490.0	CARBONDALE	COLCHESTER	COAL	0.5	1005.0	
-530.0	CARBONDALE	DEKOVEN	COAL	1.8	1045.0	
-560.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1075.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-567.0	CARBONDALE	DAVIS	COAL	5.0	1082.0	
-600.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1115.0	
-640.0	TRADEWATER	MT. RORAH	COAL	1.5	1155.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16524156000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.640959 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.887674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 1950.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-494.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	1008.0	
-598.0	SPOON	DAVIS	UNCLASSIFIED	-	1112.0	
-1436.0	BASE OF PENN.		UNCLASSIFIED	-	1950.0	

MAPID: 16500850000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 660' N line, 330' W line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.668806 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.883129 **DATE COLLECTED:** 1 / 0 / 1942
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2823.0 **LOG TYPE:** Electric Log
SOURCE: SEABOARD OIL OF DE, GALBRAITH S C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-384.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	839.0	
-415.0	CARBONDALE	SURVANT	COAL	1.5	870.0	
-478.0	CARBONDALE	COLCHESTER	COAL	0.6	933.0	
-528.0	CARBONDALE	DEKOVEN	COAL	0.6	983.0	
-551.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1006.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-559.0	CARBONDALE	DAVIS	COAL	4.0	1014.0	
-579.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1034.0	
-608.0	TRADEWATER	MT. RORAH	COAL	1.5	1063.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500850000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 660' N line, 330' W line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.668806 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.883129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2823.0 **LOG TYPE:**
SOURCE: SEABOARD OIL OF DE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-185.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2042.0	
-1963.0			LIMESTONE	-	2418.0	
-2368.0		BASE BARLOW	LIMESTONE	-	2823.0	

MAPID: 16503067000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.65718 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.883949 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 3280.0 **LOG TYPE:** Electric Log

SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-186.0	CARBONDALE	HERRIN	COAL	5.0	650.0	
-226.0	CARBONDALE	BRIAR HILL	COAL	-	690.0	
-306.0	CARBONDALE	SPRINGFIELD	COAL	-	770.0	
-364.0	CARBONDALE	HOUCHIN CREEK	COAL	-	828.0	

MAPID: 16503067000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.65718 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.883949 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	MODESTO	PIASA	LIMESTONE	5.0	549.0	
-90.0	MODESTO		GRAY SHALE	10.0	554.0	
-100.0	CARBONDALE	DANVILLE	COAL	1.0	564.0	
-101.0	CARBONDALE		SHALE & SANDSTONE	26.0	565.0	
-127.0	CARBONDALE	LAWSON	SILTY SHALE	5.0	591.0	
-132.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.0	596.0	
-137.0	CARBONDALE	LAWSON	SANDSTONE	40.0	601.0	
-177.0	CARBONDALE		SHALE	3.0	641.0	
-180.0	CARBONDALE	BRERETON	LIMESTONE	5.0	644.0	
-185.0	CARBONDALE	ANNA	BLACK SHALE	2.0	649.0	
-187.0	CARBONDALE	HERRIN	COAL	5.0	651.0	

MAPID: 16503067000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.65718 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.883949 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2836.0 **LOG TYPE:**

SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	BRERETON	LIMESTONE	-	643.0	
-1566.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2030.0	
-1952.0			LIMESTONE	-	2416.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2836.0	

MAPID: 16503067000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: AKIN **LONGITUDE:** -88.65718 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.883949 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 1883.0 **LOG TYPE:** Electric Log

SOURCE: GENTLES, ALBERT **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-491.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	955.0	
-545.0	SPOON	DAVIS	UNCLASSIFIED	-	1009.0	
-1419.0	BASE OF PENN.		UNCLASSIFIED	-	1883.0	

MAPID: 16503067000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.65718 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.883949 **DATE COLLECTED:** 11 / 0 / 1956
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Electric Log
SOURCE: GENTLES, ALBERT, ANDERSON G W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-370.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	834.0	
-413.0	CARBONDALE	SURVANT	COAL	1.0	877.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.5	953.0	
-514.0	CARBONDALE	DEKOVEN	COAL	1.5	978.0	
-536.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1000.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-544.0	CARBONDALE	DAVIS	COAL	4.0	1008.0	
-576.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1040.0	
-613.0	TRADEWATER	MT. RORAH	COAL	1.8	1077.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500013000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.683948 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.892287 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 744.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-149.0	CARBONDALE	DANVILLE	COAL	0.0	569.0	
-158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	578.0	
-163.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	10.0	583.0	
-210.0	CARBONDALE	HERRIN	COAL	5.7	630.0	
-318.0	CARBONDALE	SPRINGFIELD	COAL	4.4	738.0	

MAPID: 16500013000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.683948 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.892287 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 635.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.5	CARBONDALE	DANVILLE	COAL	2.0	557.5	
-139.5	CARBONDALE		SHALE	2.0	559.5	
-141.5	CARBONDALE	GALUM	LIMESTONE	2.0	561.5	
-143.5	CARBONDALE		SHALE	6.0	563.5	
-149.5	CARBONDALE	ALLENBY	COAL	0.2	569.5	
-149.7	CARBONDALE		SHALE	8.8	569.7	
-158.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	578.5	
-163.5	CARBONDALE	LAWSON	SANDSTONE	4.0	583.5	
-167.5	CARBONDALE	LAWSON	SHALE	3.0	587.5	
-170.5	CARBONDALE	LAWSON	SANDSTONE	3.0	590.5	
-173.5	CARBONDALE	LAWSON	SILTY SHALE	18.0	593.5	
-191.5	CARBONDALE	LAWSON	GRAY SHALE	8.0	611.5	
-199.5	CARBONDALE		BLACK SHALE	2.0	619.5	
-201.5	CARBONDALE	BRERETON	LIMESTONE	7.0	621.5	
-208.5	CARBONDALE	ANNA	BLACK SHALE	1.5	628.5	
-210.0	CARBONDALE	HERRIN	COAL	5.7	630.0	

MAPID: 16500013000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.683948 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.892287 **DATE COLLECTED:** 4 / 0 / 1920

SURFACE ELEVATION (FT.): 419.6 **LOGGED (FT.):** 743.5 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: NO LITHOLOGY GIVEN IN UNIT 39

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.6			UNCONSOLIDATED	41.0	0.0	
378.6			SHALE	26.5	41.0	
352.1			SANDSTONE	1.5	67.5	
350.6			SHALE	2.4	69.0	
348.2			COAL	1.6	71.4	
346.6			SHALE	4.0	73.0	
342.6			SHALE	9.0	77.0	
333.6			SANDY SHALE	61.0	86.0	
272.6			SANDSTONE	14.0	147.0	
258.6			SHALE	10.0	161.0	BLUE
248.6			SHALE	6.0	171.0	
242.6			COAL	1.0	177.0	
241.6			SHALE	58.0	178.0	
183.6			LIMESTONE	5.0	236.0	
178.6			SHALE	19.0	241.0	BLUE
159.6			SHALE	6.4	260.0	
153.2			COAL	1.6	266.4	
151.6			SHALE	7.0	268.0	
144.6			SANDY SHALE	14.0	275.0	
130.6			SHALE	58.0	289.0	
72.6			LIMESTONE	1.0	347.0	
71.6			SHALE	24.5	348.0	
47.1			COAL	1.3	372.5	
45.8			SHALE	5.3	373.8	
40.6			SANDSTONE	3.0	379.0	W/SH PARTING
37.6			SANDY SHALE	9.0	382.0	
28.6			SHALE	29.0	391.0	BLUE
-0.4			SANDY SHALE	9.0	420.0	
-9.4			SHALE	46.5	429.0	BLUE
-55.9			COAL	0.3	475.5	
-56.2	MODESTO		LIMESTONE	13.3	475.8	
-69.4	MODESTO		SHALE	14.0	489.0	BLUE
-83.4	MODESTO		BLACK SHALE	4.5	503.0	
-87.9	MODESTO		COAL	1.5	507.5	
-89.4	MODESTO		UNDERCLAY	3.0	509.0	
-92.4	MODESTO		LIMESTONE	2.0	512.0	
-94.4	MODESTO		SANDSTONE	2.0	514.0	
-96.4	MODESTO		SANDY SHALE	5.0	516.0	
-101.4	MODESTO		UNCLASSIFIED	10.0	521.0	

-111.4	MODESTO		SHALE	11.0	531.0	BLUE
-122.4	MODESTO		COAL	0.6	542.0	
-123.0	MODESTO		UNDERCLAY	1.4	542.6	
-124.4	MODESTO		SANDSTONE	4.0	544.0	
-128.4	MODESTO		SHALE	9.0	548.0	BLUE
-137.4	CARBONDALE	DANVILLE	COAL	2.0	557.0	
-139.4	CARBONDALE		SHALE	2.0	559.0	
-141.4	CARBONDALE		LIMESTONE	2.0	561.0	
-143.4	CARBONDALE		SANDY SHALE	3.0	563.0	
-146.4	CARBONDALE		SHALE	3.0	566.0	
-149.4	CARBONDALE	ALLENBY	COAL	0.2	569.0	
-149.6	CARBONDALE		SHALE	8.8	569.2	
-158.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	578.0	
-163.4	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	583.0	
-167.4	CARBONDALE	ANVIL ROCK	SHALE	3.0	587.0	
-170.4	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	590.0	
-173.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	593.0	
-191.4	CARBONDALE	ANVIL ROCK	SHALE	8.0	611.0	BLUE
-199.4	CARBONDALE		BLACK SHALE	2.0	619.0	
-201.4	CARBONDALE	BRERETON	LIMESTONE	7.0	621.0	
-208.4	CARBONDALE	ANNA	BLACK SHALE	1.5	628.0	
-209.9	CARBONDALE	HERRIN	COAL	5.7	629.5	
-215.6	CARBONDALE		UNDERCLAY	2.8	635.2	
-218.4	CARBONDALE	ST. DAVID	LIMESTONE	11.0	638.0	
-229.4	CARBONDALE	DYKERSBURG	SANDY SHALE	78.0	649.0	
-307.4	CARBONDALE	DYKERSBURG	SHALE	11.0	727.0	BLUE
-318.4	CARBONDALE	SPRINGFIELD	COAL	4.4	738.0	
-322.8	CARBONDALE		UNDERCLAY	1.1	742.4	

MAPID: 16501365000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: AKIN **LONGITUDE:** -88.682742 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.885918 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2792.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-184.0	CARBONDALE	BRERETON	LIMESTONE	-	600.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2003.0	
-1972.0			LIMESTONE	-	2388.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2792.0	

MAPID: 16502672000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.675748 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.884071 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE & LOBREE LISZ, WEIGHT THOMAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-364.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	788.0	
-398.0	CARBONDALE	SURVANT	COAL	1.0	822.0	
-467.0	CARBONDALE	COLCHESTER	COAL	0.5	891.0	
-514.0	CARBONDALE	DEKOVEN	COAL	2.0	938.0	
-531.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	955.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-540.0	CARBONDALE	DAVIS	COAL	4.0	964.0	
-576.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	
-610.0	TRADEWATER	MT. RORAH	COAL	0.5	1034.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502672000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: AKIN **LONGITUDE:** -88.675748 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**
SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-180.0	CARBONDALE	BRERETON	LIMESTONE	-	604.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1963.0			LIMESTONE	-	2387.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16502742000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.687397 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891401 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2809.0 **LOG TYPE:**
SOURCE: TREMONT PETER C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-192.0	CARBONDALE	BRERETON	LIMESTONE	-	617.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2004.0	
-1973.0			LIMESTONE	-	2398.0	
-2384.0		BASE BARLOW	LIMESTONE	-	2809.0	

MAPID: 16503117000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.675717 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.891317 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., HARRIS COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-372.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	808.0	
-408.0	CARBONDALE	SURVANT	COAL	0.0	844.0	
-473.0	CARBONDALE	COLCHESTER	COAL	0.5	909.0	
-512.0	CARBONDALE	DEKOVEN	COAL	2.0	948.0	
-532.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	968.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-539.0	CARBONDALE	DAVIS	COAL	4.0	975.0	
-573.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1009.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503117000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.675717 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891317 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-182.0	CARBONDALE	BRERETON	LIMESTONE	-	618.0	
-1595.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2031.0	
-1961.0			LIMESTONE	-	2397.0	
-2374.0		BASE BARLOW	LIMESTONE	-	2810.0	

MAPID: 16503130000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.678079 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891334 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-187.0	CARBONDALE	BRERETON	LIMESTONE	-	615.0	
-1593.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2021.0	
-1967.0			LIMESTONE	-	2395.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16503130000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.678079 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.891334 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 3161.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	HERRIN	COAL	6.0	624.0	
-305.0	CARBONDALE	SPRINGFIELD	COAL	4.0	733.0	
-370.0	CARBONDALE	HOUCHIN CREEK	COAL	-	798.0	

MAPID: 16503131000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.680378 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.891351 **DATE COLLECTED:** 9 / 0 / 1957
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2799.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., SMITH RALPH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-384.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	805.0	
-422.0	CARBONDALE	SURVANT	COAL	1.0	843.0	
-487.0	CARBONDALE	COLCHESTER	COAL	0.5	908.0	
-530.0	CARBONDALE	DEKOVEN	COAL	1.8	951.0	
-547.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	968.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-553.0	CARBONDALE	DAVIS	COAL	4.0	974.0	
-593.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1014.0	
-633.0	TRADEWATER	MT. RORAH	COAL	1.5	1054.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503131000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.680378 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891351 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2799.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	BRERETON	LIMESTONE	-	620.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1954.0			LIMESTONE	-	2375.0	
-2378.0		BASE BARLOW	LIMESTONE	-	2799.0	

MAPID: 16503133000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.68274 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891368 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2797.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-205.0	CARBONDALE	BRERETON	LIMESTONE	-	625.0	
-1580.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1962.0			LIMESTONE	-	2382.0	
-2377.0		BASE BARLOW	LIMESTONE	-	2797.0	

MAPID: 16503140000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.682739 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889554 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	BRERETON	LIMESTONE	-	618.0	
-1581.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1970.0			LIMESTONE	-	2389.0	
-2388.0		BASE BARLOW	LIMESTONE	-	2807.0	

MAPID: 16503161000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.685038 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.889565 **DATE COLLECTED:** 11 / 0 / 1957
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1855.0 **LOG TYPE:** Electric Log
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-487.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	902.0	
-557.0	SPOON	DAVIS	UNCLASSIFIED	-	972.0	
-1440.0	BASE OF PENN.		UNCLASSIFIED	-	1855.0	

MAPID: 16503161000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.685038 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889565 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2802.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	BRERETON	LIMESTONE	-	616.0	
-1592.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2007.0	
-1975.0			LIMESTONE	-	2390.0	
-2387.0		BASE BARLOW	LIMESTONE	-	2802.0	

MAPID: 16503173000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 220' S line, 330' E line of NE NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.685039 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2809.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-206.0	CARBONDALE	BRERETON	LIMESTONE	-	622.0	
-1589.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2005.0	
-1977.0			LIMESTONE	-	2393.0	
-2393.0		BASE BARLOW	LIMESTONE	-	2809.0	

MAPID: 16503197000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.671077 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887667 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2821.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1593.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2028.0	
-1973.0			LIMESTONE	-	2408.0	
-2386.0		BASE BARLOW	LIMESTONE	-	2821.0	

MAPID: 16503236000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.685041 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2802.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-193.0	CARBONDALE	BRERETON	LIMESTONE	-	605.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1998.0	
-1973.0			LIMESTONE	-	2385.0	
-2390.0		BASE BARLOW	LIMESTONE	-	2802.0	

MAPID: 16503253000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.682687 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887731 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2791.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-192.0	CARBONDALE	BRERETON	LIMESTONE	-	607.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1963.0			LIMESTONE	-	2378.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2791.0	

MAPID: 16503269000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.687392 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2808.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-187.0	CARBONDALE	BRERETON	LIMESTONE	-	605.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2005.0	
-1982.0			LIMESTONE	-	2400.0	
-2390.0		BASE BARLOW	LIMESTONE	-	2808.0	

MAPID: 16503322000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.687396 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887757 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	BRERETON	LIMESTONE	-	618.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2012.0	
-1971.0			LIMESTONE	-	2395.0	
-2391.0		BASE BARLOW	LIMESTONE	-	2815.0	

MAPID: 16503328000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.682752 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.878649 **DATE COLLECTED:** 8 / 0 / 1960
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2809.0 **LOG TYPE:** Electric Log
SOURCE: WILLHITE J N, WEIGHT THOMAS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-359.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	772.0	
-402.0	CARBONDALE	SURVANT	COAL	1.8	815.0	
-467.0	CARBONDALE	COLCHESTER	COAL	0.6	880.0	
-522.0	CARBONDALE	DEKOVEN	COAL	4.0	935.0	
-547.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	960.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-555.0	CARBONDALE	DAVIS	COAL	4.5	968.0	
-577.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	990.0	
-617.0	TRADEWATER	MT. RORAH	COAL	1.3	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503328000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.682752 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878649 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2809.0 **LOG TYPE:**
SOURCE: WILLHITE J N **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	BRERETON	LIMESTONE	-	592.0	
-1582.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1995.0	
-1966.0			LIMESTONE	-	2379.0	
-2396.0		BASE BARLOW	LIMESTONE	-	2809.0	

MAPID: 16501366000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.691955 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884109 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:**
SOURCE: MACDONELL CO. OF LIMA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	619.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2010.0	
-1996.0			LIMESTONE	-	2420.0	
-2396.0		BASE BARLOW	LIMESTONE	-	2820.0	

MAPID: 16501366000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: AKIN **LONGITUDE:** -88.691955 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.884109 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 3293.0 **LOG TYPE:** Electric Log

SOURCE: MACDONELL CO. OF LIMA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	DANVILLE	COAL	-	566.0	
-154.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	578.0	
-165.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	589.0	
-168.0	CARBONDALE	ANVIL ROCK	SILTSTONE & SHALE	15.0	592.0	
-200.0	CARBONDALE	HERRIN	COAL	5.0	624.0	
-300.0	CARBONDALE	SPRINGFIELD	COAL	5.0	724.0	
-334.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	34.0	758.0	
-372.0	CARBONDALE	HOUCHIN CREEK	COAL	-	796.0	

MAPID: 16501366000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: AKIN **LONGITUDE:** -88.691955 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.884109 **DATE COLLECTED:** 1 / 0 / 1951

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:** Electric Log

SOURCE: MACDONELL CO. OF LIMA, NEIGHBORS R ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-376.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	800.0	
-414.0	CARBONDALE	SURVANT	COAL	2.0	838.0	
-482.0	CARBONDALE	COLCHESTER	COAL	0.5	906.0	
-526.0	CARBONDALE	DEKOVEN	COAL	2.5	950.0	
-536.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	960.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-548.0	CARBONDALE	DAVIS	COAL	3.5	972.0	
-588.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1012.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-626.0	TRADEWATER	MT. RORAH	COAL	3.5	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501367000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: AKIN **LONGITUDE:** -88.69884 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878647 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:**
SOURCE: BARTMES, ROSS **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-177.0	CARBONDALE	BRERETON	LIMESTONE	-	590.0	
-1582.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1995.0	
-1997.0			LIMESTONE	-	2410.0	
-2397.0		BASE BARLOW	LIMESTONE	-	2810.0	

MAPID: 16501513000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2600' S line, 2600' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.697728 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.884914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 798.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-69.0	CARBONDALE	DANVILLE	COAL	2.0	499.0	
-90.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	520.0	
-105.0	CARBONDALE	ANVIL ROCK		43.0	535.0	
-155.0	CARBONDALE	HERRIN	COAL	5.3	585.0	
-194.0	CARBONDALE	VERMILIONVILLE		9.0	624.0	
-362.0	CARBONDALE	HOUCHIN CREEK	COAL	1.6	792.0	

MAPID: 16501513000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2600' S line, 2600' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.697728 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.884914 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 590.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.8	MODESTO	PIASA	LIMESTONE	4.0	480.8	
-54.8	MODESTO		SHALE	14.0	484.8	
-68.8	CARBONDALE	DANVILLE	COAL	2.0	498.8	
-70.8	CARBONDALE		SHALE	19.0	500.8	
-89.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	519.8	
-94.8	CARBONDALE	LAWSON	SILTY SHALE	10.0	524.8	
-104.8	CARBONDALE	LAWSON	SANDSTONE	43.0	534.8	
-147.8	CARBONDALE	BRERETON	LIMESTONE	6.0	577.8	
-153.8	CARBONDALE	ANNA	BLACK SHALE	1.2	583.8	
-155.0	CARBONDALE	HERRIN	COAL	5.3	585.0	

MAPID: 16501513000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2600' S line, 2600' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.697728 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.884914 **DATE COLLECTED:** 0 / 0 / 1921

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 798.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT: DEPTH OFF IN UNIT 53 BY 2' AS IN DRLG LG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	49.0	0.0	
381.0			SHALE	11.0	49.0	
370.0			SAND	30.0	60.0	
340.0			SANDY SHALE	34.0	90.0	
306.0			COAL	0.7	124.0	
305.3			SHALE	3.3	124.7	
302.0			SHALE	1.0	128.0	W/COAL STREAKS
301.0			SHALE	5.0	129.0	
296.0			LIMESTONE	3.0	134.0	
293.0			CALCAREOUS SHALE	4.0	137.0	CALC
289.0			SHALE	3.0	141.0	
286.0			LIMESTONE	2.0	144.0	
284.0			SHALE	32.0	146.0	
252.0			SHALE	4.0	178.0	W/COAL STREAKS
248.0			SHALE	7.0	182.0	
241.0			SANDSTONE	8.0	189.0	
233.0			CALCAREOUS SHALE	13.0	197.0	CALC
220.0			COAL	1.3	210.0	
218.7			SHALE	2.7	211.3	
216.0			SANDY SHALE	54.0	214.0	
162.0			SHALE	53.2	268.0	
108.8			COAL	1.3	321.2	
107.5			UNDERCLAY	0.5	322.5	
107.0			LIMESTONE	1.0	323.0	
106.0			SANDSTONE	6.0	324.0	
100.0			SANDY SHALE	15.0	330.0	
85.0			SHALE	23.0	345.0	
62.0			SANDY SHALE	2.0	368.0	
60.0			LIMESTONE	50.0	370.0	W/CLAY STREAKS
10.0			SANDY SHALE	6.0	420.0	
4.0	MODESTO		CLAYSTONE	2.0	426.0	
2.0	MODESTO		SHALE	20.0	428.0	
-18.0	MODESTO		COAL	1.0	448.0	
-19.0	MODESTO		SHALE	3.0	449.0	
-22.0	MODESTO		LIMESTONE	1.0	452.0	
-23.0	MODESTO		SANDY SHALE	4.0	453.0	
-27.0	MODESTO		CALCAREOUS SHALE	5.0	457.0	CALC
-32.0	MODESTO		LIMESTONE	19.0	462.0	W/CLAY STREAKS
-51.0	MODESTO	PIASA	LIMESTONE	4.0	481.0	

-55.0	MODESTO		SHALE	14.0	485.0	
-69.0	CARBONDALE	DANVILLE	COAL	2.0	499.0	
-71.0	CARBONDALE		SHALE	6.0	501.0	
-77.0	CARBONDALE		SANDY SHALE	5.0	507.0	
-82.0	CARBONDALE		SHALE	6.0	512.0	
-88.0	CARBONDALE		CALCAREOUS SHALE	2.0	518.0	CALC
-90.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	520.0	
-95.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	525.0	
-105.0	CARBONDALE	ANVIL ROCK	SANDSTONE	43.0	535.0	
-148.0	CARBONDALE	BRERETON	LIMESTONE	6.0	578.0	
-154.0	CARBONDALE		SHALE	1.2	584.0	W/COAL STREAKS
-155.2	CARBONDALE	HERRIN	COAL	5.3	585.2	
-160.4	CARBONDALE		UNDERCLAY	2.6	590.4	
-163.0	CARBONDALE		SHALE	29.0	593.0	DEPTH OFF BY 2'
-194.0	CARBONDALE		SANDSTONE	11.0	624.0	ORG LOG READS 9.00 FOR THICKNESS
-203.0	CARBONDALE		SANDY SHALE	58.0	633.0	
-261.0	CARBONDALE		SHALE	20.0	691.0	SPRINGFIELD COAL MISSING
-281.0	CARBONDALE		SANDY SHALE	79.0	711.0	
-360.0	CARBONDALE		SHALE	2.0	790.0	W/COAL STREAKS
-362.0	CARBONDALE		SANDY SHALE	0.5	792.0	
-362.5	CARBONDALE		COAL	1.7	792.5	
-364.2	CARBONDALE		CALCAREOUS SHALE	3.8	794.2	CALC

MAPID: 16502582000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: AKIN **LONGITUDE:** -88.698789 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.891357 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 1880.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-483.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	960.0	
-552.0	SPOON	DAVIS	UNCLASSIFIED	-	1029.0	
-1403.0	BASE OF PENN.		UNCLASSIFIED	-	1880.0	

MAPID: 16502582000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698789 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891357 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 2852.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	BRERETON	LIMESTONE	-	676.0	
-1575.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2052.0	
-1963.0			LIMESTONE	-	2440.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2852.0	

MAPID: 16502582000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698789 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.891357 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 2852.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., GILL COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-383.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	860.0	
-423.0	CARBONDALE	SURVANT	COAL	2.0	900.0	
-483.0	CARBONDALE	COLCHESTER	COAL	0.5	960.0	
-533.0	CARBONDALE	DEKOVEN	COAL	3.0	1010.0	
-543.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1020.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-551.0	CARBONDALE	DAVIS	COAL	4.0	1028.0	
-588.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1065.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502640000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.703335 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.0 **LOGGED (FT.):** 2824.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-216.0	CARBONDALE	BRERETON	LIMESTONE	-	675.0	
-1574.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2033.0	
-1962.0			LIMESTONE	-	2421.0	
-2365.0		BASE BARLOW	LIMESTONE	-	2824.0	

MAPID: 16502673000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.703345 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	BRERETON	LIMESTONE	-	650.0	
-1580.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2020.0	
-1964.0			LIMESTONE	-	2404.0	
-2367.0		BASE BARLOW	LIMESTONE	-	2807.0	

MAPID: 16502674000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.701036 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.891345 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., GILL COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-386.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	867.0	
-421.0	CARBONDALE	SURVANT	COAL	1.0	902.0	
-482.0	CARBONDALE	COLCHESTER	COAL	0.5	963.0	
-531.0	CARBONDALE	DEKOVEN	COAL	5.0	1012.0	
-541.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1022.0	
-551.0	CARBONDALE	DAVIS	COAL	4.0	1032.0	
-589.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1070.0	

MAPID: 16502674000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.701036 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891345 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 2856.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-204.0	CARBONDALE	BRERETON	LIMESTONE	-	685.0	
-1564.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2045.0	
-1959.0			LIMESTONE	-	2440.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2856.0	

MAPID: 16502691000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.703403 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880451 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2819.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	BRERETON	LIMESTONE	-	615.0	
-1578.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1992.0	
-1988.0			LIMESTONE	-	2402.0	
-2405.0		BASE BARLOW	LIMESTONE	-	2819.0	

MAPID: 16502703000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.696489 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891368 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2369.0		BASE BARLOW	LIMESTONE	-	2830.0	

MAPID: 16502704000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.705582 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891324 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 2846.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-217.0	CARBONDALE	BRERETON	LIMESTONE	-	690.0	
-1572.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2045.0	
-1962.0			LIMESTONE	-	2435.0	
-2373.0		BASE BARLOW	LIMESTONE	-	2846.0	

MAPID: 16502716000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.703413 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-191.0	CARBONDALE	BRERETON	LIMESTONE	-	615.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2000.0	
-1981.0			LIMESTONE	-	2405.0	
-2406.0		BASE BARLOW	LIMESTONE	-	2830.0	

MAPID: 16502725000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.88775 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:**
SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	BRERETON	LIMESTONE	-	638.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2018.0	
-1941.0			LIMESTONE	-	2383.0	
-2388.0		BASE BARLOW	LIMESTONE	-	2830.0	

MAPID: 16502741000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.701104 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880454 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2806.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-180.0	CARBONDALE	BRERETON	LIMESTONE	-	604.0	
-1567.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1991.0	
-1979.0			LIMESTONE	-	2403.0	
-2382.0		BASE BARLOW	LIMESTONE	-	2806.0	

MAPID: 16502746000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 450' S line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.701045 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889868 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 466.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., GILL COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-380.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	846.0	
-419.0	CARBONDALE	SURVANT	COAL	2.0	885.0	
-477.0	CARBONDALE	COLCHESTER	COAL	0.5	943.0	
-529.0	CARBONDALE	DEKOVEN	COAL	5.0	995.0	
-537.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1003.0	
-547.0	CARBONDALE	DAVIS	COAL	4.0	1013.0	
-584.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1050.0	

MAPID: 16502746000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 450' S line, 330' W line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.701045 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889868 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 466.0 **LOGGED (FT.):** 2834.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	BRERETON	LIMESTONE	-	665.0	
-1567.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2033.0	
-1960.0			LIMESTONE	-	2426.0	
-2368.0		BASE BARLOW	LIMESTONE	-	2834.0	

MAPID: 16502747000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698795 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889546 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 463.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., GILL COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-375.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	838.0	
-412.0	CARBONDALE	SURVANT	COAL	1.8	875.0	
-472.0	CARBONDALE	COLCHESTER	COAL	0.5	935.0	
-522.0	CARBONDALE	DEKOVEN	COAL	5.0	985.0	
-535.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	998.0	
-545.0	CARBONDALE	DAVIS	COAL	4.0	1008.0	
-579.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1042.0	

MAPID: 16502747000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698795 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889546 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 463.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-197.0	CARBONDALE	BRERETON	LIMESTONE	-	660.0	
-1572.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2035.0	
-1961.0			LIMESTONE	-	2424.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2838.0	

MAPID: 16502751000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 295' N line, 330' E line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.703357 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.887802 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., IL CENT R R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-385.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	818.0	
-422.0	CARBONDALE	SURVANT	COAL	1.0	855.0	
-485.0	CARBONDALE	COLCHESTER	COAL	0.5	918.0	
-541.0	CARBONDALE	DEKOVEN	COAL	2.5	974.0	
-556.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	989.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-562.0	CARBONDALE	DAVIS	COAL	4.5	995.0	
-597.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502751000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 295' N line, 330' E line of SW NW
QUADRANGLE: AKIN **LONGITUDE:** -88.703357 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887802 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2811.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-207.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2019.0	
-1979.0			LIMESTONE	-	2412.0	
-2378.0		BASE BARLOW	LIMESTONE	-	2811.0	

MAPID: 16502752000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.701059 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 2837.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-203.0	CARBONDALE	BRERETON	LIMESTONE	-	654.0	
-1574.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2025.0	
-1969.0			LIMESTONE	-	2420.0	
-2386.0		BASE BARLOW	LIMESTONE	-	2837.0	

MAPID: 16502797000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: AKIN **LONGITUDE:** -88.698833 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-186.0	CARBONDALE	BRERETON	LIMESTONE	-	602.0	
-1570.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1986.0	
-1994.0			LIMESTONE	-	2410.0	
-2388.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16502807000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: AKIN **LONGITUDE:** -88.705674 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880447 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., GILL ALLIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-381.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	809.0	
-422.0	CARBONDALE	SURVANT	COAL	1.8	850.0	
-482.0	CARBONDALE	COLCHESTER	COAL	0.5	910.0	
-544.0	CARBONDALE	DEKOVEN	COAL	3.0	972.0	
-551.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	979.0	
-560.0	CARBONDALE	DAVIS	COAL	4.0	988.0	
-598.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1026.0	
-622.0	TRADEWATER	MT. RORAH	COAL	2.0	1050.0	

MAPID: 16502807000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: AKIN **LONGITUDE:** -88.705674 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.880447 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2822.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-202.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2016.0	
-1950.0			LIMESTONE	-	2378.0	
-2394.0		BASE BARLOW	LIMESTONE	-	2822.0	

MAPID: 16502813000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.696496 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889554 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 2829.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	649.0	
-1571.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2025.0	
-1972.0			LIMESTONE	-	2426.0	
-2375.0		BASE BARLOW	LIMESTONE	-	2829.0	

MAPID: 16502835000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698805 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887724 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1565.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2020.0	
-1970.0			LIMESTONE	-	2425.0	
-2380.0		BASE BARLOW	LIMESTONE	-	2835.0	

MAPID: 16502836000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.705661 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.882269 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2819.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-204.0	CARBONDALE	BRERETON	LIMESTONE	-	624.0	
-1585.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2005.0	
-1975.0			LIMESTONE	-	2395.0	
-2399.0		BASE BARLOW	LIMESTONE	-	2819.0	

MAPID: 16502837000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.70339 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.882273 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., SHAW **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-378.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	797.0	
-419.0	CARBONDALE	SURVANT	COAL	2.5	838.0	
-475.0	CARBONDALE	COLCHESTER	COAL	0.6	894.0	
-531.0	CARBONDALE	DEKOVEN	COAL	3.0	950.0	
-541.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	960.0	
-553.0	CARBONDALE	DAVIS	COAL	2.0	972.0	
-589.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1008.0	
-616.0	TRADEWATER	MT. RORAH	COAL	4.0	1035.0	

MAPID: 16502837000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: AKIN **LONGITUDE:** -88.70339 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.882273 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2816.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	BRERETON	LIMESTONE	-	615.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1998.0	
-1981.0			LIMESTONE	-	2400.0	
-2397.0		BASE BARLOW	LIMESTONE	-	2816.0	

MAPID: 16502953000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.696506 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887732 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2823.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-192.0	CARBONDALE	BRERETON	LIMESTONE	-	638.0	
-1569.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2015.0	
-1944.0			LIMESTONE	-	2390.0	
-2377.0		BASE BARLOW	LIMESTONE	-	2823.0	

MAPID: 16502954000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.694245 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889564 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-198.0	CARBONDALE	BRERETON	LIMESTONE	-	652.0	
-1572.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2026.0	
-1939.0			LIMESTONE	-	2393.0	
-2381.0		BASE BARLOW	LIMESTONE	-	2835.0	

MAPID: 16502955000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.694242 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89138 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2823.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-198.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1563.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2010.0	
-1935.0			LIMESTONE	-	2382.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2823.0	

MAPID: 16503032000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691946 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889572 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-197.0	CARBONDALE	BRERETON	LIMESTONE	-	650.0	
-1575.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2028.0	
-1972.0			LIMESTONE	-	2425.0	
-2385.0		BASE BARLOW	LIMESTONE	-	2838.0	

MAPID: 16503033000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: AKIN **LONGITUDE:** -88.691943 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891391 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2814.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-202.0	CARBONDALE	BRERETON	LIMESTONE	-	634.0	
-1578.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2010.0	
-1968.0			LIMESTONE	-	2400.0	
-2382.0		BASE BARLOW	LIMESTONE	-	2814.0	

MAPID: 16503045000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: AKIN **LONGITUDE:** -88.694248 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.887741 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2816.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-202.0	CARBONDALE	BRERETON	LIMESTONE	-	638.0	
-1576.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2012.0	
-1979.0			LIMESTONE	-	2415.0	
-2380.0		BASE BARLOW	LIMESTONE	-	2816.0	

MAPID: 16503055000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: AKIN **LONGITUDE:** -88.689696 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891403 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2813.0 **LOG TYPE:**
SOURCE: SMITH DOYLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-200.0	CARBONDALE	BRERETON	LIMESTONE	-	625.0	
-1580.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2005.0	
-1977.0			LIMESTONE	-	2402.0	
-2388.0		BASE BARLOW	LIMESTONE	-	2813.0	

MAPID: 16503311000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698811 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.885913 **DATE COLLECTED:** 12 / 0 / 1959
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2826.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., RITCHEY COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-374.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	810.0	
-409.0	CARBONDALE	SURVANT	COAL	1.5	845.0	
-474.0	CARBONDALE	COLCHESTER	COAL	0.5	910.0	
-522.0	CARBONDALE	DEKOVEN	COAL	3.5	958.0	
-529.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	965.0	
-544.0	CARBONDALE	DAVIS	COAL	4.0	980.0	
-583.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1019.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503311000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: AKIN **LONGITUDE:** -88.698811 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.885913 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2826.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1568.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2004.0	
433.0			LIMESTONE	-	3.0	
-1953.0			LIMESTONE	-	2389.0	
-2390.0		BASE BARLOW	LIMESTONE	-	2826.0	

MAPID: 16503312000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: AKIN **LONGITUDE:** -88.696518 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884097 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2812.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1959.0			LIMESTONE	-	2390.0	
-2381.0		BASE BARLOW	LIMESTONE	-	2812.0	

MAPID: 16503326000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.68969 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.880471 **DATE COLLECTED:** 7 / 0 / 1960
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2806.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, KIMMEL-WILHITE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-357.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	770.0	
-397.0	CARBONDALE	SURVANT	COAL	1.0	810.0	
-462.0	CARBONDALE	COLCHESTER	COAL	0.5	875.0	
-515.0	CARBONDALE	DEKOVEN	COAL	2.5	928.0	
-527.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	940.0	
-539.0	CARBONDALE	DAVIS	COAL	3.5	952.0	
-577.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	990.0	
-622.0	TRADEWATER	MT. RORAH	COAL	1.8	1035.0	

MAPID: 16503326000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: AKIN **LONGITUDE:** -88.68969 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880471 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2806.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-182.0	CARBONDALE	BRERETON	LIMESTONE	-	595.0	
-1589.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2002.0	
-1982.0			LIMESTONE	-	2395.0	
-2393.0		BASE BARLOW	LIMESTONE	-	2806.0	

MAPID: 16502718000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705655 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.876822 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 3300.0 **LOG TYPE:** Electric Log
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-192.0	CARBONDALE	HERRIN	COAL	6.0	634.0	
-305.0	CARBONDALE	SPRINGFIELD	COAL	4.0	747.0	
-362.0	CARBONDALE	HOUCHIN CREEK	COAL	-	804.0	

MAPID: 16502718000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705655 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.876822 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 649.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	MODESTO	PIASA	LIMESTONE	5.0	545.0	
-108.0	MODESTO		SHALE	8.0	550.0	
-116.0	CARBONDALE	DANVILLE	COAL	2.0	558.0	
-118.0	CARBONDALE		SHALE & SANDSTONE	26.0	560.0	
-144.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	8.0	586.0	
-152.0	CARBONDALE	LAWSON	SILTY SHALE	9.0	594.0	
-161.0	CARBONDALE	LAWSON	SANDSTONE	10.0	603.0	
-171.0	CARBONDALE	LAWSON	SHALE	16.0	613.0	
-187.0	CARBONDALE	JAMESTOWN	COAL	1.0	629.0	
-188.0	CARBONDALE		BLACK SHALE	3.0	630.0	
-191.0	CARBONDALE	BRERETON	LIMESTONE	6.0	633.0	
-197.0	CARBONDALE	ANNA	BLACK SHALE	3.0	639.0	
-200.0	CARBONDALE	HERRIN	COAL	7.0	642.0	

MAPID: 16502718000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705655 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.876822 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 2836.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	BRERETON	LIMESTONE	-	632.0	
-1568.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2010.0	
-1977.0			LIMESTONE	-	2419.0	
-2394.0		BASE BARLOW	LIMESTONE	-	2836.0	

MAPID: 16502718000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705655 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.876822 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 1853.0 **LOG TYPE:** Electric Log
SOURCE: WHITE, IVAN **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-473.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	915.0	
-547.0	SPOON	DAVIS	UNCLASSIFIED	-	989.0	
-1411.0	BASE OF PENN.		UNCLASSIFIED	-	1853.0	

MAPID: 16502718000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.705655 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.876822 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: WHITE, IVAN, SERIGHT DAISY 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-367.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	809.0	
-408.0	CARBONDALE	SURVANT	COAL	1.0	850.0	
-471.0	CARBONDALE	COLCHESTER	COAL	0.6	913.0	
-530.0	CARBONDALE	DEKOVEN	COAL	3.0	972.0	
-538.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	980.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-547.0	CARBONDALE	DAVIS	COAL	4.0	989.0	
-580.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1022.0	
-608.0	TRADEWATER	MT. RORAH	COAL	0.5	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502754000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.696523 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.876825 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:**
SOURCE: WHITE, IVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-166.0	CARBONDALE	BRERETON	LIMESTONE	-	589.0	
-1585.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2008.0	
-1997.0			LIMESTONE	-	2420.0	
-2397.0		BASE BARLOW	LIMESTONE	-	2820.0	

MAPID: 16503203000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.696532 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.873228 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2825.0 **LOG TYPE:** Electric Log
SOURCE: HOILES & CALVERT DRLG., SERIGHT DAISY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-358.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	785.0	
-396.0	CARBONDALE	SURVANT	COAL	0.0	823.0	
-472.0	CARBONDALE	COLCHESTER	COAL	0.5	899.0	
-519.0	CARBONDALE	DEKOVEN	COAL	1.0	946.0	
-536.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	963.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-545.0	CARBONDALE	DAVIS	COAL	4.5	972.0	
-573.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503203000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.696532 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.873228 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2825.0 **LOG TYPE:**
SOURCE: HOILES & CALVERT DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-177.0	CARBONDALE	BRERETON	LIMESTONE	-	608.0	
-1573.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2004.0	
-1969.0			LIMESTONE	-	2400.0	
-2394.0		BASE BARLOW	LIMESTONE	-	2825.0	

MAPID: 16503285000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.703416 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.866048 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2818.0 **LOG TYPE:**
SOURCE: SCHWARTZ MAX **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1565.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1991.0	
-1984.0			LIMESTONE	-	2410.0	
-2392.0		BASE BARLOW	LIMESTONE	-	2818.0	

MAPID: 16500017000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 0' N line, 0' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.688537 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.87774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-115.0	CARBONDALE	DANVILLE	COAL	1.8	524.0	
-119.0	CARBONDALE	SS BELOW NO. 7		1.5	528.0	
-136.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	545.0	
-160.0	CARBONDALE	ANVIL ROCK		2.0	569.0	
-186.0	CARBONDALE	HERRIN	COAL	5.4	595.0	
-286.0	CARBONDALE	SPRINGFIELD	COAL	4.7	695.0	

MAPID: 16500017000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.688537 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.87774 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 600.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.2	MODESTO	PIASA	LIMESTONE	3.5	509.2	
-103.7	MODESTO		GRAY SHALE	10.8	512.7	
-114.5	CARBONDALE	DANVILLE	COAL	2.0	523.5	
-116.5	CARBONDALE		SHALE & SANDSTONE	19.4	525.5	
-135.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	544.9	
-142.1	CARBONDALE	LAWSON	SILTY SHALE	17.7	551.1	
-159.8	CARBONDALE	LAWSON	SANDSTONE	2.0	568.8	
-161.8	CARBONDALE	LAWSON	SILTY SHALE	11.0	570.8	
-172.8	CARBONDALE	LAWSON	GRAY SHALE	4.0	581.8	
-176.8	CARBONDALE	LAWSON	BLACK SHALE	4.5	585.8	
-181.3	CARBONDALE	BRERETON	LIMESTONE	4.8	590.3	
-186.0	CARBONDALE	HERRIN	COAL	5.4	595.0	

MAPID: 16500017000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.688537 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.87774 **DATE COLLECTED:** 0 / 0 / 1919

SURFACE ELEVATION (FT.): 408.5 **LOGGED (FT.):** 700.3 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.5			UNCONSOLIDATED	37.0	0.0	
371.5	BOND		SANDSTONE	68.0	37.0	
303.5	BOND		SHALE	1.0	105.0	
302.5	BOND		SANDSTONE	43.0	106.0	
259.5	BOND		SHALE	3.0	149.0	
256.5	BOND	CARTHAGE	LIMESTONE	7.0	152.0	
249.5	MODESTO		SHALE	72.1	159.0	
177.4	MODESTO	WOMAC	COAL	1.3	231.1	
176.2	MODESTO		SHALE	2.7	232.3	
173.5	MODESTO		SHALE	101.8	235.0	
71.7	MODESTO	CHAPEL	COAL	0.9	336.8	
70.8	MODESTO		SHALE	23.3	337.7	
47.5	MODESTO		SANDY SHALE	71.0	361.0	
-23.5	MODESTO		SHALE	13.0	432.0	BLUE
-36.5	MODESTO		LIMESTONE	4.0	445.0	
-40.5	MODESTO		SHALE	24.8	449.0	BLUE
-65.3	MODESTO		COAL	0.9	473.8	
-66.2	MODESTO		SHALE	4.3	474.7	
-70.5	MODESTO		LIMESTONE	11.0	479.0	
-81.5	MODESTO		SHALE	19.5	490.0	BLUE
-101.0	MODESTO	PIASA	LIMESTONE	3.5	509.5	
-104.5	MODESTO		SHALE	10.8	513.0	BLUE
-115.3	CARBONDALE	DANVILLE	COAL	2.0	523.8	
-117.3	CARBONDALE		UNDERCLAY	2.8	525.8	
-120.0	CARBONDALE		SANDSTONE	1.5	528.5	
-121.5	CARBONDALE		SHALE	10.0	530.0	
-131.5	CARBONDALE		SANDY SHALE	5.2	540.0	
-136.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	545.2	
-142.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.7	551.3	
-160.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	569.0	
-162.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	571.0	
-173.5	CARBONDALE	ANVIL ROCK	SHALE	4.0	582.0	BLUE
-177.5	CARBONDALE	ANVIL ROCK	BLACK SHALE	4.5	586.0	
-182.0	CARBONDALE	BRERETON	LIMESTONE	1.5	590.5	
-183.5	CARBONDALE	BRERETON	LIMESTONE	3.3	592.0	
-186.8	CARBONDALE	HERRIN	COAL	5.4	595.3	
-192.2	CARBONDALE		UNDERCLAY	1.3	600.7	
-193.5	CARBONDALE		SHALE	3.0	602.0	
-196.5	CARBONDALE		LIMESTONE	2.0	605.0	

-198.5	CARBONDALE		SHALE	3.0	607.0	
-201.5	CARBONDALE		SHALE	2.2	610.0	BLUE
-203.7	CARBONDALE	ST. DAVID	LIMESTONE	6.8	612.2	
-210.5	CARBONDALE	DYKERSBURG	SANDY SHALE	30.0	619.0	
-240.5	CARBONDALE	DYKERSBURG	SHALE	14.0	649.0	
-254.5	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	663.0	
-258.5	CARBONDALE	DYKERSBURG	SHALE	19.0	667.0	BLUE
-277.5	CARBONDALE	DYKERSBURG	SHALE	5.0	686.0	
-282.5	CARBONDALE	DYKERSBURG	SHALE	2.0	691.0	BLUE
-284.5	CARBONDALE	DYKERSBURG	BLACK SHALE	1.6	693.0	
-286.1	CARBONDALE	SPRINGFIELD	COAL	4.7	694.6	
-290.8	CARBONDALE		UNDERCLAY	1.0	699.3	

MAPID: 16503333000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.678119 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.876824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2777.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-186.0	CARBONDALE	BRERETON	LIMESTONE	-	595.0	
-1573.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1982.0	
-1951.0			LIMESTONE	-	2360.0	
-2368.0		BASE BARLOW	LIMESTONE	-	2777.0	

MAPID: 16503333000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: AKIN **LONGITUDE:** -88.678119 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.876824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 3186.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	HERRIN	COAL	6.0	603.0	
-297.0	CARBONDALE	SPRINGFIELD	COAL	4.0	706.0	
-367.0	CARBONDALE	HOUCHIN CREEK	COAL	-	776.0	

MAPID: 16503333000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: AKIN **LONGITUDE:** -88.678119 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876824 **DATE COLLECTED:** 11 / 0 / 1960

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2777.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, WEIGHT THOMAS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-373.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	782.0	
-413.0	CARBONDALE	SURVANT	COAL	1.0	822.0	
-495.0	CARBONDALE	COLCHESTER	COAL	2.0	904.0	
-520.0	CARBONDALE	DEKOVEN	COAL	3.0	929.0	
-541.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	950.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-548.0	CARBONDALE	DAVIS	COAL	4.0	957.0	
-584.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	993.0	
-631.0	TRADEWATER	MT. RORAH	COAL	1.5	1040.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16524144000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.675839 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.864255 **DATE COLLECTED:** 9 / 12 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 682.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 1043-C **WELL TYPE:** Coal Test
COMMENT: NO ELEVATION. ISGS CORE# C-12611

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	539.0	0.0	TOP 539' NOT IN LOG. START
-	CARBONDALE	LAWSON	DARK GRAY SHALE	11.7	539.0	
-	CARBONDALE		DARK GRAY SHALE	0.6	550.7	LOG SAYS 'POSITION OF CONANT LIMESTONE'
-	CARBONDALE	JAMESTOWN	COAL	0.5	551.2	
-	CARBONDALE		CLAYSTONE & SILTSTONE	1.8	551.7	
-	CARBONDALE		BLACK SHALE	2.4	553.4	
-	CARBONDALE	BRERETON	LIMESTONE	4.9	555.8	
-	CARBONDALE	HERRIN	COAL	7.6	560.7	
-	CARBONDALE		CLAYSTONE & SILTSTONE	0.8	568.3	
-	CARBONDALE		CLAYSTONE & SILTSTONE	5.2	569.1	
-	CARBONDALE		UNCLASSIFIED	70.0	574.3	LOG SAYS THIS INTERVAL NOT CORED
-	CARBONDALE	DYKERSBURG	SILTSTONE	7.5	644.3	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	20.0	651.8	
-	CARBONDALE	DYKERSBURG	BLACK SHALE	0.7	671.8	
-	CARBONDALE	SPRINGFIELD	COAL	5.5	672.5	
-	CARBONDALE		CLAYSTONE & SILTSTONE	0.5	677.9	
-	CARBONDALE		LIMESTONE	2.0	678.4	
-	CARBONDALE		CLAYSTONE & SILTSTONE	1.8	680.4	

MAPID: 16500018000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 400' N line, 1290' W line
QUADRANGLE: AKIN **LONGITUDE:** -88.665503 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.876573 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 729.0 **LOG TYPE:** Drillers Log
SOURCE: GALATIA COLLIERY **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	DANVILLE	COAL	1.8	518.0	
-95.0	CARBONDALE	SS BELOW NO. 7	SHALE & SANDSTONE	8.5	522.0	
-110.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	537.0	
-119.0	CARBONDALE	ANVIL ROCK		29.0	546.0	
-169.0	CARBONDALE	HERRIN	COAL	5.6	596.0	
-297.0	CARBONDALE	SPRINGFIELD	COAL	3.4	724.0	

MAPID: 16500018000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 400' N line, 1290' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.665503 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.876573 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 601.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-86.0	MODESTO	PIASA	LIMESTONE	5.0	513.0	
-91.0	CARBONDALE	DANVILLE	COAL	1.8	518.0	
-92.8	CARBONDALE		SHALE & SANDSTONE	17.0	519.8	
-109.8	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	536.8	
-118.8	CARBONDALE	LAWSON	SANDSTONE	29.0	545.8	
-147.8	CARBONDALE	LAWSON	GRAY SHALE	14.0	574.8	
-161.8	CARBONDALE	BRERETON	LIMESTONE	7.2	588.8	
-169.0	CARBONDALE	HERRIN	COAL	5.6	596.0	

MAPID: 16500018000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 400' N line, 1290' W line

QUADRANGLE: AKIN **LONGITUDE:** -88.665503 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.876573 **DATE COLLECTED:** 2 / 12 / 1920

SURFACE ELEVATION (FT.): 426.6 **LOGGED (FT.):** 729.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: THICKNESS 3 FT IN UNIT 8 CHANGED TO 11FT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.6			UNCONSOLIDATED	25.3	0.0	
401.3	BOND		SANDSTONE	1.7	25.3	
399.6	BOND		SHALE	2.2	27.0	
397.4	BOND		COAL	1.6	29.2	
395.8	BOND		SHALE	33.3	30.8	
362.6	BOND		SANDY SHALE	24.5	64.0	
338.1	BOND		SANDSTONE	2.5	88.5	
335.6	BOND		SANDY SHALE	11.0	91.0	THICKNESS 3 FT CHANGED TO 11 FT
324.6	BOND		SHALE	29.0	102.0	
295.6	BOND		SHALE	10.0	131.0	DARK
285.6	BOND		COAL	0.2	141.0	
285.4	BOND		SHALE	46.8	141.2	BLUE
238.6	BOND		SHALE	9.0	188.0	
229.6	BOND		BLACK SHALE	1.0	197.0	
228.6	BOND	CARTHAGE	LIMESTONE	1.0	198.0	
227.6	BOND	CARTHAGE	SHALE	3.0	199.0	
224.6	BOND	CARTHAGE	LIMESTONE	15.0	202.0	
209.6	BOND	CARTHAGE	LIMESTONE	10.0	217.0	
199.6	BOND		SHALE	1.5	227.0	
198.1	MODESTO	WOMAC	COAL	1.8	228.5	
196.3	MODESTO		SHALE	6.0	230.3	BLUE
190.3	MODESTO		SANDY SHALE	20.0	236.3	LOG REPORTS 20' FROM 236.25 TO 256'
170.6	MODESTO		SHALE	52.0	256.0	DEPTH OFF 13.25' AS IN ORIGINAL LOG, BLU
118.6	MODESTO		LIMESTONE	1.0	308.0	
117.6	MODESTO		SHALE	24.0	309.0	
93.6	MODESTO		SHALE	2.0	333.0	BLUE
91.6	MODESTO	CHAPEL	COAL	1.2	335.0	
90.4	MODESTO		SHALE	9.8	336.2	BLUE
80.6	MODESTO		SANDY SHALE	13.0	346.0	
67.6	MODESTO		SANDSTONE	23.0	359.0	
44.6	MODESTO		SHALE	28.0	382.0	BLUE
16.6	MODESTO		SHALE	20.0	410.0	
-3.4	MODESTO		SHALE	10.0	430.0	
-13.4	MODESTO		SANDY SHALE	8.0	440.0	
-21.4	MODESTO		SHALE	11.0	448.0	BLUE
-32.4	MODESTO		SHALE	20.0	459.0	
-52.4	MODESTO		SANDY SHALE	9.0	479.0	
-61.4	MODESTO		SHALE	25.0	488.0	
-86.4	MODESTO	PIASA	LIMESTONE	5.0	513.0	

-91.4	CARBONDALE	DANVILLE	COAL	1.8	518.0	
-93.2	CARBONDALE		SHALE	2.2	519.8	
-95.4	CARBONDALE		SANDSTONE	1.5	522.0	
-96.9	CARBONDALE		SHALE	5.0	523.5	
-101.9	CARBONDALE		SANDSTONE	2.0	528.5	
-103.9	CARBONDALE		SHALE	6.5	530.5	
-110.4	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	537.0	
-119.4	CARBONDALE	ANVIL ROCK	SANDSTONE	29.0	546.0	
-148.4	CARBONDALE	ANVIL ROCK	SHALE	14.0	575.0	BLUE
-162.4	CARBONDALE	BRERETON	LIMESTONE	6.0	589.0	
-168.4	CARBONDALE	BRERETON	LIMESTONE	1.2	595.0	
-169.6	CARBONDALE	HERRIN	COAL	5.6	596.2	
-175.2	CARBONDALE		UNDERCLAY	1.3	601.8	
-176.4	CARBONDALE		SHALE	2.5	603.0	
-178.9	CARBONDALE		LIMESTONE	1.5	605.5	
-180.4	CARBONDALE		SHALE	1.0	607.0	
-181.4	CARBONDALE		LIMESTONE	5.0	608.0	
-186.4	CARBONDALE		SHALE	2.0	613.0	
-188.4	CARBONDALE	ST. DAVID	LIMESTONE	5.0	615.0	
-193.4	CARBONDALE	DYKERSBURG	SANDY SHALE	68.5	620.0	
-261.9	CARBONDALE	DYKERSBURG	SHALE	18.5	688.5	BLUE
-280.4	CARBONDALE	DYKERSBURG	SHALE	10.0	707.0	
-290.4	CARBONDALE	DYKERSBURG	BLACK SHALE	6.7	717.0	
-297.1	CARBONDALE	SPRINGFIELD	COAL	3.4	723.7	
-300.5	CARBONDALE		SHALE	1.9	727.1	

MAPID: 16502570000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.6527 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.865971 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 2776.0 **LOG TYPE:**

SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	CARBONDALE	BRERETON	LIMESTONE	-	545.0	
-1515.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1975.0	
-1898.0			LIMESTONE	-	2358.0	
-2316.0		BASE BARLOW	LIMESTONE	-	2776.0	

MAPID: 16502570000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.6527 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.865971 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 3311.0 **LOG TYPE:** Electric Log

SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-94.0	CARBONDALE	HERRIN	COAL	6.0	554.0	
-138.0	CARBONDALE	BRIAR HILL	COAL	-	598.0	
-216.0	CARBONDALE	SPRINGFIELD	COAL	4.0	676.0	
-276.0	CARBONDALE	HOUCHIN CREEK	COAL	-	736.0	

MAPID: 16502570000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.6527 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.865971 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 1825.0 **LOG TYPE:** Electric Log

SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-390.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	850.0	
-462.0	SPOON	DAVIS	UNCLASSIFIED	-	922.0	
-1365.0	BASE OF PENN.		UNCLASSIFIED	-	1825.0	

MAPID: 16502570000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.6527 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.865971 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 2776.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO., WILLIAMS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-280.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	740.0	
-320.0	CARBONDALE	SURVANT	COAL	1.0	780.0	
-385.0	CARBONDALE	COLCHESTER	COAL	0.5	845.0	
-431.0	CARBONDALE	DEKOVEN	COAL	3.0	891.0	
-452.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	912.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-462.0	CARBONDALE	DAVIS	COAL	5.0	922.0	
-498.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	958.0	
-525.0	TRADEWATER	MT. RORAH	COAL	0.5	985.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525845000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645726 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.874911 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 989.0 **LOG TYPE:** Electric Log
SOURCE: PIAP OIL, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.0	CARBONDALE	HERRIN	COAL	5.0	619.0	
-289.5	CARBONDALE	SPRINGFIELD	COAL	2.0	771.5	
-320.0	CARBONDALE	HOUCHIN CREEK	COAL	-	802.0	
-430.0	CARBONDALE	COLCHESTER	COAL	-	912.0	
-503.5	SPOON	DAVIS	COAL	3.5	985.5	

MAPID: 16525845000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645726 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.874911 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 1880.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-428.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	910.0	
-502.0	SPOON	DAVIS	UNCLASSIFIED	-	984.0	
-1398.0	BASE OF PENN.		UNCLASSIFIED	-	1880.0	

MAPID: 16502951000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 3314.0 **LOG TYPE:** Electric Log
SOURCE: SHULMAN BROS. INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	HERRIN	COAL	6.0	566.0	
-223.0	CARBONDALE	BRIAR HILL	COAL	-	668.0	
-272.0	CARBONDALE	SPRINGFIELD	COAL	5.0	717.0	
-310.0	CARBONDALE	HOUCHIN CREEK	COAL	-	755.0	

MAPID: 16502951000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 572.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-20.0	MODESTO	PIASA	LIMESTONE	5.0	465.0	
-25.0	MODESTO		SHALE	12.0	470.0	
-37.0	CARBONDALE	DANVILLE	COAL	2.0	482.0	
-39.0	CARBONDALE		SHALE & SANDSTONE	26.0	484.0	
-65.0	CARBONDALE	LAWSON	SANDSTONE	47.0	510.0	
-112.0	CARBONDALE	BRERETON	LIMESTONE	7.0	557.0	
-119.0	CARBONDALE	ANNA	BLACK SHALE	2.0	564.0	
-121.0	CARBONDALE	HERRIN	COAL	6.0	566.0	

MAPID: 16502951000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 2790.0 **LOG TYPE:**
SOURCE: SHULMAN BROS. INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	BRERETON	LIMESTONE	-	556.0	
-1536.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1981.0	
-1963.0			LIMESTONE	-	2408.0	
-2345.0		BASE BARLOW	LIMESTONE	-	2790.0	

MAPID: 16502951000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 1842.0 **LOG TYPE:** Electric Log
SOURCE: SHULMAN BROS. INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-427.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	872.0	
-502.0	SPOON	DAVIS	UNCLASSIFIED	-	947.0	
-1397.0	BASE OF PENN.		UNCLASSIFIED	-	1842.0	

MAPID: 16502951000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 572.0 **LOG TYPE:** Electric Log
SOURCE: SHULMAN BROS. INC., MARTENS E W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-315.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	760.0	
-357.0	CARBONDALE	SURVANT	COAL	4.0	802.0	
-425.0	CARBONDALE	COLCHESTER	COAL	0.6	870.0	
-457.0	CARBONDALE	DEKOVEN	COAL	2.0	902.0	
-485.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	930.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-501.0	CARBONDALE	DAVIS	COAL	4.0	946.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502951000C **VERSION:** 6 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627403 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 949.5 **LOG TYPE:** Electric Log
SOURCE: SHULMAN BROS & PAUL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	HERRIN	COAL	6.0	566.0	
-272.0	CARBONDALE	SPRINGFIELD	COAL	6.0	717.0	
-360.0	CARBONDALE	HOUCHIN CREEK	COAL	-	805.0	
-426.0	CARBONDALE	COLCHESTER	COAL	-	871.0	
-501.0	SPOON	DAVIS	COAL	3.5	946.0	

MAPID: 16590647000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.595363 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871411 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	12.0		SPLIT (DATA FROM GAMMA-RAY LOG)

MAPID: 16590648000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.584808 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.875725 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.6		1.00% SULFUR

MAPID: 16590649000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.587582 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.884681 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590650000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.581221 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.898875 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		2.13% SULFUR

MAPID: 16590651000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.56805 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863439 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		1.99% SULFUR

MAPID: 16590652000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.576593 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871034 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		SPLIT

MAPID: 16590653000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568982 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.874106 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	10.0		SPLIT (DATA FROM CORE)

MAPID: 16590654000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.567863 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.884917 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590655000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.56674 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.905426 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590656000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.55881 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.86994 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.7		1.11% SULFUR

MAPID: 16590657000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.545703 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.868288 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	10.0		SHALEY (FROM GAMMA LOG)

MAPID: 16590658000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.554146 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.879062 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590659000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.554117 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.884691 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.7		1.06% SULFUR

MAPID: 16590660000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553947 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.896837 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.3		0.81% SULFUR

MAPID: 16590661000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.53356 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871049 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.4		

MAPID: 16590662000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.535398 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.883648 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.0		1.47% SULFUR

MAPID: 16590663000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.538924 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.896314 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		1.49% SULFUR

MAPID: 16590664000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.52323 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.900651 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590665000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.511272 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863874 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		

MAPID: 16590666000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.515235 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.881194 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.5		

MAPID: 16590667000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.508257 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.882067 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		4.22% SULFUR

MAPID: 16590668000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.512019 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.898537 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		

MAPID: 16590669000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.504189 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.906481 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.4		

MAPID: 16590670000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.502527 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863655 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590671000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: WALPOLE **LONGITUDE:** -88.501947 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.906282 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.6		4.34% SULFUR

MAPID: 16502159000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.595072 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.904029 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 3380.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	HERRIN	COAL	5.0	651.0	
-340.0	CARBONDALE	SPRINGFIELD	COAL	6.0	764.0	
-411.0	CARBONDALE	HOUCHIN CREEK	COAL	-	835.0	

MAPID: 16502159000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.595072 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904029 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-136.0	MODESTO	PIASA	LIMESTONE	5.0	560.0	
-141.0	MODESTO		SHALE	18.0	565.0	
-159.0	CARBONDALE	DANVILLE	COAL	2.0	583.0	
-161.0	CARBONDALE		SILTY SHALE	17.0	585.0	
-178.0	CARBONDALE	ALLENBY	BONE COAL	0.5	602.0	
-178.5	CARBONDALE		CLAYSTONE	12.5	602.5	
-191.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	615.0	
-194.0	CARBONDALE	LAWSON	SILTY SHALE	6.0	618.0	
-200.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	12.0	624.0	
-212.0	CARBONDALE	LAWSON	SILTY SHALE	4.0	636.0	
-216.0	CARBONDALE	LAWSON	DARK GRAY SHALE	6.0	640.0	
-222.0	CARBONDALE	BRERETON	LIMESTONE	4.0	646.0	
-226.0	CARBONDALE	ANNA	BLACK SHALE	2.0	650.0	
-228.0	CARBONDALE	HERRIN	COAL	4.0	652.0	

MAPID: 16502159000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.595072 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.904029 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2814.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-221.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1614.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2038.0	
-2010.0			LIMESTONE	-	2434.0	
-2390.0		BASE BARLOW	LIMESTONE	-	2814.0	

MAPID: 16502159000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.595072 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904029 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 1890.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-524.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	948.0	
-598.0	SPOON	DAVIS	UNCLASSIFIED	-	1022.0	
-1466.0	BASE OF PENN.		UNCLASSIFIED	-	1890.0	

MAPID: 16502159000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.595072 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.904029 **DATE COLLECTED:** 2 / 0 / 1954
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., KANE CLYDE E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-416.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	840.0	
-456.0	CARBONDALE	SURVANT	COAL	1.6	880.0	
-524.0	CARBONDALE	COLCHESTER	COAL	0.6	948.0	
-564.0	CARBONDALE	DEKOVEN	COAL	2.6	988.0	
-591.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1015.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-598.0	CARBONDALE	DAVIS	COAL	4.0	1022.0	
-636.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1060.0	
-676.0	TRADEWATER	MT. RORAH	COAL	1.5	1100.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500003000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' N line, 1980' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.565928 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.904889 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 761.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL 1009 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-167.0	CARBONDALE	DANVILLE	COAL	2.0	564.0	
-200.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	597.0	
-247.0	CARBONDALE	HERRIN	COAL	5.8	644.0	
-276.0	CARBONDALE	BRIAR HILL	COAL	6.0	673.0	
-355.0	CARBONDALE	SPRINGFIELD	COAL	7.0	752.0	

MAPID: 16500003000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' N line, 1980' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.565928 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904889 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 650.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.5	MODESTO	PIASA	LIMESTONE	8.0	538.5	
-149.5	MODESTO		CALCAREOUS SHALE	18.0	546.5	
-167.5	CARBONDALE	DANVILLE	COAL	2.0	564.5	
-169.5	CARBONDALE		SHALE	20.5	566.5	
-190.0	CARBONDALE	GALUM	LIMESTONE	5.5	587.0	
-195.5	CARBONDALE		GRAY SHALE	5.0	592.5	
-200.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	597.5	
-206.5	CARBONDALE	LAWSON	SILTY SHALE	17.0	603.5	
-223.5	CARBONDALE	LAWSON	GRAY SHALE	16.3	620.5	
-239.8	CARBONDALE	JAMESTOWN	COAL	0.3	636.8	
-240.2	CARBONDALE		BLACK SHALE	4.0	637.2	
-244.2	CARBONDALE	BRERETON	LIMESTONE	3.3	641.2	
-247.5	CARBONDALE	ANNA	BLACK SHALE	0.5	644.5	
-248.0	CARBONDALE	HERRIN	COAL	5.8	645.0	

MAPID: 16500003000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' N line, 1980' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.565928 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.904889 **DATE COLLECTED:** 6 / 0 / 1945

SURFACE ELEVATION (FT.): 397.3 **LOGGED (FT.):** 761.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.3			UNCONSOLIDATED	51.0	0.0	
346.3	BOND		SANDY SHALE	6.0	51.0	
340.3	BOND		SANDSTONE	55.0	57.0	W/SH PARTINGS
285.3	BOND		SANDSTONE	15.0	112.0	
270.3	BOND		SANDSTONE	5.0	127.0	W/SH
265.3	BOND		SANDSTONE	4.0	132.0	
261.3	BOND		SHALE	22.0	136.0	BLUE
239.3	BOND		COAL	0.7	158.0	
238.6	BOND		LIMESTONE	5.3	158.7	
233.3	BOND		CALCAREOUS SHALE	6.0	164.0	CALC
227.3	BOND		SHALE	6.0	170.0	BLUE
221.3	BOND		SHALE	38.0	176.0	W/CALC BANDS, BLUE
173.3	BOND		SHALE	4.0	224.0	LOG REPORTS PREV. UNIT 38' THK; 176-224'
169.3	BOND		SHALE	2.0	228.0	CLOD
167.3	BOND		SANDY SHALE	19.0	230.0	
148.3	BOND		SHALE	8.3	249.0	BLUE
140.0	MODESTO	WOMAC	COAL	1.0	257.3	
139.0	MODESTO		SANDY SHALE	65.7	258.3	
73.3	MODESTO		SHALE	30.0	324.0	BLUE
43.3	MODESTO		SHALE	2.0	354.0	BLUE
41.3	MODESTO		SHALE	7.0	356.0	BLUE
34.3	MODESTO	CHAPEL	COAL	1.0	363.0	
33.3	MODESTO		SHALE	2.0	364.0	GREY
31.3	MODESTO		SANDSTONE	10.0	366.0	
21.3	MODESTO		SANDY SHALE	46.0	376.0	
-24.7	MODESTO		SHALE	57.0	422.0	BLUE
-81.7	MODESTO		COAL	0.5	479.0	
-82.2	MODESTO		CALCAREOUS SHALE	3.5	479.5	CALC
-85.7	MODESTO		SANDY SHALE	7.0	483.0	
-92.7	MODESTO		SHALE	7.0	490.0	BLUE
-99.7	MODESTO		COAL	0.7	497.0	
-100.4	MODESTO		SHALE	27.3	497.7	BLUE
-127.7	MODESTO		SANDY SHALE	13.0	525.0	
-140.7	MODESTO	PIASA	LIMESTONE	8.0	538.0	
-148.7	MODESTO		BLACK SHALE	1.0	546.0	
-149.7	MODESTO		SHALE	17.0	547.0	W/CALC BANDS
-166.7	CARBONDALE	DANVILLE	COAL	2.0	564.0	
-168.7	CARBONDALE		SHALE	1.0	566.0	BLUE
-169.7	CARBONDALE		SANDY SHALE	6.0	567.0	

-175.7	CARBONDALE		SHALE	13.5	573.0	BLUE
-189.2	CARBONDALE		LIMESTONE	5.5	586.5	
-194.7	CARBONDALE		SHALE	5.0	592.0	BLUE
-199.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	597.0	
-205.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.0	603.0	
-222.7	CARBONDALE	ANVIL ROCK	SHALE	15.0	620.0	BLUE
-237.7	CARBONDALE	ANVIL ROCK	SHALE	1.3	635.0	BLUE
-239.0	CARBONDALE	JAMESTOWN	COAL	0.3	636.3	
-239.4	CARBONDALE		BLACK SHALE	3.3	636.7	
-242.7	CARBONDALE		BLACK SHALE	0.7	640.0	W/FOSSILS
-243.4	CARBONDALE	BRERETON	LIMESTONE	3.3	640.7	
-246.7	CARBONDALE	ANNA	BLACK SHALE	0.5	644.0	
-247.2	CARBONDALE	HERRIN	COAL	5.8	644.5	
-253.0	CARBONDALE		UNDERCLAY	0.8	650.3	
-253.9	CARBONDALE		SHALE	5.8	651.2	W/LS, BLUE
-259.7	CARBONDALE		CALCAREOUS SHALE	10.0	657.0	CALC
-269.7	CARBONDALE		SHALE	3.0	667.0	BLUE
-272.7	CARBONDALE		SANDY SHALE	3.0	670.0	
-275.7	CARBONDALE	BRIAR HILL	COAL	0.5	673.0	
-276.2	CARBONDALE	CANTON	SHALE	1.0	673.5	W/LS BANDS, BLUE
-277.2	CARBONDALE	CANTON	SANDY SHALE	5.5	674.5	W/FOSSILS
-282.7	CARBONDALE	CANTON	SHALE	4.5	680.0	BLUE
-287.2	CARBONDALE	CANTON	SHALE	0.8	684.5	
-288.0	CARBONDALE	ST. DAVID	LIMESTONE	1.5	685.3	
-289.5	CARBONDALE		BLACK SHALE	0.5	686.8	
-290.0	CARBONDALE	DYKERSBURG	SANDY SHALE	2.8	687.3	
-292.7	CARBONDALE	DYKERSBURG	SHALE	24.0	690.0	BLUE
-316.7	CARBONDALE	DYKERSBURG	SHALE	25.0	714.0	BLUE
-341.7	CARBONDALE	DYKERSBURG	SHALE	13.5	739.0	BLUE
-355.2	CARBONDALE	SPRINGFIELD	COAL	7.0	752.5	
-362.2	CARBONDALE		BLACK SHALE	0.5	759.5	
-362.7	CARBONDALE		SHALE	1.0	760.0	

MAPID: 16501368000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 328' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564775 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.900357 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:**
SOURCE: CALVERT & WILLIS, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-224.0	CARBONDALE	BRERETON	LIMESTONE	-	636.0	
-1594.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2006.0	
-1955.0			LIMESTONE	-	2367.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2784.0	

MAPID: 16501371000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.56477 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89673 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:**
SOURCE: PERRINE & PERRINE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-216.0	CARBONDALE	BRERETON	LIMESTONE	-	632.0	
-1577.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1993.0	
-1949.0			LIMESTONE	-	2365.0	
-2368.0		BASE BARLOW	LIMESTONE	-	2784.0	

MAPID: 16501514000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.56017 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902131 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2766.0 **LOG TYPE:**
SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-249.0	CARBONDALE	BRERETON	LIMESTONE	-	643.0	
-1592.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1986.0	
-1950.0			LIMESTONE	-	2344.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2766.0	

MAPID: 16501514000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.56017 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.902131 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 3237.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	DANVILLE	COAL	-	567.0	
-180.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	574.0	
-210.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	604.0	
-216.0	CARBONDALE	ANVIL ROCK	SILTSTONE & SHALE	15.0	610.0	
-256.0	CARBONDALE	HERRIN	COAL	4.0	650.0	
-284.0	CARBONDALE	BRIAR HILL	COAL	-	678.0	
-366.0	CARBONDALE	SPRINGFIELD	COAL	8.0	760.0	
-416.0	CARBONDALE	HOUCHIN CREEK	COAL	-	810.0	

MAPID: 16502160000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.560178 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.903925 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 1994.0 **LOG TYPE:**

SOURCE: GRAY THOMAS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-255.0	CARBONDALE	BRERETON	LIMESTONE	-	648.0	
-1601.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1994.0	

MAPID: 16502161000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.560182 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.905723 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1992.0 **LOG TYPE:**

SOURCE: GRAY THOMAS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-274.0	CARBONDALE	BRERETON	LIMESTONE	-	660.0	
-1606.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1992.0	

MAPID: 16502675000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.562455 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2786.0 **LOG TYPE:**
SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-212.0	CARBONDALE	BRERETON	LIMESTONE	-	640.0	
-1589.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2017.0	
-1954.0			LIMESTONE	-	2382.0	
-2358.0		BASE BARLOW	LIMESTONE	-	2786.0	

MAPID: 16502986000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.560166 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.900309 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2770.0 **LOG TYPE:**
SOURCE: GARREN & GREENE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-235.0	CARBONDALE	BRERETON	LIMESTONE	-	642.0	
-1579.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1986.0	
-1955.0			LIMESTONE	-	2362.0	
-2363.0		BASE BARLOW	LIMESTONE	-	2770.0	

MAPID: 16502994000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.562475 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898508 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2797.0 **LOG TYPE:**
SOURCE: MURVIN, JOHN B. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-225.0	CARBONDALE	BRERETON	LIMESTONE	-	638.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1964.0			LIMESTONE	-	2377.0	
-2384.0		BASE BARLOW	LIMESTONE	-	2797.0	

MAPID: 16503028000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 380' S line, 330' E line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564768 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896868 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2785.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-215.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1578.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1993.0	
-1949.0			LIMESTONE	-	2364.0	
-2370.0		BASE BARLOW	LIMESTONE	-	2785.0	

MAPID: 16503053000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.567083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896751 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2780.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	610.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1955.0			LIMESTONE	-	2370.0	
-2365.0		BASE BARLOW	LIMESTONE	-	2780.0	

MAPID: 16503094000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.562467 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896711 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:**
SOURCE: GARREN & GREENE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-228.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1597.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2014.0	
-1967.0			LIMESTONE	-	2384.0	
-2383.0		BASE BARLOW	LIMESTONE	-	2800.0	

MAPID: 16503103000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.564762 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.894907 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2791.0 **LOG TYPE:**

SOURCE: ROBISON OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	BRERETON	LIMESTONE	-	636.0	
-1589.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2015.0	
-1953.0			LIMESTONE	-	2379.0	
-2365.0		BASE BARLOW	LIMESTONE	-	2791.0	

MAPID: 16503134000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 405' N line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.560158 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898277 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2772.0 **LOG TYPE:**

SOURCE: GARREN & GREENE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-231.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1601.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2015.0	
-1956.0			LIMESTONE	-	2370.0	
-2358.0		BASE BARLOW	LIMESTONE	-	2772.0	

MAPID: 16525723000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.567119 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.905815 **DATE COLLECTED:** 6 / 25 / 1987

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3396.0 **LOG TYPE:** Drillers Log

SOURCE: BROWN ENTERPRISES 1 **WELL TYPE:** Coal Test

COMMENT: GAMMA DENSITY, CALIPER, NEUTRON LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0			BLACK SHALE	4.0	226.0	
44.0	MODESTO	MOUND CITY	BLACK SHALE	3.0	353.0	
41.0	MODESTO		SHALE	10.0	356.0	
31.0	MODESTO	CHAPEL	COAL	2.0	366.0	
-104.5	MODESTO		COAL	1.5	501.5	
-111.0	MODESTO		BLACK SHALE	3.5	508.0	
-173.5	CARBONDALE	DANVILLE	COAL	2.5	570.5	
-251.0	CARBONDALE	ANNA	BLACK SHALE	2.0	648.0	
-253.0	CARBONDALE	HERRIN	COAL	6.0	650.0	
-300.0	CARBONDALE		BLACK SHALE	2.5	697.0	
-302.5	CARBONDALE	DYKERSBURG	SILTY SHALE	50.5	699.5	
-353.0	CARBONDALE	SPRINGFIELD	COAL	7.5	750.0	
-412.5	CARBONDALE	EXCELLO	BLACK SHALE	3.0	809.5	
-415.5	CARBONDALE	HOUCHIN CREEK	COAL	1.0	812.5	
-450.5	CARBONDALE	SURVANT	COAL	2.5	847.5	
-532.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	929.5	
-557.0			COAL	3.0	954.0	
-762.0			COAL	2.5	1159.0	
-859.0			COAL	3.0	1256.0	

MAPID: 16525770000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 405' S line, 330' E line of NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.560167 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.900516 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 1842.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-524.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	928.0	
-584.0	SPOON	DAVIS	UNCLASSIFIED	-	988.0	
-1438.0	BASE OF PENN.		UNCLASSIFIED	-	1842.0	

MAPID: 16590020000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 8' S line, 1360' W line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.572999 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.892407 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.2 **LOGGED (FT.):** 729.8 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7620-6 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT,GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.2			UNCONSOLIDATED	25.8	0.0	GLACIAL DRIFT
383.4	BOND		GRAY SHALE	17.2	25.8	
366.2	BOND		SANDSTONE	71.0	43.0	LGRAY
295.2	BOND		GRAY SHALE	20.0	114.0	
275.2	BOND	CARTHAGE	LIMESTONE	5.0	134.0	
270.2	MODESTO		GRAY SHALE	49.0	139.0	
221.2	MODESTO		BLACK SHALE	2.0	188.0	
219.2	MODESTO		SANDY SHALE	53.0	190.0	SILTY-SANDY SHALE
166.2	MODESTO		GRAY SHALE	82.0	243.0	
84.2	MODESTO	CHAPEL	COAL	1.0	325.0	
83.2	MODESTO		DARK GRAY SHALE	6.0	326.0	
77.2	MODESTO	TRIVOLI	SANDSTONE	63.0	332.0	GRAY
14.2	MODESTO		DARK GRAY SHALE	75.0	395.0	GY - DGY
-60.8	MODESTO		GRAY SHALE	25.0	470.0	
-85.8	MODESTO	PIASA	LIMESTONE	7.0	495.0	
-92.8	MODESTO		GRAY SHALE	13.0	502.0	
-105.8	CARBONDALE	DANVILLE	COAL	1.5	515.0	
-107.3	CARBONDALE		GRAY SHALE	61.5	516.5	
-168.8	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	578.0	
-184.8	CARBONDALE		SHALE	3.5	594.0	
-188.3	CARBONDALE	BRERETON	LIMESTONE	4.0	597.5	
-192.3	CARBONDALE	HERRIN	COAL	6.0	601.5	
-198.3	CARBONDALE		GRAY SHALE	107.0	607.5	
-305.3	CARBONDALE	SPRINGFIELD	COAL	8.0	714.5	
-313.3	CARBONDALE		BLACK SHALE	1.5	722.5	
-314.8	CARBONDALE		DARK GRAY SHALE	5.8	724.0	

MAPID: 16501132000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.548741 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905612 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2764.0 **LOG TYPE:**
SOURCE: CALVERT & WILLIS, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-272.0	CARBONDALE	BRERETON	LIMESTONE	-	660.0	
-1621.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2009.0	
-1975.0			LIMESTONE	-	2363.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2764.0	

MAPID: 16501132000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.548741 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.905612 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 807.0 **LOG TYPE:**
SOURCE: CALVERT & WILLIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-289.0	CARBONDALE	HERRIN	COAL	6.0	676.0	
-317.0	CARBONDALE	BRIAR HILL	COAL	-	704.0	
-378.0	CARBONDALE	SPRINGFIELD	COAL	7.0	765.0	
-420.0	CARBONDALE	HOUCHIN CREEK	COAL	-	807.0	

MAPID: 16501370000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.557883 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.905695 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 1985.0 **LOG TYPE:**
SOURCE: MORGAN, W. O., ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-245.0	CARBONDALE	BRERETON	LIMESTONE	-	635.0	
-1595.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1985.0	

MAPID: 16501370000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.557883 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.905695 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2076.0 **LOG TYPE:** Electric Log

SOURCE: MORGAN, W. O., ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	DANVILLE	COAL	-	555.0	
-170.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	560.0	
-200.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	590.0	
-208.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	4.0	598.0	
-252.0	CARBONDALE	HERRIN	COAL	5.0	642.0	
-284.0	CARBONDALE	BRIAR HILL	COAL	-	674.0	
-285.0	CARBONDALE	CANTON	SILTSTONE	7.0	675.0	
-344.0	CARBONDALE	SPRINGFIELD	COAL	6.0	734.0	
-350.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	6.0	740.0	
-410.0	CARBONDALE	HOUCHIN CREEK	COAL	-	800.0	

MAPID: 16501370000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.557883 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.905695 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 1852.0 **LOG TYPE:** Electric Log

SOURCE: MORGAN, W. O., ETAL **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-539.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	929.0	
-593.0	SPOON	DAVIS	UNCLASSIFIED	-	983.0	
-1462.0	BASE OF PENN.		UNCLASSIFIED	-	1852.0	

MAPID: 16501372000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.55326 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.894802 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2368.0 **LOG TYPE:** Electric Log
SOURCE: COLUMBUS EXPLORATION, COOK CARL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-398.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	801.0	
-447.0	CARBONDALE	SURVANT	COAL	2.0	850.0	
-513.0	CARBONDALE	COLCHESTER	COAL	0.5	916.0	
-553.0	CARBONDALE	DEKOVEN	COAL	2.5	956.0	
-581.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	984.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-587.0	CARBONDALE	DAVIS	COAL	3.0	990.0	
-628.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	1031.0	
-675.0	TRADEWATER	MT. RORAH	COAL	2.0	1078.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501372000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.55326 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.894802 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2368.0 **LOG TYPE:**
SOURCE: COLUMBUS EXPLORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-212.0	CARBONDALE	BRERETON	LIMESTONE	-	615.0	
-1596.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1999.0	
-1965.0			LIMESTONE	-	2368.0	

MAPID: 16501373000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553267 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896624 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2775.0 **LOG TYPE:** Electric Log
SOURCE: PERRINE & PERRINE, THOMPSON LOUIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-404.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	805.0	
-447.0	CARBONDALE	SURVANT	COAL	1.5	848.0	
-523.0	CARBONDALE	COLCHESTER	COAL	0.5	924.0	
-564.0	CARBONDALE	DEKOVEN	COAL	2.0	965.0	
-582.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	983.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-587.0	CARBONDALE	DAVIS	COAL	3.0	988.0	
-637.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	1038.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-674.0	TRADEWATER	MT. RORAH	COAL	1.8	1075.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501373000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553267 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896624 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2775.0 **LOG TYPE:**
SOURCE: PERRINE & PERRINE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-219.0	CARBONDALE	BRERETON	LIMESTONE	-	620.0	
-1600.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1962.0			LIMESTONE	-	2363.0	
-2374.0		BASE BARLOW	LIMESTONE	-	2775.0	

MAPID: 16501374000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553297 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902035 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2012.0 **LOG TYPE:**
SOURCE: TAYLOR S C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-238.0	CARBONDALE	BRERETON	LIMESTONE	-	632.0	
-1618.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2012.0	

MAPID: 16503007000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.557867 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.900284 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2790.0 **LOG TYPE:**

SOURCE: MORGAN, W. O., ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-244.0	CARBONDALE	BRERETON	LIMESTONE	-	645.0	
-1597.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1998.0	
-1985.0			LIMESTONE	-	2386.0	
-2389.0		BASE BARLOW	LIMESTONE	-	2790.0	

MAPID: 16503007000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.557867 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.900284 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 657.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.0	MODESTO	PIASA	LIMESTONE	6.0	547.0	
-152.0	MODESTO		SILTY SHALE	19.0	553.0	
-171.0	CARBONDALE	DANVILLE	COAL	1.0	572.0	
-172.0	CARBONDALE		SHALE & SANDSTONE	19.0	573.0	
-191.0	CARBONDALE	ALLENBY	COAL	1.0	592.0	
-192.0	CARBONDALE		CLAYSTONE & SHALE	16.0	593.0	
-208.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	609.0	
-213.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	20.0	614.0	
-233.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	634.0	
-243.0	CARBONDALE	JAMESTOWN	COAL	0.5	644.0	
-243.5	CARBONDALE		BLACK SHALE	3.0	644.5	
-246.5	CARBONDALE	BRERETON	LIMESTONE	5.0	647.5	
-251.5	CARBONDALE	ANNA	BLACK SHALE	0.5	652.5	
-252.0	CARBONDALE	HERRIN	COAL	4.5	653.0	

MAPID: 16525676000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.557879 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.903901 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2756.0 **LOG TYPE:**

SOURCE: MORGAN, W. O., ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-237.0	CARBONDALE	BRERETON	LIMESTONE	-	630.0	
-1593.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1986.0	
-1965.0			LIMESTONE	-	2358.0	
-2363.0		BASE BARLOW	LIMESTONE	-	2756.0	

MAPID: 16590023000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2620' S line, 1260' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.54511 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.89911 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.4 **LOGGED (FT.):** 756.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7621-14 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.4			UNCONSOLIDATED	27.0	0.0	GLACIAL DRIFT DEPOSITS
364.4	BOND		SANDSTONE	105.9	27.0	
258.5	BOND		GRAY SHALE	19.0	132.9	
239.5	BOND	CARTHAGE	LIMESTONE	6.0	151.9	
233.5	MODESTO		GRAY SHALE	61.0	157.9	
172.5	MODESTO		BLACK SHALE	2.0	218.9	
170.5	MODESTO		GRAY SHALE	34.0	220.9	
136.5	MODESTO		COAL	1.0	254.9	
135.5	MODESTO		GRAY SHALE	25.0	255.9	
110.5	MODESTO		SANDY SHALE	81.0	280.9	
29.5	MODESTO	CHAPEL	COAL	1.0	361.9	
28.5	MODESTO		DARK GRAY SHALE	15.0	362.9	
13.5	MODESTO	TRIVOLI	SANDSTONE	12.0	377.9	
1.5	MODESTO		SANDY SHALE	10.0	389.9	
-8.5	MODESTO		SANDSTONE	9.0	399.9	
-17.5	MODESTO		GRAY SHALE	69.0	408.9	
-86.5	MODESTO		SANDY SHALE	59.0	477.9	
-145.5	MODESTO	PIASA	LIMESTONE	6.0	536.9	
-151.5	MODESTO		GRAY SHALE	21.0	542.9	
-172.5	CARBONDALE	DANVILLE	COAL	1.0	563.9	
-173.5	CARBONDALE		GRAY SHALE	33.0	564.9	
-206.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	597.9	
-213.5	CARBONDALE		GRAY SHALE	16.0	604.9	
-229.5	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	620.9	
-245.5	CARBONDALE		DARK GRAY SHALE	15.0	636.9	
-260.5	CARBONDALE	BRERETON	GRAY LIMESTONE	2.0	651.9	
-262.5	CARBONDALE	HERRIN	COAL	7.7	653.9	
-270.2	CARBONDALE		UNDERCLAY	3.0	661.6	
-273.2	CARBONDALE		DARK GRAY SHALE	40.0	664.6	
-313.2	CARBONDALE		LIMESTONE	2.0	704.6	
-315.2	CARBONDALE		DARK GRAY SHALE	29.0	706.6	
-344.3	CARBONDALE	SPRINGFIELD	COAL	6.2	735.7	
-350.3	CARBONDALE		DARK GRAY SHALE	1.8	741.7	
-352.1	CARBONDALE		GRAY SHALE	1.0	743.5	
-353.1	CARBONDALE		SANDSTONE	11.5	744.5	

MAPID: 16590024000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2620' S line, 2360' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.549583 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.899352 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.9 **LOGGED (FT.):** 780.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7621-13 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.9			UNCONSOLIDATED	21.0	0.0	GLACIAL DRIFT DEPOSITS
371.9	BOND		GRAY SHALE	9.0	21.0	
362.9	BOND		SANDSTONE	99.1	30.0	
263.8	BOND		GRAY SHALE	22.0	129.1	
241.8	BOND	CARTHAGE	LIMESTONE	4.0	151.1	
237.8	MODESTO		GRAY SHALE	58.0	155.1	
179.8	MODESTO		BLACK SHALE	4.0	213.1	
175.8	MODESTO		GRAY SHALE	29.0	217.1	
146.8	MODESTO		COAL	1.0	246.1	
145.8	MODESTO		GRAY SHALE	108.3	247.1	
37.5	MODESTO	CHAPEL	COAL	1.0	355.4	
36.5	MODESTO		DARK GRAY SHALE	6.0	356.4	
30.5	MODESTO	TRIVOLI	SANDSTONE	23.0	362.4	
7.5	MODESTO		GRAY SHALE	120.3	385.4	
-112.8	MODESTO		SANDSTONE	5.0	505.7	
-117.8	MODESTO		GRAY SHALE	20.0	510.7	
-137.8	MODESTO	PIASA	LIMESTONE	5.0	530.7	
-142.8	MODESTO		GRAY SHALE	20.0	535.7	
-162.8	CARBONDALE	DANVILLE	COAL	1.0	555.7	
-163.8	CARBONDALE		GRAY SHALE	31.0	556.7	
-194.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	587.7	
-200.8	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	593.7	
-208.8	CARBONDALE		GRAY SHALE	28.0	601.7	
-236.8	CARBONDALE	BRERETON	LIMESTONE	4.0	629.7	
-240.8	CARBONDALE	HERRIN	COAL	6.0	633.7	
-246.8	CARBONDALE		UNDERCLAY	3.0	639.7	
-249.8	CARBONDALE		DARK GRAY SHALE	23.0	642.7	
-272.8	CARBONDALE	BRIAR HILL	COAL	1.0	665.7	
-273.8	CARBONDALE		GRAY SHALE	12.0	666.7	
-285.8	CARBONDALE		DARK GRAY SHALE	82.0	678.7	
-367.8	CARBONDALE	SPRINGFIELD	COAL	7.7	760.7	
-375.5	CARBONDALE		DARK GRAY SHALE	1.2	768.4	
-376.7	CARBONDALE		SANDSTONE	3.0	769.6	
-379.7	CARBONDALE		DARK GRAY SHALE	7.4	772.6	

MAPID: 16500004000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2190' N line, 45' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.522861 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.900615 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 728.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-171.0	CARBONDALE	DANVILLE	COAL	2.6	549.0	
-203.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	581.0	
-253.0	CARBONDALE	HERRIN	COAL	5.5	631.0	
-304.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	18.0	682.0	
-342.0	CARBONDALE	SPRINGFIELD	COAL	5.5	720.0	

MAPID: 16500004000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2190' N line, 45' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.522861 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.900615 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 636.3 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.4	MODESTO	PIASA	LIMESTONE	5.0	524.4	
-151.4	MODESTO		GRAY SHALE	23.6	529.4	
-175.0	CARBONDALE	DANVILLE	COAL	2.6	553.0	
-177.6	CARBONDALE		SILTY SHALE	14.8	555.6	
-192.4	CARBONDALE	GALUM	LIMESTONE W/ SHALE	2.0	570.4	
-194.4	CARBONDALE		GRAY SHALE	8.0	572.4	
-202.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	580.4	
-209.4	CARBONDALE	LAWSON	LIMESTONE AND SANDSTONE	2.0	587.4	
-211.4	CARBONDALE	LAWSON	SILTY SHALE	17.0	589.4	
-228.4	CARBONDALE	LAWSON	LIMESTONE W/ SHALE	9.0	606.4	
-237.4	CARBONDALE	LAWSON	GRAY SHALE	3.0	615.4	
-240.4	CARBONDALE		BLACK SHALE	4.0	618.4	
-244.4	CARBONDALE	BRERETON	LIMESTONE	5.0	622.4	
-249.4	CARBONDALE	ANNA	BLACK SHALE	2.6	627.4	
-252.0	CARBONDALE	HERRIN	COAL	6.3	630.0	

MAPID: 16500004000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2190' N line, 45' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.522861 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.900615 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 378.5 **LOGGED (FT.):** 728.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTY COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.5			UNCONSOLIDATED	64.0	0.0	
314.5	BOND		SANDY SHALE	4.0	64.0	
310.5	BOND		SANDSTONE	36.0	68.0	
274.5	BOND		SHALE	21.0	104.0	BLUE
253.5	BOND		COAL	0.5	125.0	
253.0	BOND		CALCAREOUS SHALE	18.5	125.5	CALC
234.5	BOND		SHALE	6.0	144.0	BLUE
228.5	BOND		SHALE	58.0	150.0	BLUE
170.5	BOND		BLACK SHALE	6.0	208.0	
164.5	BOND		SHALE	4.0	214.0	BLUE
160.5	BOND		CALCAREOUS SHALE	22.0	218.0	CALC
138.5	BOND		SHALE	3.0	240.0	BLUE
135.5	BOND		SHALE	2.3	243.0	
133.2	MODESTO	WOMAC	COAL	1.8	245.3	
131.3	MODESTO		SHALE	3.8	247.2	BLUE
127.5	MODESTO		SANDY SHALE	67.0	251.0	
60.5	MODESTO		SHALE	9.0	318.0	BLUE
51.5	MODESTO		SHALE	13.0	327.0	BLUE
38.5	MODESTO		LIMESTONE	1.0	340.0	
37.5	MODESTO		BLACK SHALE	5.0	341.0	
32.5	MODESTO	CHAPEL	COAL	1.0	346.0	
31.5	MODESTO		SANDSTONE	2.0	347.0	
29.5	MODESTO		CALCAREOUS SHALE	7.0	349.0	CALC
22.5	MODESTO		SANDY SHALE	11.0	356.0	
11.5	MODESTO		COAL	0.3	367.0	
11.2	MODESTO		SANDY SHALE	19.7	367.3	
-8.5	MODESTO		SANDY SHALE	16.0	387.0	W/SS
-24.5	MODESTO		SHALE	20.0	403.0	BLUE
-44.5	MODESTO		SHALE	2.0	423.0	DARK
-46.5	MODESTO		SHALE	34.0	425.0	W/LS, BLUE
-80.5	MODESTO		SHALE	1.0	459.0	BLUE
-81.5	MODESTO		SANDY SHALE	10.0	460.0	
-91.5	MODESTO		SHALE	2.0	470.0	BLUE
-93.5	MODESTO		BLACK SHALE	4.0	472.0	
-97.5	MODESTO		SHALE	8.0	476.0	BLUE
-105.5	MODESTO		BLACK SHALE	3.8	484.0	
-109.3	MODESTO		COAL	1.1	487.8	
-110.3	MODESTO		SHALE	2.2	488.8	
-112.5	MODESTO		LIMESTONE	2.0	491.0	

-114.5	MODESTO		SANDY SHALE	15.0	493.0	
-129.5	MODESTO		SHALE	7.0	508.0	BLUE
-136.5	MODESTO		BLACK SHALE	3.0	515.0	
-139.5	MODESTO		SHALE	2.0	518.0	BLUE
-141.5	MODESTO	PIASA	LIMESTONE	5.0	520.0	
-146.5	MODESTO		SHALE	23.6	525.0	BLUE
-170.1	CARBONDALE	DANVILLE	COAL	2.6	548.6	
-172.7	CARBONDALE		SANDY SHALE	14.8	551.2	
-187.5	CARBONDALE		DARK SHALE	2.0	566.0	W/LS BANDS, DARK
-189.5	CARBONDALE		SHALE	8.0	568.0	BLUE
-197.5	CARBONDALE		CALCAREOUS SHALE	5.0	576.0	CALC
-202.5	CARBONDALE		LIMESTONE	7.0	581.0	
-209.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	588.0	W/SS
-211.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	590.0	
-218.5	CARBONDALE	ANVIL ROCK	SHALE	3.0	597.0	BLUE
-221.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	600.0	
-228.5	CARBONDALE	ANVIL ROCK	SHALE	9.0	607.0	W/LS BANDS, BLUE
-237.5	CARBONDALE	ANVIL ROCK	SHALE	3.0	616.0	BLUE
-240.5	CARBONDALE		BLACK SHALE	4.0	619.0	
-244.5	CARBONDALE	BRERETON	LIMESTONE	5.0	623.0	
-249.5	CARBONDALE	ANNA	BLACK SHALE	2.6	628.0	
-252.1	CARBONDALE	HERRIN	COAL	6.3	630.6	
-258.4	CARBONDALE		UNDERCLAY	2.1	636.9	
-260.5	CARBONDALE		SHALE	2.0	639.0	
-262.5	CARBONDALE		LIMESTONE	3.0	641.0	
-265.5	CARBONDALE		SANDY SHALE	5.0	644.0	
-270.5	CARBONDALE		SHALE	4.0	649.0	BLUE
-274.5	CARBONDALE		LIMESTONE	0.5	653.0	
-275.0	CARBONDALE	DYKERSBURG	SHALE	15.5	653.5	W/LS BANDS, BLUE
-290.5	CARBONDALE	DYKERSBURG	SHALE	13.0	669.0	BLUE
-303.5	CARBONDALE	DYKERSBURG	SANDSTONE	18.0	682.0	
-321.5	CARBONDALE	DYKERSBURG	SHALE	3.5	700.0	BLUE
-325.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	703.5	
-328.0	CARBONDALE	DYKERSBURG	LIMESTONE	1.5	706.5	
-329.5	CARBONDALE	DYKERSBURG	BLACK SHALE	1.3	708.0	
-330.8	CARBONDALE	DYKERSBURG	BLACK SHALE	1.7	709.3	W/LS
-332.5	CARBONDALE	DYKERSBURG	BLACK SHALE	9.4	711.0	
-341.9	CARBONDALE	SPRINGFIELD	COAL	5.5	720.4	
-347.4	CARBONDALE		SANDY SHALE	2.1	725.9	

MAPID: 16503065000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.511999 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.898716 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3296.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-242.0	CARBONDALE	HERRIN	COAL	5.0	618.0	
-291.0	CARBONDALE	BRIAR HILL	COAL	-	667.0	
-338.0	CARBONDALE	SPRINGFIELD	COAL	5.0	714.0	
-414.0	CARBONDALE	HOUCHIN CREEK	COAL	-	790.0	

MAPID: 16503065000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.511999 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.898716 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 623.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	MODESTO	PIASA	LIMESTONE	5.0	508.0	
-137.0	MODESTO		GRAY SHALE	28.0	513.0	
-165.0	CARBONDALE	DANVILLE	COAL	2.0	541.0	
-167.0	CARBONDALE		SANDSTONE	14.0	543.0	
-181.0	CARBONDALE	ALLENBY	COAL	1.0	557.0	
-182.0	CARBONDALE		GRAY SHALE	15.0	558.0	
-197.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	573.0	
-204.0	CARBONDALE	LAWSON	SANDSTONE	6.0	580.0	
-210.0	CARBONDALE	LAWSON	SHALE	5.0	586.0	
-215.0	CARBONDALE	LAWSON	SANDSTONE	15.0	591.0	
-230.0	CARBONDALE	BRERETON	LIMESTONE	4.0	606.0	
-234.0	CARBONDALE	ANNA	BLACK SHALE	4.0	610.0	
-238.0	CARBONDALE	ENERGY	GRAY SHALE	4.0	614.0	
-242.0	CARBONDALE	HERRIN	COAL	5.0	618.0	

MAPID: 16503065000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511999 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.898716 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2752.0 **LOG TYPE:**
SOURCE: FELMONT CORPORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-240.0	CARBONDALE	BRERETON	LIMESTONE	-	616.0	
-1640.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2016.0	
-2000.0			LIMESTONE	-	2376.0	
-2376.0		BASE BARLOW	LIMESTONE	-	2752.0	

MAPID: 16503065000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511999 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.898716 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2000.0 **LOG TYPE:** Electric Log
SOURCE: FELMONT CORPORATION **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-535.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	911.0	
-596.0	SPOON	DAVIS	UNCLASSIFIED	-	972.0	
-1624.0	BASE OF PENN.		UNCLASSIFIED	-	2000.0	

MAPID: 16503065000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511999 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.898716 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 623.0 **LOG TYPE:** Electric Log
SOURCE: FELMONT CORPORATION, WOOLARD HOWARD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-419.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	795.0	
-459.0	CARBONDALE	SURVANT	COAL	2.0	835.0	
-534.0	CARBONDALE	COLCHESTER	COAL	0.6	910.0	
-562.0	CARBONDALE	DEKOVEN	COAL	2.5	938.0	
-588.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	964.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-596.0	CARBONDALE	DAVIS	COAL	3.0	972.0	
-633.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1009.0	
-674.0	TRADEWATER	MT. RORAH	COAL	1.5	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523865000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 335' E line of SW NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.491082 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.885989 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 575.0 **LOG TYPE:** Electric Log
SOURCE: HAGAN, GEORGE W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-89.0	CARBONDALE	HERRIN	COAL	5.0	462.0	
-139.0	CARBONDALE	BRIAR HILL	COAL	-	512.0	
-196.0	CARBONDALE	SPRINGFIELD	COAL	6.0	569.0	

MAPID: 16501133000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.507222 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.889689 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2672.0 **LOG TYPE:**

SOURCE: PURE OIL CO., THE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-204.0	CARBONDALE	BRERETON	LIMESTONE	-	580.0	
-1565.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1941.0	
-1926.0			LIMESTONE	-	2302.0	
-2296.0		BASE BARLOW	LIMESTONE	-	2672.0	

MAPID: 16501133000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.507222 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.889689 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3183.0 **LOG TYPE:** Electric Log

SOURCE: PURE OIL CO., THE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.0	CARBONDALE	DANVILLE	COAL	-	517.0	
-174.0	CARBONDALE	ANVIL ROCK	SILTSTONE	10.0	550.0	
-206.0	CARBONDALE	HERRIN	COAL	7.0	582.0	
-250.0	CARBONDALE	BRIAR HILL	COAL	-	626.0	
-304.0	CARBONDALE	SPRINGFIELD	COAL	11.0	680.0	
-342.0	CARBONDALE	HOUCHIN CREEK	COAL	-	718.0	

MAPID: 16501133000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.507222 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889689 **DATE COLLECTED:** 8 / 0 / 1942
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2672.0 **LOG TYPE:** Electric Log
SOURCE: PURE OIL CO., THE, TISON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-347.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	723.0	
-389.0	CARBONDALE	SURVANT	COAL	0.5	765.0	
-474.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-492.0	CARBONDALE	DEKOVEN	COAL	2.0	868.0	
-521.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	897.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-528.0	CARBONDALE	DAVIS	COAL	4.0	904.0	
-566.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	942.0	
-606.0	TRADEWATER	MT. RORAH	COAL	1.5	982.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501134000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.518891 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.880306 **DATE COLLECTED:** 6 / 0 / 1942
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2695.0 **LOG TYPE:** Electric Log
SOURCE: FORTNER W G, GRISHAM W D 1-A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-345.0	CARBONDALE	SURVANT	COAL	2.0	764.0	
-411.0	CARBONDALE	COLCHESTER	COAL	0.5	830.0	
-455.0	CARBONDALE	DEKOVEN	COAL	2.0	874.0	
-485.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	904.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-492.0	CARBONDALE	DAVIS	COAL	4.5	911.0	
-536.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	955.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501134000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.518891 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880306 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2695.0 **LOG TYPE:**
SOURCE: FORTNER W G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	BRERETON	LIMESTONE	-	554.0	
-1518.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1937.0	
-1878.0			LIMESTONE	-	2297.0	
-2276.0		BASE BARLOW	LIMESTONE	-	2695.0	

MAPID: 16502583000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.509499 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.885973 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAM OIL CO., TISON ETAL 1- **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-320.0	CARBONDALE	HOUCHIN CREEK	COAL	3.5	703.0	
-360.0	CARBONDALE	SURVANT	COAL	1.5	743.0	
-426.0	CARBONDALE	COLCHESTER	COAL	0.5	809.0	
-471.0	CARBONDALE	DEKOVEN	COAL	1.8	854.0	
-505.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	888.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-513.0	CARBONDALE	DAVIS	COAL	4.5	896.0	
-549.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	932.0	
-587.0	TRADEWATER	MT. RORAH	COAL	0.5	970.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502583000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.509499 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.885973 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:**
SOURCE: GILLIAM OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	BRERETON	LIMESTONE	-	556.0	
-1538.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1921.0	
-1900.0			LIMESTONE	-	2283.0	
-2265.0		BASE BARLOW	LIMESTONE	-	2648.0	

MAPID: 16502583000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.509499 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.885973 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 668.5 **LOG TYPE:** Electric Log
SOURCE: GILLIAM DRILLING 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.0	MODESTO	WOMAC	COAL	2.5	170.0	
108.0	MODESTO	CHAPEL	COAL	-	275.0	
-174.0	CARBONDALE	HERRIN	COAL	6.0	557.0	
-223.0	CARBONDALE	BRIAR HILL	COAL	-	606.0	
-279.0	CARBONDALE	SPRINGFIELD	COAL	6.5	662.0	

MAPID: 16502641000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.52125 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.878424 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1895.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAM OIL CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-390.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	805.0	
-475.0	SPOON	DAVIS	UNCLASSIFIED	-	890.0	
-1480.0	BASE OF PENN.		UNCLASSIFIED	-	1895.0	

MAPID: 16502641000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.52125 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878424 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2707.0 **LOG TYPE:**
SOURCE: GILLIAM OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-105.0	CARBONDALE	BRERETON	LIMESTONE	-	520.0	
-1509.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1924.0	
-1872.0			LIMESTONE	-	2287.0	
-2292.0		BASE BARLOW	LIMESTONE	-	2707.0	

MAPID: 16502641000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.52125 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.878424 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2707.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAM OIL CO., GRISHAM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-393.0	CARBONDALE	COLCHESTER	COAL	0.6	808.0	
-440.0	CARBONDALE	DEKOVEN	COAL	3.0	855.0	
-465.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	880.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-475.0	CARBONDALE	DAVIS	COAL	4.0	890.0	
-517.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	932.0	
-555.0	TRADEWATER	MT. RORAH	COAL	1.5	970.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502641000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.52125 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.878424 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 633.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAM OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
261.0	MODESTO	WOMAC	COAL	2.5	154.0	
160.0	MODESTO	CHAPEL	COAL	-	255.0	
-115.0	CARBONDALE	HERRIN	COAL	6.0	530.0	
-155.0	CARBONDALE	BRIAR HILL	COAL	-	570.0	
-212.0	CARBONDALE	SPRINGFIELD	COAL	6.0	627.0	

MAPID: 16502748000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511776 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.88226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 3081.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAN, J. H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	HERRIN	COAL	5.0	537.0	
-193.0	CARBONDALE	BRIAR HILL	COAL	-	582.0	
-253.0	CARBONDALE	SPRINGFIELD	COAL	6.0	642.0	
-351.0	CARBONDALE	HOUCHIN CREEK	COAL	-	740.0	

MAPID: 16502748000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of NW SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.511776 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.88226 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 542.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-41.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	430.0	
-46.0	MODESTO		SHALE	28.0	435.0	
-74.0	CARBONDALE	DANVILLE	COAL	2.0	463.0	
-76.0	CARBONDALE		SHALE	14.5	465.0	
-90.5	CARBONDALE	ALLENBY	COAL	0.5	479.5	
-91.0	CARBONDALE		CLAYSTONE & SHALE	16.0	480.0	
-107.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	496.0	
-111.0	CARBONDALE	LAWSON	COAL	1.0	500.0	
-112.0	CARBONDALE	LAWSON	SILTY SHALE	19.0	501.0	
-131.0	CARBONDALE	LAWSON	SHALE	7.0	520.0	
-138.0	CARBONDALE	CONANT	LIMESTONE	3.0	527.0	
-141.0	CARBONDALE		SHALE	2.0	530.0	
-143.0	CARBONDALE	BRERETON	LIMESTONE	3.0	532.0	
-146.0	CARBONDALE	ANNA	BLACK SHALE	2.0	535.0	
-148.0	CARBONDALE	HERRIN	COAL	5.5	537.0	

MAPID: 16502748000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of NW SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.511776 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.88226 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:**

SOURCE: GILLIAN, J. H. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.0	CARBONDALE	BRERETON	LIMESTONE	-	535.0	
-1514.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1903.0	
-1867.0			LIMESTONE	-	2256.0	
-2247.0		BASE BARLOW	LIMESTONE	-	2636.0	

MAPID: 16502748000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511776 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.88226 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 542.5 **LOG TYPE:** Electric Log
SOURCE: GILLIAN, J. H., ANDERSON-SHRIVER 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-351.0	CARBONDALE	SURVANT	COAL	1.5	740.0	
-427.0	CARBONDALE	COLCHESTER	COAL	0.5	816.0	
-449.0	CARBONDALE	DEKOVEN	COAL	3.0	838.0	
-449.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	838.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-490.0	CARBONDALE	DAVIS	COAL	3.5	879.0	
-535.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	924.0	
-589.0	TRADEWATER	MT. RORAH	COAL	3.0	978.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502748000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of NW SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.511776 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.88226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 815.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAN, J. H. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.0	MODESTO	WOMAC	COAL	2.5	155.0	
129.5	MODESTO	CHAPEL	COAL	-	259.5	
-148.0	CARBONDALE	HERRIN	COAL	6.0	537.0	
-194.0	CARBONDALE	BRIAR HILL	COAL	-	583.0	
-253.0	CARBONDALE	SPRINGFIELD	COAL	6.0	642.0	
-351.0	CARBONDALE	HOUCHIN CREEK	COAL	-	740.0	
-426.0	CARBONDALE	COLCHESTER	COAL	-	815.0	

MAPID: 16503098000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 380' N line, 330' E line of SW SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.518864 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2687.0 **LOG TYPE:**
SOURCE: TOLER, W. W. DRLG. CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1511.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1930.0	
-1902.0			LIMESTONE	-	2321.0	
-2268.0		BASE BARLOW	LIMESTONE	-	2687.0	

MAPID: 16525267000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of SE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.533846 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.880162 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 469.0 **LOGGED (FT.):** 1840.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-386.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	855.0	
-466.0	SPOON	DAVIS	UNCLASSIFIED	-	935.0	
-1371.0	BASE OF PENN.		UNCLASSIFIED	-	1840.0	

MAPID: 16590022000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1260' N line, 1280' W line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.526955 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.888715 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.6 **LOGGED (FT.):** 724.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7627-10 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.6			UNCONSOLIDATED	34.0	0.0	GLACIAL DRIFT DEPOSITS
382.6			GRAY SHALE	26.0	34.0	
356.6			SANDSTONE	45.0	60.0	
311.6			DARK GRAY SHALE	6.0	105.0	
305.6			GRAY SILTSTONE	11.0	111.0	
294.6			SILTY SHALE	69.0	122.0	
225.6	MODESTO		BLACK SHALE	2.0	191.0	
223.6	MODESTO		GRAY SHALE	12.0	193.0	
211.6	MODESTO		SANDY SHALE	21.0	205.0	
190.6	MODESTO		COAL	1.0	226.0	
189.6	MODESTO		SANDY SHALE	73.0	227.0	
116.6	MODESTO		DARK GRAY SHALE	35.0	300.0	
81.6	MODESTO	CHAPEL	COAL	1.0	335.0	
80.6	MODESTO	TRIVOLI	SANDSTONE	39.0	336.0	
41.6	MODESTO		DARK GRAY SHALE	69.0	375.0	
-27.4	MODESTO		COAL	1.0	444.0	
-28.4	MODESTO		GRAY SHALE	29.0	445.0	
-57.4	MODESTO		COAL	1.0	474.0	
-58.4	MODESTO		GRAY SHALE	5.0	475.0	
-63.4	MODESTO		SANDSTONE	10.0	480.0	
-73.4	MODESTO		GRAY SHALE	16.0	490.0	
-89.4	MODESTO	PIASA	LIMESTONE	7.0	506.0	
-96.4	MODESTO		GRAY SHALE	25.0	513.0	
-121.4	CARBONDALE	DANVILLE	COAL	2.0	538.0	
-123.4	CARBONDALE		GRAY SHALE	33.0	540.0	
-156.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	573.0	
-163.4	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	580.0	
-177.4	CARBONDALE		DARK GRAY SHALE	24.0	594.0	
-201.4	CARBONDALE	BRERETON	LIMESTONE	3.0	618.0	
-204.4	CARBONDALE	HERRIN	COAL	7.5	621.0	
-211.9	CARBONDALE		DARK GRAY SHALE	30.4	628.5	
-242.3	CARBONDALE	BRIAR HILL	COAL	1.0	658.9	
-243.3	CARBONDALE		DARK GRAY SHALE	25.4	659.9	
-268.7	CARBONDALE		LIMESTONE	1.0	685.3	
-269.7	CARBONDALE		BLACK SHALE	7.0	686.3	
-276.7	CARBONDALE		DARK GRAY SHALE	14.8	693.3	
-291.5	CARBONDALE	SPRINGFIELD	COAL	7.3	708.1	
-298.8	CARBONDALE		BLACK SHALE	0.6	715.4	
-299.4	CARBONDALE		GRAY SILTSTONE	7.0	716.0	

-306.4	CARBONDALE		GRAY SHALE	1.0	723.0

MAPID: 16501135000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 3315.0 **LOG TYPE:** Electric Log

SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-250.0	CARBONDALE	HERRIN	COAL	4.0	674.0	
-296.0	CARBONDALE	BRIAR HILL	COAL	-	720.0	
-363.0	CARBONDALE	SPRINGFIELD	COAL	7.0	787.0	
-409.0	CARBONDALE	HOUCHIN CREEK	COAL	-	833.0	

MAPID: 16501135000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 677.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	MODESTO	PIASA	LIMESTONE	8.0	564.0	
-148.0	MODESTO		SHALE	19.0	572.0	
-167.0	CARBONDALE	DANVILLE	COAL	1.5	591.0	
-168.5	CARBONDALE		SHALE & SANDSTONE	21.0	592.5	
-189.5	CARBONDALE	ALLENBY	COAL	0.5	613.5	
-190.0	CARBONDALE		CLAYSTONE & SHALE	14.0	614.0	
-204.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	628.0	
-208.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	4.0	632.0	
-212.0	CARBONDALE	LAWSON	DARK GRAY SHALE	4.0	636.0	
-216.0	CARBONDALE	LAWSON	SANDSTONE	10.0	640.0	
-226.0	CARBONDALE	LAWSON	SHALE	15.0	650.0	
-241.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	665.0	
-242.0	CARBONDALE		SHALE	3.0	666.0	
-245.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	4.0	669.0	
-249.0	CARBONDALE	ANNA	BLACK SHALE	1.0	673.0	
-250.0	CARBONDALE	HERRIN	COAL	3.0	674.0	

MAPID: 16501135000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2797.0 **LOG TYPE:**
SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-240.0	CARBONDALE	BRERETON	LIMESTONE	-	664.0	
-1588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2012.0	
-1953.0			LIMESTONE	-	2377.0	
-2373.0		BASE BARLOW	LIMESTONE	-	2797.0	

MAPID: 16501135000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:** 6 / 0 / 1943
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 1870.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-506.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	930.0	
-576.0	SPOON	DAVIS	UNCLASSIFIED	-	1000.0	
-1446.0	BASE OF PENN.		UNCLASSIFIED	-	1870.0	

MAPID: 16501135000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:** 6 / 0 / 1943
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 677.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO., BUSLER DAVID **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-414.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	838.0	
-438.0	CARBONDALE	SURVANT	COAL	0.5	862.0	
-504.0	CARBONDALE	COLCHESTER	COAL	0.5	928.0	
-544.0	CARBONDALE	DEKOVEN	COAL	1.8	968.0	
-572.0	CARBONDALE	LOWER DEKOVEN	COAL	0.1	996.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-578.0	CARBONDALE	DAVIS	COAL	3.0	1002.0	
-621.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1045.0	
-658.0	TRADEWATER	MT. RORAH	COAL	1.3	1082.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501135000C **VERSION:** 6 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.553259 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.891185 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 794.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
240.0	MODESTO	WOMAC	COAL	-	184.0	
34.0	MODESTO	CHAPEL	COAL	-	390.0	
-250.0	CARBONDALE	HERRIN	COAL	4.5	674.0	
-362.0	CARBONDALE	SPRINGFIELD	COAL	8.0	786.0	

MAPID: 16500006000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' N line, 1320' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.563612 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.890365 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 730.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL 1013 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	2.0	542.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	569.0	
-	CARBONDALE	HERRIN	COAL	5.2	618.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	645.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.9	723.0	

MAPID: 16500006000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' N line, 1320' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.563612 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.890365 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 624.2 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.5	MODESTO	PIASA	LIMESTONE	6.0	519.5	
-93.5	MODESTO		GRAY SHALE	17.0	525.5	
-110.5	CARBONDALE	DANVILLE	COAL	2.0	542.5	
-112.5	CARBONDALE		SHALE	25.0	544.5	
-137.5	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	10.0	569.5	
-147.5	CARBONDALE	LAWSON	SILTY SHALE	30.0	579.5	
-177.5	CARBONDALE	LAWSON	GRAY SHALE	1.0	609.5	
-178.5	CARBONDALE		BLACK SHALE	2.0	610.5	
-180.5	CARBONDALE	BRERETON	LIMESTONE	5.0	612.5	
-185.5	CARBONDALE	ANNA	BLACK SHALE	1.5	617.5	
-187.0	CARBONDALE	HERRIN	COAL	5.2	619.0	

MAPID: 16500006000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' N line, 1320' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.563612 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.890365 **DATE COLLECTED:** 0 / 0 / 1921

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 730.0 **LOG TYPE:** Drillers Log

SOURCE: TRI COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	35.0	0.0	
400.0	BOND		SHALE	6.0	35.0	
394.0	BOND		COAL	1.0	41.0	
393.0	BOND		SANDSTONE	89.0	42.0	
304.0	BOND		SHALE	1.0	131.0	
303.0	BOND		SANDSTONE	24.0	132.0	
279.0	BOND		SHALE	20.0	156.0	
259.0	BOND		CALCAREOUS SHALE	16.0	176.0	CALC
243.0	BOND		SHALE	20.0	192.0	BLUE
223.0	BOND		SHALE	24.0	212.0	DARK
199.0	BOND		BLACK SHALE	3.0	236.0	
196.0	BOND		LIMESTONE	1.0	239.0	
195.0	BOND		CALCAREOUS SHALE	12.0	240.0	CALC
183.0	BOND		SHALE	13.0	252.0	
170.0	MODESTO	WOMAC	COAL	1.0	265.0	
169.0	MODESTO		SANDY SHALE	104.0	266.0	
65.0	MODESTO		SHALE	7.5	370.0	BLUE
57.5	MODESTO	CHAPEL	COAL	1.5	377.5	
56.0	MODESTO		SANDSTONE	14.0	379.0	
42.0	MODESTO		SHALE	10.0	393.0	BLUE
32.0	MODESTO		SANDY SHALE	25.0	403.0	BLUE
7.0	MODESTO		UNDERCLAY	5.0	428.0	
2.0	MODESTO		SHALE	27.0	433.0	BLUE
-25.0	MODESTO		LIMESTONE	2.0	460.0	
-27.0	MODESTO		SANDY SHALE	13.0	462.0	
-40.0	MODESTO		BLACK SHALE	10.0	475.0	
-50.0	MODESTO		ARGILACEOUS SHALE	5.0	485.0	ARG
-55.0	MODESTO		SANDY SHALE	20.0	490.0	
-75.0	MODESTO		SHALE	9.0	510.0	DARK
-84.0	MODESTO	PIASA	LIMESTONE	6.0	519.0	
-90.0	MODESTO		BLACK SHALE	4.0	525.0	
-94.0	MODESTO		SHALE	13.0	529.0	
-107.0	CARBONDALE	DANVILLE	COAL	2.0	542.0	
-109.0	CARBONDALE		SANDY SHALE	5.0	544.0	
-114.0	CARBONDALE		BLACK SHALE	10.0	549.0	
-124.0	CARBONDALE		SHALE	10.0	559.0	
-134.0	CARBONDALE		CALCAREOUS SHALE	10.0	569.0	CALC
-144.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.0	579.0	
-164.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	599.0	BLUE

-174.0	CARBONDALE	ANVIL ROCK	SHALE	1.0	609.0	BLUE
-175.0	CARBONDALE	ANVIL ROCK	BLACK SHALE	2.0	610.0	
-177.0	CARBONDALE	BRERETON	LIMESTONE	5.0	612.0	
-182.0	CARBONDALE	ANNA	BLACK SHALE	1.5	617.0	
-183.5	CARBONDALE	HERRIN	COAL	5.2	618.5	
-188.7	CARBONDALE		ARGILACEOUS SHALE	1.3	623.7	ARG
-190.0	CARBONDALE		SHALE	2.0	625.0	
-192.0	CARBONDALE		CALCAREOUS SHALE	3.0	627.0	CALC
-195.0	CARBONDALE		SHALE	15.0	630.0	BLUE
-210.0	CARBONDALE	BRIAR HILL	COAL	1.0	645.0	
-211.0	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	646.0	
-236.0	CARBONDALE	DYKERSBURG	SHALE	52.0	671.0	
-288.0	CARBONDALE	SPRINGFIELD	COAL	5.9	723.0	
-293.9	CARBONDALE		UNDERCLAY	1.1	728.9	

MAPID: 16501375000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.564808 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.887628 **DATE COLLECTED:** 7 / 0 / 1950

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 1994.0 **LOG TYPE:** Electric Log

SOURCE: ABERDEEN PET. CORP, ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-454.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	894.0	
-538.0	SPOON	DAVIS	UNCLASSIFIED	-	978.0	
-1554.0	BASE OF PENN.		UNCLASSIFIED	-	1994.0	

MAPID: 16501375000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.564808 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.887628 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:**

SOURCE: ABERDEEN PET. CORP, ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-172.0	CARBONDALE	BRERETON	LIMESTONE	-	612.0	
-1580.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2020.0	
-1945.0			LIMESTONE	-	2385.0	
-2364.0		BASE BARLOW	LIMESTONE	-	2804.0	

MAPID: 16501375000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564808 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.887628 **DATE COLLECTED:** 7 / 0 / 1950
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2804.0 **LOG TYPE:** Electric Log
SOURCE: ABERDEEN PET. CORP, ETAL, HARRELSON HARR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-349.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	789.0	
-388.0	CARBONDALE	SURVANT	COAL	1.5	828.0	
-457.0	CARBONDALE	COLCHESTER	COAL	0.6	897.0	
-496.0	CARBONDALE	DEKOVEN	COAL	2.0	936.0	
-526.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	966.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-536.0	CARBONDALE	DAVIS	COAL	3.0	976.0	
-577.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1017.0	
-610.0	TRADEWATER	MT. RORAH	COAL	1.3	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501375000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564808 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.887628 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 897.0 **LOG TYPE:** Electric Log
SOURCE: TALBOT & ABERDEEN 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-176.0	CARBONDALE	HERRIN	COAL	4.5	616.0	
-297.0	CARBONDALE	SPRINGFIELD	COAL	8.0	737.0	
-348.0	CARBONDALE	HOUCHIN CREEK	COAL	-	788.0	
-457.0	CARBONDALE	COLCHESTER	COAL	-	897.0	

MAPID: 16502616000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564902 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.878482 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 2812.0 **LOG TYPE:** Electric Log
SOURCE: MURVIN & STEBER DRLG, HARRELSON H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-341.0	CARBONDALE	HOUCHIN CREEK	COAL	0.0	803.0	
-388.0	CARBONDALE	SURVANT	COAL	0.1	850.0	
-443.0	CARBONDALE	COLCHESTER	COAL	0.6	905.0	
-483.0	CARBONDALE	DEKOVEN	COAL	3.0	945.0	
-518.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	980.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-526.0	CARBONDALE	DAVIS	COAL	4.0	988.0	
-563.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1025.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-613.0	TRADEWATER	MT. RORAH	COAL	4.0	1075.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502616000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.564902 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878482 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 2812.0 **LOG TYPE:**
SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-105.0	CARBONDALE	BRERETON	LIMESTONE	-	567.0	
-1550.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2012.0	
-1922.0			LIMESTONE	-	2384.0	
-2350.0		BASE BARLOW	LIMESTONE	-	2812.0	

MAPID: 16525799000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 510' S line, 398' W line of SW NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.566887 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.886317 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 770.0 **LOG TYPE:** Electric Log
SOURCE: SOUTHERN TRIANGLE OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-164.0	CARBONDALE	HERRIN	COAL	5.5	595.0	
-269.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	700.0	CHANNEL - COAL MISSING
-339.0	CARBONDALE	HOUCHIN CREEK	COAL	-	770.0	

MAPID: 16525804000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.571754 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.882237 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 920.0 **LOG TYPE:** Electric Log
SOURCE: SOUTHERN TRIANGLE OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	HERRIN	COAL	5.0	588.0	
-234.0	CARBONDALE	SPRINGFIELD	COAL	2.0	688.0	
-236.0	CARBONDALE	SPRINGFIELD	SHALE	14.5	690.0	
-250.5	CARBONDALE	SPRINGFIELD	COAL	3.5	704.5	
-349.0	CARBONDALE	HOUCHIN CREEK	COAL	-	803.0	
-466.0	CARBONDALE	COLCHESTER	COAL	-	920.0	

MAPID: 16590033000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1' S line, 1780' W line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.571314 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.877687 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 694.5 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-3 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-130.0	CARBONDALE	HERRIN	COAL	5.2	590.0	
-230.0	CARBONDALE	SPRINGFIELD	COAL	4.5	690.0	

MAPID: 16590034000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' S line, 2180' W line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.569912 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.879481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 660.0 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-4 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HERRIN	COAL	4.5	554.0	
-220.0	CARBONDALE	SPRINGFIELD	COAL	0.0	660.0	GALATIA CHANNEL - COAL MISSING

MAPID: 16590035000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1425' S line, 2570' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.568098 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.881561 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 694.5 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-5 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	HERRIN	COAL	5.0	587.0	
-237.0	CARBONDALE	SPRINGFIELD	COAL	0.0	690.0	GALATIA CHANNEL - COAL MISSING

MAPID: 16590036000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2160' S line, 2200' E line

QUADRANGLE: WALPOLE **LONGITUDE:** -88.56678 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.883569 **DATE COLLECTED:** 7 / 22 / 1987

SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO I-7-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.0	PLEISTOCENE		CLAY	8.0	0.0	RED
415.0	PLEISTOCENE		SAND	15.0	8.0	BROWN
400.0	CARBONDALE		SANDSTONE	12.0	23.0	GRAY
388.0	CARBONDALE		SANDY SHALE	33.0	35.0	
355.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	68.0	
352.0	CARBONDALE	COLCHESTER	COAL	0.3	71.0	
351.7	CARBONDALE		UNDERCLAY	4.7	71.3	
347.0	CARBONDALE		SANDSTONE	21.0	76.0	GRAY
326.0	CARBONDALE		SANDY SHALE	22.0	97.0	
304.0	CARBONDALE	DEKOVEN	COAL	2.2	119.0	
301.8	CARBONDALE		SANDY SHALE	18.3	121.2	
283.5	CARBONDALE		BLACK SHALE	1.5	139.5	
282.0	CARBONDALE	DAVIS	COAL	4.3	141.0	
277.7	TRADEWATER		SANDY SHALE	2.7	145.3	
275.0	TRADEWATER		SANDSTONE	33.0	148.0	GRAY
242.0	TRADEWATER		SANDY SHALE	2.0	181.0	
240.0	TRADEWATER		BLACK SHALE	2.0	183.0	
238.0	TRADEWATER	WISE RIDGE	COAL	0.6	185.0	
237.4	TRADEWATER		UNDERCLAY	1.4	185.6	
236.0	TRADEWATER		SANDSTONE	8.0	187.0	GRAY
228.0	TRADEWATER		SANDY SHALE	9.5	195.0	
218.5	TRADEWATER		COAL	0.2	204.5	
218.3	TRADEWATER		SANDY SHALE	0.8	204.7	
217.5	TRADEWATER		SANDSTONE	16.5	205.5	GRAY
201.0	TRADEWATER		SANDY SHALE	7.0	222.0	
194.0	TRADEWATER	MURPHYSBORO	COAL	0.4	229.0	
193.6	TRADEWATER		UNDERCLAY	0.6	229.4	
193.0	TRADEWATER		SANDSTONE	46.0	230.0	GRAY

MAPID: 16590036000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2160' S line, 2200' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.56678 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.883569 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-6 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.0	CARBONDALE	HERRIN	COAL	6.0	596.0	
-250.0	CARBONDALE	SPRINGFIELD	COAL	0.0	700.0	GALATIA CHANNEL - COAL MISSING

MAPID: 16590037000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2930' S line, 1800' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.565356 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.885669 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 719.2 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-7 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-170.0	CARBONDALE	HERRIN	COAL	4.8	600.0	
-284.0	CARBONDALE	SPRINGFIELD	COAL	5.2	714.0	

MAPID: 16590038000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1400' N line, 1300' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.563573 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.888322 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 737.5 **LOG TYPE:** Cross section
SOURCE: KERR-MCGEE COAL CO. 7629-8 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, LITHOLOGIC LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	HERRIN	COAL	6.1	610.0	
-286.0	CARBONDALE	SPRINGFIELD	COAL	8.5	723.0	

MAPID: 16500007000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.586675 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.885027 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 590.3 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.8	MODESTO	PIASA	LIMESTONE	4.0	480.8	
-54.8	MODESTO		GRAY SHALE	14.0	484.8	
-68.8	CARBONDALE	DANVILLE	COAL	2.0	498.8	
-70.8	CARBONDALE		DARK GRAY SHALE	19.0	500.8	
-89.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	519.8	
-94.8	CARBONDALE	LAWSON	SILTY SHALE	10.0	524.8	
-104.8	CARBONDALE	LAWSON	SANDSTONE	43.0	534.8	
-147.8	CARBONDALE	BRERETON	LIMESTONE	5.5	577.8	
-153.3	CARBONDALE	ANNA	BLACK SHALE	1.7	583.3	
-155.0	CARBONDALE	HERRIN	COAL	5.3	585.0	

MAPID: 16500007000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.586675 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.885027 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 798.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	2.0	499.0	
-	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	5.0	507.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	520.0	
-	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	43.0	535.0	
-	CARBONDALE	HERRIN	COAL	5.3	585.0	
-	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	9.0	624.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	1.7	792.0	

MAPID: 16500007000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: WALPOLE **LONGITUDE:** -88.586675 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.885027 **DATE COLLECTED:** 1 / 28 / 1921
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 798.0 **LOG TYPE:** Drillers Log
SOURCE: TRI COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT: NO ELEVATION GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	49.0	0.0	
-	BOND		SHALE	11.0	49.0	BLUE
-	BOND		SANDSTONE	30.0	60.0	
-	BOND		SANDY SHALE	34.0	90.0	
-	BOND		COAL	0.7	124.0	
-	BOND		SHALE	3.3	124.7	BLUE
-	BOND		BLACK SHALE	1.0	128.0	
-	BOND		SHALE	5.0	129.0	BLUE
-	BOND		LIMESTONE	3.0	134.0	
-	BOND		CALCAREOUS SHALE	4.0	137.0	CALC
-	BOND		SHALE	3.0	141.0	BLUE
-	BOND		LIMESTONE	2.0	144.0	
-	BOND		SHALE	32.0	146.0	BLUE
-	BOND		BLACK SHALE	4.0	178.0	BLACK
-	BOND		SHALE	7.0	182.0	
-	BOND		SANDSTONE	8.0	189.0	
-	BOND		CALCAREOUS SHALE	13.0	197.0	CALC
-	MODESTO	WOMAC	COAL	1.3	210.0	
-	MODESTO		SHALE	2.7	211.3	DARK
-	MODESTO		SANDY SHALE	54.0	214.0	
-	MODESTO		SHALE	53.2	268.0	BLUE
-	MODESTO	CHAPEL	COAL	1.3	321.2	
-	MODESTO		UNDERCLAY	0.5	322.5	
-	MODESTO		LIMESTONE	1.0	323.0	
-	MODESTO		SANDSTONE	6.0	324.0	
-	MODESTO		SANDY SHALE	15.0	330.0	
-	MODESTO		SHALE	23.0	345.0	BLUE
-	MODESTO		SANDY SHALE	2.0	368.0	
-	MODESTO		SHALE	42.0	370.0	BLUE
-	MODESTO		SHALE	8.0	412.0	BLUE
-	MODESTO		SANDY SHALE	6.0	420.0	
-	MODESTO		SHALE	2.0	426.0	BROWN
-	MODESTO		SHALE	20.0	428.0	BLUE
-	MODESTO		COAL	1.0	448.0	
-	MODESTO		SHALE	2.5	449.0	BLUE
-	MODESTO		LIMESTONE	1.5	451.5	
-	MODESTO		SANDY SHALE	4.0	453.0	
-	MODESTO		CALCAREOUS SHALE	5.0	457.0	CALC
-	MODESTO		SHALE	19.0	462.0	BLUE

-	MODESTO	PIASA	LIMESTONE	4.0	481.0	
-	MODESTO		SHALE	14.0	485.0	BLUE
-	CARBONDALE	DANVILLE	COAL	2.0	499.0	
-	CARBONDALE		SHALE	6.0	501.0	BLUE
-	CARBONDALE		SHALE	5.0	507.0	DARK
-	CARBONDALE		SHALE	6.0	512.0	BLUE
-	CARBONDALE		CALCAREOUS SHALE	2.0	518.0	CALC
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	520.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	525.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	43.0	535.0	
-	CARBONDALE	BRERETON	LIMESTONE	5.5	578.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.7	583.6	
-	CARBONDALE	HERRIN	COAL	5.3	585.2	
-	CARBONDALE		UNDERCLAY	2.6	590.4	
-	CARBONDALE		SHALE	31.0	593.0	BLUE
-	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	624.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	58.0	633.0	
-	CARBONDALE	DYKERSBURG	SHALE	20.0	691.0	BLUE
-	CARBONDALE	DYKERSBURG	SANDY SHALE	79.0	711.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	1.7	790.0	
-	CARBONDALE		SHALE	0.8	791.7	W/FOSSILS, DARK
-	CARBONDALE	HOUCHIN CREEK	COAL	1.7	792.5	
-	CARBONDALE		CALCAREOUS SHALE	3.8	794.2	CALC

MAPID: 16501136000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: WALPOLE **LONGITUDE:** -88.578661 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.878701 **DATE COLLECTED:** 12 / 0 / 1941

SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2759.0 **LOG TYPE:** Electric Log

SOURCE: CONCANNON T F, DURHAM RAY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-339.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	778.0	
-379.0	CARBONDALE	SURVANT	COAL	2.5	818.0	
-460.0	CARBONDALE	COLCHESTER	COAL	0.5	899.0	
-491.0	CARBONDALE	DEKOVEN	COAL	2.0	930.0	
-515.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	954.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-524.0	CARBONDALE	DAVIS	COAL	4.0	963.0	
-561.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	
-615.0	TRADEWATER	MT. RORAH	COAL	3.0	1054.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501136000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.578661 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.878701 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2759.0 **LOG TYPE:**
SOURCE: CONCANNON T F **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.0	CARBONDALE	BRERETON	LIMESTONE	-	580.0	
-1549.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1988.0	
-1897.0			LIMESTONE	-	2336.0	
-2320.0		BASE BARLOW	LIMESTONE	-	2759.0	

MAPID: 16501136000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.578661 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.878701 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 699.5 **LOG TYPE:** Electric Log
SOURCE: CONCANNON T F 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	HERRIN	COAL	5.0	587.0	
-255.0	CARBONDALE	SPRINGFIELD	COAL	5.5	694.0	

MAPID: 16503112000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.590404 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.889592 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 1880.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-489.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	930.0	
-559.0	SPOON	DAVIS	UNCLASSIFIED	-	1000.0	
-1439.0	BASE OF PENN.		UNCLASSIFIED	-	1880.0	

MAPID: 16503112000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.590404 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.889592 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:**
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-185.0	CARBONDALE	BRERETON	LIMESTONE	-	626.0	
-1591.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2032.0	
-1965.0			LIMESTONE	-	2406.0	
-2343.0		BASE BARLOW	LIMESTONE	-	2784.0	

MAPID: 16503112000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.590404 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889592 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG., BROWN CECIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-379.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	820.0	
-419.0	CARBONDALE	SURVANT	COAL	1.5	860.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.6	930.0	
-529.0	CARBONDALE	DEKOVEN	COAL	3.0	970.0	
-559.0	CARBONDALE	DAVIS	COAL	2.0	1000.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-618.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1059.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-659.0	TRADEWATER	MT. RORAH	COAL	2.0	1100.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503112000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.590404 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.889592 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 930.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	HERRIN	COAL	4.5	635.0	
-303.0	CARBONDALE	SPRINGFIELD	COAL	5.0	744.0	
-379.0	CARBONDALE	HOUCHIN CREEK	COAL	-	820.0	
-489.0	CARBONDALE	COLCHESTER	COAL	-	930.0	

MAPID: 16524082000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 120' S line, 30' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.59629 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863602 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 488.0 **LOGGED (FT.):** 690.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 7631-2 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-86.4	CARBONDALE	HERRIN	COAL	5.8	574.4	
-195.2	CARBONDALE	SPRINGFIELD	COAL	6.8	683.2	

MAPID: 16525226000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.588088 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.87685 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 690.0 **LOG TYPE:** Nuclear Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	HERRIN	COAL	5.0	582.0	
-247.0	CARBONDALE	SPRINGFIELD	COAL	4.0	686.0	

MAPID: 16525422000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 300' S line, 970' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.580924 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.874967 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 865.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HERRIN	COAL	5.0	566.0	
-256.0	CARBONDALE	SPRINGFIELD	COAL	2.5	687.0	
-258.5	CARBONDALE	SPRINGFIELD	SHALE	2.5	689.5	
-261.0	CARBONDALE	SPRINGFIELD	COAL	4.0	692.0	
-316.0	CARBONDALE	HOUCHIN CREEK	COAL	-	747.0	
-434.0	CARBONDALE	COLCHESTER	COAL	-	865.0	

MAPID: 16525422000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 300' S line, 970' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.580924 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.874967 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 1820.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-436.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	867.0	
-502.0	SPOON	DAVIS	UNCLASSIFIED	-	933.0	
-1389.0	BASE OF PENN.		UNCLASSIFIED	-	1820.0	

MAPID: 16526139000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2200' N line, 200' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.595673 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.871667 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 710.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7631-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	GLACIAL DRIFT
-	BOND		SANDSTONE	11.0	17.0	BROWN
-	BOND		GRAY SHALE	35.0	28.0	
-	BOND		SILTY SHALE	4.0	63.0	WITH SANDSTONE BEDS
-	BOND		SANDSTONE	31.0	67.0	
-	BOND		GRAY SHALE	6.0	98.0	
-	BOND		COAL	1.0	104.0	BONEY
-	BOND		SILTY SHALE	23.0	105.0	WITH SANDSTONE BEDS
-	BOND		GRAY SHALE	31.0	128.0	WITH SIDERITE
-	BOND		SHALE	1.5	159.0	DARK GRAY
-	BOND		LIMESTONE	0.5	160.5	
-	BOND		SANDY SHALE	28.0	161.0	WITH LIMESTONE NODULES
-	MODESTO	WOMAC	COAL	1.0	189.0	
-	MODESTO		SILTY SHALE	79.0	190.0	
-	MODESTO		GRAY SHALE	26.0	269.0	WITH SIDERITE
-	MODESTO	CHAPEL	COAL	1.0	295.0	
-	MODESTO	TRIVOLI	SANDSTONE	36.0	296.0	
-	MODESTO		SILTY SHALE	22.0	332.0	
-	MODESTO		SILTY SHALE	36.0	354.0	WITH SIDERITE
-	MODESTO		SANDY SHALE	15.0	390.0	WITH LIMESTONE NODULES
-	MODESTO		SANDSTONE	5.0	405.0	
-	MODESTO		SILTY SHALE	60.0	410.0	
-	MODESTO	PIASA	LIMESTONE	4.0	470.0	
-	MODESTO		SILTY SHALE	16.0	474.0	
-	CARBONDALE	DANVILLE	COAL	1.0	490.0	
-	CARBONDALE		SILTY SHALE	21.0	491.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	512.0	
-	CARBONDALE		SILTY SHALE	3.0	518.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	49.0	521.0	
-	CARBONDALE		SHALE	2.0	570.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	4.0	572.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	576.0	
-	CARBONDALE	HERRIN	COAL	6.5	578.0	
-	CARBONDALE		UNDERCLAY	2.5	584.5	
-	CARBONDALE		LIMESTONE	4.0	587.0	NODULAR SHALY
-	CARBONDALE		SILTY SHALE	10.0	591.0	
-	CARBONDALE		SILTY SHALE	82.0	601.0	WITH SANDSTONE BEDS
-	CARBONDALE	SPRINGFIELD	COAL	6.8	683.0	
-	CARBONDALE		CARBONACEOUS SHALE	6.0	689.8	

-	CARBONDALE	SILTY SHALE	3.0	695.8	DARK GRAY
-	CARBONDALE	SILTY SHALE	11.2	698.8	WITH LIMESTONE NODULES

MAPID: 16526140000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1000' S line, 2200' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.588727 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.866002 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 650.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7631-5 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	84.0	0.0	
-			SILTY SHALE	46.0	84.0	
-			SHALE	10.0	130.0	DARK GRAY
-			SANDY SHALE	36.0	140.0	
-	MODESTO	WOMAC	COAL	2.0	176.0	
-	MODESTO		SILTY SHALE	77.0	178.0	
-	MODESTO		GRAY SHALE	68.0	255.0	WITH SANDSTONE
-	MODESTO		SILTY SHALE	37.0	323.0	
-	MODESTO		SANDSTONE	8.0	360.0	
-	MODESTO		SILTY SHALE	27.0	368.0	
-	MODESTO		SANDSTONE	22.0	395.0	
-	MODESTO		SHALE	8.0	417.0	DARK GRAY
-	MODESTO	PIASA	LIMESTONE	5.0	425.0	
-	MODESTO		SHALE	14.0	430.0	DARK GRAY
-	CARBONDALE	DANVILLE	COAL	2.0	444.0	
-	CARBONDALE		SILTY SHALE	19.0	446.0	
-	CARBONDALE		SHALE	4.0	465.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	469.0	
-	CARBONDALE		SILTY SHALE	18.0	475.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	37.0	493.0	
-	CARBONDALE		SHALE	3.0	530.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	4.0	533.0	
-	CARBONDALE	ANNA	SHALE	3.0	537.0	DARK GRAY
-	CARBONDALE	HERRIN	COAL	6.0	540.0	
-	CARBONDALE		UNDERCLAY	2.0	546.0	
-	CARBONDALE		SILTY SHALE	16.0	548.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	564.0	
-	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	30.0	565.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	43.0	595.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	638.0	
-	CARBONDALE		SILTY SHALE	5.0	645.0	DARK GRAY

MAPID: 16526141000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 800' S line, 1350' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.591687 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.86546 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 662.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7631-6 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	59.0	0.0	GLACIAL DEPOSITS
-	MODESTO		SILTY SHALE	103.0	59.0	
-	MODESTO	WOMAC	COAL	1.0	162.0	
-	MODESTO		SILTY SHALE	101.0	163.0	
-	MODESTO	TRIVOLI	SANDSTONE	65.0	264.0	
-	MODESTO		GRAY SHALE	38.0	329.0	
-	MODESTO		SILTY SHALE	38.0	367.0	DARK GRAY
-	MODESTO		SANDSTONE	5.0	405.0	
-	MODESTO		SILTY SHALE	22.0	410.0	
-	MODESTO	PIASA	LIMESTONE	4.0	432.0	
-	MODESTO		SHALE	13.0	436.0	
-	CARBONDALE	DANVILLE	COAL	1.0	449.0	
-	CARBONDALE		SILTY SHALE	25.0	450.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	475.0	
-	CARBONDALE		SHALE	5.0	480.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	54.0	485.0	
-	CARBONDALE		SHALE	3.0	539.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	6.0	542.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.0	548.0	
-	CARBONDALE	HERRIN	COAL	6.0	549.0	
-	CARBONDALE		UNDERCLAY	4.0	555.0	
-	CARBONDALE		LIMESTONE	3.0	559.0	NODULAR, SHALY
-	CARBONDALE		SILTY SHALE	10.0	562.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	572.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	71.0	573.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	644.0	
-	CARBONDALE		SILTY SHALE	10.0	652.0	

MAPID: 16590012000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 100' S line, 2060' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.584845 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.8635 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 557.7 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 7631-3 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-25.0	CARBONDALE	HERRIN	COAL	6.0	453.0	
-101.0	CARBONDALE	BRIAR HILL	COAL	1.5	529.0	
-121.0	CARBONDALE	SPRINGFIELD	COAL	8.7	549.0	

MAPID: 16525258000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56027 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.864 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 901.0 **LOG TYPE:** Nuclear Log
SOURCE: TEXAS-REBEL OIL PRODUCER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	HERRIN	COAL	6.0	520.0	
-170.0	CARBONDALE	SPRINGFIELD	COAL	8.0	646.0	
-334.0	CARBONDALE	COLCHESTER	COAL	-	810.0	
-420.0	SPOON	DAVIS	COAL	5.0	896.0	

MAPID: 16526142000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1500' N line, 3000' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.569627 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.873512 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 697.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7632-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0	GLACIAL DRIFT
-	BOND		SHALY SANDSTONE	58.0	43.0	
-	BOND		SANDY SHALE	6.0	101.0	CARB
-	BOND		SILTY SHALE	9.0	107.0	
-	BOND		SANDY LIMESTONE	3.0	116.0	
-	BOND		SANDY SHALE	5.0	119.0	
-	BOND		SILTY SHALE	37.0	124.0	
-	BOND		BLACK SHALE	2.0	161.0	
-	BOND		LIMESTONE	1.0	163.0	DARK GRAY
-	BOND		SILTY SHALE	4.0	164.0	
-	BOND		SANDY SHALE	23.0	168.0	WITH SANDSTONE BEDS
-	BOND		SHALE	3.0	191.0	
-	BOND		SHALY SANDSTONE	53.0	194.0	
-	BOND		SANDY SHALE	11.0	247.0	
-	BOND		SILTY SHALE	37.0	258.0	
-	MODESTO	CHAPEL	COAL	2.0	295.0	
-	MODESTO		SANDY SHALE	4.0	297.0	
-	MODESTO		SHALY SANDSTONE	42.0	301.0	
-	MODESTO		SANDY SHALE	12.0	343.0	
-	MODESTO		SILTY SHALE	41.0	355.0	
-	MODESTO		SANDSTONE	7.0	396.0	
-	MODESTO		SILTY SHALE	6.0	403.0	
-	MODESTO		SHALE	9.0	409.0	DARK GRAY
-	MODESTO	POND CREEK	COAL	1.0	418.0	
-	MODESTO		CALCAREOUS SHALE	4.0	419.0	
-	MODESTO		CALCAREOUS SANDSTONE	22.0	423.0	
-	MODESTO		SILTY SHALE	10.0	445.0	
-	MODESTO	PIASA	LIMESTONE	4.0	455.0	TAN
-	MODESTO		SILTY SHALE	15.0	459.0	
-	CARBONDALE	DANVILLE	COAL	2.0	474.0	
-	CARBONDALE		SANDSTONE	14.0	476.0	
-	CARBONDALE		SANDY SHALE	8.0	490.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	60.0	498.0	
-	CARBONDALE		SHALE	6.0	558.0	DARK GRAY TO BLUE
-	CARBONDALE	BRERETON	LIMESTONE	3.0	564.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	567.0	
-	CARBONDALE	HERRIN	COAL	6.8	569.0	
-	CARBONDALE		SILTSTONE	4.2	575.8	

-	CARBONDALE		GRAY SHALE	3.0	580.0	WITH LIMESTONE NODULES
-	CARBONDALE		SILTY SHALE	8.0	583.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	591.0	BONEY
-	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	33.0	592.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	62.0	625.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	3.0	687.0	BONE COAL
-	CARBONDALE	SPRINGFIELD	COAL	4.8	690.0	
-	CARBONDALE		CARBONACEOUS SHALE	2.2	694.8	DARK GRAY

MAPID: 16526143000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 2500' N line, 200' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.576894 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.870879 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 669.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7632-2 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0	GLACIAL DRIFT
-	BOND		SHALY SANDSTONE	7.0	23.0	
-	BOND		SILTY SHALE	89.0	30.0	
-	BOND		SHALE	3.0	119.0	DARK GRAY
-	BOND	CARTHAGE	LIMESTONE	1.0	122.0	
-	MODESTO		SILTY SHALE	29.0	123.0	
-	MODESTO	WOMAC	COAL	1.0	152.0	
-	MODESTO		SILTY SHALE	87.0	153.0	
-	MODESTO		LIMESTONE	1.0	240.0	
-	MODESTO		SILTY SHALE	18.0	241.0	
-	MODESTO	CHAPEL	COAL	1.0	259.0	
-	MODESTO		SILTSTONE	5.0	260.0	
-	MODESTO	TRIVOLI	SANDSTONE	27.0	265.0	
-	MODESTO		SILTY SHALE	98.0	292.0	
-	MODESTO		SANDSTONE	20.0	390.0	
-	MODESTO		SILTY SHALE	9.0	410.0	
-	MODESTO	DEGRAFF	COAL	1.0	419.0	
-	MODESTO		CALCAREOUS SHALE	1.0	420.0	GREEN GRAY
-	MODESTO	PIASA	LIMESTONE	3.0	421.0	
-	CARBONDALE		SILTY SHALE	14.0	424.0	
-	CARBONDALE	DANVILLE	COAL	1.0	438.0	
-	CARBONDALE		SANDSTONE	12.0	439.0	
-	CARBONDALE		SILTY SHALE	12.0	451.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	463.0	
-	CARBONDALE		SILTY SHALE	20.0	466.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	36.0	486.0	
-	CARBONDALE		CALCAREOUS SHALE	1.0	522.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	3.0	523.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.0	526.0	
-	CARBONDALE	HERRIN	COAL	6.2	527.0	
-	CARBONDALE		UNDERCLAY	1.8	533.2	
-	CARBONDALE		SILTSTONE	3.0	535.0	
-	CARBONDALE		LIMESTONE	1.0	538.0	
-	CARBONDALE		SILTSTONE	6.0	539.0	
-	CARBONDALE		SILTY SHALE	20.0	545.0	
-	CARBONDALE		SHALY SANDSTONE	53.0	565.0	
-	CARBONDALE		SANDY SHALE	12.0	618.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.7	630.0	
-	CARBONDALE	SPRINGFIELD	COAL	2.3	636.7	WITH SHALE

-	CARBONDALE	SILTY SHALE	30.0	639.0

MAPID: 16523952000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1660' S line, 1440' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.54573 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.867535 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 604.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7633-2 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-51.0	CARBONDALE	HERRIN	COAL	7.0	499.0	
-77.0	CARBONDALE	BRIAR HILL	COAL	2.0	525.0	
-152.0	CARBONDALE	SPRINGFIELD	COAL	4.0	600.0	

MAPID: 16526144000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2300' S line, 200' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.558458 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.869424 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 715.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 7633-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0	GLACIAL DRIFT
-	BOND		LIMESTONE	2.0	42.0	
-	BOND		SILTY SHALE	86.0	44.0	
-	BOND	CARTHAGE	LIMESTONE	1.0	130.0	
-	MODESTO		SILTY SHALE	83.0	131.0	DARK GRAY
-	MODESTO		SANDSTONE	4.0	214.0	
-	MODESTO		SILTY SHALE	77.0	218.0	
-	MODESTO		LIMESTONE	1.0	295.0	DARK GRAY
-	MODESTO		SILTY SHALE	16.0	296.0	
-	MODESTO	CHAPEL	COAL	1.0	312.0	
-	MODESTO	TRIVOLI	SANDSTONE	19.0	313.0	
-	MODESTO		SILTY SHALE	82.0	332.0	
-	MODESTO	POND CREEK	COAL	1.0	414.0	
-	MODESTO		SILTY SHALE	64.0	415.0	
-	MODESTO	PIASA	LIMESTONE	3.0	479.0	TAN
-	MODESTO		SILTY SHALE	18.0	482.0	
-	CARBONDALE	DANVILLE	COAL	2.0	500.0	
-	CARBONDALE		SILTY SHALE	28.0	502.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	530.0	TAN
-	CARBONDALE		SHALY SANDSTONE	15.0	536.0	
-	CARBONDALE		SANDY SHALE	19.0	551.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	570.0	
-	CARBONDALE	ANNA	BLACK SHALE	3.0	574.0	
-	CARBONDALE	HERRIN	COAL	6.6	577.0	
-	CARBONDALE		UNDERCLAY	3.4	583.6	
-	CARBONDALE		SILTSTONE	3.0	587.0	
-	CARBONDALE		GRAY SHALE	10.0	590.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	600.0	
-	CARBONDALE		SHALY SANDSTONE	32.0	601.0	
-	CARBONDALE		SANDY SHALE	11.0	633.0	
-	CARBONDALE		SHALY SANDSTONE	6.0	644.0	
-	CARBONDALE		SANDY SHALE	36.0	650.0	
-	CARBONDALE	TURNER MINE	CARBONACEOUS SHALE	2.0	686.0	DARK GRAY TO BLACK
-	CARBONDALE	SPRINGFIELD	COAL	3.9	688.0	
-	CARBONDALE		SHALE	2.1	691.9	DARK GRAY
-	CARBONDALE		SILTSTONE	6.0	694.0	
-	CARBONDALE		SANDSTONE	15.0	700.0	

MAPID: 16501137000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.528005 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.869288 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 3154.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	DANVILLE	COAL	-	352.0	
40.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SILTSTONE	3.0	360.0	
28.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	372.0	
14.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	40.0	386.0	
-36.0	CARBONDALE	HERRIN	COAL	-	436.0	
-58.0	CARBONDALE	BRIAR HILL	COAL	-	458.0	
-116.0	CARBONDALE	CANTON	SANDSTONE/SHALE	66.0	516.0	
-233.0	CARBONDALE	HOUCHIN CREEK	COAL	-	633.0	

MAPID: 16501137000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.528005 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.869288 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 439.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
74.5	MODESTO	PIASA	LIMESTONE	6.0	325.5	
68.5	MODESTO		SHALE	22.0	331.5	
46.5	CARBONDALE	DANVILLE	COAL	2.0	353.5	
44.5	CARBONDALE		SHALE	17.0	355.5	
27.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	372.5	
24.5	CARBONDALE	LAWSON	SHALE	6.0	375.5	
18.5	CARBONDALE	LAWSON	SANDSTONE	45.0	381.5	
-26.5	CARBONDALE	LAWSON	BLACK SHALE	3.0	426.5	
-29.5	CARBONDALE	BRERETON	LIMESTONE	4.5	429.5	
-34.0	CARBONDALE	ANNA	BLACK SHALE	2.0	434.0	
-36.0	CARBONDALE	HERRIN	COAL	3.5	436.0	

MAPID: 16501137000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.528005 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869288 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2639.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-28.0	CARBONDALE	BRERETON	LIMESTONE	-	428.0	
-1455.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1855.0	
-1824.0			LIMESTONE	-	2224.0	
-2239.0		BASE BARLOW	LIMESTONE	-	2639.0	

MAPID: 16501137000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.528005 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.869288 **DATE COLLECTED:** 7 / 0 / 1947
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 439.5 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, CRAWFORD EMRY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-234.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	634.0	
-272.0	CARBONDALE	SURVANT	COAL	0.5	672.0	
-338.0	CARBONDALE	COLCHESTER	COAL	0.6	738.0	
-380.0	CARBONDALE	DEKOVEN	COAL	0.5	780.0	
-423.0	CARBONDALE	DAVIS	COAL	4.0	823.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	860.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-495.0	TRADEWATER	MT. RORAH	COAL	1.3	895.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501137000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.528005 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.869288 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 737.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
232.0	MODESTO	CHAPEL	COAL	-	168.0	
-35.0	CARBONDALE	HERRIN	COAL	4.0	435.0	
-52.0	CARBONDALE	BRIAR HILL	COAL	-	452.0	
-160.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	560.0	CHANNEL - COAL MISSING
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	-	632.0	
-337.0	CARBONDALE	COLCHESTER	COAL	-	737.0	

MAPID: 16523925000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534935 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.865633 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 657.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-45.0	CARBONDALE	HERRIN	COAL	4.0	460.0	
-178.0	CARBONDALE	SPRINGFIELD	COAL	7.0	593.0	
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	-	657.0	

MAPID: 16523925000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534935 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.865633 **DATE COLLECTED:** 3 / 0 / 1976
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1862.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-346.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	761.0	
-427.0	SPOON	DAVIS	UNCLASSIFIED	-	842.0	
-1447.0	BASE OF PENN.		UNCLASSIFIED	-	1862.0	

MAPID: 16525200000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of NE NE NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.533832 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.876507 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 797.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-69.0	CARBONDALE	HERRIN	COAL	5.0	506.0	
-189.0	CARBONDALE	SPRINGFIELD	COAL	8.0	626.0	
-360.0	CARBONDALE	COLCHESTER	COAL	-	797.0	

MAPID: 16525218000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533814 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.874704 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.5 **LOGGED (FT.):** 602.0 **LOG TYPE:** Electric Log
SOURCE: KEATING OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.5	CARBONDALE	HERRIN	COAL	-	495.0	
-172.5	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	-	602.0	

MAPID: 16525253000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of NE
QUADRANGLE: WALPOLE **LONGITUDE:** -88.524671 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.876567 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 597.0 **LOG TYPE:** Electric Log
SOURCE: KEATING OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-74.0	CARBONDALE	HERRIN	COAL	-	491.0	
-180.0	CARBONDALE	SPRINGFIELD	COAL	-	597.0	

MAPID: 16525254000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538402 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.872857 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 600.0 **LOG TYPE:** Electric Log
SOURCE: KEATING OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HERRIN	COAL	-	482.0	
-175.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	600.0	CHANNEL - COAL MISSING

MAPID: 16525259000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of NW NW
QUADRANGLE: WALPOLE **LONGITUDE:** -88.538412 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.876476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 663.5 **LOG TYPE:** Electric Log
SOURCE: KEATING OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-81.0	CARBONDALE	HERRIN	COAL	5.5	542.0	
-196.5	CARBONDALE	SPRINGFIELD	COAL	1.0	657.5	
-197.5	CARBONDALE	SPRINGFIELD	SHALE	1.5	658.5	
-199.0	CARBONDALE	SPRINGFIELD	COAL	3.5	660.0	

MAPID: 16590021000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1280' N line, 11' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.531829 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.873945 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 413.7 **LOGGED (FT.):** 604.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 7634-2 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.7			UNCONSOLIDATED	30.0	0.0	GLACIAL DRIFT DEPOSITS
383.7			GRAY SHALE	54.0	30.0	
329.7			BLACK SHALE	4.0	84.0	
325.7			GRAY SHALE	36.0	88.0	
289.7			COAL	1.0	124.0	
288.7			DARK GRAY SHALE	98.0	125.0	
190.7	MODESTO	CHAPEL	COAL	1.0	223.0	
189.7	MODESTO	TRIVOLI	SANDSTONE	21.0	224.0	
168.7	MODESTO		GRAY SHALE	121.0	245.0	
47.7	MODESTO		SANDSTONE	7.0	366.0	
40.7	MODESTO		GRAY SHALE	19.0	373.0	
21.7	MODESTO	PIASA	LIMESTONE	7.0	392.0	
14.7	MODESTO		GRAY SHALE	22.0	399.0	
-7.3	CARBONDALE	DANVILLE	COAL	1.0	421.0	
-8.3	CARBONDALE		GRAY SHALE	24.0	422.0	
-32.3	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	446.0	
-40.3	CARBONDALE		DARK GRAY SHALE	11.0	454.0	
-51.3	CARBONDALE		SANDSTONE	6.0	465.0	
-57.3	CARBONDALE	BRERETON	LIMESTONE	4.0	471.0	
-61.3	CARBONDALE	HERRIN	COAL	5.5	475.0	
-66.8	CARBONDALE		UNDERCLAY	3.0	480.5	
-69.8	CARBONDALE		GRAY SHALE	24.0	483.5	
-93.8	CARBONDALE	BRIAR HILL	COAL	1.0	507.5	
-94.8	CARBONDALE		GRAY SHALE	81.9	508.5	
-176.7	CARBONDALE	SPRINGFIELD	COAL	6.1	590.4	
-182.8	CARBONDALE		DARK GRAY SHALE	0.6	596.5	
-183.4	CARBONDALE		BONE COAL	0.6	597.1	
-184.0	CARBONDALE		DARK GRAY SHALE	6.3	597.7	

MAPID: 16501517000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511743 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-27.0	CARBONDALE	BRERETON	LIMESTONE	-	408.0	
-1435.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1797.0			LIMESTONE	-	2178.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2542.0	

MAPID: 16501517000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511743 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.869419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	DANVILLE	COAL	-	346.0	
-171.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	552.0	
8.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	373.0	
2.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	3.0	379.0	
-33.0	CARBONDALE	HERRIN	COAL	-	414.0	
-66.0	CARBONDALE	BRIAR HILL	COAL	-	447.0	
-155.0	CARBONDALE	SPRINGFIELD	COAL	-	536.0	
-179.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	30.0	560.0	
-215.0	CARBONDALE	HOUCHIN CREEK	COAL	-	596.0	

MAPID: 16501517000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511743 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.869419 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS BEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-214.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	595.0	
-254.0	CARBONDALE	SURVANT	COAL	3.0	635.0	
-319.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-339.0	CARBONDALE	DEKOVEN	COAL	2.5	720.0	
-369.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	750.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-379.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-433.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	814.0	
-459.0	TRADEWATER	MT. RORAH	COAL	1.5	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501517000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511743 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.869419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. A-1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.0	MODESTO	CHAPEL	COAL	-	150.0	
-33.0	CARBONDALE	HERRIN	COAL	5.5	414.0	
-75.0	CARBONDALE	BRIAR HILL	COAL	-	456.0	
-147.0	CARBONDALE	SPRINGFIELD	COAL	4.0	528.0	
-151.0	CARBONDALE	SPRINGFIELD	SHALE	3.0	532.0	
-154.0	CARBONDALE	SPRINGFIELD	COAL	3.0	535.0	
-215.0	CARBONDALE	HOUCHIN CREEK	COAL	-	596.0	
-319.0	CARBONDALE	COLCHESTER	COAL	-	700.0	

MAPID: 16502163000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511719 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.867567 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS BEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-251.0	CARBONDALE	SURVANT	COAL	4.0	632.0	
-319.0	CARBONDALE	COLCHESTER	COAL	0.6	700.0	
-343.0	CARBONDALE	DEKOVEN	COAL	3.5	724.0	
-379.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	760.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-387.0	CARBONDALE	DAVIS	COAL	3.0	768.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	803.0	
-427.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	808.0	
-449.0	TRADEWATER	MT. RORAH	COAL	1.0	830.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502163000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511719 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.867567 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	BRERETON	LIMESTONE	-	395.0	
-1436.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1813.0			LIMESTONE	-	2194.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16502163000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511719 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.867567 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.0	MODESTO	CHAPEL	COAL	-	134.0	
-21.0	CARBONDALE	HERRIN	COAL	5.0	402.0	
-53.0	CARBONDALE	BRIAR HILL	COAL	-	434.0	
-140.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.5	521.0	CONTAINS A SHALE PARTING
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	-	590.0	
-319.0	CARBONDALE	COLCHESTER	COAL	-	700.0	

MAPID: 16502164000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513994 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.865731 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 679.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
246.0	MODESTO	CHAPEL	COAL	-	137.0	
-16.0	CARBONDALE	HERRIN	COAL	5.0	399.0	
-52.0	CARBONDALE	BRIAR HILL	COAL	-	435.0	
-131.0	CARBONDALE	SPRINGFIELD	COAL	3.0	514.0	
-134.0	CARBONDALE	SPRINGFIELD	SHALE	3.0	517.0	
-137.0	CARBONDALE	SPRINGFIELD	COAL	6.5	520.0	
-194.0	CARBONDALE	HOUCHIN CREEK	COAL	-	577.0	
-296.0	CARBONDALE	COLCHESTER	COAL	-	679.0	

MAPID: 16502164000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513994 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.865731 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-9.0	CARBONDALE	BRERETON	LIMESTONE	-	392.0	
-1427.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1797.0			LIMESTONE	-	2180.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2539.0	

MAPID: 16502165000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 430' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509716 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.86944 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2196.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS BEN "A" **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-215.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	595.0	
-255.0	CARBONDALE	SURVANT	COAL	3.5	635.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-357.0	CARBONDALE	DEKOVEN	COAL	2.5	737.0	
-392.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	772.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-403.0	CARBONDALE	DAVIS	COAL	3.0	783.0	
-440.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	820.0	
-443.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	823.0	
-470.0	TRADEWATER	MT. RORAH	COAL	0.0	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502165000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 430' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509716 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2196.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-29.0	CARBONDALE	BRERETON	LIMESTONE	-	410.0	
-1439.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1815.0			LIMESTONE	-	2196.0	

MAPID: 16502165000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 430' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509716 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.86944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	MODESTO	CHAPEL	COAL	-	153.0	
-	CARBONDALE	HERRIN	COAL	5.5	406.0	
-	CARBONDALE	BRIAR HILL	COAL	-	453.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	523.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	596.0	
-	CARBONDALE	COLCHESTER	COAL	-	700.0	

MAPID: 16502166000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 373' N line, 473' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509863 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.86932 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 695.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 5SWD **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	MODESTO	CHAPEL	COAL	-	150.0	
-	CARBONDALE	HERRIN	COAL	5.5	413.5	
-	CARBONDALE	BRIAR HILL	COAL	-	451.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	517.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	594.0	
-	CARBONDALE	COLCHESTER	COAL	-	695.0	

MAPID: 16502166000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 373' N line, 473' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509863 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86932 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 407.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Water Injection
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-27.0	CARBONDALE	BRERETON	LIMESTONE	-	407.0	

MAPID: 16502167000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509351 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.867582 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2188.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
240.0	MODESTO	CHAPEL	COAL	-	140.0	
-22.0	CARBONDALE	BRERETON	LIMESTONE	-	402.0	
-634.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1014.0	
-1808.0			LIMESTONE	-	2188.0	

MAPID: 16502168000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.516328 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.863882 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1719.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-309.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	695.0	
-372.0	SPOON	DAVIS	UNCLASSIFIED	-	758.0	
-1333.0	BASE OF PENN.		UNCLASSIFIED	-	1719.0	

MAPID: 16502168000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.516328 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.863882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
16.0	CARBONDALE	BRERETON	LIMESTONE	-	370.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1793.0			LIMESTONE	-	2179.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2556.0	

MAPID: 16502168000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.516328 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.863882 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS-SMITH COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-197.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	583.0	
-240.0	CARBONDALE	SURVANT	COAL	2.0	626.0	
-309.0	CARBONDALE	COLCHESTER	COAL	2.0	695.0	
-336.0	CARBONDALE	DEKOVEN	COAL	5.0	722.0	
-360.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	746.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-370.0	CARBONDALE	DAVIS	COAL	4.0	756.0	
-406.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	792.0	
-418.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	804.0	
-442.0	TRADEWATER	MT. RORAH	COAL	0.5	828.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502168000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.516328 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 508.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
8.0	CARBONDALE	HERRIN	COAL	-	378.0	
-22.0	CARBONDALE	BRIAR HILL	COAL	-	408.0	
-122.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	508.0	CHANNEL - COAL MISSING

MAPID: 16502169000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511683 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871241 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 707.0 **LOG TYPE:** Electric Log
SOURCE: BREUER, GEORGE W. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
211.0	MODESTO	CHAPEL	COAL	-	170.0	
-52.0	CARBONDALE	HERRIN	COAL	-	433.0	
-154.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	5.0	535.0	
-159.0	CARBONDALE	SPRINGFIELD	SHALE	2.0	540.0	
-161.0	CARBONDALE	SPRINGFIELD	COAL	4.0	542.0	
-223.5	CARBONDALE	HOUCHIN CREEK	COAL	-	604.5	
-326.0	CARBONDALE	COLCHESTER	COAL	-	707.0	

MAPID: 16502169000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511683 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871241 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: BREUER, GEORGE W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	BRERETON	LIMESTONE	-	434.0	
-1444.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1812.0			LIMESTONE	-	2193.0	
-2151.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502170000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.511805 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.871239 **DATE COLLECTED:** 9 / 0 / 1952
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: BOLING-LEVINE-YABROV, MASSEY J H ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-229.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	612.0	
-269.0	CARBONDALE	SURVANT	COAL	3.0	652.0	
-332.0	CARBONDALE	COLCHESTER	COAL	0.5	715.0	
-375.0	CARBONDALE	DEKOVEN	COAL	2.0	758.0	
-405.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	788.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-415.0	CARBONDALE	DAVIS	COAL	3.0	798.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	837.0	
-459.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	842.0	
-492.0	TRADEWATER	MT. RORAH	COAL	1.5	875.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502170000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.511805 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: BOLING-LEVINE-YABROV **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-11.0	CARBONDALE	BRERETON	LIMESTONE	-	394.0	
-1451.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1834.0	
-1808.0			LIMESTONE	-	2191.0	
-2185.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502170000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.511805 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 715.0 **LOG TYPE:** Electric Log
SOURCE: BOLING-LEVINE-YABROV 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HERRIN	COAL	5.5	440.0	
-96.0	CARBONDALE	BRIAR HILL	COAL	-	479.0	
-134.0	CARBONDALE	SPRINGFIELD	COAL	6.5	517.0	
-229.0	CARBONDALE	HOUCHIN CREEK	COAL	-	612.0	
-332.0	CARBONDALE	COLCHESTER	COAL	-	715.0	

MAPID: 16502171000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50942 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.874987 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-54.0	CARBONDALE	BRERETON	LIMESTONE	-	435.0	
-1477.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1858.0	
-1832.0			LIMESTONE	-	2213.0	
-2200.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16502171000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.50942 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.874987 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 492.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-27.5	CARBONDALE	DANVILLE	COAL	2.5	408.5	
-30.0	CARBONDALE		CALCAREOUS SHALE	12.0	411.0	
-42.0	CARBONDALE	ALLENBY	COAL	0.5	423.0	
-42.5	CARBONDALE		CLAYSTONE & SHALE	15.5	423.5	
-58.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	439.0	
-64.0	CARBONDALE	LAWSON	SILTY SHALE	32.0	445.0	
-96.0	CARBONDALE	JAMESTOWN	BLACK SHALE	1.0	477.0	
-97.0	CARBONDALE		SHALE	4.0	478.0	
-101.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.5	482.0	
-103.5	CARBONDALE	ANNA	BLACK SHALE	1.5	484.5	
-105.0	CARBONDALE	HERRIN	COAL	6.0	486.0	

MAPID: 16502171000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.50942 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874987 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 492.0 **LOG TYPE:** Electric Log

SOURCE: BREVER-ROBISON OIL CO., MASSEY J H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	644.0	
-302.0	CARBONDALE	SURVANT	COAL	4.0	683.0	
-365.0	CARBONDALE	COLCHESTER	COAL	0.5	746.0	
-414.0	CARBONDALE	DEKOVEN	COAL	3.0	795.0	
-439.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	820.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	4.5	825.0	
-497.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	878.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-502.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	883.0	
-534.0	TRADEWATER	MT. RORAH	COAL	0.0	915.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502171000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50942 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.874987 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 745.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.0	MODESTO	CHAPEL	COAL	-	207.0	
-112.5	CARBONDALE	HERRIN	COAL	5.5	493.5	
-142.0	CARBONDALE	BRIAR HILL	COAL	-	523.0	
-195.0	CARBONDALE	SPRINGFIELD	COAL	6.5	576.0	
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	-	644.0	
-364.0	CARBONDALE	COLCHESTER	COAL	-	745.0	

MAPID: 16502172000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509384 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 706.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
218.0	MODESTO	CHAPEL	COAL	-	163.0	
-62.0	CARBONDALE	HERRIN	COAL	6.0	443.0	
-106.0	CARBONDALE	BRIAR HILL	COAL	-	487.0	
-163.5	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.0	544.5	CONTAINS A SHALE PARTING
-226.0	CARBONDALE	HOUCHIN CREEK	COAL	-	607.0	
-325.0	CARBONDALE	COLCHESTER	COAL	-	706.0	

MAPID: 16502172000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509384 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	BRERETON	LIMESTONE	-	437.0	
-1452.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1833.0	
-1815.0			LIMESTONE	-	2196.0	
-2165.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16502173000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.51874 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 715.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-46.0	CARBONDALE	HERRIN	COAL	-	433.0	
-79.0	CARBONDALE	BRIAR HILL	COAL	-	466.0	
-140.5	CARBONDALE	SPRINGFIELD	COAL	2.5	527.5	
-143.0	CARBONDALE	SPRINGFIELD	SHALE	6.5	530.0	
-149.5	CARBONDALE	SPRINGFIELD	COAL	5.5	536.5	
-155.0	CARBONDALE	SPRINGFIELD	SHALE	4.5	542.0	
-159.5	CARBONDALE	SPRINGFIELD	COAL	3.5	546.5	
-223.0	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	
-328.0	CARBONDALE	COLCHESTER	COAL	-	715.0	

MAPID: 16502173000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.51874 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-38.0	CARBONDALE	BRERETON	LIMESTONE	-	425.0	
-1450.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1837.0	
-1806.0			LIMESTONE	-	2193.0	
-2203.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502174000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507052 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.867595 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 523.5 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.5	CARBONDALE	HERRIN	COAL	6.5	417.5	
-133.5	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	515.5	CONTAINS A SHALE PARTING

MAPID: 16502174000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507052 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.867595 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	BRERETON	LIMESTONE	-	415.0	
-1438.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1812.0			LIMESTONE	-	2194.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502175000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507069 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869418 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	BRERETON	LIMESTONE	-	435.0	
-1445.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1820.0			LIMESTONE	-	2203.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502176000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507088 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.871336 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 610.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	450.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	544.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	

MAPID: 16502176000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507088 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871336 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	BRERETON	LIMESTONE	-	440.0	
-1450.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1833.0	
-1826.0			LIMESTONE	-	2209.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16502177000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511696 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.865744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 520.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-9.0	CARBONDALE	HERRIN	COAL	5.0	392.0	
-42.0	CARBONDALE	BRIAR HILL	COAL	-	425.0	
-130.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.0	513.0	CONTAINS A SHALE PARTING

MAPID: 16502177000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511696 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.865744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2.0	CARBONDALE	BRERETON	LIMESTONE	-	385.0	
-1424.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1803.0			LIMESTONE	-	2186.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16502178000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511672 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863892 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 566.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-6.0	CARBONDALE	HERRIN	COAL	5.0	391.0	
-40.0	CARBONDALE	BRIAR HILL	COAL	-	425.0	
-123.0	CARBONDALE	SPRINGFIELD	COAL	6.5	508.0	
-181.0	CARBONDALE	HOUCHIN CREEK	COAL	-	566.0	

MAPID: 16502178000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511672 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.863892 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
1.0	CARBONDALE	BRERETON	LIMESTONE	-	384.0	
-1418.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	
-1792.0			LIMESTONE	-	2177.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16502179000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.86576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 572.0 **LOG TYPE:** Electric Log
SOURCE: BREUER-ROBINSON OIL 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-12.0	CARBONDALE	HERRIN	COAL	5.0	393.0	
-126.0	CARBONDALE	SPRINGFIELD	COAL	6.5	507.0	
-191.0	CARBONDALE	HOUCHIN CREEK	COAL	-	572.0	

MAPID: 16502179000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509331 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-5.0	CARBONDALE	BRERETON	LIMESTONE	-	386.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1793.0			LIMESTONE	-	2174.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2529.0	

MAPID: 16502180000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509374 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863899 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 570.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-11.0	CARBONDALE	HERRIN	COAL	5.5	396.0	
-49.0	CARBONDALE	BRIAR HILL	COAL	-	434.0	
-123.5	CARBONDALE	SPRINGFIELD	COAL	2.5	508.5	
-126.0	CARBONDALE	SPRINGFIELD	SHALE	3.5	511.0	
-129.5	CARBONDALE	SPRINGFIELD	COAL	5.5	514.5	
-185.0	CARBONDALE	HOUCHIN CREEK	COAL	-	570.0	

MAPID: 16502180000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509374 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.863899 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2530.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-5.0	CARBONDALE	BRERETON	LIMESTONE	-	390.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1785.0			LIMESTONE	-	2170.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2530.0	

MAPID: 16502464000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.865776 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 584.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	403.5	
-	CARBONDALE	BRIAR HILL	COAL	-	443.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	523.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	584.0	

MAPID: 16502464000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.507036 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.865776 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2543.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	BRERETON	LIMESTONE	-	395.0	
-1429.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1802.0			LIMESTONE	-	2183.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2543.0	

MAPID: 16502571000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.506957 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 568.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-15.0	CARBONDALE	HERRIN	COAL	5.5	395.0	
-131.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	511.0	CONTAINS A SHALE PARTING
-188.0	CARBONDALE	HOUCHIN CREEK	COAL	-	568.0	

MAPID: 16502571000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.506957 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.863906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	BRERETON	LIMESTONE	-	387.0	
-1429.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1808.0			LIMESTONE	-	2188.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16501515000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.50236 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.863924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**
SOURCE: RYAN & SHARP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-30.0	CARBONDALE	BRERETON	LIMESTONE	-	410.0	
-1450.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1830.0	
-1851.0			LIMESTONE	-	2231.0	
-2191.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16501515000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.50236 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.863924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3106.0 **LOG TYPE:** Electric Log
SOURCE: RYAN & SHARP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
14.0	CARBONDALE	DANVILLE	COAL	-	366.0	
-356.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE	5.0	736.0	
-15.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	395.0	
-40.0	CARBONDALE	HERRIN	COAL	5.0	420.0	
-90.0	CARBONDALE	BRIAR HILL	COAL	-	470.0	
-142.0	CARBONDALE	SPRINGFIELD	COAL	5.0	522.0	
-190.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	10.0	570.0	
-203.0	CARBONDALE	HOUCHIN CREEK	COAL	-	583.0	

MAPID: 16501515000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.50236 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.863924 **DATE COLLECTED:** 7 / 0 / 1953
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:** Electric Log
SOURCE: RYAN & SHARP, IRVIN WALTER 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-204.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	584.0	
-245.0	CARBONDALE	SURVANT	COAL	4.5	625.0	
-318.0	CARBONDALE	COLCHESTER	COAL	0.6	698.0	
-335.0	CARBONDALE	DEKOVEN	COAL	3.5	715.0	
-368.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	748.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-378.0	CARBONDALE	DAVIS	COAL	4.5	758.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	793.0	
-418.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	798.0	
-440.0	TRADEWATER	MT. RORAH	COAL	1.5	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501515000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.50236 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 583.0 **LOG TYPE:** Electric Log
SOURCE: RYAN & SHARP 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	HERRIN	COAL	5.5	417.0	
-90.0	CARBONDALE	BRIAR HILL	COAL	-	470.0	
-142.0	CARBONDALE	SPRINGFIELD	COAL	6.5	522.0	
-203.0	CARBONDALE	HOUCHIN CREEK	COAL	-	583.0	

MAPID: 16502181000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.502398 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869501 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-72.0	CARBONDALE	BRERETON	LIMESTONE	-	450.0	
-1462.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1840.0	
-1852.0			LIMESTONE	-	2230.0	
-2199.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502181000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.502398 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.869501 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 455.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
24.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	354.0	
20.0	MODESTO		SHALE	28.5	358.0	
-8.5	CARBONDALE	DANVILLE	COAL	2.5	386.5	
-11.0	CARBONDALE		SILTY SHALE	17.0	389.0	
-28.0	CARBONDALE	ALLENBY	COAL	1.0	406.0	
-29.0	CARBONDALE		CLAYSTONE & SHALE	10.0	407.0	
-39.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	22.0	417.0	
-61.0	CARBONDALE	LAWSON	LIMESTONE & SHALE	2.0	439.0	
-63.0	CARBONDALE	LAWSON	SHALE	9.0	441.0	
-72.0	CARBONDALE	HERRIN	COAL	5.0	450.0	

MAPID: 16502181000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.502398 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.869501 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 455.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS E H, LEWIS EDWIN 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	620.0	
-284.0	CARBONDALE	SURVANT	COAL	3.0	662.0	
-357.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-382.0	CARBONDALE	DEKOVEN	COAL	1.8	760.0	
-412.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-421.0	CARBONDALE	DAVIS	COAL	4.0	799.0	
-457.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	835.0	
-462.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	840.0	
-486.0	TRADEWATER	MT. RORAH	COAL	1.3	864.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502181000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.502398 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.869501 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 620.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS E H 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	MODESTO	CHAPEL	COAL	-	175.0	
-72.0	CARBONDALE	HERRIN	COAL	5.5	450.0	
-120.0	CARBONDALE	BRIAR HILL	COAL	-	498.0	
-169.5	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	6.5	547.5	CONTAINS A SHALE PARTING
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	-	620.0	

MAPID: 16523861000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488687 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.874963 **DATE COLLECTED:** 8 / 0 / 1974
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 25.7 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONTINENT OIL, RE LLOYD B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-259.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	630.0	
-294.0	CARBONDALE	SURVANT	COAL	3.5	665.0	
-364.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-399.0	CARBONDALE	DEKOVEN	COAL	1.5	770.0	
-429.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	800.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-434.0	CARBONDALE	DAVIS	COAL	3.5	805.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	845.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-480.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	851.0	
-516.0	TRADEWATER	MT. RORAH	COAL	1.5	887.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523967000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.49319 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.869503 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 696.0 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONTINENT/DEE DRLG 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	HERRIN	COAL	5.0	431.0	
-153.0	CARBONDALE	SPRINGFIELD	COAL	6.0	528.0	
-225.0	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	
-321.0	CARBONDALE	COLCHESTER	COAL	-	696.0	

MAPID: 16590672000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.483868 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.882477 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.7		

MAPID: 16590673000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.484547 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.899815 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590674000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.466292 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.898484 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.5		

MAPID: 16590675000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.438585 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.895064 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.5		

MAPID: 16590676000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447374 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.89247 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.3		

MAPID: 16590677000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447304 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.890357 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590678000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.428895 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.876143 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.6		

MAPID: 16500001000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.485361 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.899649 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 382.2 **LOGGED (FT.):** 654.0 **LOG TYPE:** Drillers Log

SOURCE: TRI. COUNTY COAL CO. 1002 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.2			UNCONSOLIDATED	21.0	0.0	
361.2	MODESTO		SANDSTONE	2.0	21.0	
359.2			SHALE	20.4	23.0	
338.8			COAL	1.5	43.4	
337.3			UNDERCLAY	0.0	44.9	
337.3			LIMESTONE	0.9	44.9	
336.4			SHALE	102.2	45.8	
234.2			BLACK SHALE	4.0	148.0	
230.2			LIMESTONE	0.7	152.0	
229.5	MODESTO		SHALE	29.8	152.7	
199.7	MODESTO		COAL	0.8	182.5	
198.9	MODESTO		SHALE	67.8	183.3	
131.2	MODESTO		BLACK SHALE	2.0	251.0	
129.2	MODESTO		SHALE	26.0	253.0	
103.2	MODESTO		BLACK SHALE	4.0	279.0	
99.2	MODESTO	CHAPEL	COAL	0.3	283.0	
98.9	MODESTO		SHALE	25.0	283.3	
73.9	MODESTO		COAL	0.6	308.3	
73.4	MODESTO		SHALE	65.2	308.8	
8.2	MODESTO		LIMESTONE	2.0	374.0	
6.2	MODESTO		SHALE	15.5	376.0	
-9.3	MODESTO		COAL	0.7	391.5	
-10.0	MODESTO		SHALE	14.8	392.2	
-24.8	MODESTO		BLACK SHALE	7.0	407.0	
-31.8	MODESTO		SHALE	2.0	414.0	
-33.8	MODESTO		BLACK SHALE	2.0	416.0	
-35.8	MODESTO		COAL	0.6	418.0	
-36.4	MODESTO		SHALE	13.4	418.6	
-49.8	MODESTO		SANDSTONE	8.0	432.0	
-57.8	MODESTO		BLACK SHALE	5.0	440.0	
-62.8	MODESTO		LIMESTONE	5.0	445.0	
-67.8	MODESTO		BLACK SHALE	8.0	450.0	
-75.8	MODESTO		SHALE	26.0	458.0	
-101.8	CARBONDALE	DANVILLE	COAL	2.4	484.0	
-104.2	CARBONDALE		SHALE	12.1	486.4	
-116.3	CARBONDALE		BLACK SHALE	2.5	498.5	
-118.8	CARBONDALE		SHALE	15.0	501.0	
-133.8	CARBONDALE		LIMESTONE	4.0	516.0	
-137.8	CARBONDALE		SHALE	26.5	520.0	

-164.3	CARBONDALE		CONGLOMERATE	1.5	546.5
-165.8	CARBONDALE	BRERETON	LIMESTONE	4.5	548.0
-170.3	CARBONDALE	ANNA	BLACK SHALE	1.0	552.5
-171.3	CARBONDALE	ANNA	COAL	0.2	553.5
-171.5	CARBONDALE	ANNA	BLACK SHALE	1.8	553.7
-173.3	CARBONDALE	HERRIN	COAL	5.7	555.5
-179.0	CARBONDALE		UNDERCLAY	0.8	561.2
-179.8	CARBONDALE		SHALE	12.0	562.0
-191.8	CARBONDALE		SANDSTONE	8.0	574.0
-199.8	CARBONDALE		SHALE	12.0	582.0
-211.8	CARBONDALE		COAL	0.5	594.0
-212.3	CARBONDALE		SHALE	12.9	594.5
-225.2	CARBONDALE		COAL	0.4	607.4
-225.6	CARBONDALE		SHALE	1.2	607.8
-226.8	CARBONDALE		SANDSTONE	10.0	609.0
-236.8	CARBONDALE		SHALE	24.0	619.0
-260.8	CARBONDALE	ST. DAVID	LIMESTONE	1.5	643.0
-262.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	644.5
-266.1	CARBONDALE	SPRINGFIELD	COAL	5.5	648.3
-271.6			UNDERCLAY	0.8	653.8

MAPID: 16500001000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.485361 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.899649 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 561.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-63.5	MODESTO	PIASA	LIMESTONE & SHALE	5.0	445.5	
-68.5	MODESTO		DARK GRAY SHALE	34.0	450.5	
-102.5	CARBONDALE	DANVILLE	COAL	2.4	484.5	
-104.9	CARBONDALE		DARK GRAY SHALE	12.1	486.9	
-117.0	CARBONDALE	ALLENBY	BLACK SHALE	2.5	499.0	
-119.5	CARBONDALE		GRAY SHALE	15.0	501.5	
-134.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	516.5	
-138.5	CARBONDALE	LAWSON	SILTY SHALE	18.0	520.5	
-156.5	CARBONDALE	LAWSON	GRAY SHALE	8.5	538.5	
-165.0	CARBONDALE	LAWSON	CONGLOMERATE	1.5	547.0	
-166.5	CARBONDALE	BRERETON	LIMESTONE	4.5	548.5	
-171.0	CARBONDALE	ANNA	BLACK SHALE	3.0	553.0	
-174.0	CARBONDALE	HERRIN	COAL	5.7	556.0	

MAPID: 16500001000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.485361 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.899649 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 655.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-102.0	CARBONDALE	DANVILLE	COAL	2.4	484.0	
-134.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	516.0	
-174.0	CARBONDALE	HERRIN	COAL	5.7	556.0	
-192.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	8.0	574.0	
-212.0	CARBONDALE	BRIAR HILL	COAL	0.4	594.0	
-227.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	10.0	609.0	
-266.0	CARBONDALE	SPRINGFIELD	COAL	5.5	648.0	

MAPID: 16500001000C **VERSION:** 4 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.485361 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.899649 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.2 **LOGGED (FT.):** 654.5 **LOG TYPE:** Drillers Log

SOURCE: TRI COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT: COAL #6 ANALYSED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.2			UNCONSOLIDATED	35.0	0.0	
347.2	BOND		SANDY SHALE	8.0	35.0	
339.2	BOND		COAL	0.4	43.0	
338.8	BOND		UNDERCLAY	1.5	43.4	
337.3	BOND		LIMESTONE	0.9	44.9	
336.4	BOND		SHALE	38.2	45.8	BLUE
298.2	BOND		SHALE	38.0	84.0	BLUE
260.2	BOND		SHALE	26.0	122.0	BLUE
234.2	BOND		BLACK SHALE	4.0	148.0	
230.2	BOND		LIMESTONE	0.7	152.0	
229.5	BOND		SHALE	4.3	152.7	
225.2	BOND		SHALE	18.0	157.0	BLUE
207.2	BOND		SANDY SHALE	7.5	175.0	
199.7	BOND		COAL	0.8	182.5	
198.9	BOND		SANDY SHALE	61.8	183.3	
137.2	BOND		BLACK SHALE	6.0	245.0	
131.2	BOND		SANDY SHALE	2.0	251.0	
129.2	BOND		SHALE	26.0	253.0	BLUE
103.2	BOND		BLACK SHALE	4.0	279.0	
99.2	MODESTO	CHAPEL	COAL	0.3	283.0	
98.9	MODESTO		CALCAREOUS SHALE	4.0	283.3	CALC
94.9	MODESTO		SHALE	12.8	287.3	
82.2	MODESTO		SHALE	6.0	300.0	BLUE
76.2	MODESTO		SANDY SHALE	2.3	306.0	
73.9	MODESTO		COAL	0.6	308.3	
73.4	MODESTO		SHALE	3.2	308.8	BLUE
70.2	MODESTO		SANDY SHALE	20.0	312.0	
50.2	MODESTO		SHALE	9.0	332.0	BLUE
41.2	MODESTO		SHALE	33.0	341.0	BLUE
8.2	MODESTO		LIMESTONE	2.0	374.0	
6.2	MODESTO		SHALE	10.0	376.0	BLUE
-3.8	MODESTO		SHALE	5.5	386.0	BLUE
-9.3	MODESTO		COAL	0.7	391.5	
-10.0	MODESTO		SHALE	15.3	392.2	W/LS BANDS, BLUE
-25.3	MODESTO		BLACK SHALE	6.5	407.5	
-31.8	MODESTO		SHALE	2.0	414.0	
-33.8	MODESTO		BLACK SHALE	2.0	416.0	
-35.8	MODESTO		COAL	0.6	418.0	
-36.4	MODESTO		SHALE	4.4	418.6	BLUE

-40.8	MODESTO		SHALE	9.0	423.0	
-49.8	MODESTO		SANDSTONE	8.0	432.0	
-57.8	MODESTO		BLACK SHALE	5.0	440.0	
-62.8	MODESTO	PIASA	LIMESTONE	2.0	445.0	
-64.8	MODESTO	PIASA	LIMESTONE	1.0	447.0	
-65.8	MODESTO		CALCAREOUS SHALE	2.0	448.0	CALC
-67.8	MODESTO		BLACK SHALE	8.0	450.0	
-75.8	MODESTO		SHALE	10.0	458.0	W/LS BANDS, BLUE
-85.8	MODESTO		SHALE	16.0	468.0	BLUE
-101.8	CARBONDALE	DANVILLE	COAL	2.4	484.0	
-104.2	CARBONDALE		SANDY SHALE	6.6	486.4	
-110.8	CARBONDALE		SHALE	5.5	493.0	DARK
-116.3	CARBONDALE		BLACK SHALE	2.5	498.5	
-118.8	CARBONDALE		SHALE	10.0	501.0	W/LS BANDS, BLUE
-128.8	CARBONDALE		SHALE	5.0	511.0	BLUE
-133.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	516.0	
-137.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	520.0	
-155.8	CARBONDALE	ANVIL ROCK	SHALE	8.5	538.0	BLUE
-164.3	CARBONDALE	ANVIL ROCK	CONGLOMERATE	1.5	546.5	
-165.8	CARBONDALE	BRERETON	LIMESTONE	4.5	548.0	
-170.3	CARBONDALE	ANNA	BLACK SHALE	1.0	552.5	
-171.3	CARBONDALE	ANNA	COAL	0.2	553.5	
-171.5	CARBONDALE	ANNA	BLACK SHALE	1.8	553.7	
-173.3	CARBONDALE	HERRIN	COAL	5.7	555.5	ANALYSED
-179.0	CARBONDALE		UNDERCLAY	0.8	561.2	
-179.8	CARBONDALE		SHALE	12.0	562.0	BLUE
-191.8	CARBONDALE		SANDSTONE	8.0	574.0	
-199.8	CARBONDALE		SANDY SHALE	4.5	582.0	
-204.3	CARBONDALE		SHALE	7.5	586.5	BLUE
-211.8	CARBONDALE	BRIAR HILL	COAL	0.4	594.0	
-212.2	CARBONDALE		SHALE	13.0	594.4	BLUE
-225.2	CARBONDALE		COAL	0.4	607.4	
-225.6	CARBONDALE		SHALE	1.2	607.8	BLUE
-226.8	CARBONDALE		SANDSTONE	10.0	609.0	NEXT 34' LOOKS LIKE DYKERSBURG MEMBER
-236.8	CARBONDALE		SHALE	14.0	619.0	BLUE
-250.8	CARBONDALE		SHALE	10.0	633.0	BLUE
-260.8	CARBONDALE	ST. DAVID	LIMESTONE	1.5	643.0	
-262.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	644.5	
-266.1	CARBONDALE	SPRINGFIELD	COAL	5.5	648.3	
-271.6	CARBONDALE		UNDERCLAY	0.8	653.8	

MAPID: 16501138000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.473911 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.901476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2714.0 **LOG TYPE:**
SOURCE: ROBINSON & PUCKETT, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-175.0	CARBONDALE	BRERETON	LIMESTONE	-	555.0	
-1587.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1967.0	
-1940.0			LIMESTONE	-	2320.0	
-2334.0		BASE BARLOW	LIMESTONE	-	2714.0	

MAPID: 16501138000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.473911 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.901476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3300.0 **LOG TYPE:** Electric Log
SOURCE: ROBINSON & PUCKETT, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	DANVILLE	COAL	-	500.0	
-147.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	29.0	527.0	
-182.0	CARBONDALE	HERRIN	COAL	5.0	562.0	
-215.0	CARBONDALE	BRIAR HILL	COAL	-	595.0	
-280.0	CARBONDALE	SPRINGFIELD	COAL	5.0	660.0	
-337.0	CARBONDALE	HOUCHIN CREEK	COAL	-	717.0	

MAPID: 16524448000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.472754 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.895089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1778.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-396.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	770.0	
-475.0	SPOON	DAVIS	UNCLASSIFIED	-	849.0	
-1404.0	BASE OF PENN.		UNCLASSIFIED	-	1778.0	

MAPID: 16501376000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.461262 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893345 **DATE COLLECTED:** 10 / 0 / 1951
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2664.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, GAINES L W **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-274.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	640.0	
-302.0	CARBONDALE	SURVANT	COAL	1.0	668.0	
-376.0	CARBONDALE	COLCHESTER	COAL	0.5	742.0	
-394.0	CARBONDALE	DEKOVEN	COAL	1.5	760.0	
-434.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	800.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-442.0	CARBONDALE	DAVIS	COAL	3.5	808.0	
-464.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	830.0	
-521.0	TRADEWATER	MT. RORAH	COAL	1.0	887.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501376000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.461262 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893345 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2664.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-194.0	CARBONDALE	BRERETON	LIMESTONE	-	560.0	
-1540.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1906.0	
-1931.0			LIMESTONE	-	2297.0	
-2298.0		BASE BARLOW	LIMESTONE	-	2664.0	

MAPID: 16501377000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.465894 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898784 **DATE COLLECTED:** 9 / 0 / 1951

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2680.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, PEMBERTON MALINDA **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-319.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	690.0	
-349.0	CARBONDALE	SURVANT	COAL	1.0	720.0	
-414.0	CARBONDALE	COLCHESTER	COAL	0.5	785.0	
-452.0	CARBONDALE	DEKOVEN	COAL	3.0	823.0	
-481.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	852.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-487.0	CARBONDALE	DAVIS	COAL	4.0	858.0	
-518.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	889.0	
-525.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	896.0	
-562.0	TRADEWATER	MT. RORAH	COAL	1.5	933.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501377000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.465894 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898784 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2680.0 **LOG TYPE:**

SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-149.0	CARBONDALE	BRERETON	LIMESTONE	-	520.0	
-1584.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1955.0	
-1945.0			LIMESTONE	-	2316.0	
-2309.0		BASE BARLOW	LIMESTONE	-	2680.0	

MAPID: 16501429000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.452087 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.897094 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2690.0 **LOG TYPE:**
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	BRERETON	LIMESTONE	-	495.0	
-1568.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1942.0	
-1929.0			LIMESTONE	-	2303.0	
-2316.0		BASE BARLOW	LIMESTONE	-	2690.0	

MAPID: 16501429000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.452087 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.897094 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2724.0 **LOG TYPE:** Electric Log
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-29.0	CARBONDALE	DANVILLE	COAL	-	403.0	
-31.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	15.0	405.0	
-56.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	430.0	
-66.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	43.0	440.0	
-118.0	CARBONDALE	HERRIN	COAL	5.0	492.0	
-168.0	CARBONDALE	BRIAR HILL	COAL	-	542.0	
-171.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	12.0	545.0	
-228.0	CARBONDALE	SPRINGFIELD	COAL	6.0	602.0	
-254.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	72.0	628.0	
-326.0	CARBONDALE	HOUCHIN CREEK	COAL	-	700.0	

MAPID: 16501429000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.452087 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.897094 **DATE COLLECTED:** 5 / 0 / 1952
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1790.0 **LOG TYPE:** Electric Log
SOURCE: JONES, BOND D. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-401.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	775.0	
-478.0	SPOON	DAVIS	UNCLASSIFIED	-	852.0	
-1416.0	BASE OF PENN.		UNCLASSIFIED	-	1790.0	

MAPID: 16501429000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.452087 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.897094 **DATE COLLECTED:** 5 / 0 / 1952
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2690.0 **LOG TYPE:** Electric Log
SOURCE: JONES, BOND D., GAINES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-330.0	CARBONDALE	SURVANT	COAL	4.5	704.0	
-411.0	CARBONDALE	COLCHESTER	COAL	0.5	785.0	
-426.0	CARBONDALE	DEKOVEN	COAL	0.5	800.0	
-474.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	848.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-480.0	CARBONDALE	DAVIS	COAL	3.5	854.0	
-501.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	875.0	
-566.0	TRADEWATER	MT. RORAH	COAL	1.5	940.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503076000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.463615 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.90246 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2704.0 **LOG TYPE:** Electric Log
SOURCE: SCHLAFLY H J ETAL, ROBERTS IVA R **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-343.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	720.0	
-373.0	CARBONDALE	SURVANT	COAL	2.0	750.0	
-451.0	CARBONDALE	COLCHESTER	COAL	2.0	828.0	
-468.0	CARBONDALE	DEKOVEN	COAL	2.0	845.0	
-496.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	873.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-503.0	CARBONDALE	DAVIS	COAL	4.0	880.0	
-531.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	908.0	
-575.0	TRADEWATER	MT. RORAH	COAL	1.5	952.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503076000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.463615 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.90246 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2704.0 **LOG TYPE:**
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-168.0	CARBONDALE	BRERETON	LIMESTONE	-	545.0	
-1593.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1970.0	
-1950.0			LIMESTONE	-	2327.0	
-2327.0		BASE BARLOW	LIMESTONE	-	2704.0	

MAPID: 16503329000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.465946 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.906093 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:**
SOURCE: TOTO GAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	BRERETON	LIMESTONE	-	550.0	
-1600.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1977.0	
-1950.0			LIMESTONE	-	2327.0	
-2323.0		BASE BARLOW	LIMESTONE	-	2700.0	

MAPID: 16503329000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.465946 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.906093 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 560.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-41.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	418.0	
-46.0	MODESTO		DARK GRAY SHALE	33.0	423.0	
-79.0	CARBONDALE	DANVILLE	COAL	2.0	456.0	
-81.0	CARBONDALE		SHALE & SANDSTONE	16.0	458.0	
-97.0	CARBONDALE	ALLENBY	COAL	1.0	474.0	
-98.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	25.0	475.0	
-123.0	CARBONDALE	LAWSON	SANDSTONE	47.0	500.0	
-170.0	CARBONDALE	LAWSON	SHALE	3.0	547.0	
-173.0	CARBONDALE	BRERETON	LIMESTONE	5.5	550.0	
-178.5	CARBONDALE	ANNA	BLACK SHALE	0.5	555.5	
-179.0	CARBONDALE	HERRIN	COAL	4.0	556.0	

MAPID: 16503590000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 0' N line, 660' E line of NE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.450965 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.907149 **DATE COLLECTED:** 5 / 18 / 1973

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 667.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 84C **WELL TYPE:** Coal Test

COMMENT: ISGS CORE#: C-11371

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0			CLAY	9.0	0.0	
383.0	MODESTO		SANDSTONE	7.0	9.0	
376.0	MODESTO		GRAY SHALE	5.0	16.0	
371.0	MODESTO		LIMESTONE	2.0	21.0	
369.0	MODESTO		SANDSTONE	36.0	23.0	
333.0	MODESTO		SANDY SHALE	42.0	59.0	
291.0	MODESTO		GRAY SHALE	35.0	101.0	
256.0	MODESTO		BLACK SHALE	4.0	136.0	
252.0	MODESTO		UNDERCLAY	5.0	140.0	
247.0	MODESTO		SANDSTONE	8.0	145.0	
239.0	MODESTO		GRAY SHALE	49.0	153.0	
190.0	MODESTO		SANDSTONE	22.0	202.0	
168.0	MODESTO		SANDY SHALE	31.0	224.0	
137.0	MODESTO		SANDSTONE	103.0	255.0	
34.0	MODESTO		SANDY SHALE	7.0	358.0	
27.0	MODESTO		COAL	1.0	365.0	
26.0	MODESTO		UNDERCLAY	1.0	366.0	
25.0	MODESTO		LIMESTONE	4.0	367.0	
21.0	MODESTO		DARK GRAY SHALE	14.0	371.0	
7.0	MODESTO		BLACK SHALE	2.5	385.0	
4.5	MODESTO		COAL	1.0	387.5	
3.5	MODESTO		UNDERCLAY	3.5	388.5	
0.0	MODESTO		SANDY SHALE	15.0	392.0	
-15.0	MODESTO	PIASA	LIMESTONE	4.0	407.0	
-19.0	MODESTO		GRAY SHALE	36.0	411.0	
-55.0	CARBONDALE	DANVILLE	COAL	2.0	447.0	
-57.0	CARBONDALE		SANDSTONE	6.0	449.0	
-63.0	CARBONDALE		SANDSTONE	10.0	455.0	
-73.0	CARBONDALE		GRAY SHALE	8.5	465.0	
-81.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	473.5	
-86.0	CARBONDALE		GRAY SHALE	6.0	478.0	
-92.0	CARBONDALE		SANDSTONE	29.7	484.0	
-121.7	CARBONDALE		SANDSTONE	11.7	513.7	
-133.4	CARBONDALE		BLACK SHALE	1.0	525.4	
-134.4	CARBONDALE	BRERETON	LIMESTONE	6.7	526.4	
-141.1	CARBONDALE	ANNA	BLACK SHALE	0.6	533.1	
-141.7	CARBONDALE	HERRIN	COAL	5.2	533.7	
-146.9	CARBONDALE		SANDSTONE	9.6	538.9	
-156.5	CARBONDALE		SANDSTONE	20.8	548.5	

-177.4	CARBONDALE		SANDY SHALE	42.0	569.4
-219.4	CARBONDALE		SANDSTONE	39.0	611.4
-258.4	CARBONDALE		SANDY SHALE	7.0	650.4
-265.4	CARBONDALE		SANDY SHALE	2.0	657.4
-267.4	CARBONDALE	SPRINGFIELD	COAL	5.0	659.4
-272.4	CARBONDALE		SANDSTONE	3.0	664.4

MAPID: 16501430000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442907 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.900827 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2701.0 **LOG TYPE:**

SOURCE: GOFFINET J EVERETT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-110.0	CARBONDALE	BRERETON	LIMESTONE	-	485.0	
-1577.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1952.0	
-1938.0			LIMESTONE	-	2313.0	
-2326.0		BASE BARLOW	LIMESTONE	-	2701.0	

MAPID: 16501430000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442907 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.900827 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3176.0 **LOG TYPE:** Electric Log

SOURCE: GOFFINET J EVERETT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-45.0	CARBONDALE	DANVILLE	COAL	-	420.0	
-49.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	13.0	424.0	
-75.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	450.0	
-95.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	470.0	
-115.0	CARBONDALE	HERRIN	COAL	5.0	490.0	
-155.0	CARBONDALE	BRIAR HILL	COAL	-	530.0	

MAPID: 16501430000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442907 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.900827 **DATE COLLECTED:** 5 / 0 / 1952
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1809.0 **LOG TYPE:** Electric Log
SOURCE: GOFFINET J EVERETT **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-445.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	820.0	
-495.0	SPOON	DAVIS	UNCLASSIFIED	-	870.0	
-1434.0	BASE OF PENN.		UNCLASSIFIED	-	1809.0	

MAPID: 16501430000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442907 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.900827 **DATE COLLECTED:** 5 / 0 / 1952
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2701.0 **LOG TYPE:** Electric Log
SOURCE: GOFFINET J EVERETT, GRISHAM HALLIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-333.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	708.0	
-361.0	CARBONDALE	SURVANT	COAL	3.0	736.0	
-444.0	CARBONDALE	COLCHESTER	COAL	0.5	819.0	
-465.0	CARBONDALE	DEKOVEN	COAL	0.5	840.0	
-484.0	CARBONDALE	LOWER DEKOVEN	COAL	4.0	859.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-494.0	CARBONDALE	DAVIS	COAL	3.3	869.0	
-515.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502183000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442886 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.893519 **DATE COLLECTED:** 4 / 0 / 1952
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2676.0 **LOG TYPE:** Electric Log
SOURCE: JONES, BOND D., MAHONEY "A" 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-301.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	673.0	
-328.0	CARBONDALE	SURVANT	COAL	2.0	700.0	
-398.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-428.0	CARBONDALE	DEKOVEN	COAL	1.8	800.0	
-471.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	843.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	4.0	850.0	
-508.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	880.0	
-513.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	885.0	
-558.0	TRADEWATER	MT. RORAH	COAL	1.0	930.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502183000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442886 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893519 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2676.0 **LOG TYPE:**
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	BRERETON	LIMESTONE	-	497.0	
-1546.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1918.0	
-1909.0			LIMESTONE	-	2281.0	
-2304.0		BASE BARLOW	LIMESTONE	-	2676.0	

MAPID: 16502184000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of SE SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.44289 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.895342 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2689.0 **LOG TYPE:**
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-133.0	CARBONDALE	BRERETON	LIMESTONE	-	505.0	
-1555.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1927.0	
-1931.0			LIMESTONE	-	2303.0	
-2317.0		BASE BARLOW	LIMESTONE	-	2689.0	

MAPID: 16502185000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.438294 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.893554 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2689.0 **LOG TYPE:**
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-95.0	CARBONDALE	BRERETON	LIMESTONE	-	468.0	
-1554.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1927.0	
-1931.0			LIMESTONE	-	2304.0	
-2316.0		BASE BARLOW	LIMESTONE	-	2689.0	

MAPID: 16502523000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.438302 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.897212 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2697.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	BRERETON	LIMESTONE	-	485.0	
-1562.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1936.0	
-1926.0			LIMESTONE	-	2300.0	
-2323.0		BASE BARLOW	LIMESTONE	-	2697.0	

MAPID: 16502523000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.438302 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.897212 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 493.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
1.0	MODESTO	PIASA	LIMESTONE	4.0	373.0	
-3.0	MODESTO		DARK GRAY SHALE	41.0	377.0	
-44.0	CARBONDALE	DANVILLE	COAL	2.0	418.0	
-46.0	CARBONDALE		SHALE & SANDSTONE	19.0	420.0	
-65.0	CARBONDALE	ALLENBY	COAL	1.0	439.0	
-66.0	CARBONDALE		CLAYSTONE & SHALE	10.0	440.0	
-76.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.0	450.0	
-81.0	CARBONDALE	LAWSON	SILTY SHALE	15.0	455.0	
-96.0	CARBONDALE	LAWSON	SANDSTONE	10.0	470.0	
-106.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	480.0	
-107.0	CARBONDALE		BLACK SHALE	3.0	481.0	
-110.0	CARBONDALE	BRERETON	LIMESTONE	5.0	484.0	
-115.0	CARBONDALE	ANNA	BLACK SHALE	1.0	489.0	
-116.0	CARBONDALE	HERRIN	COAL	3.0	490.0	

MAPID: 16502523000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.438302 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.897212 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 493.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., YOUNG C E **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-333.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	707.0	
-361.0	CARBONDALE	SURVANT	COAL	4.5	735.0	
-436.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-458.0	CARBONDALE	DEKOVEN	COAL	0.5	832.0	
-499.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	873.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-504.0	CARBONDALE	DAVIS	COAL	4.0	878.0	
-535.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	909.0	
-610.0	TRADEWATER	MT. RORAH	COAL	2.5	984.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523905000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.440628 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.906334 **DATE COLLECTED:** 4 / 3 / 1970

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 699.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 29-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.5	0.0	SURFACE LAYERS (CLAY, EARTH, DRIFT)
371.5	MODESTO		GRAY SHALE	240.7	18.5	SH AND SS MIXED
130.8	MODESTO	MOUND CITY	BLACK SHALE	2.0	259.2	
128.8	MODESTO	CHAPEL	COAL	0.6	261.2	
128.2	MODESTO		UNDERCLAY	1.2	261.8	
127.0	MODESTO		GRAY SANDSTONE	23.3	263.0	
103.7	MODESTO		GRAY SHALE	6.6	286.3	
97.1	MODESTO		LIMESTONE	1.5	292.9	
95.6	MODESTO		GRAY SANDSTONE	8.8	294.4	
86.8	MODESTO		GRAY SHALE	44.4	303.2	WITH SS MIXED
42.4	MODESTO		LIMESTONE	2.5	347.6	
39.9	MODESTO		GRAY SHALE	21.8	350.1	
18.1	MODESTO		LIMESTONE	2.4	371.9	
15.7	MODESTO		GRAY SHALE	16.3	374.3	
-0.6	MODESTO		BLACK SHALE	3.4	390.6	SLATE WITH COAL BANDS
-4.0	MODESTO		COAL	1.2	394.0	
-5.2	MODESTO		SHALE	13.9	395.2	
-19.1	MODESTO		CALCAREOUS SHALE	7.0	409.1	
-26.1	MODESTO		GRAY SHALE	33.4	416.1	
-59.5	MODESTO		SANDSTONE	2.3	449.5	
-61.8	MODESTO		GRAY SHALE	4.6	451.8	
-66.4	CARBONDALE	DANVILLE	COAL	1.3	456.4	
-67.7	CARBONDALE		GRAY SHALE	3.5	457.7	
-71.2	CARBONDALE		SANDSTONE	3.5	461.2	
-74.7	CARBONDALE		GRAY SHALE	18.2	464.7	
-92.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	482.9	
-97.9	CARBONDALE		GRAY SHALE	11.3	487.9	
-109.2	CARBONDALE		LIMESTONE	0.7	499.2	
-109.9	CARBONDALE		GRAY SHALE	17.1	499.9	
-127.0	CARBONDALE		SANDSTONE	1.9	517.0	
-128.9	CARBONDALE	BRERETON	LIMESTONE	5.6	518.9	
-134.5	CARBONDALE	ANNA	BLACK SHALE	0.5	524.5	
-135.0	CARBONDALE	HERRIN	COAL	0.6	525.0	
-135.6	CARBONDALE		PYRITE	0.2	525.6	A PYRITE BAND
-135.7	CARBONDALE		COAL	2.3	525.7	
-138.1	CARBONDALE		UNCLASSIFIED	0.3	528.1	A BLUE BAND
-138.3	CARBONDALE		COAL	0.6	528.3	
-138.9	CARBONDALE		SHALE	0.0	528.9	
-138.9	CARBONDALE		COAL	0.7	528.9	

-139.6	CARBONDALE		UNDERCLAY	1.8	529.6	
-141.4	CARBONDALE		SANDSTONE	1.6	531.4	
-143.0	CARBONDALE		GRAY SANDSTONE	37.2	533.0	WITH SANDSTONE MIXED
-180.2	CARBONDALE	BRIAR HILL	COAL	0.8	570.2	
-181.0	CARBONDALE		GRAY SHALE	34.2	571.0	MIXED WITH SANDSTONE
-215.2	CARBONDALE		SANDSTONE	2.6	605.2	
-217.8	CARBONDALE		SANDY SHALE	91.6	607.8	

MAPID: 16502686000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403848 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.902976 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2637.0 **LOG TYPE:**
SOURCE: BAILOR, W. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-123.0	CARBONDALE	BRERETON	LIMESTONE	-	484.0	
-1536.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1897.0	
-1904.0			LIMESTONE	-	2265.0	
-2276.0		BASE BARLOW	LIMESTONE	-	2637.0	

MAPID: 16502686000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403848 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.902976 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 3160.0 **LOG TYPE:** Electric Log
SOURCE: BAILOR, W. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HERRIN	COAL	4.0	493.0	
-189.0	CARBONDALE	BRIAR HILL	COAL	-	550.0	
-246.0	CARBONDALE	SPRINGFIELD	COAL	7.0	607.0	
-299.0	CARBONDALE	HOUCHIN CREEK	COAL	-	660.0	

MAPID: 16502686000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403848 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.902976 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1750.0 **LOG TYPE:** Electric Log
SOURCE: BAILOR, W. E. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-409.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	770.0	
-478.0	SPOON	DAVIS	UNCLASSIFIED	-	839.0	
-1389.0	BASE OF PENN.		UNCLASSIFIED	-	1750.0	

MAPID: 16502686000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403848 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.902976 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BAILOR, W. E., IN NATL BANK 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-299.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	660.0	
-331.0	CARBONDALE	SURVANT	COAL	2.0	692.0	
-404.0	CARBONDALE	COLCHESTER	COAL	0.6	765.0	
-434.0	CARBONDALE	DEKOVEN	COAL	2.0	795.0	
-467.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	828.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-477.0	CARBONDALE	DAVIS	COAL	4.0	838.0	
-549.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	910.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503551000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 0' E line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.393374 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.901196 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 528.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 2 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
18.0	MODESTO	PIASA	LIMESTONE W/ SHALE	13.7	377.0	
4.3	MODESTO		GRAY SHALE	45.5	390.7	
-41.2	CARBONDALE	DANVILLE	COAL	1.7	436.2	
-42.9	CARBONDALE		GRAY SHALE	59.5	437.9	
-102.4	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	497.4	
-102.9	CARBONDALE	LAWSON	GRAY SHALE	17.2	497.9	
-120.1	CARBONDALE	BRERETON	LIMESTONE	5.5	515.1	
-125.6	CARBONDALE	ANNA	BLACK SHALE	2.0	520.6	
-128.0	CARBONDALE	HERRIN	COAL	5.4	523.0	

MAPID: 16501378000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375821 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.89784 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2594.0 **LOG TYPE:**
SOURCE: BALDERSON, J. F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	BRERETON	LIMESTONE	-	445.0	
-1470.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-1822.0			LIMESTONE	-	2202.0	
-2214.0		BASE BARLOW	LIMESTONE	-	2594.0	

MAPID: 16501378000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375821 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.89784 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3163.0 **LOG TYPE:** Electric Log

SOURCE: BALDERSON, J. F. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
10.0	CARBONDALE	DANVILLE	COAL	-	370.0	
7.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE	12.0	373.0	
-22.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	402.0	
-34.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	24.0	414.0	
-71.0	CARBONDALE	HERRIN	COAL	3.0	451.0	
-89.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	4.0	469.0	
-126.0	CARBONDALE	BRIAR HILL	COAL	-	506.0	
-140.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	10.0	520.0	
-184.0	CARBONDALE	SPRINGFIELD	COAL	5.0	564.0	
-248.0	CARBONDALE	HOUCHIN CREEK	COAL	-	628.0	

MAPID: 16501378000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375821 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89784 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1709.0 **LOG TYPE:** Electric Log

SOURCE: BALDERSON, J. F. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-360.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	740.0	
-408.0	SPOON	DAVIS	UNCLASSIFIED	-	788.0	
-1329.0	BASE OF PENN.		UNCLASSIFIED	-	1709.0	

MAPID: 16501378000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375821 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.89784 **DATE COLLECTED:** 8 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BALDERSON, J. F., BRUCE B F **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	632.0	
-274.0	CARBONDALE	SURVANT	COAL	1.5	654.0	
-359.0	CARBONDALE	COLCHESTER	COAL	0.5	739.0	
-377.0	CARBONDALE	DEKOVEN	COAL	3.0	757.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	780.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-407.0	CARBONDALE	DAVIS	COAL	4.0	787.0	
-435.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	815.0	
-474.0	TRADEWATER	MT. RORAH	COAL	0.5	854.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501379000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375818 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896017 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-61.0	CARBONDALE	BRERETON	LIMESTONE	-	435.0	
-1473.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1847.0	
-1826.0			LIMESTONE	-	2200.0	
-2219.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16501380000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375828 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.90163 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2598.0 **LOG TYPE:**
SOURCE: BALDERSON, J. F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-63.0	CARBONDALE	BRERETON	LIMESTONE	-	445.0	
-1484.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1866.0	
-1844.0			LIMESTONE	-	2226.0	
-2216.0		BASE BARLOW	LIMESTONE	-	2598.0	

MAPID: 16501380000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375828 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.90163 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 456.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	MODESTO	PIASA	LIMESTONE W/ SHALE	10.0	314.0	
58.0	MODESTO		SHALE	48.0	324.0	
10.0	CARBONDALE	DANVILLE	COAL	2.0	372.0	
8.0	CARBONDALE		SHALE & SANDSTONE	28.0	374.0	
-20.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	402.0	
-23.0	CARBONDALE	LAWSON	SHALE	10.0	405.0	
-33.0	CARBONDALE	LAWSON	SANDSTONE	25.0	415.0	
-58.0	CARBONDALE	LAWSON	DARK GRAY SHALE	5.0	440.0	
-63.0	CARBONDALE	BRERETON	LIMESTONE	5.0	445.0	
-68.0	CARBONDALE	ANNA	BLACK SHALE	2.0	450.0	
-70.0	CARBONDALE	HERRIN	COAL	4.0	452.0	

MAPID: 16501380000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375828 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.90163 **DATE COLLECTED:** 12 / 0 / 1950
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BALDERSON, J. F., DEWEES J D **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-251.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	633.0	
-270.0	CARBONDALE	SURVANT	COAL	1.8	652.0	
-343.0	CARBONDALE	COLCHESTER	COAL	0.5	725.0	
-378.0	CARBONDALE	DEKOVEN	COAL	3.5	760.0	
-408.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	790.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-416.0	CARBONDALE	DAVIS	COAL	3.5	798.0	
-443.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	825.0	
-446.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	828.0	
-493.0	TRADEWATER	MT. RORAH	COAL	0.5	875.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501381000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.385176 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.901401 **DATE COLLECTED:** 12 / 0 / 1949
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: COLUMBUS EXPLORATION, DEWEES J D **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-276.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	646.0	
-305.0	CARBONDALE	SURVANT	COAL	1.8	675.0	
-366.0	CARBONDALE	COLCHESTER	COAL	0.5	736.0	
-404.0	CARBONDALE	DEKOVEN	COAL	2.5	774.0	
-440.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	810.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-447.0	CARBONDALE	DAVIS	COAL	4.5	817.0	
-470.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501381000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.385176 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.901401 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2235.0 **LOG TYPE:**
SOURCE: COLUMBUS EXPLORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-92.0	CARBONDALE	BRERETON	LIMESTONE	-	462.0	
-1508.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1878.0	
-1865.0			LIMESTONE	-	2235.0	

MAPID: 16501382000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.380494 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.897753 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2592.0 **LOG TYPE:**
SOURCE: MINERVA OIL & BALDERSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-61.0	CARBONDALE	BRERETON	LIMESTONE	-	430.0	
-1489.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1858.0	
-1834.0			LIMESTONE	-	2203.0	
-2223.0		BASE BARLOW	LIMESTONE	-	2592.0	

MAPID: 16501383000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.382755 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884755 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: HEATH B M ETAL **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-32.0	CARBONDALE	BRERETON	LIMESTONE	-	390.0	
-1461.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1791.0			LIMESTONE	-	2149.0	
-2194.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16501383000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.382755 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.884755 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:**

SOURCE: HEATH B M ETAL **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
22.0	CARBONDALE	DANVILLE	COAL	-	336.0	
15.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	343.0	
-4.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	24.0	362.0	
-40.0	CARBONDALE	HERRIN	COAL	4.0	398.0	
-50.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	6.0	408.0	
-94.0	CARBONDALE	BRIAR HILL	COAL	-	452.0	
-102.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	12.0	460.0	
-150.0	CARBONDALE	SPRINGFIELD	COAL	4.0	508.0	
-226.0	CARBONDALE	HOUCHIN CREEK	COAL	-	584.0	

MAPID: 16501383000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.382755 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.884755 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, BARNES HAROLD P 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-230.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-254.0	CARBONDALE	SURVANT	COAL	1.5	612.0	
-292.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-354.0	CARBONDALE	DEKOVEN	COAL	1.8	712.0	
-381.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	739.0	68 PERCENT SANDSTONE IN DEKOVEN SPLIT
-391.0	CARBONDALE	DAVIS	COAL	4.0	749.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-466.0	TRADEWATER	MT. RORAH	COAL	0.5	824.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502186000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375813 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.888508 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., BARNES **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	590.0	
-250.0	CARBONDALE	SURVANT	COAL	1.0	609.0	
-331.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-354.0	CARBONDALE	DEKOVEN	COAL	3.5	713.0	
-378.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	737.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-387.0	CARBONDALE	DAVIS	COAL	4.0	746.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	778.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-459.0	TRADEWATER	MT. RORAH	COAL	0.5	818.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502186000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.375813 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.888508 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-41.0	CARBONDALE	BRERETON	LIMESTONE	-	400.0	
-1466.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1818.0			LIMESTONE	-	2177.0	
-2205.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16503360000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.387405 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.886586 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1675.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR DRILLING CO **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-333.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	692.0	
-408.0	SPOON	DAVIS	UNCLASSIFIED	-	767.0	
-1316.0	BASE OF PENN.		UNCLASSIFIED	-	1675.0	

MAPID: 16503360000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.387405 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.886586 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2209.0 **LOG TYPE:**
SOURCE: FARRAR DRILLING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	BRERETON	LIMESTONE	-	410.0	
-1470.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1831.0	
-1848.0			LIMESTONE	-	2209.0	

MAPID: 16503360000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.387405 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.886586 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR DRILLING CO, BARNES **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-247.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	606.0	
-269.0	CARBONDALE	SURVANT	COAL	1.8	628.0	
-334.0	CARBONDALE	COLCHESTER	COAL	0.5	693.0	
-371.0	CARBONDALE	DEKOVEN	COAL	3.3	730.0	
-399.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	758.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-407.0	CARBONDALE	DAVIS	COAL	3.3	766.0	
-439.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	798.0	
-481.0	TRADEWATER	MT. RORAH	COAL	0.5	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503402000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.389607 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.881108 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**

SOURCE: J. B. DRILLING CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-21.0	CARBONDALE	BRERETON	LIMESTONE	-	390.0	
-1460.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1829.0	
-1807.0			LIMESTONE	-	2176.0	
-2201.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16503402000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.389607 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.881108 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	MODESTO	PIASA	LIMESTONE	3.0	253.0	
110.0	MODESTO		SHALE	57.0	256.0	
53.0	CARBONDALE	DANVILLE	COAL	1.0	313.0	
52.0	CARBONDALE		SHALE & SANDSTONE	26.0	314.0	
26.0	CARBONDALE	LAWSON	SILTY SHALE	26.0	340.0	
0.0	CARBONDALE	LAWSON	SANDSTONE	5.0	366.0	
-5.0	CARBONDALE	LAWSON	SILTY SHALE	12.0	371.0	
-17.0	CARBONDALE	LAWSON	DARK GRAY SHALE	7.0	383.0	
-24.0	CARBONDALE	BRERETON	LIMESTONE	4.0	390.0	
-28.0	CARBONDALE	ANNA	BLACK SHALE	2.0	394.0	
-30.0	CARBONDALE	HERRIN	COAL	4.0	396.0	

MAPID: 16503402000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.389607 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.881108 **DATE COLLECTED:** 12 / 0 / 1961
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: J. B. DRILLING CO., ELSNER GUS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-214.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-238.0	CARBONDALE	SURVANT	COAL	0.6	604.0	
-303.0	CARBONDALE	COLCHESTER	COAL	0.6	669.0	
-334.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-366.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	732.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-379.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-364.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-449.0	TRADEWATER	MT. RORAH	COAL	0.5	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500835000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.410509 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.880069 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2614.0 **LOG TYPE:**
SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	BRERETON	LIMESTONE	-	438.0	
-1497.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1870.0	
-1865.0			LIMESTONE	-	2238.0	
-2241.0		BASE BARLOW	LIMESTONE	-	2614.0	

MAPID: 16500835000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.410509 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.880069 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3155.0 **LOG TYPE:** Electric Log

SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
7.0	CARBONDALE	DANVILLE	COAL	-	366.0	
-13.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	11.0	386.0	
-30.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	403.0	
-41.0	CARBONDALE	ANVIL ROCK	SILTSTONE	6.0	414.0	
-74.0	CARBONDALE	HERRIN	COAL	4.0	447.0	
-83.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	24.0	456.0	
-133.0	CARBONDALE	BRIAR HILL	COAL	-	506.0	
-187.0	CARBONDALE	SPRINGFIELD	COAL	6.0	560.0	
-247.0	CARBONDALE	HOUCHIN CREEK	COAL	-	620.0	

MAPID: 16500835000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.410509 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.880069 **DATE COLLECTED:** 6 / 0 / 1924

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 462.0 **LOG TYPE:** Survey Sample Study

SOURCE: SINCLAIR WYOMING OIL CO. **WELL TYPE:** Dry Hole

COMMENT: CONTROL BY WELL #24

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCLASSIFIED	10.0	0.0	NO RECORD
363.0	MODESTO		SHALE	122.0	10.0	
241.0	MODESTO		UNCLASSIFIED	3.0	132.0	
238.0	MODESTO		SHALE	38.0	135.0	
200.0	MODESTO		BLACK SHALE	2.0	173.0	
198.0	MODESTO		COAL	1.0	175.0	
197.0	MODESTO		CALCAREOUS CLAYSTONE	2.0	176.0	CALC
195.0	MODESTO		ARGILLACEOUS SILTSTONE	70.0	178.0	ARG
125.0	MODESTO		LIMESTONE	15.0	248.0	LOG STATES BLACK SH PRESENT, BROWN
110.0	MODESTO		GRAY SHALE	4.0	263.0	
106.0	MODESTO		CALCAREOUS SANDSTONE	13.0	267.0	CALC
93.0	MODESTO		SHALE	5.0	280.0	LOG STATES LITTLE COAL
88.0	MODESTO		SHALE	13.0	285.0	
75.0	MODESTO		BLACK SHALE	1.0	298.0	
74.0	MODESTO		COAL	1.0	299.0	
73.0	MODESTO		CALCAREOUS CLAYSTONE	2.0	300.0	CALC
71.0	MODESTO		CALCAREOUS SANDSTONE	18.0	302.0	CALC
53.0	MODESTO		CALCAREOUS SHALE	4.0	320.0	RED/GREEN/GRAY, CALC
49.0	MODESTO	PIASA	LIMESTONE	3.0	324.0	CALC
46.0	MODESTO		SHALE	15.0	327.0	PYRITIC
31.0	MODESTO		SANDY SHALE	8.0	342.0	GRAY
23.0	MODESTO		SHALE	20.0	350.0	SIDERITE CONC
3.0	CARBONDALE	DANVILLE	COAL	1.0	370.0	
2.0	CARBONDALE		SHALE	2.0	371.0	PYRITIC, FOSSILIFEROUS
0.0	CARBONDALE		CALCAREOUS SHALE	6.0	373.0	SIDERITE CONC, CALC GRAY
-6.0	CARBONDALE		SANDSTONE	7.0	379.0	CARBONACEOUS
-13.0	CARBONDALE		SHALE	3.0	386.0	
-16.0	CARBONDALE		CALCAREOUS SANDSTONE	12.0	389.0	CALC
-28.0	CARBONDALE		CALCAREOUS SHALE	5.0	401.0	CALC
-33.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	406.0	FOSSILIFEROUS
-39.0	CARBONDALE	ANVIL ROCK	ARGILLACEOUS SANDSTONE	10.0	412.0	ARG
-49.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	422.0	CARBONACEOUS
-57.0	CARBONDALE	ANVIL ROCK	SHALE	10.0	430.0	SIDERITE CONC

-67.0	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	5.0	440.0	ARG
-72.0	CARBONDALE	ANNA	BLACK SHALE	2.0	445.0	
-74.0	CARBONDALE	HERRIN	COAL	7.0	447.0	
-81.0	CARBONDALE		UNDERCLAY	4.0	454.0	GRAY
-85.0	CARBONDALE		CALCAREOUS SANDSTONE	4.0	458.0	CALC

MAPID: 16502552000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.40358 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.884694 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2605.0 **LOG TYPE:**

SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-72.0	CARBONDALE	BRERETON	LIMESTONE	-	437.0	
-1497.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1862.0	
-1849.0			LIMESTONE	-	2214.0	
-2240.0		BASE BARLOW	LIMESTONE	-	2605.0	

MAPID: 16502552000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.40358 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.884694 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 448.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	316.0	
44.0	MODESTO		SHALE	51.0	321.0	
-7.0	CARBONDALE	DANVILLE	COAL	1.0	372.0	
-8.0	CARBONDALE		SILTY SHALE	22.0	373.0	
-30.0	CARBONDALE	ALLENBY	COAL	1.0	395.0	
-31.0	CARBONDALE		CLAYSTONE & SHALE	9.0	396.0	
-40.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	405.0	
-48.0	CARBONDALE	LAWSON	SHALE	24.0	413.0	
-72.0	CARBONDALE	BRERETON	LIMESTONE	5.5	437.0	
-77.5	CARBONDALE	ANNA	BLACK SHALE	2.5	442.5	
-80.0	CARBONDALE	HERRIN	COAL	3.0	445.0	

MAPID: 16502552000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.40358 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.884694 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1715.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-355.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	720.0	
-433.0	SPOON	DAVIS	UNCLASSIFIED	-	798.0	
-1350.0	BASE OF PENN.		UNCLASSIFIED	-	1715.0	

MAPID: 16502552000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.40358 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.884694 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO., GARNER HENRY T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-265.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	630.0	
-290.0	CARBONDALE	SURVANT	COAL	0.5	655.0	
-355.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-395.0	CARBONDALE	DEKOVEN	COAL	2.0	760.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-432.0	CARBONDALE	DAVIS	COAL	3.0	797.0	
-465.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	830.0	
-515.0	TRADEWATER	MT. RORAH	COAL	0.5	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503447000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.394292 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.884745 **DATE COLLECTED:** 3 / 0 / 1963
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP., HINES ETAL COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	603.0	
-272.0	CARBONDALE	SURVANT	COAL	0.0	634.0	
-338.0	CARBONDALE	COLCHESTER	COAL	0.6	700.0	
-369.0	CARBONDALE	DEKOVEN	COAL	3.0	731.0	
-396.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	758.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-405.0	CARBONDALE	DAVIS	COAL	4.0	767.0	
-433.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	795.0	
-483.0	TRADEWATER	MT. RORAH	COAL	0.5	845.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503447000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.394292 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.884745 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2592.0 **LOG TYPE:**
SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	BRERETON	LIMESTONE	-	415.0	
-1488.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-1853.0			LIMESTONE	-	2215.0	
-2230.0		BASE BARLOW	LIMESTONE	-	2592.0	

MAPID: 16523889000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 350' S line, 400' E line of SE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.39441 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.879346 **DATE COLLECTED:** 12 / 20 / 1974
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 145.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN B. RIDER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	88.0	0.0	
280.0			SANDSTONE	10.0	88.0	MAY BE DRIFT
270.0			SHALE	37.0	98.0	
233.0			COAL	2.0	135.0	
231.0			SANDSTONE	2.0	137.0	
229.0			LIMESTONE	6.0	139.0	

MAPID: 16501431000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447477 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.891665 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2671.0 **LOG TYPE:**
SOURCE: FERBANTA DRLG CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	BRERETON	LIMESTONE	-	484.0	
-1540.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1911.0	
-1905.0			LIMESTONE	-	2276.0	
-2300.0		BASE BARLOW	LIMESTONE	-	2671.0	

MAPID: 16501431000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447477 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.891665 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3175.0 **LOG TYPE:** Electric Log

SOURCE: FERBANTA DRLG CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-26.0	CARBONDALE	DANVILLE	COAL	-	397.0	
-32.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SILTSTONE	12.0	403.0	
-53.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	424.0	
-57.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	52.0	428.0	
-117.0	CARBONDALE	HERRIN	COAL	5.0	488.0	
-166.0	CARBONDALE	BRIAR HILL	COAL	-	537.0	
-169.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	17.0	540.0	
-221.0	CARBONDALE	SPRINGFIELD	COAL	8.0	592.0	
-239.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	42.0	610.0	
-281.0	CARBONDALE	HOUCHIN CREEK	COAL	-	652.0	

MAPID: 16502187000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442881 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.8917 **DATE COLLECTED:** 4 / 0 / 1952

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1758.0 **LOG TYPE:** Electric Log

SOURCE: JONES, BOND D. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-397.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	769.0	
-474.0	SPOON	DAVIS	UNCLASSIFIED	-	846.0	
-1386.0	BASE OF PENN.		UNCLASSIFIED	-	1758.0	

MAPID: 16502187000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.442881 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8917 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2674.0 **LOG TYPE:**
SOURCE: JONES, BOND D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	BRERETON	LIMESTONE	-	485.0	
-1548.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1920.0	
-1911.0			LIMESTONE	-	2283.0	
-2302.0		BASE BARLOW	LIMESTONE	-	2674.0	

MAPID: 16503070000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447484 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.886168 **DATE COLLECTED:** 11 / 0 / 1956
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2652.0 **LOG TYPE:** Electric Log
SOURCE: MCCULLOUGH, RICHARD, MAHONEY ESTATE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-272.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	640.0	
-307.0	CARBONDALE	SURVANT	COAL	2.5	675.0	
-380.0	CARBONDALE	COLCHESTER	COAL	0.5	748.0	
-402.0	CARBONDALE	DEKOVEN	COAL	0.1	770.0	
-440.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	808.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-447.0	CARBONDALE	DAVIS	COAL	4.0	815.0	
-479.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	847.0	
-522.0	TRADEWATER	MT. RORAH	COAL	0.5	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503070000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.447484 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.886168 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2652.0 **LOG TYPE:**
SOURCE: MCCULLOUGH, RICHARD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	CARBONDALE	BRERETON	LIMESTONE	-	471.0	
-1500.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1868.0	
-1885.0			LIMESTONE	-	2253.0	
-2284.0		BASE BARLOW	LIMESTONE	-	2652.0	

MAPID: 16503418000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.440574 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889876 **DATE COLLECTED:** 8 / 0 / 1962
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2677.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK JAMES H, MAHONEY MAURICE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-300.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	670.0	
-333.0	CARBONDALE	SURVANT	COAL	1.5	703.0	
-405.0	CARBONDALE	COLCHESTER	COAL	0.6	775.0	
-430.0	CARBONDALE	DEKOVEN	COAL	0.1	800.0	
-477.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	847.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-483.0	CARBONDALE	DAVIS	COAL	4.0	853.0	
-513.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	883.0	
-560.0	TRADEWATER	MT. RORAH	COAL	0.5	930.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503418000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.440574 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.889876 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2677.0 **LOG TYPE:**

SOURCE: VANDENBARK JAMES H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	BRERETON	LIMESTONE	-	452.0	
-1544.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1914.0	
-1918.0			LIMESTONE	-	2288.0	
-2307.0		BASE BARLOW	LIMESTONE	-	2677.0	

MAPID: 16503550000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.445181 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.891677 **DATE COLLECTED:** 11 / 9 / 1967

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 600.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT: NE CORNER OF NE/NW/NW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	63.0	0.0	SURFACE CLAY
-	MODESTO		GRAY SHALE	64.0	63.0	
-	MODESTO	WOMAC	COAL	1.3	127.0	
-	MODESTO		SANDY SHALE	60.5	128.3	
-	MODESTO		SHALE	25.0	188.8	WITH LIMESTONE STREAKS
-	MODESTO	MOUND CITY	BLACK SHALE	1.3	213.8	
-	MODESTO	CHAPEL	COAL	0.9	215.1	
-	MODESTO		UNDERCLAY	1.1	216.0	
-	MODESTO		GRAY SANDSTONE	20.9	217.1	
-	MODESTO		SANDY SHALE	14.4	238.0	
-	MODESTO		SANDSTONE	1.4	252.4	
-	MODESTO		SANDY SHALE	45.1	253.8	
-	MODESTO		LIMESTONE	1.8	298.9	
-	MODESTO		SANDY SHALE	20.9	300.7	
-	MODESTO		LIMESTONE	2.3	321.6	
-	MODESTO		SANDY SHALE	20.0	323.9	
-	MODESTO		COAL	1.1	343.8	
-	MODESTO		GRAY SHALE	3.0	344.9	
-	MODESTO		GRAY SANDSTONE	5.5	347.9	
-	MODESTO		SANDY SHALE	14.1	353.4	
-	MODESTO	PIASA	LIMESTONE	7.0	367.5	
-	MODESTO		SANDY SHALE	15.5	374.5	
-	MODESTO		GRAY SANDSTONE	12.0	390.0	
-	MODESTO		GRAY SHALE	8.7	402.0	
-	CARBONDALE	DANVILLE	COAL	1.7	410.7	
-	CARBONDALE		GRAY SANDSTONE	6.6	412.4	
-	CARBONDALE		SANDY SHALE	8.5	419.0	
-	CARBONDALE		GRAY SHALE	8.6	427.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	436.1	
-	CARBONDALE		GRAY SANDSTONE	9.4	441.8	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	31.7	451.2	
-	CARBONDALE		DARK GRAY SHALE	6.8	482.9	
-	CARBONDALE	BRERETON	LIMESTONE	5.1	489.7	
-	CARBONDALE	ANNA	BLACK SHALE	0.8	494.7	
-	CARBONDALE	HERRIN	COAL	0.8	495.5	
-	CARBONDALE		SHALE	0.0	496.3	
-	CARBONDALE		COAL	0.1	496.3	
-	CARBONDALE		PYRITE	0.0	496.4	A PYRITE UNIT
-	CARBONDALE		COAL	1.6	496.4	

-	CARBONDALE		PYRITE	0.0	498.0	A PYRITE UNIT
-	CARBONDALE		COAL	0.6	498.0	
-	CARBONDALE		PYRITE	0.0	498.6	A PYRITE UNIT
-	CARBONDALE		COAL	0.3	498.6	
-	CARBONDALE		SHALE	0.2	498.9	SHALE WITH A BLUE BAND
-	CARBONDALE		COAL	1.2	499.1	
-	CARBONDALE		PYRITE	0.1	500.3	A PYRITE UNIT
-	CARBONDALE		COAL	0.9	500.3	
-	CARBONDALE		UNDERCLAY	3.6	501.2	
-	CARBONDALE		SANDY SHALE	41.8	504.8	
-	CARBONDALE	BRIAR HILL	COAL	1.6	546.6	
-	CARBONDALE		SANDY SHALE	26.5	548.2	
-	CARBONDALE		GRAY SHALE	15.0	574.7	
-	CARBONDALE		LIMESTONE	1.5	589.7	
-	CARBONDALE		BLACK SHALE	2.7	591.1	
-	CARBONDALE		SANDY SHALE	2.8	593.8	
-	CARBONDALE		UNCLASSIFIED	0.5	596.6	LOG SAYS 'RASH-CAOL STKS #5'
-	CARBONDALE		COAL	1.4	597.1	
-	CARBONDALE		COAL	0.8	598.4	WITH SHALE STREAKS
-	CARBONDALE		GRAY SHALE	1.2	599.2	

MAPID: 16500002000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.455543 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.883365 **DATE COLLECTED:** 6 / 0 / 1920

SURFACE ELEVATION (FT.): 363.3 **LOGGED (FT.):** 542.0 **LOG TYPE:** Drillers Log

SOURCE: TRI COUNTIES COAL CO. 1003 **WELL TYPE:** Coal Test

COMMENT: ANALYSIS ON COAL #5 AND 6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.3			UNCONSOLIDATED	70.0	0.0	
293.3	MODESTO		SANDY SHALE	30.0	70.0	
263.3	MODESTO		SHALE	40.0	100.0	
223.3	MODESTO		SHALE	22.0	140.0	BLUE
201.3	MODESTO		SHALE	4.5	162.0	
196.8	MODESTO		COAL	0.5	166.5	
196.3	MODESTO		SHALE	18.0	167.0	
178.3	MODESTO		SANDY SHALE	19.0	185.0	
159.3	MODESTO		SHALE	39.0	204.0	BLUE
120.3	MODESTO		LIMESTONE	2.0	243.0	
118.3	MODESTO		SHALE	19.5	245.0	BLUE
98.8	MODESTO		COAL	0.5	264.5	
98.3	MODESTO		SHALE	10.0	265.0	
88.3	MODESTO		BLUE SHALE	3.0	275.0	BLUE
85.3	MODESTO		BLACK SHALE	3.0	278.0	
82.3	MODESTO		SHALE	4.0	281.0	
78.3	MODESTO		SHALE	4.0	285.0	
74.3	MODESTO		COAL	0.8	289.0	
73.5	MODESTO		SANDY SHALE	26.2	289.8	
47.3	MODESTO		SHALE	6.0	316.0	
41.3	MODESTO		SHALE	25.0	322.0	BLUE
16.3	MODESTO		BLACK SHALE	2.0	347.0	
14.3	CARBONDALE	DANVILLE	COAL	1.3	349.0	
13.0	CARBONDALE		SHALE	21.7	350.3	
-8.7	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	372.0	
-15.7	CARBONDALE	ANVIL ROCK	SANDSTONE	47.5	379.0	
-63.2	CARBONDALE		BLACK SHALE	2.0	426.5	
-65.2	CARBONDALE	BRERETON	LIMESTONE	6.5	428.5	
-71.7	CARBONDALE	ANNA	BLACK SHALE	0.8	435.0	
-72.5	CARBONDALE	HERRIN	COAL	5.1	435.8	
-77.6	CARBONDALE		SANDY SHALE	10.1	440.9	
-87.7	CARBONDALE		SHALE	33.7	451.0	BLUE
-121.4	CARBONDALE	BRIAR HILL	COAL	1.3	484.7	
-122.7	CARBONDALE		SANDY SHALE	12.0	486.0	
-134.7	CARBONDALE		SHALE	25.0	498.0	BLUE
-159.7	CARBONDALE		BLACK SHALE	2.0	523.0	
-161.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	525.0	
-162.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	526.0	
-164.7	CARBONDALE	DYKERSBURG	SHALE	6.3	528.0	

-171.0	CARBONDALE	SPRINGFIELD	COAL	7.1	534.3
-178.1	CARBONDALE		SHALE	0.6	541.4

MAPID: 16500002000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.455543 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.883365 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 542.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
14.0	CARBONDALE	DANVILLE	COAL	1.3	349.0	
-9.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	372.0	
-16.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	47.0	379.0	
-73.0	CARBONDALE	HERRIN	COAL	5.1	436.0	
-122.0	CARBONDALE	BRIAR HILL	COAL	1.3	485.0	
-171.0	CARBONDALE	SPRINGFIELD	COAL	7.1	534.0	

MAPID: 16501432000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.449793 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.880673 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2633.0 **LOG TYPE:**

SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-36.0	CARBONDALE	BRERETON	LIMESTONE	-	400.0	
-1509.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1873.0	
-1893.0			LIMESTONE	-	2257.0	
-2269.0		BASE BARLOW	LIMESTONE	-	2633.0	

MAPID: 16501432000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.449793 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.880673 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 3151.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
34.0	CARBONDALE	DANVILLE	COAL	-	330.0	
14.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	350.0	
0.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	36.0	364.0	
-42.0	CARBONDALE	HERRIN	COAL	4.0	406.0	
-80.0	CARBONDALE	BRIAR HILL	COAL	-	444.0	

MAPID: 16501432000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.449793 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880673 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2633.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., CARTER OTIS A ETAL 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	612.0	
-290.0	CARBONDALE	SURVANT	COAL	1.0	650.0	
-360.0	CARBONDALE	COLCHESTER	COAL	0.6	720.0	
-382.0	CARBONDALE	DEKOVEN	COAL	0.1	742.0	
-418.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	778.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-425.0	CARBONDALE	DAVIS	COAL	4.0	785.0	
-455.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	815.0	
-495.0	TRADEWATER	MT. RORAH	COAL	0.5	855.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502477000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.458989 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.88425 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1745.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-327.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	695.0	
-396.0	SPOON	DAVIS	UNCLASSIFIED	-	764.0	
-1377.0	BASE OF PENN.		UNCLASSIFIED	-	1745.0	

MAPID: 16502477000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.458989 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.88425 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2639.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	BRERETON	LIMESTONE	-	403.0	
-1527.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1895.0	
-1894.0			LIMESTONE	-	2262.0	
-2271.0		BASE BARLOW	LIMESTONE	-	2639.0	

MAPID: 16503552000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.457842 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.87787 **DATE COLLECTED:** 8 / 15 / 1968

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 427.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 12 **WELL TYPE:** Coal Test

COMMENT: 0' FROM Sline, 2640' FROM Eline OF SEC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	81.4	0.0	SURFACE LAYERS (EARTH, CLAY, & DRIFT)
283.6	MODESTO		GRAY SHALE	52.4	81.4	
231.2	MODESTO	MOUND CITY	BLACK SHALE	1.5	133.8	
229.7	MODESTO	CHAPEL	COAL	0.9	135.3	
228.9	MODESTO		GRAY SHALE	3.4	136.1	
225.5	MODESTO		LIMESTONE	1.6	139.5	
223.9	MODESTO		SHALE	61.4	141.1	SHALE AND SANDSTONE
162.5	MODESTO		LIMESTONE	1.9	202.5	
160.6	MODESTO		GRAY SHALE	22.8	204.4	
137.8	MODESTO		LIMESTONE	2.3	227.2	
135.5	MODESTO		GRAY SHALE	35.1	229.5	
100.5	MODESTO		BLACK SHALE	1.5	264.5	
99.0	MODESTO		GRAY SHALE	6.6	266.0	
92.4	MODESTO		BLACK SHALE	1.1	272.6	
91.3	MODESTO		COAL	0.6	273.7	
90.7	MODESTO		GRAY SHALE	8.6	274.3	
82.1	MODESTO		GRAY SANDSTONE	7.1	282.9	
75.0	MODESTO		GRAY SHALE	6.7	290.0	
68.3	MODESTO	PIASA	LIMESTONE	4.0	296.7	
64.3	MODESTO		GRAY SHALE	34.3	300.7	
30.0	CARBONDALE	DANVILLE	COAL	1.9	335.0	
28.1	CARBONDALE		GRAY SHALE	15.8	336.9	
12.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	352.7	
8.8	CARBONDALE		GRAY SHALE	5.5	356.2	
3.3	CARBONDALE		GRAY SANDSTONE	24.9	361.7	
-21.5	CARBONDALE		GRAY SHALE	20.4	386.5	
-41.9	CARBONDALE		GRAY SANDSTONE	6.6	406.9	
-48.5	CARBONDALE	JAMESTOWN	COAL	0.2	413.5	
-48.7	CARBONDALE		DARK GRAY SHALE	1.5	413.7	
-50.2	CARBONDALE	BRERETON	LIMESTONE	5.2	415.2	
-55.3	CARBONDALE	ANNA	BLACK SHALE	0.9	420.3	
-56.2	CARBONDALE		PYRITE	0.1	421.2	
-56.3	CARBONDALE	HERRIN	COAL	1.0	421.3	
-57.2	CARBONDALE	HERRIN	SHALE	0.0	422.2	
-57.2	CARBONDALE	HERRIN	COAL	0.4	422.2	
-57.6	CARBONDALE	HERRIN	PYRITE	0.1	422.6	
-57.6	CARBONDALE	HERRIN	COAL	2.0	422.6	
-59.6	CARBONDALE	HERRIN	SHALE	0.2	424.6	WITH BLUE BAND
-59.8	CARBONDALE	HERRIN	COAL	0.1	424.8	

-59.9	CARBONDALE	HERRIN	SHALE	0.1	424.9
-60.0	CARBONDALE	HERRIN	COAL	1.7	425.0
-61.7	CARBONDALE		UNDERCLAY	1.0	426.7

MAPID: 16503552000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.457842 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.87787 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 426.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 12 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
12.6			LIMESTONE	3.5	352.4	
9.1	CARBONDALE	LAWSON	GRAY SHALE	5.5	355.9	
3.6	CARBONDALE	LAWSON	SANDSTONE	24.9	361.4	
-21.3	CARBONDALE	LAWSON	GRAY SHALE	20.4	386.3	
-41.6	CARBONDALE	LAWSON	SANDSTONE	6.6	406.6	
-48.2	CARBONDALE	JAMESTOWN	COAL	0.2	413.2	
-48.4	CARBONDALE		DARK GRAY SHALE	1.5	413.4	
-49.9	CARBONDALE	BRERETON	LIMESTONE	5.2	414.9	
-55.1	CARBONDALE	ANNA	BLACK SHALE	1.0	420.1	
-56.0	CARBONDALE	HERRIN	COAL	5.5	421.0	

MAPID: 16502527000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.472767 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.876845 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2616.0 **LOG TYPE:**
SOURCE: FELMONT CORPORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-55.0	CARBONDALE	BRERETON	LIMESTONE	-	424.0	
-1519.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1888.0	
-1873.0			LIMESTONE	-	2242.0	
-2247.0		BASE BARLOW	LIMESTONE	-	2616.0	

MAPID: 16502527000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.472767 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.876845 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 435.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	MODESTO	PIASA	CALCAREOUS SHALE	12.0	311.0	
46.0	MODESTO		SHALE	44.0	323.0	
2.0	CARBONDALE	DANVILLE	COAL	3.0	367.0	
-1.0	CARBONDALE		SHALE	19.0	370.0	
-20.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	7.0	389.0	
-27.0	CARBONDALE	LAWSON	SHALE	3.0	396.0	
-30.0	CARBONDALE	LAWSON	COAL	1.0	399.0	
-31.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	400.0	
-51.0	CARBONDALE	JAMESTOWN	COAL	1.0	420.0	
-52.0	CARBONDALE		CALCAREOUS SHALE	3.0	421.0	
-55.0	CARBONDALE	BRERETON	LIMESTONE	6.0	424.0	
-61.0	CARBONDALE	HERRIN	COAL	5.0	430.0	

MAPID: 16502527000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.472767 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.876845 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 1733.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-350.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	719.0	
-416.0	SPOON	DAVIS	UNCLASSIFIED	-	785.0	
-1364.0	BASE OF PENN.		UNCLASSIFIED	-	1733.0	

MAPID: 16502527000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.472767 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.876845 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 435.0 **LOG TYPE:** Electric Log
SOURCE: FELMONT CORPORATION, JONES E J ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-346.0	CARBONDALE	COLCHESTER	COAL	0.6	715.0	
-383.0	CARBONDALE	DEKOVEN	COAL	2.0	752.0	
-411.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	780.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-417.0	CARBONDALE	DAVIS	COAL	5.0	786.0	
-441.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	
-501.0	TRADEWATER	MT. RORAH	COAL	0.5	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523873000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 817' N line, 350' W line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.484041 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.875414 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2627.0 **LOG TYPE:**
SOURCE: IL MIDCONTINENT/DEE DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	BRERETON	LIMESTONE	-	405.0	
-1508.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1880.0	
-1984.0			LIMESTONE	-	2356.0	
-2255.0		BASE BARLOW	LIMESTONE	-	2627.0	

MAPID: 16501384000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45663 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.875176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2616.0 **LOG TYPE:**
SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-6.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1510.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1879.0	
-1885.0			LIMESTONE	-	2254.0	
-2247.0		BASE BARLOW	LIMESTONE	-	2616.0	

MAPID: 16501384000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45663 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.875176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3117.0 **LOG TYPE:** Electric Log
SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	DANVILLE	COAL	-	310.0	
45.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	324.0	
37.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	40.0	332.0	
-7.0	CARBONDALE	HERRIN	COAL	5.0	376.0	
-216.0	CARBONDALE	HOUCHIN CREEK	COAL	-	585.0	

MAPID: 16502696000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.454234 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.871581 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2594.0 **LOG TYPE:** Electric Log
SOURCE: SCOTT CHAS W, CARTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	579.0	
-243.0	CARBONDALE	SURVANT	COAL	1.0	613.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.6	690.0	
-335.0	CARBONDALE	DEKOVEN	COAL	4.0	705.0	
-368.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	738.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-374.0	CARBONDALE	DAVIS	COAL	4.0	744.0	
-405.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-440.0	TRADEWATER	MT. RORAH	COAL	0.5	810.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502696000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.454234 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871581 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2594.0 **LOG TYPE:**
SOURCE: SCOTT CHAS W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
24.0	CARBONDALE	BRERETON	LIMESTONE	-	346.0	
-1481.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1851.0	
-1850.0			LIMESTONE	-	2220.0	
-2224.0		BASE BARLOW	LIMESTONE	-	2594.0	

MAPID: 16502734000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451939 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871599 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2598.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1473.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1843.0	
-1850.0			LIMESTONE	-	2220.0	
-2228.0		BASE BARLOW	LIMESTONE	-	2598.0	

MAPID: 16502734000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451939 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.871599 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 367.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
127.0	MODESTO	PIASA	LIMESTONE W/ SHALE	18.0	243.0	
109.0	MODESTO		SHALE	34.0	261.0	
75.0	CARBONDALE	DANVILLE	COAL	4.0	295.0	
71.0	CARBONDALE		SHALE & SANDSTONE	21.0	299.0	
50.0	CARBONDALE	LAWSON	SANDSTONE	42.0	320.0	
8.0	CARBONDALE	HERRIN	COAL	5.0	362.0	

MAPID: 16502802000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45651 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.869744 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2583.0 **LOG TYPE:** Electric Log
SOURCE: SCOTT CHAS W, MURPHY-CARTER ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-204.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	574.0	
-240.0	CARBONDALE	SURVANT	COAL	1.0	610.0	
-312.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-338.0	CARBONDALE	DEKOVEN	COAL	3.5	708.0	
-365.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	735.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-372.0	CARBONDALE	DAVIS	COAL	4.0	742.0	
-405.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-410.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	780.0	
-439.0	TRADEWATER	MT. RORAH	COAL	0.5	809.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502802000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45651 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2583.0 **LOG TYPE:**
SOURCE: SCOTT CHAS W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1481.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1851.0	
-1867.0			LIMESTONE	-	2237.0	
-2213.0		BASE BARLOW	LIMESTONE	-	2583.0	

MAPID: 16503147000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.461176 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.871528 **DATE COLLECTED:** 12 / 0 / 1957
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:** Electric Log
SOURCE: WAUSAU PETRO. CORP., CARTER O A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-218.0	CARBONDALE	HOUCHIN CREEK	COAL	3.5	587.0	
-251.0	CARBONDALE	SURVANT	COAL	1.0	620.0	
-319.0	CARBONDALE	COLCHESTER	COAL	0.5	688.0	
-340.0	CARBONDALE	DEKOVEN	COAL	0.5	709.0	
-381.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	750.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-391.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-421.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	790.0	
-469.0	TRADEWATER	MT. RORAH	COAL	1.5	838.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503147000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.461176 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:**
SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-6.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1492.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1861.0	
-1869.0			LIMESTONE	-	2238.0	
-2227.0		BASE BARLOW	LIMESTONE	-	2596.0	

MAPID: 16503409000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465678 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.866056 **DATE COLLECTED:** 1 / 0 / 1962
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1719.0 **LOG TYPE:** Electric Log
SOURCE: MABEE PETROLEUM CORP. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-303.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	673.0	
-370.0	SPOON	DAVIS	UNCLASSIFIED	-	740.0	
-1349.0	BASE OF PENN.		UNCLASSIFIED	-	1719.0	

MAPID: 16503409000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465678 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.866056 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2583.0 **LOG TYPE:**
SOURCE: MABEE PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
27.0	CARBONDALE	BRERETON	LIMESTONE	-	346.0	
-1484.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1857.0	
-1865.0			LIMESTONE	-	2238.0	
-2210.0		BASE BARLOW	LIMESTONE	-	2583.0	

MAPID: 16501385000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.438064 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.873456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2632.0 **LOG TYPE:**
SOURCE: AFFELD, M. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	BRERETON	LIMESTONE	-	412.0	
-1493.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1861.0	
-1879.0			LIMESTONE	-	2247.0	
-2264.0		BASE BARLOW	LIMESTONE	-	2632.0	

MAPID: 16501385000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.438064 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.873456 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 3116.0 **LOG TYPE:** Electric Log

SOURCE: AFFELD, M. E. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	DANVILLE	COAL	-	342.0	
18.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	4.0	350.0	
6.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	362.0	
-14.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	28.0	382.0	
-50.0	CARBONDALE	HERRIN	COAL	-	418.0	
-90.0	CARBONDALE	BRIAR HILL	COAL	-	458.0	
-165.0	CARBONDALE	SPRINGFIELD	COAL	5.0	533.0	
-236.0	CARBONDALE	HOUCHIN CREEK	COAL	-	604.0	

MAPID: 16501386000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440172 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.864406 **DATE COLLECTED:** 2 / 0 / 1949

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 24.3 **LOG TYPE:** Electric Log

SOURCE: SCHOONMAKER, GEORGE C., PARKS-PEMBERTON **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-229.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	603.0	
-266.0	CARBONDALE	SURVANT	COAL	0.5	640.0	
-334.0	CARBONDALE	COLCHESTER	COAL	0.6	708.0	
-370.0	CARBONDALE	DEKOVEN	COAL	2.0	744.0	
-399.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	773.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-406.0	CARBONDALE	DAVIS	COAL	4.0	780.0	
-443.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	817.0	
-476.0	TRADEWATER	MT. RORAH	COAL	0.5	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501419000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 981' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444999 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.869815 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: AFFELD OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-21.0	CARBONDALE	BRERETON	LIMESTONE	-	390.0	
-1469.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1838.0	
-1839.0			LIMESTONE	-	2208.0	
-2239.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16502660000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440211 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86621 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2207.0 **LOG TYPE:**
SOURCE: BRYANT, G. & M. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-29.0	CARBONDALE	BRERETON	LIMESTONE	-	395.0	
-1468.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1834.0	
-1841.0			LIMESTONE	-	2207.0	

MAPID: 16502660000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440211 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.86621 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 406.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	286.0	
76.0	MODESTO		SHALE	37.0	290.0	
39.0	CARBONDALE	DANVILLE	COAL	3.0	327.0	
36.0	CARBONDALE		SHALE & SANDSTONE	10.0	330.0	
26.0	CARBONDALE	LAWSON	SILTY SHALE	25.0	340.0	
1.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	15.0	365.0	
-14.0	CARBONDALE	LAWSON	SANDSTONE	17.0	380.0	
-31.0	CARBONDALE	BRERETON	LIMESTONE	4.5	397.0	
-35.5	CARBONDALE	ANNA	BLACK SHALE	1.5	401.5	
-37.0	CARBONDALE	HERRIN	COAL	3.5	403.0	

MAPID: 16502660000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440211 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86621 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 406.5 **LOG TYPE:** Electric Log

SOURCE: BRYANT, G. & M., MCDANIEL CLAUD **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	598.0	
-264.0	CARBONDALE	SURVANT	COAL	0.5	630.0	
-329.0	CARBONDALE	COLCHESTER	COAL	0.5	695.0	
-359.0	CARBONDALE	DEKOVEN	COAL	4.0	725.0	
-394.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	760.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-404.0	CARBONDALE	DAVIS	COAL	3.0	770.0	
-442.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	808.0	
-469.0	TRADEWATER	MT. RORAH	COAL	1.0	835.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525771000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 430' E line of SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440513 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.864412 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1681.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-325.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	698.0	
-397.0	SPOON	DAVIS	UNCLASSIFIED	-	770.0	
-1308.0	BASE OF PENN.		UNCLASSIFIED	-	1681.0	

MAPID: 16500679000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 200' N line, 400' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.428684 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.877491 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 565.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
20.0	CARBONDALE	DANVILLE	COAL	2.1	355.0	
15.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	360.0	
-33.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	408.0	
-55.0	CARBONDALE	HERRIN	COAL	4.6	430.0	
-88.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	16.0	463.0	
-104.0	CARBONDALE	BRIAR HILL	COAL	1.2	479.0	
-105.0	CARBONDALE	CANTON	SANDSTONE/SHALE	22.0	480.0	
-179.0	CARBONDALE	SPRINGFIELD	COAL	6.6	554.0	

MAPID: 16500679000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 200' N line, 400' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.428684 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.877491 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 560.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	DANVILLE	COAL	1.2	479.0	
-105.2	CARBONDALE		SHALE & SANDSTONE	26.5	480.2	
-131.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	506.7	
-132.7	CARBONDALE	LAWSON	BLACK SHALE	1.0	507.7	
-133.7	CARBONDALE	LAWSON	SILTY SHALE	17.0	508.7	
-150.7	CARBONDALE	LAWSON	GRAY SHALE	28.3	525.7	
-179.0	CARBONDALE	HERRIN	COAL	6.6	554.0	

MAPID: 16500679000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 200' N line, 400' W line

QUADRANGLE: BROUGHTON **LONGITUDE:** -88.428684 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.877491 **DATE COLLECTED:** 0 / 0 / 1923

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 566.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	51.0	0.0	
324.0	MODESTO	WOMAC	COAL	0.7	51.0	
323.3	MODESTO		SHALE	94.0	51.7	
229.3	MODESTO		BONE COAL	0.7	145.7	
228.7	MODESTO		UNDERCLAY	5.0	146.3	
223.7	MODESTO		SANDSTONE	6.0	151.3	
217.7	MODESTO		SHALE	55.0	157.3	
162.7	MODESTO		LIMESTONE	4.0	212.3	
158.7	MODESTO		SHALE	14.7	216.3	
144.0	MODESTO		SANDY SHALE	12.0	231.0	
132.0	MODESTO		SHALE	4.0	243.0	
128.0	MODESTO		BLACK SHALE	7.0	247.0	
121.0	MODESTO		SHALE	3.0	254.0	CONTAINS COAL STREAKS
118.0	MODESTO		BLACK SHALE	14.0	257.0	
104.0	MODESTO		BONE COAL	0.7	271.0	
103.3	MODESTO		CLAYSTONE	6.3	271.7	
97.0	MODESTO		SHALE	9.0	278.0	
88.0	MODESTO		SHALE	63.0	287.0	
25.0	MODESTO	PIASA	LIMESTONE	1.5	350.0	
23.5	MODESTO		BLACK SHALE	3.5	351.5	
20.0	CARBONDALE	DANVILLE	COAL	2.1	355.0	
17.9	CARBONDALE		UNDERCLAY	3.0	357.1	
14.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	360.1	
10.4	CARBONDALE		SHALE	15.0	364.6	
-4.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.4	379.6	
-31.0	CARBONDALE	ANVIL ROCK	DARK SHALE	2.5	406.0	DARK
-33.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	408.5	
-41.5	CARBONDALE	ANVIL ROCK	DARK SHALE	7.5	416.5	DARK
-49.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	424.0	
-51.5	CARBONDALE	BRERETON	LIMESTONE	3.7	426.5	
-55.2	CARBONDALE	HERRIN	COAL	2.8	430.2	
-58.0	CARBONDALE	HERRIN	SHALE	0.2	433.0	BLUE BAND
-58.2	CARBONDALE	HERRIN	COAL	1.6	433.2	
-59.8	CARBONDALE		UNDERCLAY	3.0	434.8	
-62.8	CARBONDALE		SANDY SHALE	25.0	437.8	
-87.8	CARBONDALE	VERMILIONVILLE	SANDSTONE	16.3	462.8	SS AND SH
-104.0	CARBONDALE	BRIAR HILL	COAL	1.2	479.0	
-105.2	CARBONDALE		SANDSTONE	22.0	480.2	SS AND SH
-127.2	CARBONDALE		BLACK SHALE	4.5	502.2	

-131.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	506.7
-132.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	507.7
-133.7	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	508.7
-150.7	CARBONDALE	DYKERSBURG	SHALE	28.3	525.7
-179.0	CARBONDALE	SPRINGFIELD	COAL	6.6	554.0
-185.6	CARBONDALE		UNDERCLAY	3.3	560.6
-188.9	CARBONDALE		SANDY SHALE	2.1	563.9

MAPID: 16501387000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 990' E line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.415033 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.875466 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2613.0 **LOG TYPE:**
SOURCE: GARFIELD SAMUEL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	BRERETON	LIMESTONE	-	429.0	
-1491.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1864.0	
-1842.0			LIMESTONE	-	2215.0	
-2240.0		BASE BARLOW	LIMESTONE	-	2613.0	

MAPID: 16501387000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 990' E line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.415033 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.875466 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3135.0 **LOG TYPE:** Electric Log
SOURCE: GARFIELD SAMUEL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
23.0	CARBONDALE	DANVILLE	COAL	-	350.0	
5.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	368.0	
-47.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	4.0	420.0	
-63.0	CARBONDALE	HERRIN	COAL	4.0	436.0	
-69.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	22.0	442.0	
-121.0	CARBONDALE	BRIAR HILL	COAL	-	494.0	
-177.0	CARBONDALE	SPRINGFIELD	COAL	5.0	550.0	
-291.0	CARBONDALE	HOUCHIN CREEK	COAL	-	664.0	

MAPID: 16501387000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 990' E line
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.415033 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.875466 **DATE COLLECTED:** 11 / 0 / 1949
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: GARFIELD SAMUEL S, GARNER JAS T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-246.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	619.0	
-272.0	CARBONDALE	SURVANT	COAL	0.5	645.0	
-343.0	CARBONDALE	COLCHESTER	COAL	1.0	716.0	
-371.0	CARBONDALE	DEKOVEN	COAL	2.0	744.0	
-401.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	774.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-410.0	CARBONDALE	DAVIS	COAL	3.8	783.0	
-439.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	812.0	
-480.0	TRADEWATER	MT. RORAH	COAL	0.5	853.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503114000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424225 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.873553 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log
SOURCE: TAYLOR & SCHUMACHER **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-338.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	710.0	
-416.0	SPOON	DAVIS	UNCLASSIFIED	-	788.0	
-1338.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 16503114000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424225 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.873553 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2619.0 **LOG TYPE:**
SOURCE: TAYLOR & SCHUMACHER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	BRERETON	LIMESTONE	-	426.0	
-1480.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1854.0	
-1829.0			LIMESTONE	-	2203.0	
-2245.0		BASE BARLOW	LIMESTONE	-	2619.0	

MAPID: 16503155000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' S line, 990' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41487 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.866411 **DATE COLLECTED:** 2 / 0 / 1958
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: WAUSAU PETRO. CORP., GARNER JAS T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	580.0	
-241.0	CARBONDALE	SURVANT	COAL	0.5	610.0	
-306.0	CARBONDALE	COLCHESTER	COAL	0.6	675.0	
-336.0	CARBONDALE	DEKOVEN	COAL	3.0	705.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	743.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-383.0	CARBONDALE	DAVIS	COAL	4.0	752.0	
-414.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	783.0	
-421.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	790.0	
-451.0	TRADEWATER	MT. RORAH	COAL	0.5	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503155000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' S line, 990' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41487 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.866411 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2611.0 **LOG TYPE:**
SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-22.0	CARBONDALE	BRERETON	LIMESTONE	-	391.0	
-1473.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1842.0	
-1840.0			LIMESTONE	-	2209.0	
-2242.0		BASE BARLOW	LIMESTONE	-	2611.0	

MAPID: 16501140000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398769 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.866495 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2173.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
9.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1451.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1814.0			LIMESTONE	-	2173.0	

MAPID: 16501388000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401085 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868306 **DATE COLLECTED:** 6 / 0 / 1949
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., GARNER JAMES **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	2.6	556.0	
-213.0	CARBONDALE	SURVANT	COAL	0.5	582.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	643.0	
-324.0	CARBONDALE	DEKOVEN	COAL	2.0	693.0	
-351.0	CARBONDALE	LOWER DEKOVEN	COAL	2.1	720.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-358.0	CARBONDALE	DAVIS	COAL	4.5	727.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-431.0	TRADEWATER	MT. RORAH	COAL	0.5	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501388000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401085 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.868306 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2192.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	BRERETON	LIMESTONE	-	366.0	
-1460.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1829.0	
-1823.0			LIMESTONE	-	2192.0	

MAPID: 16501433000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403457 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.877396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2605.0 **LOG TYPE:**
SOURCE: PURE OIL CO., THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1486.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1859.0	
-1849.0			LIMESTONE	-	2222.0	
-2232.0		BASE BARLOW	LIMESTONE	-	2605.0	

MAPID: 16501433000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403457 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.877396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3150.0 **LOG TYPE:** Electric Log
SOURCE: PURE OIL CO., THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
33.0	CARBONDALE	DANVILLE	COAL	-	340.0	
16.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	13.0	357.0	
-1.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	374.0	
-9.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	3.0	382.0	
-45.0	CARBONDALE	HERRIN	COAL	2.0	418.0	
-54.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	10.0	427.0	
-101.0	CARBONDALE	BRIAR HILL	COAL	-	474.0	
-107.0	CARBONDALE	CANTON	SANDSTONE/SHALE	27.0	480.0	
-161.0	CARBONDALE	SPRINGFIELD	COAL	5.0	534.0	
-223.0	CARBONDALE	HOUCHIN CREEK	COAL	-	596.0	

MAPID: 16501433000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.403457 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.877396 **DATE COLLECTED:** 6 / 0 / 1953
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: PURE OIL CO., THE, GARNER H T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-252.0	CARBONDALE	SURVANT	COAL	0.5	625.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.5	693.0	
-357.0	CARBONDALE	DEKOVEN	COAL	3.5	730.0	
-392.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	765.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-400.0	CARBONDALE	DAVIS	COAL	4.0	773.0	
-430.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	803.0	
-475.0	TRADEWATER	MT. RORAH	COAL	0.5	848.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502982000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396477 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.868328 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1808.0 **LOG TYPE:**
SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
10.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1448.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	

MAPID: 16502982000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.396477 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868328 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 359.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
144.0	MODESTO	PIASA	LIMESTONE	4.0	216.0	
140.0	MODESTO		SHALE	43.0	220.0	
97.0	CARBONDALE	DANVILLE	COAL	2.0	263.0	
95.0	CARBONDALE		SHALE & SANDSTONE	29.0	265.0	
66.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.0	294.0	
61.0	CARBONDALE	LAWSON	SANDSTONE	50.0	299.0	
11.0	CARBONDALE	BRERETON	LIMESTONE	4.0	349.0	
7.0	CARBONDALE	ANNA	BLACK SHALE	2.0	353.0	
5.0	CARBONDALE	HERRIN	COAL	4.0	355.0	

MAPID: 16502982000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.396477 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868328 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-260.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	620.0	
-349.0	SPOON	DAVIS	UNCLASSIFIED	-	709.0	
-1300.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16502982000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396477 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868328 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., GARNER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-190.0	CARBONDALE	SURVANT	COAL	1.0	560.0	
-250.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-295.0	CARBONDALE	DEKOVEN	COAL	3.0	665.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	700.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	3.0	709.0	
-370.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-374.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	744.0	
-402.0	TRADEWATER	MT. RORAH	COAL	1.0	772.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503037000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410371 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871896 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2605.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	BRERETON	LIMESTONE	-	404.0	
-1482.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1853.0	
-1846.0			LIMESTONE	-	2217.0	
-2234.0		BASE BARLOW	LIMESTONE	-	2605.0	

MAPID: 16500549000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.391873 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.864695 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2143.0 **LOG TYPE:**
SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	CARBONDALE	BRERETON	LIMESTONE	-	314.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1771.0			LIMESTONE	-	2143.0	

MAPID: 16501389000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.37796 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.86835 **DATE COLLECTED:** 10 / 0 / 1950
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-202.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	570.0	
-292.0	SPOON	DAVIS	UNCLASSIFIED	-	660.0	
-1232.0	BASE OF PENN.		UNCLASSIFIED	-	1600.0	

MAPID: 16501389000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.37796 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86835 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
64.0	CARBONDALE	BRERETON	LIMESTONE	-	304.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1729.0			LIMESTONE	-	2097.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16501390000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377984 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.870145 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2491.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	BRERETON	LIMESTONE	-	311.0	
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1756.0	
-1739.0			LIMESTONE	-	2107.0	
-2123.0		BASE BARLOW	LIMESTONE	-	2491.0	

MAPID: 16501391000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380234 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.866528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2481.0 **LOG TYPE:**
SOURCE: IL MID-CONTINENT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1726.0			LIMESTONE	-	2094.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2481.0	

MAPID: 16501392000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377936 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86653 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2473.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	292.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1720.0			LIMESTONE	-	2090.0	
-2103.0		BASE BARLOW	LIMESTONE	-	2473.0	

MAPID: 16501393000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.391858 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.871994 **DATE COLLECTED:** 7 / 0 / 1949
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: HEATH B M ETAL, WESSEL-BRAMLETT 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	518.0	
-185.0	CARBONDALE	SURVANT	COAL	0.5	545.0	
-236.0	CARBONDALE	COLCHESTER	COAL	0.5	596.0	
-276.0	CARBONDALE	DEKOVEN	COAL	3.0	636.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	664.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-316.0	CARBONDALE	DAVIS	COAL	5.0	676.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501393000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.391858 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.871994 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2179.0 **LOG TYPE:**
SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1451.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1811.0	
-1819.0			LIMESTONE	-	2179.0	

MAPID: 16501420000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.380379 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.87739 **DATE COLLECTED:** 7 / 0 / 1950
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, BRAMLETT BESSIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	532.0	
-195.0	CARBONDALE	SURVANT	COAL	0.5	562.0	
-255.0	CARBONDALE	COLCHESTER	COAL	0.5	622.0	
-281.0	CARBONDALE	DEKOVEN	COAL	3.5	648.0	
-309.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	676.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-321.0	CARBONDALE	DAVIS	COAL	4.0	688.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-386.0	TRADEWATER	MT. RORAH	COAL	0.5	753.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501420000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: BROUGHTON **LONGITUDE:** -88.380379 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.87739 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
21.0	CARBONDALE	BRERETON	LIMESTONE	-	346.0	
-1427.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1797.0			LIMESTONE	-	2164.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2525.0	

MAPID: 16501434000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.384893 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.868349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3033.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	DANVILLE	COAL	-	232.0	
126.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	23.0	247.0	
93.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	280.0	
83.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	290.0	
61.0	CARBONDALE	HERRIN	COAL	4.0	312.0	
10.0	CARBONDALE	BRIAR HILL	COAL	-	363.0	
8.0	CARBONDALE	CANTON	SILTSTONE	20.0	365.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	4.0	417.0	
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	-	490.0	

MAPID: 16501434000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.384893 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.0	CARBONDALE	DANVILLE	COAL	1.0	236.0	
136.0	CARBONDALE		SHALE & SANDSTONE	13.0	237.0	
123.0	CARBONDALE	LAWSON	SANDSTONE	15.0	250.0	
108.0	CARBONDALE	LAWSON	SILTY SHALE	25.0	265.0	
83.0	CARBONDALE	LAWSON	SANDSTONE	10.0	290.0	
73.0	CARBONDALE	LAWSON	DARK GRAY SHALE	7.0	300.0	
66.0	CARBONDALE	BRERETON	LIMESTONE	3.0	307.0	
63.0	CARBONDALE	ANNA	BLACK SHALE	2.0	310.0	
61.0	CARBONDALE	HERRIN	COAL	3.0	312.0	

MAPID: 16501434000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384893 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.868349 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1750.0			LIMESTONE	-	2123.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2512.0	

MAPID: 16501434000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384893 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868349 **DATE COLLECTED:** 3 / 0 / 1953
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., BRAMLETT BESSIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	495.0	
-147.0	CARBONDALE	SURVANT	COAL	0.5	520.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-241.0	CARBONDALE	DEKOVEN	COAL	3.0	614.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	642.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-282.0	CARBONDALE	DAVIS	COAL	4.5	655.0	
-317.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-347.0	TRADEWATER	MT. RORAH	COAL	0.5	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502189000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38021 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86473 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2480.0 **LOG TYPE:**
SOURCE: IL MID-CONTINENT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	289.0	
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1724.0			LIMESTONE	-	2096.0	
-2108.0		BASE BARLOW	LIMESTONE	-	2480.0	

MAPID: 16524433000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 7S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE SE NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379694 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868798 **DATE COLLECTED:** 1 / 20 / 1982
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: JUNIPER PETROLEUM CORP., BRAMLETT "E" LE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-133.0	CARBONDALE	HOUCHIN CREEK	COAL	4.0	500.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	519.0	
-213.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-261.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-288.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	655.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-303.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	66% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-378.0	TRADEWATER	MT. RORAH	COAL	0.5	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590573000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684615 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803237 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		

MAPID: 16590574000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675091 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802426 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.3		

MAPID: 16590575000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.678279 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804818 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		

MAPID: 16590576000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.682434 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.808456 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		

MAPID: 16590577000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679034 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813961 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 16590578000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.687049 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.819482 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.9		

MAPID: 16590579000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.673767 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.816267 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.2		

MAPID: 16590580000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.660382 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.792165 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.2		

MAPID: 16590581000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659953 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.797614 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		

MAPID: 16590582000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.646717 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.785074 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		

MAPID: 16590583000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.649118 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.790036 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590584000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648535 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.793477 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590585000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.649849 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804196 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.6		

MAPID: 16590586000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64244 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.787899 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590587000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64246 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.793197 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		

MAPID: 16590588000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641518 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800732 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590589000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.635109 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.782522 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.3		

MAPID: 16590590000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.633153 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.789226 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.9		

MAPID: 16590591000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634903 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.799134 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.7		

MAPID: 16590593000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.628921 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.777036 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.7		

MAPID: 16590594000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.625499 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.784715 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.4		

MAPID: 16590595000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.628121 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.794618 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590596000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.625917 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796484 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.1		

MAPID: 16590597000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627576 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800268 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590598000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.640098 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.788 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.4		

MAPID: 16590602000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617273 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.781811 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590603000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.621671 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803989 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.1		

MAPID: 16590605000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.613544 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803387 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590606000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606615 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805724 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.2		1.60% SULFUR

MAPID: 16590607000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627093 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.811992 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.3		

MAPID: 16590608000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.628028 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.815478 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.3		

MAPID: 16590609000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614903 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.81594 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590610000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.654324 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.824324 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		

MAPID: 16590611000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.643258 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831748 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590612000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.637164 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.827095 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.7		1.75% SULFUR

MAPID: 16590613000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.631804 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.821889 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590614000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.622358 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.823882 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590615000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614847 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.826502 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590616000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666163 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834918 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.3		

MAPID: 16590617000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.65617 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834889 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		

MAPID: 16590618000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.660844 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.8496 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590619000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.640895 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841087 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.1		

MAPID: 16590620000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.636938 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848572 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.4		1.19% SULFUR

MAPID: 16590621000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627836 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835119 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.1		

MAPID: 16590622000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.626012 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835955 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 16590623000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.626045 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.838757 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.8		

MAPID: 16590624000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620958 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.837667 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.4		

MAPID: 16590625000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.619731 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.839493 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590627000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.639291 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.863417 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		0.78% SULFUR

MAPID: 16590628000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.632942 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857138 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590629000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620486 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860674 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590630000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.613534 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857133 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16503087000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613548 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.856819 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 3234.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	HERRIN	COAL	6.0	500.0	
-213.0	CARBONDALE	HOUCHIN CREEK	COAL	-	680.0	

MAPID: 16503087000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613548 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.856819 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 505.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
71.0	MODESTO	PIASA	LIMESTONE	4.0	396.0	
67.0	MODESTO		GRAY SHALE	13.0	400.0	
54.0	CARBONDALE	DANVILLE	COAL	2.0	413.0	
52.0	CARBONDALE		SHALE	16.0	415.0	
36.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	431.0	
32.0	CARBONDALE	LAWSON	GRAY SHALE	15.0	435.0	
17.0	CARBONDALE	LAWSON	SANDSTONE	15.0	450.0	
2.0	CARBONDALE	LAWSON	SILTY SHALE	5.0	465.0	
-3.0	CARBONDALE	LAWSON	SANDSTONE	15.0	470.0	
-18.0	CARBONDALE	LAWSON	SILTY SHALE	5.0	485.0	
-23.0	CARBONDALE	CONANT	SHALE	1.0	490.0	
-24.0	CARBONDALE	JAMESTOWN	CALCAREOUS SHALE	1.0	491.0	
-25.0	CARBONDALE		SHALE	2.0	492.0	
-27.0	CARBONDALE	BRERETON	LIMESTONE	3.0	494.0	
-30.0	CARBONDALE	ANNA	BLACK SHALE	3.0	497.0	
-33.0	CARBONDALE	HERRIN	COAL	5.0	500.0	

MAPID: 16503087000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613548 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856819 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 2720.0 **LOG TYPE:**
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-26.0	CARBONDALE	BRERETON	LIMESTONE	-	493.0	
-1471.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1938.0	
-1856.0			LIMESTONE	-	2323.0	
-2253.0		BASE BARLOW	LIMESTONE	-	2720.0	

MAPID: 16503087000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613548 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.856819 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 1781.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-345.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	812.0	
-425.0	SPOON	DAVIS	UNCLASSIFIED	-	892.0	
-1314.0	BASE OF PENN.		UNCLASSIFIED	-	1781.0	

MAPID: 16503087000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613548 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856819 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 505.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP., ANDERSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-218.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	685.0	
-249.0	CARBONDALE	SURVANT	COAL	0.5	716.0	
-345.0	CARBONDALE	COLCHESTER	COAL	0.5	812.0	
-388.0	CARBONDALE	DEKOVEN	COAL	3.5	855.0	
-415.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	882.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-426.0	CARBONDALE	DAVIS	COAL	4.5	893.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	930.0	
-501.0	TRADEWATER	MT. RORAH	COAL	0.5	968.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525503000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597665 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 479.0 **LOGGED (FT.):** 876.0 **LOG TYPE:** Nuclear Log
SOURCE: ASHLAND EXPLORATION, INC. 7 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	HERRIN	COAL	4.5	487.0	
-33.0	CARBONDALE	BRIAR HILL	COAL	1.5	512.0	
-103.0	CARBONDALE	SPRINGFIELD	COAL	6.0	582.0	
-393.0	SPOON	DAVIS	COAL	4.0	872.0	

MAPID: 16590040000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1160' N line, 80' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.596707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860069 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 616.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 851-3 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0			UNCONSOLIDATED	50.0	0.0	GLACIAL DRIFT DEPOSITS
96.0	CARBONDALE	DANVILLE	COAL	1.5	404.0	
5.0	CARBONDALE	HERRIN	COAL	5.5	495.0	
-110.0	CARBONDALE	SPRINGFIELD	COAL	6.0	610.0	

MAPID: 16590041000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 100' S line, 545' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.598437 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848932 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 607.3 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 851-4 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
4.0	CARBONDALE	HERRIN	COAL	5.3	486.0	
-21.0	CARBONDALE	BRIAR HILL	COAL	1.0	511.0	
-22.0	CARBONDALE	DYKERSBURG	GRAY SHALE	88.0	512.0	
-110.0	CARBONDALE	SPRINGFIELD	COAL	7.3	600.0	

MAPID: 16503082000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620536 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.860522 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 3199.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HERRIN	COAL	5.0	472.0	
-177.0	CARBONDALE	SPRINGFIELD	COAL	5.0	596.0	
-218.0	CARBONDALE	HOUCHIN CREEK	COAL	-	637.0	

MAPID: 16503082000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620536 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.860522 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 476.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
54.0	MODESTO	PIASA	LIMESTONE	5.0	365.0	
49.0	MODESTO		GRAY SHALE	13.0	370.0	
36.0	CARBONDALE	DANVILLE	CARBONACEOUS SHALE	2.0	383.0	
34.0	CARBONDALE		SHALE	6.0	385.0	
28.0	CARBONDALE	ALLENBY	CARBONACEOUS SHALE	2.0	391.0	
26.0	CARBONDALE		SHALE	4.0	393.0	
22.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	397.0	
19.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	50.0	400.0	
-31.0	CARBONDALE		BLACK SHALE	3.0	450.0	
-34.0	CARBONDALE	BRERETON	LIMESTONE	5.0	453.0	
-39.0	CARBONDALE	ANNA	BLACK SHALE	3.0	458.0	
-53.0	CARBONDALE	HERRIN	COAL	4.0	472.0	

MAPID: 16503082000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620536 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.860522 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2690.0 **LOG TYPE:**
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	BRERETON	LIMESTONE	-	463.0	
-1471.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1890.0	
-1852.0			LIMESTONE	-	2271.0	
-2271.0		BASE BARLOW	LIMESTONE	-	2690.0	

MAPID: 16503082000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620536 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.860522 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 476.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP., SULLIVAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-223.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	642.0	
-255.0	CARBONDALE	SURVANT	COAL	0.5	674.0	
-345.0	CARBONDALE	COLCHESTER	COAL	0.5	764.0	
-389.0	CARBONDALE	DEKOVEN	COAL	2.0	808.0	
-411.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	830.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-419.0	CARBONDALE	DAVIS	COAL	3.5	838.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	879.0	
-498.0	TRADEWATER	MT. RORAH	COAL	0.5	917.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503145000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620503 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.849529 **DATE COLLECTED:** 11 / 0 / 1957
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-298.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	703.0	
-371.0	SPOON	DAVIS	UNCLASSIFIED	-	776.0	
-1255.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16503145000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620503 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:**
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
21.0	CARBONDALE	BRERETON	LIMESTONE	-	384.0	
-1417.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1821.0			LIMESTONE	-	2226.0	
-2231.0		BASE BARLOW	LIMESTONE	-	2636.0	

MAPID: 16503145000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620503 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.849529 **DATE COLLECTED:** 11 / 0 / 1957
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:** Electric Log
SOURCE: SCHLAFLY H J ETAL, STEVENS CLIFTON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-175.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	580.0	
-220.0	CARBONDALE	SURVANT	COAL	2.0	625.0	
-298.0	CARBONDALE	COLCHESTER	COAL	0.6	703.0	
-339.0	CARBONDALE	DEKOVEN	COAL	3.0	744.0	
-361.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	766.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-371.0	CARBONDALE	DAVIS	COAL	4.0	776.0	
-409.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	814.0	
-440.0	TRADEWATER	MT. RORAH	COAL	0.5	845.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503145000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620503 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.849529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 583.0 **LOG TYPE:** Electric Log
SOURCE: H. J. SCHLAFLY ET. AL. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	HERRIN	COAL	-	390.0	
-95.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	500.0	CHANNEL - COAL MISSING
-178.0	CARBONDALE	HOUCHIN CREEK	COAL	-	583.0	

MAPID: 16500019000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2640' S line, 0' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.633435 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.856156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	DANVILLE	COAL	2.2	370.0	
64.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	388.0	
45.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	35.0	407.0	
-2.0	CARBONDALE	HERRIN	COAL	5.4	454.0	
-30.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	38.0	482.0	
-148.0	CARBONDALE	SPRINGFIELD	COAL	5.5	600.0	

MAPID: 16500019000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2640' S line, 0' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.633435 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.856156 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 459.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
96.7	MODESTO	PIASA	LIMESTONE	4.0	355.3	
92.7	MODESTO		GRAY SHALE	10.5	359.3	
82.2	CARBONDALE	DANVILLE	COAL	2.2	369.8	
80.1	CARBONDALE		SHALE	16.3	371.9	
63.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	388.3	
62.7	CARBONDALE	LAWSON	GRAY SHALE	5.5	389.3	
57.2	CARBONDALE	LAWSON	SILTY SHALE	12.8	394.8	
44.4	CARBONDALE	LAWSON	SANDSTONE	27.5	407.6	
16.9	CARBONDALE	LAWSON	SILTY SHALE	1.0	435.1	
15.9	CARBONDALE	LAWSON	SANDSTONE	6.8	436.1	
9.2	CARBONDALE	JAMESTOWN	BONE COAL	0.5	442.8	
8.7	CARBONDALE		GRAY SHALE	0.7	443.3	
8.0	CARBONDALE	BRERETON	LIMESTONE	7.3	444.0	
0.7	CARBONDALE	ANNA	BLACK SHALE	2.8	451.3	
-2.0	CARBONDALE	HERRIN	COAL	5.4	454.0	

MAPID: 16500019000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2640' S line, 0' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.633435 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.856156 **DATE COLLECTED:** 5 / 4 / 1919

SURFACE ELEVATION (FT.): 451.8 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.8			UNCONSOLIDATED	26.0	0.0	
425.8	BOND		SHALE	26.3	26.0	BLUE
399.5	BOND		BLACK SHALE	2.7	52.3	
396.8	BOND		LIMESTONE	0.6	55.0	
396.2	BOND		ARGILACEOUS SHALE	3.0	55.6	ARG
393.2	BOND		SHALE	3.0	58.6	
390.2	BOND		SHALE	1.5	61.6	BLUE
388.7	BOND		SANDY SHALE	23.6	63.1	
365.1	BOND		SHALE	2.0	86.7	BLUE
363.1	MODESTO	WOMAC	COAL	1.7	88.7	CORRELATION UNCERTAIN
361.5	MODESTO		UNDERCLAY	1.5	90.3	
360.0	MODESTO		SHALE	4.2	91.8	BLUE
355.8	MODESTO		SANDY SHALE	28.0	96.0	
327.8	MODESTO		SHALE	14.8	124.0	BLUE
313.0	MODESTO		LIMESTONE	0.7	138.8	
312.4	MODESTO		SHALE	26.7	139.4	BLUE
285.7	MODESTO		LIMESTONE	0.5	166.1	
285.2	MODESTO		SHALE	20.3	166.6	BLUE
264.9	MODESTO	CHAPEL	COAL	1.3	186.9	
263.6	MODESTO		UNDERCLAY	1.0	188.2	
262.6	MODESTO		ARGILLACEOUS SANDSTONE	23.8	189.2	ARG
238.8	MODESTO		SHALE	4.0	213.0	BLUE
234.8	MODESTO		SANDY SHALE	28.0	217.0	
206.8	MODESTO		SHALE	19.0	245.0	BLUE
187.8	MODESTO		SHALE	25.5	264.0	WELL INDURATED, BLUE
162.3	MODESTO		COAL	0.2	289.5	
162.1	MODESTO		UNDERCLAY	1.0	289.7	
161.1	MODESTO		SHALE	3.0	290.7	CONTAINS LS PEBBLES
158.1	MODESTO		SANDY SHALE	7.0	293.7	
151.1	MODESTO		SHALE	10.2	300.7	BLUE
141.0	MODESTO		BLACK SHALE	6.5	310.8	
134.5	MODESTO		COAL	1.3	317.3	
133.2	MODESTO		ARGILACEOUS SHALE	5.4	318.6	ARG
127.8	MODESTO		UNDERCLAY	1.0	324.0	
126.8	MODESTO		SANDSTONE	7.5	325.0	SS AND SH
119.3	MODESTO		SHALE	20.2	332.5	BLUE
99.1	MODESTO		BLACK SHALE	0.7	352.7	
98.5	MODESTO		COAL	0.2	353.3	

98.3	MODESTO		UNDERCLAY	1.5	353.5	
96.8	MODESTO	PIASA	LIMESTONE	4.0	355.0	
92.8	MODESTO		SHALE	10.5	359.0	BLUE
82.3	CARBONDALE	DANVILLE	COAL	2.2	369.5	
80.1	CARBONDALE		SHALE	3.9	371.7	BLUE
76.2	CARBONDALE		SANDY SHALE	4.6	375.6	
71.6	CARBONDALE		SHALE	2.4	380.2	BLUE
69.2	CARBONDALE		CALCAREOUS SHALE	2.9	382.6	CALC
66.3	CARBONDALE		ARGILACEOUS SHALE	2.5	385.5	ARG
63.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	388.0	BLUE
62.8	CARBONDALE		SHALE	5.5	389.0	
57.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.8	394.5	
44.5	CARBONDALE	ANVIL ROCK	SANDSTONE	27.5	407.3	
17.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	434.8	
16.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.8	435.8	
9.2	CARBONDALE		SHALE	0.2	442.6	
9.0	CARBONDALE	JAMESTOWN	COAL	0.3	442.8	
8.7	CARBONDALE		SHALE	0.7	443.1	BLUE
8.0	CARBONDALE	BRERETON	LIMESTONE	7.3	443.8	
0.8	CARBONDALE	ANNA	BLACK SHALE	2.8	451.0	
-2.0	CARBONDALE	HERRIN	COAL	5.4	453.8	
-7.4	CARBONDALE		UNDERCLAY	3.8	459.2	
-11.2	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	5.6	463.0	ARG, GRAY
-16.8	CARBONDALE	DYKERSBURG	SHALE	13.2	468.6	BLUE
-30.0	CARBONDALE	DYKERSBURG	SANDSTONE	30.3	481.8	
-60.2	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	512.0	CONTAINS COAL PARTINGS
-68.2	CARBONDALE	DYKERSBURG	SHALE	76.0	520.0	BLUE
-144.2	CARBONDALE	DYKERSBURG	SANDY SHALE	3.5	596.0	
-147.7	CARBONDALE	SPRINGFIELD	COAL	5.5	599.5	
-153.2	CARBONDALE		UNDERCLAY	1.0	605.0	

MAPID: 16525849000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.648222 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855186 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 491.0 **LOGGED (FT.):** 1781.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-313.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	804.0	
-391.0	SPOON	DAVIS	UNCLASSIFIED	-	882.0	
-1290.0	BASE OF PENN.		UNCLASSIFIED	-	1781.0	

MAPID: 16500020000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.660852 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.848904 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 564.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	DANVILLE	COAL	1.8	360.0	
42.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	391.0	
34.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	18.0	399.0	
-11.0	CARBONDALE	HERRIN	COAL	5.8	444.0	
-47.0	CARBONDALE	VERMILIONVILLE		44.0	480.0	
-125.0	CARBONDALE	SPRINGFIELD	COAL	5.8	558.0	

MAPID: 16500020000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.660852 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.848904 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 449.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
84.3	MODESTO	PIASA	LIMESTONE	3.2	348.7	
81.2	MODESTO		CALCAREOUS SHALE	8.0	351.8	
73.2	CARBONDALE	DANVILLE	COAL	1.8	359.8	
71.3	CARBONDALE		SILTY SHALE	28.8	361.7	
42.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	390.4	
35.9	CARBONDALE	LAWSON	CLAYSTONE & SHALE	1.6	397.1	
34.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	18.0	398.7	
16.3	CARBONDALE	LAWSON	SILTY SHALE	15.0	416.7	
1.3	CARBONDALE	LAWSON	GRAY SHALE	2.7	431.7	
-1.3	CARBONDALE	JAMESTOWN	COAL	0.2	434.3	
-1.5	CARBONDALE		BLACK SHALE	4.0	434.5	
-5.5	CARBONDALE	BRERETON	LIMESTONE	3.5	438.5	
-9.0	CARBONDALE	ANNA	BLACK SHALE	2.0	442.0	
-11.0	CARBONDALE	HERRIN	COAL	5.8	444.0	

MAPID: 16500020000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.660852 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.848904 **DATE COLLECTED:** 5 / 0 / 1917

SURFACE ELEVATION (FT.): 432.6 **LOGGED (FT.):** 564.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COAL, INC. **WELL TYPE:** Coal Test

COMMENT: DEPTH OFF BY 2 IN. AT UNIT 4 AS IN LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.6			UNCONSOLIDATED	20.0	0.0	
412.6	BOND		SHALE	10.8	20.0	
401.8	BOND		SHALE	2.0	30.8	DARK,LOG REPORTED 2.83',30.83-32.83
399.8	BOND		LIMESTONE	0.7	32.8	DEPTH OFF BY 2 INCHES
399.1	BOND		ARGILACEOUS SHALE	1.0	33.5	ARG
398.1	BOND		SANDSTONE	34.5	34.5	
363.6	MODESTO	WOMAC	COAL	1.6	69.0	CORRELATION UNCERTAIN
362.0	MODESTO		SANDSTONE	5.4	70.6	
356.6	MODESTO		SANDSTONE	6.0	76.0	SS WITH SH STREAKS
350.6	MODESTO		SANDY SHALE	23.0	82.0	
327.6	MODESTO		SHALE	9.0	105.0	WELL INDURATED, BLUE
318.6	MODESTO		SHALE	42.0	114.0	BLUE
276.6	MODESTO		LIMESTONE	1.0	156.0	
275.6	MODESTO		SHALE	16.8	157.0	BLUE
258.8	MODESTO		CLAYSTONE	1.5	173.8	
257.3	MODESTO		SANDSTONE	24.8	175.3	
232.6	MODESTO		SANDY SHALE	39.0	200.0	
193.6	MODESTO		SHALE	40.0	239.0	BLUE
153.6	MODESTO		COAL	0.2	279.0	
153.4	MODESTO		UNDERCLAY	1.8	279.2	
151.6	MODESTO		LIMESTONE	3.0	281.0	LS WITH INTERBEDDED SH
148.6	MODESTO		SANDY SHALE	7.5	284.0	
141.1	MODESTO		SHALE	12.5	291.5	BLUE
128.6	MODESTO		BLACK SHALE	4.6	304.0	
124.0	MODESTO		COAL	0.8	308.6	
123.3	MODESTO		UNDERCLAY	8.2	309.3	
115.1	MODESTO		SANDY SHALE	20.5	317.5	
94.6	MODESTO		SHALE	7.0	338.0	BLUE
87.6	MODESTO		BLACK SHALE	3.0	345.0	
84.6	MODESTO		CALCAREOUS SHALE	1.0	348.0	CALC
83.6	MODESTO	PIASA	LIMESTONE	3.2	349.0	
80.4	MODESTO		CALCAREOUS SHALE	3.3	352.2	CALC
77.1	MODESTO		LIMESTONE	0.2	355.5	
76.9	MODESTO		SHALE	4.5	355.7	BLUE
72.4	CARBONDALE	DANVILLE	COAL	1.8	360.2	
70.6	CARBONDALE		SANDY SHALE	26.0	362.0	
44.6	CARBONDALE		CALCAREOUS SHALE	2.8	388.0	CALC
41.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	390.8	
35.2	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	1.6	397.4	ARG

33.6	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	399.0	SS WITH SH STREAKS
15.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	417.0	
0.6	CARBONDALE		SHALE	2.7	432.0	BLUE
-2.1	CARBONDALE	JAMESTOWN	COAL	0.2	434.7	
-2.2	CARBONDALE		BLACK SHALE	4.0	434.8	
-6.2	CARBONDALE	BRERETON	LIMESTONE	3.5	438.8	BLUE
-9.7	CARBONDALE	ANNA	BLACK SHALE	2.0	442.3	
-11.7	CARBONDALE	HERRIN	COAL	5.8	444.3	
-17.6	CARBONDALE		UNDERCLAY	5.1	450.2	
-22.7	CARBONDALE	DYKERSBURG	SHALE	15.5	455.3	
-38.2	CARBONDALE	DYKERSBURG	SHALE	9.3	470.8	SH AND SS STREAKS, LUE
-47.4	CARBONDALE	DYKERSBURG	SANDSTONE	14.0	480.0	
-61.4	CARBONDALE	DYKERSBURG	SANDSTONE	15.0	494.0	SS WITH COAL PARTINGS
-76.4	CARBONDALE	DYKERSBURG	SANDSTONE	15.6	509.0	
-92.0	CARBONDALE	DYKERSBURG	SANDY SHALE	32.4	524.6	
-124.4	CARBONDALE	DYKERSBURG	SHALE	0.6	557.0	
-125.0	CARBONDALE	SPRINGFIELD	COAL	5.8	557.6	
-130.7	CARBONDALE		UNDERCLAY	0.7	563.3	

MAPID: 16500021000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 200' N line, 50' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.669521 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.862804 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.1 **LOGGED (FT.):** 688.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.1			UNCONSOLIDATED	10.7	0.0	
407.4	BOND		SHALE	0.8	10.7	
406.6	BOND		SANDSTONE	5.0	11.5	
401.6	BOND		SANDSTONE	31.5	16.5	
370.1	BOND		SHALE	51.0	48.0	
319.1	BOND		SHALE	55.0	99.0	DARK
264.1	MODESTO	WOMAC	COAL	1.0	154.0	
263.1	MODESTO		SHALE	5.0	155.0	DARK
258.1	MODESTO		SANDY SHALE	17.0	160.0	
241.1	MODESTO		SHALE	29.0	177.0	
212.1	MODESTO		SHALE	47.0	206.0	DARK
165.1	MODESTO		SHALE	2.0	253.0	
163.1	MODESTO	CHAPEL	COAL	1.3	255.0	
161.8	MODESTO		LIMESTONE	6.8	256.3	
155.1	MODESTO		SANDSTONE	11.0	263.0	
144.1	MODESTO		SANDSTONE	19.0	274.0	SS WITH SH PARTINGS
125.1	MODESTO		SHALE	30.0	293.0	BLUE
95.1	MODESTO		SHALE	42.0	323.0	
53.1	MODESTO		COAL	0.3	365.0	
52.8	MODESTO		LIMESTONE	9.8	365.3	
43.1	MODESTO		SHALY SANDSTONE	4.0	375.0	
39.1	MODESTO		SHALE	15.5	379.0	
23.6	MODESTO		COAL	0.5	394.5	
23.1	MODESTO		LIMESTONE	10.0	395.0	
13.1	MODESTO		SANDSTONE	16.0	405.0	SS WITH SH PARTINGS
-2.9	MODESTO		SHALE	14.0	421.0	
-16.9	MODESTO	PIASA	LIMESTONE	4.0	435.0	
-20.9	MODESTO		SHALE	10.8	439.0	
-31.7	CARBONDALE	DANVILLE	COAL	1.9	449.8	
-33.6	CARBONDALE		SANDY SHALE	16.3	451.7	
-49.9	CARBONDALE	ALLENBY	COAL	0.3	468.0	
-50.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	468.3	
-53.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	472.0	
-59.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	38.0	478.0	
-97.9	CARBONDALE	JAMESTOWN	COAL	0.5	516.0	
-98.4	CARBONDALE	ANNA	BLACK SHALE	6.0	516.5	
-104.4	CARBONDALE	ANNA	LIMESTONE	2.0	522.5	
-106.4	CARBONDALE	HERRIN	COAL	1.2	524.5	
-107.6	CARBONDALE	HERRIN	LIMESTONE	0.3	525.7	

-107.8	CARBONDALE	HERRIN	COAL	0.4	525.9	
-108.2	CARBONDALE	HERRIN	LIMESTONE	0.3	526.3	
-108.5	CARBONDALE	HERRIN	COAL	0.8	526.6	
-109.3	CARBONDALE	HERRIN	LIMESTONE	0.2	527.4	
-109.5	CARBONDALE	HERRIN	COAL	0.3	527.6	
-109.7	CARBONDALE	HERRIN	LIMESTONE	0.3	527.8	
-110.0	CARBONDALE		UNDERCLAY	2.6	528.1	
-112.6	CARBONDALE		CLAYSTONE	4.0	530.7	
-116.6	CARBONDALE	ST. DAVID	LIMESTONE	2.3	534.7	
-118.9	CARBONDALE	DYKERSBURG	SHALE	8.0	537.0	
-126.9	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	71.0	545.0	
-197.9	CARBONDALE	DYKERSBURG	SHALE	15.6	616.0	
-213.5	CARBONDALE	DYKERSBURG	SHALE	2.0	631.6	BLUE
-215.5	CARBONDALE	SPRINGFIELD	COAL	4.6	633.6	
-220.1	CARBONDALE		UNDERCLAY	2.8	638.2	
-222.9	CARBONDALE		LIMESTONE	3.0	641.0	
-225.9	CARBONDALE		SANDSTONE	4.0	644.0	
-229.9	CARBONDALE		SANDSTONE	33.0	648.0	SS WITH SH PARTINGS
-262.9	CARBONDALE		SHALE	3.0	681.0	
-265.9	CARBONDALE		SANDSTONE	4.0	684.0	

MAPID: 16500021000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 200' N line, 50' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.669521 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.862804 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 688.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-32.0	CARBONDALE	DANVILLE	COAL	-	450.0	
-50.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.8	468.0	
-106.0	CARBONDALE	HERRIN	COAL	6.2	524.0	
-216.0	CARBONDALE	SPRINGFIELD	COAL	4.6	634.0	
-226.0	CARBONDALE	SS BELOW NO. 5		44.0	644.0	

MAPID: 16502998000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666297 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.858835 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2709.0 **LOG TYPE:**
SOURCE: MINTON OMAR W JR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	BRERETON	LIMESTONE	-	525.0	
-1490.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1915.0	
-1869.0			LIMESTONE	-	2294.0	
-2284.0		BASE BARLOW	LIMESTONE	-	2709.0	

MAPID: 16502998000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666297 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.858835 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 3236.0 **LOG TYPE:** Electric Log
SOURCE: MINTON OMAR W JR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-105.0	CARBONDALE	HERRIN	COAL	6.0	530.0	
-219.0	CARBONDALE	SPRINGFIELD	COAL	5.0	644.0	
-278.0	CARBONDALE	HOUCHIN CREEK	COAL	-	703.0	

MAPID: 16502998000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666297 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.858835 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 1770.0 **LOG TYPE:** Electric Log
SOURCE: MINTON OMAR W JR **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-400.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	825.0	
-475.0	SPOON	DAVIS	UNCLASSIFIED	-	900.0	
-1345.0	BASE OF PENN.		UNCLASSIFIED	-	1770.0	

MAPID: 16502998000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666297 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.858835 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2709.0 **LOG TYPE:** Electric Log
SOURCE: MINTON OMAR W JR, HARRIS-MURPHY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-285.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	710.0	
-400.0	CARBONDALE	COLCHESTER	COAL	0.6	825.0	
-443.0	CARBONDALE	DEKOVEN	COAL	2.0	868.0	
-465.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	890.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-475.0	CARBONDALE	DAVIS	COAL	3.0	900.0	
-510.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	935.0	
-550.0	TRADEWATER	MT. RORAH	COAL	1.8	975.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500022000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2340' S line, 2040' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.69517 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.855414 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 626.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-16.0	CARBONDALE	DANVILLE	COAL	1.9	444.0	
-40.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	468.0	
-47.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	8.0	475.0	
-94.0	CARBONDALE	HERRIN	COAL	5.9	522.0	
-121.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	20.0	549.0	
-192.0	CARBONDALE	SPRINGFIELD	COAL	5.1	620.0	

MAPID: 16500022000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2340' S line, 2040' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.69517 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855414 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 527.9 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.1	MODESTO	PIASA	LIMESTONE	4.0	424.9	
-0.9	MODESTO		SHALE	14.6	428.9	
-15.5	CARBONDALE	DANVILLE	COAL	1.9	443.5	
-17.4	CARBONDALE		SHALE	13.5	445.4	
-30.9	CARBONDALE	ALLENBY	BONE COAL	0.3	458.9	
-31.2	CARBONDALE		SHALE & SANDSTONE	8.3	459.2	
-39.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	467.4	
-45.4	CARBONDALE	LAWSON	SILTY SHALE	1.5	473.4	
-46.9	CARBONDALE	LAWSON	SANDSTONE	3.0	474.9	
-49.9	CARBONDALE	LAWSON	DARK GRAY SHALE	4.0	477.9	
-53.9	CARBONDALE	LAWSON	SANDSTONE	1.0	481.9	
-54.9	CARBONDALE	LAWSON	SILTY SHALE	20.0	482.9	
-74.9	CARBONDALE	BRERETON	LIMESTONE	3.0	502.9	
-77.9	CARBONDALE	ANNA	BLACK SHALE	6.0	505.9	
-83.9	CARBONDALE	ENERGY	GRAY SHALE	9.2	511.9	
-93.1	CARBONDALE	ENERGY	BLACK SHALE	0.9	521.1	
-94.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	5.9	522.0	

MAPID: 16500022000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2340' S line, 2040' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.69517 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.855414 **DATE COLLECTED:** 4 / 0 / 1920

SURFACE ELEVATION (FT.): 428.1 **LOGGED (FT.):** 625.7 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.1			UNCONSOLIDATED	24.0	0.0	
404.1	BOND		SANDSTONE	18.0	24.0	POORLY INDURATED
386.1	BOND		SHALE	66.0	42.0	
320.1	BOND	CARTHAGE	LIMESTONE	24.0	108.0	
296.1	BOND		SANDSTONE	7.0	132.0	
289.1	MODESTO	WOMAC	COAL	0.5	139.0	
288.6	MODESTO		SANDY SHALE	41.5	139.5	
247.1	MODESTO		SHALE	12.0	181.0	
235.1	MODESTO		SHALE	51.0	193.0	
184.1	MODESTO		SHALE	0.5	244.0	DARK
183.6	MODESTO	CHAPEL	COAL	1.1	244.5	
182.5	MODESTO		SHALE	0.6	245.6	FOSSILS PRESENT
181.9	MODESTO		SANDSTONE	15.8	246.2	
166.1	MODESTO		SANDSTONE	12.0	262.0	SS WITH SH PARTINGS
154.1	MODESTO		SHALE	6.0	274.0	BLUE
148.1	MODESTO		SANDSTONE	4.0	280.0	
144.1	MODESTO		SHALY SANDSTONE	20.0	284.0	
124.1	MODESTO		SHALE	53.0	304.0	BLUE
71.1	MODESTO		SHALE	1.0	357.0	DARK
70.1	MODESTO		COAL	0.2	358.0	
69.9	MODESTO		SHALE	1.8	358.2	GREEN
68.1	MODESTO		CALCAREOUS SHALE	7.0	360.0	CALC
61.1	MODESTO		SHALY SANDSTONE	4.0	367.0	
57.1	MODESTO		SHALE	6.0	371.0	DARK
51.1	MODESTO		BLACK SHALE	12.6	377.0	
38.5	MODESTO		BONE COAL	0.7	389.6	
37.8	MODESTO		UNDERCLAY	2.8	390.3	
35.1	MODESTO		SANDSTONE	20.0	393.0	SS MIXED WITH SH
15.1	MODESTO		SHALE	12.0	413.0	BLUE
3.1	MODESTO	PIASA	LIMESTONE	4.0	425.0	
-0.9	MODESTO		SHALE	9.0	429.0	
-9.9	MODESTO		BLACK SHALE	5.6	438.0	
-15.5	CARBONDALE	DANVILLE	COAL	1.9	443.6	
-17.4	CARBONDALE		SHALE	2.0	445.5	
-19.4	CARBONDALE		SANDY SHALE	8.5	447.5	
-27.9	CARBONDALE		SHALE	3.0	456.0	DARK
-30.9	CARBONDALE	ALLENBY	BONE COAL	0.3	459.0	
-31.2	CARBONDALE		SHALE	2.8	459.3	SH MIXED WITH SS
-33.9	CARBONDALE		UNCERTAIN	0.4	462.0	MAY BE CALCAREOUS SH?

-34.3	CARBONDALE		SHALE	5.1	462.4	GREEN
-39.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	467.5	
-45.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.5	473.5	
-46.9	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	475.0	
-49.9	CARBONDALE	ANVIL ROCK	SHALE	4.0	478.0	DARK
-53.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	482.0	
-54.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.0	483.0	
-74.9	CARBONDALE	BRERETON	LIMESTONE	3.0	503.0	
-77.9	CARBONDALE		BLACK SHALE	6.0	506.0	
-83.9	CARBONDALE		SHALE	9.2	512.0	GREEN
-93.1	CARBONDALE	ANNA	BLACK SHALE	0.9	521.2	
-94.0	CARBONDALE	HERRIN	COAL	0.5	522.1	
-94.5	CARBONDALE	HERRIN	SHALE	0.1	522.6	
-94.6	CARBONDALE	HERRIN	COAL	2.5	522.7	
-97.1	CARBONDALE	HERRIN	SHALE	0.1	525.2	
-97.2	CARBONDALE	HERRIN	COAL	2.8	525.3	
-99.9	CARBONDALE		BLACK SHALE	0.3	528.0	
-100.2	CARBONDALE		SHALE	0.7	528.3	GREEN
-100.9	CARBONDALE	ST. DAVID	LIMESTONE	10.0	529.0	
-110.9	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	539.0	
-120.9	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	549.0	SS WITH SH PARTINGS
-140.9	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	569.0	
-149.9	CARBONDALE	DYKERSBURG	SHALE	20.0	578.0	BLUE
-169.9	CARBONDALE	DYKERSBURG	SANDY SHALE	21.6	598.0	BLUE
-191.5	CARBONDALE	SPRINGFIELD	COAL	5.1	619.6	
-196.6	CARBONDALE		UNDERCLAY	1.0	624.7	

MAPID: 16502803000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 260' S line, 330' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.691629 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.853286 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2712.0 **LOG TYPE:**

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-74.0	CARBONDALE	BRERETON	LIMESTONE	-	506.0	
-1473.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1905.0	
-1889.0			LIMESTONE	-	2321.0	
-2280.0		BASE BARLOW	LIMESTONE	-	2712.0	

MAPID: 16502803000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 260' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.691629 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.853286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 3257.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-78.0	CARBONDALE	HERRIN	COAL	6.0	510.0	
-95.0	CARBONDALE	BRIAR HILL	COAL	-	527.0	
-178.0	CARBONDALE	SPRINGFIELD	COAL	6.0	610.0	
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	-	580.0	

MAPID: 16502803000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 260' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.691629 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.853286 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 1750.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-388.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	820.0	
-448.0	SPOON	DAVIS	UNCLASSIFIED	-	880.0	
-1318.0	BASE OF PENN.		UNCLASSIFIED	-	1750.0	

MAPID: 16502803000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 260' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.691629 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853286 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2712.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, FARLEY HEIRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-253.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	685.0	
-343.0	CARBONDALE	SURVANT	COAL	2.0	775.0	
-387.0	CARBONDALE	COLCHESTER	COAL	2.0	819.0	
-420.0	CARBONDALE	DEKOVEN	COAL	2.0	852.0	
-436.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	868.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	4.0	876.0	
-466.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	898.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500023000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1600' S line, 300' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.689317 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.83872 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 534.0 **LOG TYPE:** Drillers Log

SOURCE: NO COMPANY **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	DANVILLE	COAL	1.2	326.0	
61.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	364.0	
22.0	CARBONDALE	HERRIN	COAL	5.6	403.0	
-2.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	5.0	427.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	0.5	434.0	
-102.0	CARBONDALE	SPRINGFIELD	COAL	6.1	527.0	

MAPID: 16500023000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1600' S line, 300' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.689317 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.83872 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 408.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.9	MODESTO	PIASA	LIMESTONE	4.0	315.1	
105.9	MODESTO		CLAYSTONE & SHALE	7.4	319.1	
98.5	CARBONDALE	DANVILLE	COAL	1.2	326.5	
97.3	CARBONDALE		SILTY SHALE	22.3	327.7	
75.0	CARBONDALE	BANKSTON FORK	GRAY SHALE	4.0	350.0	
71.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	354.0	
61.0	CARBONDALE	LAWSON	SANDSTONE	8.0	364.0	
53.0	CARBONDALE	LAWSON	SILTY SHALE	19.5	372.0	
33.5	CARBONDALE	BRERETON	LIMESTONE	7.5	391.5	
26.0	CARBONDALE	ANNA	BLACK SHALE	4.0	399.0	
22.0	CARBONDALE	HERRIN	COAL	5.6	403.0	

MAPID: 16500023000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1600' S line, 300' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.689317 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.83872 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 534.2 **LOG TYPE:** Drillers Log

SOURCE: DEWOLF (SOURCE)/STRALING CLARK (FARM)8 **WELL TYPE:** Coal Test

COMMENT: NO DATE/NO COMPANY GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	29.5	0.0	
395.5	BOND		SHALE	15.0	29.5	
380.5	MODESTO	NEW HAVEN	COAL	0.5	44.5	
380.0	MODESTO		UNDERCLAY	2.0	45.0	
378.0	MODESTO		SHALE	6.0	47.0	
372.0	MODESTO		SHALE	8.0	53.0	BLUE
364.0	MODESTO		SHALE	51.0	61.0	
313.0	MODESTO		SHALE	1.0	112.0	BLUE
312.0	MODESTO		LIMESTONE	3.0	113.0	
309.0	MODESTO		SANDY SHALE	14.0	116.0	
295.0	MODESTO		SHALE	15.0	130.0	
280.0	MODESTO		BLACK SHALE	1.0	145.0	
279.0	MODESTO		UNDERCLAY	3.0	146.0	
276.0	MODESTO		CLAYSTONE	1.5	149.0	
274.5	MODESTO		SANDSTONE	17.5	150.5	
257.0	MODESTO		SANDSTONE	40.0	168.0	WHITE
217.0	MODESTO		CLAYSTONE	4.0	208.0	
213.0	MODESTO		SHALE	8.0	212.0	
205.0	MODESTO		LIMESTONE	2.0	220.0	
203.0	MODESTO		SHALE	12.0	222.0	LIGHT
191.0	MODESTO		SHALE	8.0	234.0	
183.0	MODESTO		ARGILACEOUS SHALE	18.0	242.0	ARG
165.0	MODESTO		SHALE	7.5	260.0	
157.5	MODESTO		BLACK SHALE	8.5	267.5	
149.0	MODESTO		SANDSTONE	8.0	276.0	WHITE
141.0	MODESTO		SHALY LIMESTONE	9.0	284.0	
132.0	MODESTO		BLACK SHALE	8.0	293.0	
124.0	MODESTO		SANDSTONE	14.0	301.0	
110.0	MODESTO	PIASA	LIMESTONE	4.0	315.0	
106.0	MODESTO		CLAYSTONE	2.5	319.0	
103.5	MODESTO		BLACK SHALE	1.0	321.5	
102.5	MODESTO		SHALE	4.0	322.5	
98.5	CARBONDALE	DANVILLE	COAL	1.2	326.5	
97.3	CARBONDALE		UNDERCLAY	2.0	327.7	
95.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.3	329.7	
75.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	350.0	BLUE
71.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	354.0	
61.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	364.0	WHITE
53.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.5	372.0	

33.5	CARBONDALE	BRERETON	LIMESTONE	7.5	391.5	
26.0	CARBONDALE	ANNA	BLACK SHALE	4.0	399.0	
22.0	CARBONDALE	HERRIN	COAL	5.6	403.0	
16.4	CARBONDALE		UNDERCLAY	8.4	408.6	
8.0	CARBONDALE		LIMESTONE	2.0	417.0	
6.0	CARBONDALE		SHALE	8.0	419.0	LIGHT
-2.0	CARBONDALE	VERMILIONVILLE	SANDSTONE	5.0	427.0	
-7.0	CARBONDALE		BLACK SHALE	2.0	432.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	0.5	434.0	
-9.5	CARBONDALE		UNDERCLAY	1.0	434.5	
-10.5	CARBONDALE	DYKERSBURG	SANDY SHALE	87.5	435.5	
-98.0	CARBONDALE	DYKERSBURG	SLATY SHALE	4.0	523.0	DRAW
-102.0	CARBONDALE	SPRINGFIELD	COAL	6.1	527.0	
-108.1	CARBONDALE		UNDERCLAY	1.1	533.1	

MAPID: 16524051000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1320' N line, 660' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.690451 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.845346 **DATE COLLECTED:** 1 / 18 / 1979

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 513.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1044-C **WELL TYPE:** Coal Test

COMMENT: 1320' FROM Nline, 660' FROM Eline OF SEC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	391.7	0.0	TOP 391.7' ABSENT. STARTS
-	CARBONDALE	BRERETON	LIMESTONE	0.5	391.7	
-	CARBONDALE	ANNA	BLACK SHALE	4.0	392.2	
-	CARBONDALE	ENERGY	DARK GRAY SHALE	4.9	396.2	
-	CARBONDALE		BLACK SHALE	0.7	401.0	
-	CARBONDALE	HERRIN	COAL	5.8	401.7	
-	CARBONDALE		UNDERCLAY	3.6	407.4	
-	CARBONDALE		UNCLASSIFIED	56.1	411.0	LOG SAYS 'INTERVAL NOT CORED'
-	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	41.1	467.1	
-	CARBONDALE	SPRINGFIELD	COAL	5.0	508.2	

MAPID: 16502824000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 460' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.686503 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.84809 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, WILSON-TEACHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-161.0	CARBONDALE	HOUCHIN CREEK	COAL	2.8	553.0	
-202.0	CARBONDALE	SURVANT	COAL	1.8	594.0	
-283.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-323.0	CARBONDALE	DEKOVEN	COAL	4.0	715.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	730.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-348.0	CARBONDALE	DAVIS	COAL	3.5	740.0	
-388.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502824000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 460' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.686503 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.84809 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:**
SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
0.0	CARBONDALE	BRERETON	LIMESTONE	-	392.0	
-1430.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1836.0			LIMESTONE	-	2228.0	
-2242.0		BASE BARLOW	LIMESTONE	-	2634.0	

MAPID: 16502984000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 250' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675293 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842576 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2637.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, WILSON-TEACHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-177.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	570.0	
-217.0	CARBONDALE	SURVANT	COAL	1.8	610.0	
-301.0	CARBONDALE	COLCHESTER	COAL	0.5	694.0	
-335.0	CARBONDALE	DEKOVEN	COAL	2.0	728.0	
-347.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	740.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-357.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-400.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	793.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502984000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 250' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675293 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2637.0 **LOG TYPE:**
SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
17.0	CARBONDALE	BRERETON	LIMESTONE	-	376.0	
-1423.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1829.0			LIMESTONE	-	2222.0	
-2244.0		BASE BARLOW	LIMESTONE	-	2637.0	

MAPID: 16503054000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.675685 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.839037 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	HERRIN	COAL	4.0	380.0	
-106.0	CARBONDALE	SPRINGFIELD	COAL	5.0	497.0	
-166.0	CARBONDALE	HOUCHIN CREEK	COAL	-	557.0	

MAPID: 16503054000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.675685 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.839037 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 385.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
101.0	MODESTO	PIASA	LIMESTONE	5.0	290.0	
96.0	MODESTO		CLAYSTONE & SHALE	11.5	295.0	
84.5	CARBONDALE	DANVILLE	COAL	1.5	306.5	
83.0	CARBONDALE		SILTY SHALE	18.0	308.0	
65.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	326.0	
58.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	27.0	333.0	
31.0	CARBONDALE	LAWSON	SHALE	6.0	360.0	
25.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.0	366.0	
20.0	CARBONDALE	JAMESTOWN	COAL	1.0	371.0	
19.0	CARBONDALE		CLAYSTONE & SHALE	3.0	372.0	
16.0	CARBONDALE	BRERETON	LIMESTONE	5.0	375.0	
11.0	CARBONDALE	HERRIN	COAL	5.0	380.0	

MAPID: 16503054000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.675685 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.839037 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2630.0 **LOG TYPE:**

SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
17.0	CARBONDALE	BRERETON	LIMESTONE	-	374.0	
-1427.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	
-1828.0			LIMESTONE	-	2219.0	
-2239.0		BASE BARLOW	LIMESTONE	-	2630.0	

MAPID: 16503054000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.675685 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.839037 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-294.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	685.0	
-357.0	SPOON	DAVIS	UNCLASSIFIED	-	748.0	
-1299.0	BASE OF PENN.		UNCLASSIFIED	-	1690.0	

MAPID: 16503054000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.675685 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.839037 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 385.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC., BRADEN BERTRAM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	563.0	
-211.0	CARBONDALE	SURVANT	COAL	1.5	602.0	
-292.0	CARBONDALE	COLCHESTER	COAL	0.6	683.0	
-333.0	CARBONDALE	DEKOVEN	COAL	3.0	724.0	
-344.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	735.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-354.0	CARBONDALE	DAVIS	COAL	3.0	745.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503073000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.67084 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846216 **DATE COLLECTED:** 11 / 0 / 1956
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, KEUPPER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	583.0	
-232.0	CARBONDALE	SURVANT	COAL	1.5	625.0	
-315.0	CARBONDALE	COLCHESTER	COAL	2.0	708.0	
-341.0	CARBONDALE	DEKOVEN	COAL	2.0	734.0	
-360.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	753.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-369.0	CARBONDALE	DAVIS	COAL	4.0	762.0	
-409.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	802.0	
-447.0	TRADEWATER	MT. RORAH	COAL	2.0	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503073000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.67084 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846216 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:**
SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-11.0	CARBONDALE	BRERETON	LIMESTONE	-	404.0	
-1429.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1841.0			LIMESTONE	-	2234.0	
-2255.0		BASE BARLOW	LIMESTONE	-	2648.0	

MAPID: 16500024000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 500' S line, 400' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.666892 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.835755 **DATE COLLECTED:** 1 / 0 / 1920

SURFACE ELEVATION (FT.): 386.1 **LOGGED (FT.):** 482.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: DEPTH IN UNIT 7 IS OFF AS IN ORIG LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.1			UNCONSOLIDATED	60.2	0.0	
325.9	MODESTO		SHALE	20.8	60.2	
305.1	MODESTO		LIMESTONE	2.0	81.0	
303.1	MODESTO		SANDSTONE	27.0	83.0	
276.1	MODESTO		SANDSTONE	55.0	110.0	SS WITH SH PARTINGS
221.1	MODESTO		SHALE	22.0	165.0	DEPTH OFF AS IN ORIG LOG
199.1	MODESTO		LIMESTONE	7.0	187.0	
192.1	MODESTO		SHALE	15.0	194.0	
177.1	MODESTO		BLACK SHALE	1.5	209.0	
175.6	MODESTO		COAL	0.8	210.5	
174.8	MODESTO		LIMESTONE	24.3	211.3	
150.6	MODESTO		SANDSTONE	16.5	235.5	
134.1	MODESTO		SHALE	12.0	252.0	
122.1	MODESTO	PIASA	LIMESTONE	5.0	264.0	
117.1	MODESTO		SHALE	5.0	269.0	
112.1	MODESTO		LIMESTONE	2.0	274.0	
110.1	MODESTO		SHALE	3.5	276.0	
106.6	CARBONDALE	DANVILLE	COAL	1.8	279.5	
104.8	CARBONDALE		LIMESTONE	4.3	281.3	
100.6	CARBONDALE		SANDSTONE	9.0	285.5	
91.6	CARBONDALE	"Allenby rider"	COAL	0.3	294.5	
91.3	CARBONDALE		LIMESTONE	2.7	294.8	
88.7	CARBONDALE	ALLENBY	COAL	0.2	297.4	
88.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	297.6	
83.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	303.0	
77.6	CARBONDALE	ANVIL ROCK	SHALE	5.5	308.5	
72.1	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	314.0	
71.1	CARBONDALE	ANVIL ROCK	SHALE	4.0	315.0	
67.1	CARBONDALE	ANVIL ROCK	SANDSTONE	23.0	319.0	
44.1	CARBONDALE	ANVIL ROCK	SHALE	4.0	342.0	BLUE
40.1	CARBONDALE	ANVIL ROCK	SHALE	4.0	346.0	
36.1	CARBONDALE		BLACK SHALE	3.0	350.0	
33.1	CARBONDALE	BRERETON	LIMESTONE	2.0	353.0	
31.1	CARBONDALE		SHALE	4.2	355.0	
26.9	CARBONDALE	HERRIN	COAL	5.3	359.2	
21.6	CARBONDALE		UNDERCLAY	2.2	364.5	SH PARTING
19.4	CARBONDALE		LIMESTONE	12.8	366.7	
6.6	CARBONDALE		BLACK SHALE	2.8	379.5	
3.8	CARBONDALE		LIMESTONE	2.5	382.3	

1.3	CARBONDALE		SHALE	6.3	384.8	BLUE
-4.9	CARBONDALE		SANDSTONE	2.3	391.0	
-7.2	CARBONDALE	ST. DAVID	LIMESTONE	1.3	393.3	
-8.6	CARBONDALE	DYKERSBURG	SANDY SHALE	29.3	394.7	
-37.9	CARBONDALE	DYKERSBURG	SHALE	7.0	424.0	
-44.9	CARBONDALE	DYKERSBURG	SHALE	40.0	431.0	BLUE
-84.9	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	471.0	
-86.9	CARBONDALE	DYKERSBURG	SHALE	2.2	473.0	
-89.1	CARBONDALE	SPRINGFIELD	COAL	5.3	475.2	
-94.3	CARBONDALE		UNDERCLAY	0.3	480.4	
-94.6	CARBONDALE		SANDY SHALE	1.3	480.7	

MAPID: 16500024000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 500' S line, 400' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.666892 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835755 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 364.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
121.7	MODESTO	PIASA	LIMESTONE	5.0	264.3	
116.7	MODESTO		LIMESTONE W/ SHALE	10.0	269.3	
106.7	CARBONDALE	DANVILLE	COAL	1.8	279.3	
104.9	CARBONDALE	GALUM	LIMESTONE	4.3	281.1	
100.7	CARBONDALE		SANDSTONE	9.0	285.3	
91.7	CARBONDALE	ALLENBY	COAL	0.3	294.3	
91.4	CARBONDALE		CARBONACEOUS LIMESTONE	2.8	294.6	
88.6	CARBONDALE	BANKSTON FORK	LIMESTONE	10.9	297.4	
77.7	CARBONDALE	LAWSON	SHALE	5.5	308.3	
72.2	CARBONDALE	LAWSON	SANDSTONE	1.0	313.8	
71.2	CARBONDALE	LAWSON	SHALE	4.0	314.8	
67.2	CARBONDALE	LAWSON	SANDSTONE	23.0	318.8	
44.2	CARBONDALE	LAWSON	GRAY SHALE	8.0	341.8	
36.2	CARBONDALE		BLACK SHALE	3.0	349.8	
33.2	CARBONDALE	BRERETON	LIMESTONE	2.0	352.8	
31.2	CARBONDALE	ANNA	SHALE	4.2	354.8	
27.0	CARBONDALE	HERRIN	COAL	5.3	359.0	

MAPID: 16500024000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 500' S line, 400' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.666892 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.835755 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.0	CARBONDALE	DANVILLE	COAL	1.8	280.0	
75.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	9.0	285.0	
62.0	CARBONDALE	BANKSTON FORK	LIMESTONE	11.1	298.0	
46.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	28.0	314.0	
1.0	CARBONDALE	HERRIN	COAL	5.3	359.0	
-31.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	2.3	391.0	
-115.0	CARBONDALE	SPRINGFIELD	COAL	5.3	475.0	

MAPID: 16500024000C **VERSION:** 4 **PROJECT:** CONTROL

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 500' S line, 400' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.666892 **GEOLOGIST:** HINES

CONFIDENTIAL: N **LATITUDE:** 37.835755 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 482.0 **LOG TYPE:** Survey Sample Study

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 16501518000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.659363 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.84616 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2645.0 **LOG TYPE:**

SOURCE: WEIDLER W E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
9.0	CARBONDALE	BRERETON	LIMESTONE	-	405.0	
-1422.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-1816.0			LIMESTONE	-	2230.0	
-2231.0		BASE BARLOW	LIMESTONE	-	2645.0	

MAPID: 16501518000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.659363 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.84616 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 3045.0 **LOG TYPE:** Electric Log

SOURCE: WEIDLER W E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	DANVILLE	COAL	-	332.0	
69.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	345.0	
53.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	361.0	
36.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	15.0	378.0	
2.0	CARBONDALE	HERRIN	COAL	-	412.0	
-26.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	70.0	440.0	
-141.0	CARBONDALE	SPRINGFIELD	COAL	8.0	555.0	
-176.0	CARBONDALE	HOUCHIN CREEK	COAL	-	590.0	

MAPID: 16502423000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 660' W line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.662945 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844356 **DATE COLLECTED:** 7 / 0 / 1942

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2643.0 **LOG TYPE:** Electric Log

SOURCE: ELLIOTT A D, WILSON CLAY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-189.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	594.0	
-245.0	CARBONDALE	SURVANT	COAL	1.5	650.0	
-313.0	CARBONDALE	COLCHESTER	COAL	0.5	718.0	
-343.0	CARBONDALE	DEKOVEN	COAL	3.0	748.0	
-362.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	767.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-373.0	CARBONDALE	DAVIS	COAL	3.0	778.0	
-411.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	816.0	
-455.0	TRADEWATER	MT. RORAH	COAL	1.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502423000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 660' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.662945 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844356 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2643.0 **LOG TYPE:**
SOURCE: ELLIOTT A D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
0.0	CARBONDALE	BRERETON	LIMESTONE	-	405.0	
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1831.0	
-1824.0			LIMESTONE	-	2229.0	
-2238.0		BASE BARLOW	LIMESTONE	-	2643.0	

MAPID: 16502904000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657482 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.835191 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1680.0 **LOG TYPE:** Electric Log
SOURCE: PIONEER OIL COMPANY **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-269.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	655.0	
-334.0	SPOON	DAVIS	UNCLASSIFIED	-	720.0	
-1294.0	BASE OF PENN.		UNCLASSIFIED	-	1680.0	

MAPID: 16502904000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657482 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835191 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: PIONEER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1794.0			LIMESTONE	-	2180.0	
-2203.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16502904000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657482 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835191 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:** Electric Log
SOURCE: PIONEER OIL COMPANY, MORRIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	542.0	
-184.0	CARBONDALE	SURVANT	COAL	0.5	570.0	
-266.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-309.0	CARBONDALE	DEKOVEN	COAL	3.0	695.0	
-323.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	709.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-334.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	
-416.0	TRADEWATER	MT. RORAH	COAL	1.5	802.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502952000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668815 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.838938 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2629.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, HUGHES LAWRENCE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	555.0	
-204.0	CARBONDALE	SURVANT	COAL	1.5	595.0	
-286.0	CARBONDALE	COLCHESTER	COAL	0.6	677.0	
-328.0	CARBONDALE	DEKOVEN	COAL	2.5	719.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	730.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-349.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	782.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502952000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668815 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838938 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2629.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	BRERETON	LIMESTONE	-	376.0	
-1428.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1838.0			LIMESTONE	-	2229.0	
-2238.0		BASE BARLOW	LIMESTONE	-	2629.0	

MAPID: 16502996000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652851 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842465 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2624.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., WOOLARD COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	575.0	
-205.0	CARBONDALE	SURVANT	COAL	1.5	615.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	695.0	
-325.0	CARBONDALE	DEKOVEN	COAL	2.0	735.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	755.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-354.0	CARBONDALE	DAVIS	COAL	4.5	764.0	
-395.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	805.0	
-399.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	809.0	
-435.0	TRADEWATER	MT. RORAH	COAL	1.8	845.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502996000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652851 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2624.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	384.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	
-1805.0			LIMESTONE	-	2215.0	
-2214.0		BASE BARLOW	LIMESTONE	-	2624.0	

MAPID: 16502825000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.641526 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835125 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBER HEIRS 1-A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-166.0	CARBONDALE	SURVANT	COAL	1.8	565.0	
-236.0	CARBONDALE	COLCHESTER	COAL	0.5	635.0	
-273.0	CARBONDALE	DEKOVEN	COAL	1.5	672.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	698.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-309.0	CARBONDALE	DAVIS	COAL	3.8	708.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	755.0	
-393.0	TRADEWATER	MT. RORAH	COAL	1.0	792.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502825000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.641526 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835125 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	BRERETON	LIMESTONE	-	327.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1788.0			LIMESTONE	-	2187.0	
-2191.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502829000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646059 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835129 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBBER PEARL 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	530.0	
-170.0	CARBONDALE	SURVANT	COAL	1.8	568.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-287.0	CARBONDALE	DEKOVEN	COAL	3.5	685.0	
-307.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	705.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-316.0	CARBONDALE	DAVIS	COAL	4.0	714.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	
-363.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	761.0	
-397.0	TRADEWATER	MT. RORAH	COAL	1.0	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502829000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646059 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
69.0	CARBONDALE	BRERETON	LIMESTONE	-	329.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1792.0			LIMESTONE	-	2190.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2566.0	

MAPID: 16502840000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648356 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.835132 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 1640.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-239.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	630.0	
-319.0	SPOON	DAVIS	UNCLASSIFIED	-	710.0	
-1249.0	BASE OF PENN.		UNCLASSIFIED	-	1640.0	

MAPID: 16502840000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648356 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835132 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1785.0			LIMESTONE	-	2176.0	
-2195.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16502840000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648356 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835132 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	523.0	
-239.0	CARBONDALE	COLCHESTER	COAL	0.6	630.0	
-306.0	CARBONDALE	DEKOVEN	COAL	0.6	697.0	
-315.0	CARBONDALE	DAVIS	COAL	4.0	706.0	

MAPID: 16502852000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646008 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846116 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2651.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., KARNES DAVID L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-159.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-199.0	CARBONDALE	SURVANT	COAL	1.8	640.0	
-273.0	CARBONDALE	COLCHESTER	COAL	0.5	714.0	
-319.0	CARBONDALE	DEKOVEN	COAL	3.8	760.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	786.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-357.0	CARBONDALE	DAVIS	COAL	5.0	798.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	825.0	
-389.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	830.0	
-424.0	TRADEWATER	MT. RORAH	COAL	2.0	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502852000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646008 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846116 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2651.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	415.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1860.0	
-1819.0			LIMESTONE	-	2260.0	
-2210.0		BASE BARLOW	LIMESTONE	-	2651.0	

MAPID: 16502898000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636991 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835119 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	530.0	
-166.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-246.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-282.0	CARBONDALE	DEKOVEN	COAL	2.5	686.0	
-306.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	710.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-314.0	CARBONDALE	DAVIS	COAL	3.0	718.0	
-356.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-361.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	765.0	
-396.0	TRADEWATER	MT. RORAH	COAL	1.0	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502898000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.636991 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.835119 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:**

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	BRERETON	LIMESTONE	-	347.0	
-1362.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1766.0	
-1776.0			LIMESTONE	-	2180.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2587.0	

MAPID: 16502901000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.634751 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83696 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-147.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-186.0	CARBONDALE	SURVANT	COAL	1.8	594.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	676.0	
-307.0	CARBONDALE	DEKOVEN	COAL	4.0	715.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	736.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-337.0	CARBONDALE	DAVIS	COAL	3.8	745.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	785.0	
-421.0	TRADEWATER	MT. RORAH	COAL	1.8	829.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502901000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.634751 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83696 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
36.0	CARBONDALE	BRERETON	LIMESTONE	-	374.0	
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1782.0			LIMESTONE	-	2192.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502907000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643824 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835126 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBBER PEARL 1-W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-168.0	CARBONDALE	SURVANT	COAL	2.0	565.0	
-237.0	CARBONDALE	COLCHESTER	COAL	0.5	634.0	
-278.0	CARBONDALE	DEKOVEN	COAL	3.0	675.0	
-301.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	698.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-308.0	CARBONDALE	DAVIS	COAL	4.5	705.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-358.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	755.0	
-393.0	TRADEWATER	MT. RORAH	COAL	1.0	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502907000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643824 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835126 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	BRERETON	LIMESTONE	-	327.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1798.0			LIMESTONE	-	2195.0	
-2193.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502936000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646051 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83697 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	331.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1901.0			LIMESTONE	-	2297.0	
-2201.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16502936000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.646051 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.83697 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 348.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	238.0	
154.0	MODESTO		SHALE	11.0	242.0	
143.0	CARBONDALE	DANVILLE	COAL	1.0	253.0	
142.0	CARBONDALE		SHALE	19.0	254.0	
123.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	10.0	273.0	
113.0	CARBONDALE	LAWSON	SHALE	7.0	283.0	
106.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	42.0	290.0	
64.0	CARBONDALE	BRERETON	LIMESTONE	7.0	332.0	
57.0	CARBONDALE	ANNA	BLACK SHALE	3.0	339.0	
54.0	CARBONDALE	HERRIN	COAL	6.0	342.0	

MAPID: 16502936000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.646051 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83697 **DATE COLLECTED:** 5 / 0 / 1956

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 348.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D, WEBBER PEARL 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	535.0	
-174.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-251.0	CARBONDALE	COLCHESTER	COAL	0.5	647.0	
-296.0	CARBONDALE	DEKOVEN	COAL	2.0	692.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	711.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-324.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-366.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	762.0	
-369.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	765.0	
-409.0	TRADEWATER	MT. RORAH	COAL	1.0	805.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502946000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.648348 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836971 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	532.0	
-182.0	CARBONDALE	SURVANT	COAL	1.8	575.0	
-247.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-292.0	CARBONDALE	DEKOVEN	COAL	2.0	685.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	705.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-322.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	758.0	
-404.0	TRADEWATER	MT. RORAH	COAL	0.5	797.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502946000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.648348 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.836971 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1788.0			LIMESTONE	-	2181.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16502963000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646043 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.838809 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., RYAN COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-177.0	CARBONDALE	SURVANT	COAL	0.5	580.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	662.0	
-303.0	CARBONDALE	DEKOVEN	COAL	2.0	706.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	730.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-335.0	CARBONDALE	DAVIS	COAL	4.0	738.0	
-375.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	778.0	
-417.0	TRADEWATER	MT. RORAH	COAL	1.0	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502963000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646043 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838809 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1803.0			LIMESTONE	-	2206.0	
-2194.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16503046000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648341 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838793 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:**
SOURCE: WRIGHT OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1792.0			LIMESTONE	-	2190.0	
-2202.0		BASE BARLOW	LIMESTONE	-	2600.0	

MAPID: 16503318000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643812 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.838789 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:**

SOURCE: BEELER, MIKE OIL CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1811.0			LIMESTONE	-	2212.0	
-2203.0		BASE BARLOW	LIMESTONE	-	2604.0	

MAPID: 16503318000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643812 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.838789 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 3076.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	HERRIN	COAL	6.0	358.0	
-63.0	CARBONDALE	SPRINGFIELD	COAL	6.0	464.0	
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	-	542.0	

MAPID: 16503318000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643812 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838789 **DATE COLLECTED:** 4 / 0 / 1960

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO., RYAN WILEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	546.0	
-179.0	CARBONDALE	SURVANT	COAL	1.8	580.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-305.0	CARBONDALE	DEKOVEN	COAL	1.8	706.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	733.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-379.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-384.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	785.0	
-424.0	TRADEWATER	MT. RORAH	COAL	1.5	825.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500025000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 580' N line, 1270' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.628544 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.839875 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 403.7 **LOGGED (FT.):** 517.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.7			UNCONSOLIDATED	37.0	0.0	
366.7	MODESTO		SHALE	7.0	37.0	
359.7	MODESTO		SANDY SHALE	18.0	44.0	
341.7	MODESTO		SHALE	15.0	62.0	
326.7	MODESTO		SHALE	23.5	77.0	DARK
303.2	MODESTO	CHAPEL	COAL	0.8	100.5	
302.4	MODESTO		SHALE	7.7	101.3	
294.7	MODESTO		SHALY SANDSTONE	38.0	109.0	
256.7	MODESTO		SANDSTONE	15.0	147.0	
241.7	MODESTO		DARK SHALE	36.0	162.0	DAR, DARK
205.7	MODESTO		COAL	1.0	198.0	
204.7	MODESTO		SHALE	5.0	199.0	DARK
199.7	MODESTO		SHALE	11.0	204.0	
188.7	MODESTO		SHALE	21.0	215.0	DARK
167.7	MODESTO		COAL	1.0	236.0	
166.7	MODESTO		UNDERCLAY	3.0	237.0	
163.7	MODESTO		CALCAREOUS SHALE	12.0	240.0	CALC
151.7	MODESTO		SANDY SHALE	15.0	252.0	
136.7	MODESTO		SHALE	11.0	267.0	DARK
125.7	MODESTO	PIASA	LIMESTONE	2.8	278.0	
122.9	MODESTO		SHALE	11.2	280.8	DARK
111.7	CARBONDALE	DANVILLE	COAL	2.2	292.0	
109.5	CARBONDALE		SANDY SHALE	13.5	294.2	
96.0	CARBONDALE	ALLENBY	COAL	0.3	307.7	
95.7	CARBONDALE		SHALE	6.0	308.0	DARK
89.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	314.0	
84.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	319.0	
75.7	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	18.0	328.0	
57.7	CARBONDALE	ANVIL ROCK	SANDSTONE	20.5	346.0	
37.2	CARBONDALE	JAMESTOWN	COAL	0.3	366.5	
36.9	CARBONDALE		BLACK SHALE	0.3	366.8	
36.6	CARBONDALE	BRERETON	LIMESTONE	0.9	367.1	
35.7	CARBONDALE	ANNA	SHALE	8.0	368.0	DARK
27.7	CARBONDALE	HERRIN	COAL	6.0	376.0	
21.7	CARBONDALE		UNDERCLAY	4.0	382.0	
17.7	CARBONDALE		SHALE	13.0	386.0	DARK
4.7	CARBONDALE	DYKERSBURG	SANDSTONE	56.0	399.0	
-51.3	CARBONDALE	DYKERSBURG	SANDY SHALE	52.0	455.0	
-103.3	CARBONDALE	DYKERSBURG	SHALE	1.3	507.0	DARK

-104.6	CARBONDALE	SPRINGFIELD	COAL	7.8	508.3
-112.3	CARBONDALE		UNDERCLAY	1.0	516.0

MAPID: 16500025000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 580' N line, 1270' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.628544 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.839875 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 517.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	DANVILLE	COAL	2.2	292.0	
90.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	314.0	
76.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	38.0	328.0	
28.0	CARBONDALE	HERRIN	COAL	6.0	376.0	
5.0	CARBONDALE	CANTON		56.0	399.0	
-104.0	CARBONDALE	SPRINGFIELD	COAL	7.8	508.0	

MAPID: 16500027000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.62154 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.839617 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 529.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	DANVILLE	COAL	1.8	256.0	
140.0	CARBONDALE	SS BELOW NO. 7		10.3	259.0	
119.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	280.0	
115.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	40.0	284.0	
67.0	CARBONDALE	HERRIN	COAL	5.8	332.0	
44.0	CARBONDALE	BRIAR HILL	COAL	6.0	355.0	
40.0	CARBONDALE	CANTON	SANDSTONE/SHALE	-	359.0	

MAPID: 16500027000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.62154 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.839617 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 337.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.8	MODESTO	PIASA	LIMESTONE	2.4	243.2	
153.4	MODESTO		DARK GRAY SHALE	10.6	245.6	
142.8	CARBONDALE	DANVILLE	COAL	1.8	256.2	
141.0	CARBONDALE		SHALE & SANDSTONE	14.8	258.0	
126.2	CARBONDALE	ALLENBY	BONE COAL	0.3	272.8	
125.8	CARBONDALE		CLAYSTONE & SHALE	6.5	273.2	
119.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	279.7	
115.3	CARBONDALE	LAWSON	GRAY SHALE	0.4	283.7	
114.9	CARBONDALE	LAWSON	SANDSTONE	19.1	284.1	
95.8	CARBONDALE	LAWSON	SILTY SHALE	15.0	303.2	
80.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	6.5	318.2	
74.3	CARBONDALE	JAMESTOWN	COAL	0.3	324.7	
74.1	CARBONDALE		CLAYSTONE	0.4	324.9	
73.7	CARBONDALE	BRERETON	LIMESTONE	2.8	325.3	
70.8	CARBONDALE	ANNA	GRAY SHALE	3.8	328.2	
67.0	CARBONDALE	HERRIN	COAL	5.8	332.0	

MAPID: 16500027000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.62154 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.839617 **DATE COLLECTED:** 4 / 7 / 1917

SURFACE ELEVATION (FT.): 399.4 **LOGGED (FT.):** 529.3 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.4			UNCONSOLIDATED	21.0	0.0	
378.4	MODESTO		SHALE	52.5	21.0	BLUE
325.9	MODESTO	CHAPEL	COAL	1.5	73.5	
324.4	MODESTO		UNDERCLAY	0.6	75.0	
323.8	MODESTO		SHALE	5.9	75.6	
317.9	MODESTO		SANDSTONE	6.5	81.5	
311.4	MODESTO		SANDSTONE	48.0	88.0	SS WITH SH LAYERS
263.4	MODESTO		SANDSTONE	1.8	136.0	
261.6	MODESTO		LIMESTONE	0.6	137.8	
261.0	MODESTO		SHALE	36.4	138.4	BLUE
224.6	MODESTO		COAL	0.2	174.8	
224.4	MODESTO		UNDERCLAY	2.3	175.0	
222.1	MODESTO		SANDY SHALE	9.8	177.3	
212.4	MODESTO		SHALE	11.5	187.0	BLUE
200.9	MODESTO		BLACK SHALE	5.4	198.5	
195.5	MODESTO		COAL	0.9	203.9	
194.6	MODESTO		UNDERCLAY	0.3	204.8	
194.2	MODESTO		ARGILACEOUS SHALE	6.7	205.2	ARG
187.6	MODESTO		LIMESTONE	2.0	211.8	
185.6	MODESTO		SANDY SHALE	16.0	213.8	
169.6	MODESTO		SHALE	10.2	229.8	BLUE
159.4	MODESTO		SHALE	3.0	240.0	
156.4	MODESTO	PIASA	LIMESTONE	2.4	243.0	
154.0	MODESTO		SHALE	10.6	245.4	DARK
143.4	CARBONDALE	DANVILLE	COAL	1.8	256.0	
141.6	CARBONDALE		UNDERCLAY	0.8	257.8	
140.7	CARBONDALE		SANDSTONE	2.7	258.7	
138.1	CARBONDALE		SHALE	4.8	261.3	BLUE
133.2	CARBONDALE		SANDSTONE	2.8	266.2	
130.4	CARBONDALE		SANDY SHALE	1.8	269.0	
128.6	CARBONDALE		SHALE	1.5	270.8	BLUE
127.1	CARBONDALE		BLACK SHALE	0.3	272.3	
126.7	CARBONDALE	ALLENBY	COAL	0.3	272.7	
126.5	CARBONDALE	ALLENBY	PYRITE	0.1	272.9	
126.4	CARBONDALE		SANDY CLAYSTONE	1.5	273.0	SANDY
124.9	CARBONDALE		ARGILACEOUS SHALE	3.5	274.5	ARG
121.4	CARBONDALE		CALCAREOUS SHALE	1.5	278.0	CALC
119.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	279.5	
115.9	CARBONDALE		SHALE	0.4	283.5	BLUE

115.5	CARBONDALE	ANVIL ROCK	SANDSTONE	19.1	283.9	
96.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	303.0	
81.4	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	318.0	
74.9	CARBONDALE	JAMESTOWN	COAL	0.3	324.5	
74.6	CARBONDALE		UNDERCLAY	0.4	324.8	DARK
74.2	CARBONDALE	BRERETON	LIMESTONE	2.8	325.2	
71.4	CARBONDALE		SHALE	3.8	328.0	BLUE
67.6	CARBONDALE	HERRIN	COAL	5.8	331.8	
61.8	CARBONDALE		UNDERCLAY	2.4	337.6	
59.4	CARBONDALE		ARGILACEOUS SHALE	2.2	340.0	ARG
57.2	CARBONDALE		SHALE	5.0	342.2	BLUE
52.2	CARBONDALE		LIMESTONE	1.0	347.2	
51.2	CARBONDALE		SHALE	6.8	348.2	BLUE
44.4	CARBONDALE	BRIAR HILL	BONE COAL	0.5	355.0	
43.9	CARBONDALE		SANDY SHALE	3.6	355.5	
40.3	CARBONDALE		SANDSTONE	8.9	359.1	
31.4	CARBONDALE		SANDSTONE	7.0	368.0	SS WITH SH PARTINGS
24.4	CARBONDALE		SANDY SHALE	16.7	375.0	
7.7	CARBONDALE		SANDSTONE	3.7	391.7	
4.1	CARBONDALE		SANDY SHALE	6.0	395.3	
-1.9	CARBONDALE		SHALY SANDSTONE	5.0	401.3	
-6.9	CARBONDALE		SANDY SHALE	47.0	406.3	SPRINGFIELD COAL MISSING
-53.9	CARBONDALE		SANDSTONE/COAL	38.3	453.3	SS WITH COAL PARTINGS, COAL
-92.3	CARBONDALE		SHALE	12.3	491.7	GREEN
-104.6	CARBONDALE		SHALE	2.5	504.0	BLUE
-107.1	CARBONDALE		SANDY SHALE	7.4	506.5	
-114.5	CARBONDALE		SANDSTONE	8.8	513.9	
-123.3	CARBONDALE		SANDY SHALE	4.6	522.7	
-127.9	CARBONDALE		SANDSTONE	2.0	527.3	

MAPID: 16500028000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2260' N line, 470' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.625774 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.835205 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 407.9 **LOGGED (FT.):** 491.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT: DEPTH OFF BY 2" IN UNIT 5 AS IN ORIG LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.9			UNCONSOLIDATED	46.0	0.0	
361.9	MODESTO		SHALE	19.0	46.0	
342.9	MODESTO		LIMESTONE	1.0	65.0	
341.9	MODESTO		SHALE	13.0	66.0	LOG REPORTED 15',66 TO 79'
328.9	MODESTO		SHALE	2.0	79.0	
326.9	MODESTO		SANDY SHALE	65.0	81.0	
261.9	MODESTO		SHALE	8.0	146.0	DARK
253.9	MODESTO		CLAYSTONE	2.0	154.0	
251.9	MODESTO		SHALE	9.0	156.0	
242.9	MODESTO		SHALE	26.5	165.0	DARK
216.4	MODESTO		COAL	0.3	191.5	
216.1	MODESTO		SHALE	2.2	191.8	DARK
213.9	MODESTO		SANDY SHALE	16.0	194.0	
197.9	MODESTO		SHALE	9.0	210.0	DARK
188.9	MODESTO		COAL	1.0	219.0	
187.9	MODESTO		UNDERCLAY	6.0	220.0	
181.9	MODESTO		SANDSTONE	2.0	226.0	
179.9	MODESTO		SANDY SHALE	25.0	228.0	
154.9	MODESTO		SHALE	10.0	253.0	DARK
144.9	MODESTO	PIASA	LIMESTONE	3.5	263.0	
141.4	MODESTO		SHALE	3.5	266.5	
137.9	MODESTO		BLACK SHALE	8.7	270.0	
129.2	CARBONDALE	DANVILLE	COAL	2.0	278.7	
127.2	CARBONDALE		SHALE	9.0	280.7	
118.2	CARBONDALE	ALLENBY	COAL	0.3	289.7	
117.9	CARBONDALE		SHALE	11.0	290.0	
106.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	301.0	
100.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	38.8	307.0	
62.1	CARBONDALE	JAMESTOWN	COAL	0.3	345.8	
61.9	CARBONDALE		SHALE	6.7	346.0	DARK
55.2	CARBONDALE	HERRIN	COAL	5.9	352.7	
49.3	CARBONDALE		UNDERCLAY	0.4	358.6	
48.9	CARBONDALE		SHALE	13.0	359.0	
35.9	CARBONDALE	BRIAR HILL	COAL	1.5	372.0	
34.4	CARBONDALE		SHALE	2.0	373.5	
32.4	CARBONDALE	DYKERSBURG	SANDY SHALE	33.5	375.5	
-1.1	CARBONDALE	DYKERSBURG	SANDSTONE	21.0	409.0	
-22.1	CARBONDALE	DYKERSBURG	SANDY SHALE	38.0	430.0	
-60.1	CARBONDALE	DYKERSBURG	SHALE	9.5	468.0	

-69.6	CARBONDALE	DYKERSBURG	SHALE	6.0	477.5	DARK
-75.6	CARBONDALE	DYKERSBURG	COAL	0.5	483.5	
-76.1	CARBONDALE	DYKERSBURG	SHALE	1.0	484.0	DARK
-77.1	CARBONDALE	SPRINGFIELD	COAL	4.8	485.0	
-81.9	CARBONDALE		SHALE	1.5	489.8	DARK

MAPID: 16500028000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2260' N line, 470' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.625774 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.835205 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 491.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	HERRIN	COAL	5.9	352.0	
36.0	CARBONDALE	BRIAR HILL	COAL	1.5	372.0	
-77.0	CARBONDALE	SPRINGFIELD	COAL	4.8	485.0	

MAPID: 16500029000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2380' N line, 1240' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.628455 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.834905 **DATE COLLECTED:** 4 / 22 / 1917

SURFACE ELEVATION (FT.): 393.9 **LOGGED (FT.):** 491.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.9			UNCONSOLIDATED	60.0	0.0	
333.9	MODESTO		SHALE	12.0	60.0	
321.9	MODESTO		SHALE	3.5	72.0	BLUE
318.4	MODESTO	CHAPEL	COAL	1.5	75.5	
316.9	MODESTO		SHALE	0.3	77.0	
316.6	MODESTO		CALCAREOUS SHALE	1.1	77.3	CALC
315.5	MODESTO		SHALE	6.6	78.4	GREEN
308.9	MODESTO		SANDSTONE	13.0	85.0	
295.9	MODESTO		SANDSTONE	17.0	98.0	
278.9	MODESTO		SANDSTONE	23.8	115.0	
255.1	MODESTO		SHALE	43.7	138.8	BLUE
211.4	MODESTO		COAL	0.2	182.5	
211.2	MODESTO		UNDERCLAY	1.0	182.7	
210.2	MODESTO		SANDY SHALE	10.7	183.7	
199.6	MODESTO		SHALE	11.7	194.3	BLUE
187.9	MODESTO		BLACK SHALE	2.0	206.0	
185.9	MODESTO		SHALE	2.0	208.0	BLUE
183.9	MODESTO		BLACK SHALE	2.0	210.0	
181.9	MODESTO		COAL	0.8	212.0	
181.1	MODESTO		UNDERCLAY	1.2	212.8	
179.9	MODESTO		ARGILACEOUS SHALE	6.0	214.0	ARG
173.9	MODESTO		SANDSTONE	3.2	220.0	
170.7	MODESTO		SHALE	3.3	223.2	BLUE
167.4	MODESTO		SANDSTONE	10.5	226.5	
156.9	MODESTO		SANDY SHALE	6.2	237.0	
150.7	MODESTO		SHALE	5.8	243.2	BLUE
144.9	MODESTO		SHALE	6.5	249.0	BLUE
138.4	MODESTO	PIASA	LIMESTONE	3.8	255.5	
134.6	MODESTO		SHALE	1.0	259.3	BLUE
133.6	MODESTO		BLACK SHALE	1.0	260.3	
132.6	MODESTO		SANDY SHALE	0.5	261.3	
132.1	MODESTO		SHALE	8.1	261.8	BLUE
124.1	CARBONDALE	DANVILLE	COAL	1.5	269.8	
122.6	CARBONDALE		SHALE	6.3	271.3	BLUE
116.2	CARBONDALE		SANDSTONE	2.3	277.7	
114.0	CARBONDALE		SANDY SHALE	0.8	279.9	
113.2	CARBONDALE		SANDSTONE	0.8	280.7	
112.4	CARBONDALE		SHALE	3.2	281.5	BLUE
109.2	CARBONDALE	ALLENBY	COAL	0.5	284.7	

108.7	CARBONDALE		UNDERCLAY	0.5	285.2	
108.3	CARBONDALE		ARGILACEOUS SHALE	2.3	285.6	ARG
105.9	CARBONDALE	BANKSTON FORK	SHALY LIMESTONE	3.0	288.0	
102.9	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	291.0	
99.3	CARBONDALE	BANKSTON FORK	SHALY LIMESTONE	2.0	294.6	
97.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	31.4	296.6	
65.9	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	328.0	
50.9	CARBONDALE	JAMESTOWN	COAL	0.2	343.0	
50.7	CARBONDALE		BLACK SHALE	1.3	343.2	
49.4	CARBONDALE	BRERETON	LIMESTONE	4.0	344.5	
45.4	CARBONDALE	HERRIN	COAL	5.5	348.5	
39.9	CARBONDALE		PYRITE	0.1	354.0	
39.8	CARBONDALE		UNDERCLAY	0.6	354.1	DARK
39.2	CARBONDALE		ARGILACEOUS SHALE	5.3	354.7	ARG
33.9	CARBONDALE		SHALE	8.0	360.0	SH WITH LS PARTINGS
25.9	CARBONDALE		SANDY SHALE	4.0	368.0	
21.9	CARBONDALE		SHALE	1.5	372.0	BLUE
20.4	CARBONDALE	BRIAR HILL	COAL	0.5	373.5	
19.9	CARBONDALE		BLACK SHALE	0.3	374.0	
19.6	CARBONDALE		SANDY CLAYSTONE	0.8	374.3	SANDY
18.8	CARBONDALE	DYKERSBURG	SHALE	1.4	375.1	BLUE
17.4	CARBONDALE	DYKERSBURG	SANDSTONE	27.5	376.5	
-10.1	CARBONDALE	DYKERSBURG	SANDSTONE	22.3	404.0	SS WITH SH PARTINGS
-32.4	CARBONDALE	DYKERSBURG	SANDY SHALE	56.3	426.3	
-88.6	CARBONDALE	SPRINGFIELD	COAL	8.1	482.5	
-96.7	CARBONDALE		UNDERCLAY	0.4	490.6	

MAPID: 16500029000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2380' N line, 1240' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.628455 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.834905 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 491.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
46.0	CARBONDALE	HERRIN	COAL	5.5	348.0	
21.0	CARBONDALE	BRIAR HILL	COAL	0.5	373.0	
-88.0	CARBONDALE	SPRINGFIELD	COAL	8.1	482.0	

MAPID: 16500550000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1000' N line, 660' W line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.62183 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.838637 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 517.0 **LOG TYPE:** Drillers Log

SOURCE: GALATIA COLLIERY **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	HERRIN	COAL	6.0	367.0	
30.0	CARBONDALE	BRIAR HILL	COAL	0.8	380.0	
-75.0	CARBONDALE	SPRINGFIELD	COAL	6.4	485.0	

MAPID: 16500551000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1200' N line, 1550' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.629526 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.838176 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 541.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: NEAR CENTER OF SW 1/4, 11-8S-5E

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	41.0	0.0	
369.0	MODESTO		SANDY SHALE	68.0	41.0	
301.0	MODESTO		COAL	1.3	109.0	
299.7	MODESTO		SANDSTONE	59.7	110.3	
240.0	MODESTO		SHALE	47.0	170.0	BLUE
193.0	MODESTO		COAL	0.3	217.0	
192.7	MODESTO		UNDERCLAY	2.0	217.3	
190.7	MODESTO		CALCAREOUS SHALE	7.0	219.3	CALC
183.7	MODESTO		SHALE	26.0	226.3	BLUE
157.7	MODESTO		COAL	0.5	252.3	
157.2	MODESTO		UNDERCLAY	4.0	252.8	
153.2	MODESTO		CALCAREOUS CLAYSTONE	6.0	256.8	CALC
147.2	MODESTO		SANDY SHALE	20.0	262.8	
127.2	MODESTO		SHALE	8.0	282.8	BLUE
119.2	MODESTO		BLACK SHALE	4.0	290.8	
115.2	MODESTO	PIASA	LIMESTONE	4.0	294.8	
111.2	MODESTO		SHALE	12.0	298.8	
99.2	CARBONDALE	DANVILLE	COAL	2.0	310.8	
97.2	CARBONDALE		ARGILACEOUS SHALE	22.0	312.8	ARG
75.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	334.8	
68.2	CARBONDALE		SHALE	4.0	341.8	A
64.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	30.0	345.8	
34.2	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	375.8	COAL STREAK AT BASE
26.2	CARBONDALE	BRERETON	LIMESTONE	9.0	383.8	
17.2	CARBONDALE		SHALE	2.0	392.8	
15.2	CARBONDALE	HERRIN	COAL	7.0	394.8	
8.2	CARBONDALE		UNDERCLAY	10.0	401.8	
-1.8	CARBONDALE		ARGILACEOUS SHALE	9.0	411.8	ARG
-10.8	CARBONDALE		SANDY SHALE	16.0	420.8	
-26.8	CARBONDALE	DYKERSBURG	SANDSTONE	38.0	436.8	
-64.8	CARBONDALE	DYKERSBURG	SHALE	18.0	474.8	
-82.8	CARBONDALE	DYKERSBURG	SANDY SHALE	24.0	492.8	
-106.8	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	516.8	
-113.8	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	523.8	
-125.8	CARBONDALE	SPRINGFIELD	COAL	6.0	535.8	

MAPID: 16500551000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1200' N line, 1550' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.629526 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.838176 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 542.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
16.0	CARBONDALE	HERRIN	COAL	7.0	394.0	
-125.0	CARBONDALE	SPRINGFIELD	COAL	6.0	535.0	

MAPID: 16500690000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.631234 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.83968 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 406.8 **LOGGED (FT.):** 530.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: SEE #16500551 (COMBINATION)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.8			UNCONSOLIDATED	38.0	0.0	
368.8	MODESTO		SHALE	27.0	38.0	BLUE
341.8	MODESTO		ARGILACEOUS SHALE	16.0	65.0	ARG
325.8	MODESTO		SHALE	1.0	81.0	
324.8	MODESTO		SHALE	19.0	82.0	BLUE
305.8	MODESTO		CALCAREOUS SHALE	10.0	101.0	CALC
295.8	MODESTO		SANDY SHALE	11.0	111.0	
284.8	MODESTO		SHALE	96.0	122.0	BLUE
188.8	MODESTO		CALCAREOUS SHALE	7.0	218.0	CALC
181.8	MODESTO		ARGILACEOUS SHALE	15.0	225.0	ARG
166.8	MODESTO		SHALE	2.0	240.0	
164.8	MODESTO		COAL	1.5	242.0	
163.3	MODESTO		UNDERCLAY	1.5	243.5	
161.8	MODESTO		CALCAREOUS SHALE	28.0	245.0	CALC
133.8	MODESTO		ARGILACEOUS SHALE	12.0	273.0	ARG
121.8	MODESTO	PIASA	LIMESTONE	4.0	285.0	
117.8	MODESTO		CLAYSTONE	2.0	289.0	
115.8	CARBONDALE		SHALE	32.0	291.0	
83.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	323.0	
76.8	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	28.0	330.0	ARG
48.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	358.0	
37.8	CARBONDALE		SHALE	2.0	369.0	DARK
35.8	CARBONDALE	JAMESTOWN	COAL	1.0	371.0	
34.8	CARBONDALE		ARGILACEOUS SHALE	8.0	372.0	ARG
26.8	CARBONDALE	HERRIN	COAL	4.0	380.0	
22.8	CARBONDALE		ARGILACEOUS SHALE	36.0	384.0	ARG
-13.2	CARBONDALE		SANDY SHALE	25.0	420.0	
-38.2	CARBONDALE		SANDSTONE	22.0	445.0	
-60.2	CARBONDALE		SHALE	13.0	467.0	
-73.2	CARBONDALE		LIMESTONE	4.0	480.0	
-77.2	CARBONDALE	DYKERSBURG	SHALE	31.0	484.0	
-108.2	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	5.0	515.0	ARG
-113.2	CARBONDALE	DYKERSBURG	SHALE	3.0	520.0	
-116.2	CARBONDALE	SPRINGFIELD	COAL	6.0	523.0	
-122.2	CARBONDALE		UNDERCLAY	1.0	529.0	

MAPID: 16500690000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.631234 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.83968 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 530.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
27.0	CARBONDALE	HERRIN	COAL	4.0	380.0	
-116.0	CARBONDALE	SPRINGFIELD	COAL	6.0	523.0	

MAPID: 16502950000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 250' N line, 330' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.632453 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840832 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	382.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1796.0			LIMESTONE	-	2204.0	
-2204.0		BASE BARLOW	LIMESTONE	-	2612.0	

MAPID: 16503038000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618204 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.847661 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 703.0 **LOG TYPE:** Electric Log
SOURCE: INGLIS, JACK OIL PROP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
23.0	CARBONDALE	HERRIN	COAL	5.0	378.0	
-99.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	500.0	CHANNEL - COAL MISSING
-179.0	CARBONDALE	HOUCHIN CREEK	COAL	-	580.0	
-302.0	CARBONDALE	COLCHESTER	COAL	-	703.0	

MAPID: 16503038000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618204 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847661 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:**
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	370.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1814.0			LIMESTONE	-	2215.0	
-2233.0		BASE BARLOW	LIMESTONE	-	2634.0	

MAPID: 16503071000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615765 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.845837 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2629.0 **LOG TYPE:**
SOURCE: INGLIS, JACK OIL PROP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
41.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1799.0			LIMESTONE	-	2200.0	
-2228.0		BASE BARLOW	LIMESTONE	-	2629.0	

MAPID: 16503081000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625249 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.847798 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 1685.0 **LOG TYPE:** Electric Log
SOURCE: SLAPE, DON DRILLING **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-287.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	718.0	
-361.0	SPOON	DAVIS	UNCLASSIFIED	-	792.0	
-1254.0	BASE OF PENN.		UNCLASSIFIED	-	1685.0	

MAPID: 16503081000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625249 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847798 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2658.0 **LOG TYPE:**
SOURCE: SLAPE, DON DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
17.0	CARBONDALE	BRERETON	LIMESTONE	-	414.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1841.0	
-1812.0			LIMESTONE	-	2243.0	
-2227.0		BASE BARLOW	LIMESTONE	-	2658.0	

MAPID: 16503081000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625249 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.847798 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 718.0 **LOG TYPE:** Electric Log
SOURCE: SLAPE, DON DRILLING 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	HERRIN	COAL	-	428.0	
-110.0	CARBONDALE	SPRINGFIELD	COAL	9.0	541.0	
-168.0	CARBONDALE	HOUCHIN CREEK	COAL	-	599.0	
-287.0	CARBONDALE	COLCHESTER	COAL	-	718.0	

MAPID: 16503092000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620501 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.847707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 699.0 **LOG TYPE:** Electric Log
SOURCE: SCHLAFLY H J ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
22.0	CARBONDALE	HERRIN	COAL	-	378.0	
-130.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	530.0	CHANNEL - COAL MISSING
-186.0	CARBONDALE	HOUCHIN CREEK	COAL	-	586.0	
-299.0	CARBONDALE	COLCHESTER	COAL	-	699.0	

MAPID: 16503092000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620501 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2630.0 **LOG TYPE:**
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	369.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1820.0			LIMESTONE	-	2220.0	
-2230.0		BASE BARLOW	LIMESTONE	-	2630.0	

MAPID: 16503122000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620518 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.84409 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2618.0 **LOG TYPE:**
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
47.0	CARBONDALE	BRERETON	LIMESTONE	-	358.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1796.0			LIMESTONE	-	2201.0	
-2213.0		BASE BARLOW	LIMESTONE	-	2618.0	

MAPID: 16503122000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620518 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.84409 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	HERRIN	COAL	5.0	365.0	
18.0	CARBONDALE	BRIAR HILL	COAL	-	387.0	

MAPID: 16525741000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.618242 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.838623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 450.0 **LOG TYPE:** Nuclear Log

SOURCE: FINITE RESOURCES, LTD. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
69.5	CARBONDALE	HERRIN	COAL	5.0	329.5	
-51.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	450.0	CHANNEL - COAL MISSING

MAPID: 16523938000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.601931 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.846834 **DATE COLLECTED:** 4 / 26 / 1976

SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 576.5 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 85-12-1 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			CLAY	42.5	0.0	BROWN GLACIAL CLAY
409.5			CLAY	19.5	42.5	GRAY GLACIAL CLAY
390.0			GRAY SHALE	9.5	62.0	
380.5			DARK SHALE	0.5	71.5	
380.0			SILTY SHALE	14.5	72.0	
365.5			SANDY SHALE	19.5	86.5	SDY SH W/ SS SEAMS
346.0			SANDY SHALE	53.0	106.0	
293.0			SILTY SHALE	11.0	159.0	
282.0	MODESTO		SILTY SHALE	14.5	170.0	
267.5	MODESTO	CHAPEL	BONE COAL	1.0	184.5	
266.5	MODESTO		SHALE	5.0	185.5	SH W/ SS
261.5	MODESTO		SANDSTONE	45.0	190.5	
216.5	MODESTO		SILTY SHALE	4.5	235.5	
212.0	MODESTO		SANDY SHALE	23.0	240.0	
189.0	MODESTO		SILTY SHALE	20.0	263.0	
169.0	MODESTO		SHALE	13.0	283.0	SH W/ SS SEAMS
156.0	MODESTO		GRAY SHALE	15.0	296.0	
141.0	MODESTO	POND CREEK	COAL	1.0	311.0	
140.0	MODESTO		GRAY SHALE	4.0	312.0	
136.0	MODESTO		LIMESTONE	0.5	316.0	
135.5	MODESTO		SANDSTONE	18.5	316.5	
117.0	MODESTO		SANDY SHALE	17.5	335.0	
99.5	MODESTO	PIASA	LIMESTONE	2.5	352.5	
97.0	MODESTO		SILTY SHALE	12.0	355.0	
85.0	MODESTO		SANDY SHALE	22.5	367.0	SDY SH W/ SS
62.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	389.5	
59.0	CARBONDALE	ANVIL ROCK	SANDSTONE	42.0	393.0	
17.0	CARBONDALE		SILTY SHALE	6.5	435.0	DARK SILTY SHALE
10.5	CARBONDALE	BRERETON	LIMESTONE	3.9	441.5	
6.6	CARBONDALE	ANNA	BLACK SHALE	2.2	445.4	
4.4	CARBONDALE		CARBONACEOUS SHALE	0.2	447.6	
4.2	CARBONDALE	HERRIN	COAL	5.4	447.8	
-1.2	CARBONDALE		SHALE	1.9	453.2	
-3.0	CARBONDALE		UNCLASSIFIED	1.3	455.0	CORE LOSS IN CLAY SHALE
-4.3	CARBONDALE		GRAY SHALE	0.2	456.3	
-4.5	CARBONDALE		SILTY SHALE	1.5	456.5	
-6.0	CARBONDALE		SILTSTONE	6.1	458.0	
-12.1	CARBONDALE		SILTY SHALE	7.4	464.1	
-19.5	CARBONDALE	BRIAR HILL	COAL	1.0	471.5	

-20.5	CARBONDALE	DYKERSBURG	SANDY SHALE	77.0	472.5	SDY SH W/ SS SEAMS
-97.5	CARBONDALE	SPRINGFIELD	COAL	0.5	549.5	
-98.0	CARBONDALE	SPRINGFIELD	COAL	5.2	550.0	
-103.2	CARBONDALE		SILTY SHALE	6.5	555.2	SLT SH W/ COAL SEAMS
-109.6	CARBONDALE		SILTY SHALE	2.8	561.6	
-112.4	CARBONDALE		SANDY SHALE	12.1	564.4	

MAPID: 16502638000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.604456 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820408 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:** Electric Log

SOURCE: FIRST NAT'L. PETRO., THEI S LOUELLA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	475.0	
-132.0	CARBONDALE	SURVANT	COAL	0.6	510.0	
-208.0	CARBONDALE	COLCHESTER	COAL	0.6	586.0	
-251.0	CARBONDALE	DEKOVEN	COAL	2.0	629.0	
-272.0	CARBONDALE	LOWER DEKOVEN	COAL	0.6	650.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	5.0	657.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-335.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	713.0	
-372.0	TRADEWATER	MT. RORAH	COAL	2.0	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502638000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.604456 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.820408 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**

SOURCE: FIRST NAT'L. PETRO., THE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1346.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1722.0			LIMESTONE	-	2120.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502940000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613549 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82954 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., TUTTLE ROBT C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-152.0	CARBONDALE	SURVANT	COAL	1.3	565.0	
-227.0	CARBONDALE	COLCHESTER	COAL	0.6	640.0	
-268.0	CARBONDALE	DEKOVEN	COAL	3.0	681.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	702.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-301.0	CARBONDALE	DAVIS	COAL	5.0	714.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	749.0	
-369.0	TRADEWATER	MT. RORAH	COAL	1.8	782.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502940000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613549 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	BRERETON	LIMESTONE	-	324.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1746.0			LIMESTONE	-	2159.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502940000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613549 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.82954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 639.0 **LOG TYPE:** Electric Log
SOURCE: E. F. MORAN, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	HERRIN	COAL	-	341.0	
-47.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	460.0	CHANNEL - COAL MISSING
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	-	500.0	
-226.0	CARBONDALE	COLCHESTER	COAL	-	639.0	

MAPID: 16503460000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3009.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	HERRIN	COAL	4.0	290.0	
71.0	CARBONDALE	BRIAR HILL	COAL	-	310.0	

MAPID: 16503460000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 294.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	MODESTO	PIASA	LIMESTONE	3.0	190.0	
188.0	MODESTO		SHALE	10.0	193.0	
178.0	CARBONDALE	DANVILLE	COAL	1.0	203.0	
177.0	CARBONDALE		SHALE & SANDSTONE	25.0	204.0	
152.0	CARBONDALE	LAWSON	SHALE	34.0	229.0	
118.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	20.0	263.0	
98.0	CARBONDALE	BRERETON	LIMESTONE	7.0	283.0	
91.0	CARBONDALE	HERRIN	COAL	4.0	290.0	

MAPID: 16503460000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	282.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1732.0	
-1741.0			LIMESTONE	-	2122.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16503460000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:** 7 / 0 / 1963
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	580.0	
-269.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1219.0	BASE OF PENN.		UNCLASSIFIED	-	1600.0	

MAPID: 16503460000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:** 7 / 0 / 1963
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 294.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, TUTTLE R C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.0	CARBONDALE	SURVANT	COAL	1.3	508.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-237.0	CARBONDALE	DEKOVEN	COAL	1.5	618.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	644.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-270.0	CARBONDALE	DAVIS	COAL	4.0	651.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-364.0	TRADEWATER	MT. RORAH	COAL	1.6	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503460000C **VERSION:** 6 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611275 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.824042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 581.0 **LOG TYPE:** Electric Log
SOURCE: H. E. HOWARD & J. V. HOWELL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	HERRIN	COAL	-	289.0	
-29.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	
-200.0	CARBONDALE	COLCHESTER	COAL	-	581.0	

MAPID: 16524102000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604479 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.829494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 465.0 **LOG TYPE:** Electric Log
SOURCE: ILLINI DRILLING CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
54.0	CARBONDALE	HERRIN	COAL	-	340.0	
27.0	CARBONDALE	BRIAR HILL	COAL	-	367.0	
-65.0	CARBONDALE	SPRINGFIELD	COAL	6.0	459.0	

MAPID: 16501519000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.625291 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.825947 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	BRERETON	LIMESTONE	-	282.0	
-1352.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1738.0	
-1754.0			LIMESTONE	-	2140.0	
-2171.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16501519000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.625291 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.825947 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	DANVILLE	COAL	-	211.0	
166.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	11.0	220.0	
146.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	240.0	
128.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	12.0	258.0	
96.0	CARBONDALE	HERRIN	COAL	4.0	290.0	
74.0	CARBONDALE	BRIAR HILL	COAL	-	312.0	
62.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	22.0	324.0	
-22.0	CARBONDALE	SPRINGFIELD	COAL	8.0	408.0	
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	-	446.0	

MAPID: 16501519000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.625291 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.825947 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 584.0 **LOG TYPE:** Electric Log

SOURCE: NATIONAL ASSOC. PETROLEUM CO. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
96.0	CARBONDALE	HERRIN	COAL	4.5	290.0	
70.0	CARBONDALE	BRIAR HILL	COAL	-	316.0	
-22.0	CARBONDALE	SPRINGFIELD	COAL	9.0	408.0	
-198.0	CARBONDALE	COLCHESTER	COAL	-	584.0	

MAPID: 16502899000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.632411 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.822344 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**

SOURCE: LAUDERDALE OIL PROP **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1321.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1702.0	
-1755.0			LIMESTONE	-	2136.0	
-2151.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502899000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.632411 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.822344 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 289.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
194.0	MODESTO	PIASA	LIMESTONE & SHALE	6.0	187.0	
188.0	MODESTO		SHALE	7.0	193.0	
181.0	CARBONDALE	DANVILLE	COAL	1.0	200.0	
180.0	CARBONDALE		SHALE	19.0	201.0	
161.0	CARBONDALE	ALLENBY	COAL	0.5	220.0	
160.5	CARBONDALE		CLAYSTONE & SHALE	5.5	220.5	
155.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	226.0	
148.0	CARBONDALE	LAWSON	SHALE	14.0	233.0	
134.0	CARBONDALE	LAWSON	SANDSTONE	30.0	247.0	
104.0	CARBONDALE	BRERETON	LIMESTONE	6.5	277.0	
97.5	CARBONDALE	ANNA	BLACK SHALE	0.5	283.5	
97.0	CARBONDALE	HERRIN	COAL	5.0	284.0	

MAPID: 16502899000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.632411 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822344 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 289.0 **LOG TYPE:** Electric Log
SOURCE: LAUDERDALE OIL PROP, BONA COMM "A" **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	460.0	
-119.0	CARBONDALE	SURVANT	COAL	1.3	500.0	
-189.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	615.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	635.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-299.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	
-334.0	TRADEWATER	MT. RORAH	COAL	1.3	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502922000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.632405 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820516 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:** Electric Log
SOURCE: LAUDERDALE OIL PROP, BONA COMM "A" **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-78.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	460.0	
-114.0	CARBONDALE	SURVANT	COAL	1.0	496.0	
-183.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-228.0	CARBONDALE	DEKOVEN	COAL	3.3	610.0	
-248.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	630.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-258.0	CARBONDALE	DAVIS	COAL	4.5	640.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	
-336.0	TRADEWATER	MT. RORAH	COAL	1.0	718.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502922000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.632405 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820516 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: LAUDERDALE OIL PROP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	BRERETON	LIMESTONE	-	272.0	
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1705.0	
-1750.0			LIMESTONE	-	2132.0	
-2153.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16502980000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622996 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.824099 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1575.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-189.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	570.0	
-269.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1194.0	BASE OF PENN.		UNCLASSIFIED	-	1575.0	

MAPID: 16502980000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622996 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824099 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRERETON	LIMESTONE	-	261.0	
-1338.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1719.0	
-1732.0			LIMESTONE	-	2113.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502980000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622996 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824099 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BENNETT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-101.0	CARBONDALE	HOUCHIN CREEK	COAL	0.6	482.0	
-151.0	CARBONDALE	SURVANT	COAL	0.5	532.0	
-189.0	CARBONDALE	COLCHESTER	COAL	0.6	570.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	635.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	5.0	645.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	682.0	
-344.0	TRADEWATER	MT. RORAH	COAL	1.5	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502980000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622996 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.824099 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 570.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	HERRIN	COAL	-	276.0	
88.0	CARBONDALE	BRIAR HILL	COAL	-	293.0	
-2.0	CARBONDALE	SPRINGFIELD	COAL	8.0	383.0	
-189.0	CARBONDALE	COLCHESTER	COAL	-	570.0	

MAPID: 16503351000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.61829 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820405 **DATE COLLECTED:** 4 / 0 / 1961
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log
SOURCE: GENTLES, ALBERT, GRIFFIN HEIRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	SURVANT	COAL	1.8	510.0	
-202.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	612.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	637.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	1.5	645.0	
-308.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	686.0	
-314.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	692.0	
-347.0	TRADEWATER	MT. RORAH	COAL	1.0	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503351000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.61829 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
128.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1339.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1717.0	
-1731.0			LIMESTONE	-	2109.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16503351000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.61829 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820405 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 580.0 **LOG TYPE:** Electric Log
SOURCE: ALBERT GENTLES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	HERRIN	COAL	-	255.0	
98.0	CARBONDALE	BRIAR HILL	COAL	-	280.0	
28.0	CARBONDALE	SPRINGFIELD	SILTSTONE/SANDSTONE	0.0	350.0	CHANNEL - COAL MISSING
-202.0	CARBONDALE	COLCHESTER	COAL	-	580.0	

MAPID: 16523902000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 660' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.621847 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820433 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 569.0 **LOG TYPE:** Electric Log
SOURCE: DUKE RESOURCES CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	HERRIN	COAL	-	269.0	
-10.0	CARBONDALE	SPRINGFIELD	COAL	6.0	394.0	
-185.0	CARBONDALE	COLCHESTER	COAL	-	569.0	

MAPID: 16525536000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627587 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.83327 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 468.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	HERRIN	COAL	4.0	328.0	
-65.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	460.0	

MAPID: 16502424000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.640408 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.821465 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**

SOURCE: TAYLOR IKE W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1337.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1767.0			LIMESTONE	-	2150.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16502796000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.65061 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829677 **DATE COLLECTED:** 1 / 0 / 1956

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:** Electric Log

SOURCE: WDWAY STRS-DELWD OIL, LEWIS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	502.0	
-157.0	CARBONDALE	SURVANT	COAL	1.0	542.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-270.0	CARBONDALE	DEKOVEN	COAL	0.5	655.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	671.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-297.0	CARBONDALE	DAVIS	COAL	5.5	682.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	723.0	
-375.0	TRADEWATER	MT. RORAH	COAL	1.5	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502796000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.65061 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.829677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**

SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1762.0	
-1778.0			LIMESTONE	-	2163.0	
-2185.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502808000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.650606 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831499 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log

SOURCE: PORTIS, R. W. DRLG., HEFLIN CLAUDE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	512.0	
-164.0	CARBONDALE	SURVANT	COAL	0.5	551.0	
-238.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-283.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-303.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	690.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-313.0	CARBONDALE	DAVIS	COAL	5.0	700.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	732.0	
-383.0	TRADEWATER	MT. RORAH	COAL	1.0	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502808000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.650606 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831499 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1761.0	
-1773.0			LIMESTONE	-	2160.0	
-2181.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502809000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.648365 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827861 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: DELWOOD OIL CO, LEWIS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	505.0	
-162.0	CARBONDALE	SURVANT	COAL	1.0	548.0	
-228.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-274.0	CARBONDALE	DEKOVEN	COAL	1.5	660.0	
-292.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	678.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-300.0	CARBONDALE	DAVIS	COAL	4.0	686.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-383.0	TRADEWATER	MT. RORAH	COAL	1.0	769.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502809000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.648365 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827861 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: DELWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1747.0	
-1774.0			LIMESTONE	-	2160.0	
-2182.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502818000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.641539 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831481 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 12.5 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBBER HEIRS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-110.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	502.0	
-158.0	CARBONDALE	SURVANT	COAL	1.3	550.0	
-220.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-283.0	CARBONDALE	DEKOVEN	COAL	2.5	675.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	690.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-303.0	CARBONDALE	DAVIS	COAL	4.5	695.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	
-352.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	744.0	
-383.0	TRADEWATER	MT. RORAH	COAL	1.3	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502900000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636966 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.822364 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1556.0 **LOG TYPE:** Electric Log
SOURCE: LAUDERDALE OIL PROP **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	572.0	
-268.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1174.0	BASE OF PENN.		UNCLASSIFIED	-	1556.0	

MAPID: 16502900000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636966 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: LAUDERDALE OIL PROP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1317.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1699.0	
-1750.0			LIMESTONE	-	2132.0	
-2149.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502900000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636966 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822364 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:** Electric Log
SOURCE: LAUDERDALE OIL PROP, BONA COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	465.0	
-123.0	CARBONDALE	SURVANT	COAL	2.5	505.0	
-190.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-237.0	CARBONDALE	DEKOVEN	COAL	3.0	619.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	635.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	4.0	647.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	693.0	
-316.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	698.0	
-348.0	TRADEWATER	MT. RORAH	COAL	1.0	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502908000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.641527 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	317.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1756.0	
-1781.0			LIMESTONE	-	2176.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2584.0	

MAPID: 16502909000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643825 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831487 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log
SOURCE: DELWOOD OIL CO, HEFLIN DELWOOD 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	508.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	546.0	
-226.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-266.0	CARBONDALE	DEKOVEN	COAL	4.0	660.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	685.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-300.0	CARBONDALE	DAVIS	COAL	5.0	694.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	739.0	
-386.0	TRADEWATER	MT. RORAH	COAL	1.5	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502909000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643825 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831487 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: DELWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	BRERETON	LIMESTONE	-	313.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1785.0			LIMESTONE	-	2179.0	
-2186.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16502910000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.64382 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827849 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2583.0 **LOG TYPE:**
SOURCE: DELWD OIL-WDWAY STRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1793.0			LIMESTONE	-	2186.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2583.0	

MAPID: 16502916000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.641525 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829662 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBBER HEIRS 5 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	499.0	
-154.0	CARBONDALE	SURVANT	COAL	1.0	540.0	
-224.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	653.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	675.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-298.0	CARBONDALE	DAVIS	COAL	3.5	684.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	
-382.0	TRADEWATER	MT. RORAH	COAL	1.3	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502916000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.641525 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829662 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1354.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1777.0			LIMESTONE	-	2163.0	
-2186.0		BASE BARLOW	LIMESTONE	-	2572.0	

MAPID: 16502918000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646067 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83149 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: DELWD OIL-WDWAY STRS, HEFLIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-131.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	512.0	
-162.0	CARBONDALE	SURVANT	COAL	1.5	543.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	611.0	
-274.0	CARBONDALE	DEKOVEN	COAL	2.5	655.0	
-296.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	677.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	
-383.0	TRADEWATER	MT. RORAH	COAL	1.3	764.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502918000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646067 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83149 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: DELWD OIL-WDWAY STRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
75.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1782.0			LIMESTONE	-	2167.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502919000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646066 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833307 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: DELWD OIL-WDWAY STRS, HEFLIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	512.0	
-161.0	CARBONDALE	SURVANT	COAL	1.5	550.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	622.0	
-276.0	CARBONDALE	DEKOVEN	COAL	4.0	665.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	688.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-309.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	742.0	
-357.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	746.0	
-394.0	TRADEWATER	MT. RORAH	COAL	1.8	783.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502919000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.646066 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833307 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: DELWD OIL-WDWAY STRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	316.0	
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1802.0			LIMESTONE	-	2191.0	
-2197.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16502920000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643823 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829665 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1787.0			LIMESTONE	-	2170.0	
-2196.0		BASE BARLOW	LIMESTONE	-	2579.0	

MAPID: 16502920000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643823 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.829665 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2988.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	HERRIN	COAL	5.0	320.0	
-42.0	CARBONDALE	SPRINGFIELD	COAL	3.0	425.0	
-115.0	CARBONDALE	HOUCHIN CREEK	COAL	-	498.0	

MAPID: 16502920000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643823 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829665 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL, LEWIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	503.0	
-162.0	CARBONDALE	SURVANT	COAL	1.2	545.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-276.0	CARBONDALE	DEKOVEN	COAL	2.0	659.0	
-297.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	680.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-307.0	CARBONDALE	DAVIS	COAL	4.0	690.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	728.0	
-347.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	730.0	
-385.0	TRADEWATER	MT. RORAH	COAL	2.0	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502925000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.639263 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82237 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., WEBBER HEIRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	473.0	
-130.0	CARBONDALE	SURVANT	COAL	1.5	512.0	
-198.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-240.0	CARBONDALE	DEKOVEN	COAL	2.5	622.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	643.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-271.0	CARBONDALE	DAVIS	COAL	4.0	653.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-353.0	TRADEWATER	MT. RORAH	COAL	1.5	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502925000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.639263 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82237 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	BRERETON	LIMESTONE	-	282.0	
-1332.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1714.0	
-1770.0			LIMESTONE	-	2152.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502937000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636969 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824186 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES, H. V. & DUNCAN,W, PHELPS MARY ET **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	472.0	
-129.0	CARBONDALE	SURVANT	COAL	2.0	510.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-247.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	650.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	5.0	660.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-354.0	TRADEWATER	MT. RORAH	COAL	0.5	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502937000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.636969 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824186 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: SPIRES, H. V. & DUNCAN,W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1324.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1705.0	
-1755.0			LIMESTONE	-	2136.0	
-2153.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502941000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.648364 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83331 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2591.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	512.0	
-162.0	CARBONDALE	SURVANT	COAL	0.5	551.0	
-235.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-278.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-297.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	686.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-307.0	CARBONDALE	DAVIS	COAL	5.0	696.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	739.0	
-353.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	742.0	
-394.0	TRADEWATER	MT. RORAH	COAL	1.0	783.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502941000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.648364 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83331 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2591.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	316.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1779.0	
-1793.0			LIMESTONE	-	2182.0	
-2202.0		BASE BARLOW	LIMESTONE	-	2591.0	

MAPID: 16502944000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.639289 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8333 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WEBBER HEIRS 4 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	517.0	
-155.0	CARBONDALE	SURVANT	COAL	2.0	555.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-272.0	CARBONDALE	DEKOVEN	COAL	3.0	672.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	694.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	4.0	704.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	742.0	
-385.0	TRADEWATER	MT. RORAH	COAL	0.8	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502944000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.639289 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
75.0	CARBONDALE	BRERETON	LIMESTONE	-	325.0	
-1342.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1776.0			LIMESTONE	-	2176.0	
-2181.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16502960000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650625 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82423 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1350.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1732.0	
-1768.0			LIMESTONE	-	2150.0	
-2186.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502961000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650621 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826044 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL, LEWIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-180.0	CARBONDALE	SURVANT	COAL	2.5	565.0	
-243.0	CARBONDALE	COLCHESTER	COAL	0.5	628.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	675.0	
-307.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	692.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-315.0	CARBONDALE	DAVIS	COAL	4.5	700.0	
-364.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	749.0	
-367.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	752.0	
-410.0	TRADEWATER	MT. RORAH	COAL	2.5	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502961000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650621 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1738.0	
-1775.0			LIMESTONE	-	2160.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502995000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648369 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826039 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL, LEWIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	500.0	
-166.0	CARBONDALE	SURVANT	COAL	3.5	546.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-273.0	CARBONDALE	DEKOVEN	COAL	2.0	653.0	
-292.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	672.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-300.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	722.0	
-380.0	TRADEWATER	MT. RORAH	COAL	1.5	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502995000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.648369 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826039 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1359.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1739.0	
-1779.0			LIMESTONE	-	2159.0	
-2185.0		BASE BARLOW	LIMESTONE	-	2565.0	

MAPID: 16503014000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643815 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822385 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:**
SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1739.0	
-1766.0			LIMESTONE	-	2150.0	
-2175.0		BASE BARLOW	LIMESTONE	-	2559.0	

MAPID: 16503014000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643815 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.822385 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
179.0	MODESTO	PIASA	LIMESTONE	5.0	205.0	
174.0	MODESTO		SHALE	9.0	210.0	
165.0	CARBONDALE	DANVILLE	COAL	1.0	219.0	
164.0	CARBONDALE		SILTY SHALE	15.0	220.0	
149.0	CARBONDALE	ALLENBY	BONE COAL	0.5	235.0	
148.5	CARBONDALE		CLAYSTONE & SHALE	5.5	235.5	
143.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	241.0	
139.0	CARBONDALE	LAWSON	SHALE	30.0	245.0	
109.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	11.0	275.0	
98.0	CARBONDALE	BRERETON	LIMESTONE	10.0	286.0	
88.0	CARBONDALE	ANNA	BLACK SHALE	4.0	296.0	
84.0	CARBONDALE	HERRIN	COAL	5.0	300.0	

MAPID: 16503014000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643815 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822385 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE & LOBREE LISZ, HARRIS HEIRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-137.0	CARBONDALE	SURVANT	COAL	1.3	521.0	
-203.0	CARBONDALE	COLCHESTER	COAL	0.5	587.0	
-246.0	CARBONDALE	DEKOVEN	COAL	0.5	630.0	
-266.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	650.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-277.0	CARBONDALE	DAVIS	COAL	5.0	661.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	702.0	
-356.0	TRADEWATER	MT. RORAH	COAL	0.5	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503022000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.650602 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83331 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1762.0	
-1783.0			LIMESTONE	-	2170.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16503095000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.636992 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8333 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:** Electric Log
SOURCE: FERRALL, T. A., WEBBER HEIRS 1-B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	516.0	
-158.0	CARBONDALE	SURVANT	COAL	1.5	555.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-276.0	CARBONDALE	DEKOVEN	COAL	2.5	673.0	
-297.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	694.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-306.0	CARBONDALE	DAVIS	COAL	3.3	703.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	745.0	
-353.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	750.0	
-388.0	TRADEWATER	MT. RORAH	COAL	1.3	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503095000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.636992 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:**
SOURCE: FERRALL, T. A. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1343.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1779.0			LIMESTONE	-	2176.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2575.0	

MAPID: 16503233000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.636977 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	BRERETON	LIMESTONE	-	294.0	
-1329.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	
-1753.0			LIMESTONE	-	2142.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16503588000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.650614 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827866 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	BRERETON	LIMESTONE	-	325.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1749.0	
-1778.0			LIMESTONE	-	2158.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502800000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652907 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829689 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL, RYAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	510.0	
-168.0	CARBONDALE	SURVANT	COAL	1.3	553.0	
-237.0	CARBONDALE	COLCHESTER	COAL	0.5	622.0	
-285.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-300.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	685.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-308.0	CARBONDALE	DAVIS	COAL	4.0	693.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	738.0	
-357.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	742.0	
-395.0	TRADEWATER	MT. RORAH	COAL	2.0	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502800000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652907 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829689 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 485.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
153.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1272.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1678.0			LIMESTONE	-	2163.0	
-2091.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502819000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652903 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831511 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
45.0	CARBONDALE	BRERETON	LIMESTONE	-	342.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1761.0	
-1773.0			LIMESTONE	-	2160.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502820000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657483 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83155 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log
SOURCE: FOX LONNIE JR, GOGUE MAE ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-186.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	641.0	
-305.0	CARBONDALE	DEKOVEN	COAL	4.5	689.0	
-316.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	700.0	
-327.0	CARBONDALE	DAVIS	COAL	4.5	711.0	
-356.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	
-362.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	746.0	
-400.0	TRADEWATER	MT. RORAH	COAL	2.0	784.0	

MAPID: 16502820000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657483 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83155 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: FOX LONNIE JR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1780.0			LIMESTONE	-	2164.0	
-2196.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16502823000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.655193 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.829708 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1629.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-241.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	628.0	
-311.0	SPOON	DAVIS	UNCLASSIFIED	-	698.0	
-1242.0	BASE OF PENN.		UNCLASSIFIED	-	1629.0	

MAPID: 16502823000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.655193 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829708 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1758.0	
-1779.0			LIMESTONE	-	2166.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502823000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.655193 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829708 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., BAKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-173.0	CARBONDALE	SURVANT	COAL	1.0	560.0	
-238.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-287.0	CARBONDALE	DEKOVEN	COAL	5.0	674.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	685.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-309.0	CARBONDALE	DAVIS	COAL	4.0	696.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	739.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	743.0	
-397.0	TRADEWATER	MT. RORAH	COAL	3.0	784.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502902000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.655191 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831669 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., NOBLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	516.0	
-172.0	CARBONDALE	SURVANT	COAL	1.0	560.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-292.0	CARBONDALE	DEKOVEN	COAL	3.3	680.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	692.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-315.0	CARBONDALE	DAVIS	COAL	5.0	703.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	738.0	
-352.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	740.0	
-392.0	TRADEWATER	MT. RORAH	COAL	2.5	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502902000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.655191 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831669 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
34.0	CARBONDALE	BRERETON	LIMESTONE	-	354.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1778.0			LIMESTONE	-	2166.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502903000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.652899 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833325 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., NOBLE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	518.0	
-171.0	CARBONDALE	SURVANT	COAL	1.5	559.0	
-241.0	CARBONDALE	COLCHESTER	COAL	0.5	629.0	
-286.0	CARBONDALE	DEKOVEN	COAL	3.0	674.0	
-300.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	688.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-310.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	739.0	
-354.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	742.0	
-492.0	TRADEWATER	MT. RORAH	COAL	0.8	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502903000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.652899 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833325 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1784.0			LIMESTONE	-	2172.0	
-2192.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16502917000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.652911 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827875 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2574.0 **LOG TYPE:** Electric Log
SOURCE: WDWAY STRS-DELWD OIL, RYAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	518.0	
-181.0	CARBONDALE	SURVANT	COAL	1.3	560.0	
-251.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-299.0	CARBONDALE	DEKOVEN	COAL	3.0	678.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	692.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-323.0	CARBONDALE	DAVIS	COAL	4.0	702.0	
-370.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	749.0	
-372.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	751.0	
-413.0	TRADEWATER	MT. RORAH	COAL	3.0	792.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502917000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652911 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.827875 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2574.0 **LOG TYPE:**

SOURCE: WDWAY STRS-DELWD OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1754.0	
-1773.0			LIMESTONE	-	2152.0	
-2195.0		BASE BARLOW	LIMESTONE	-	2574.0	

MAPID: 16502921000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.65518 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.827892 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.0	CARBONDALE	BRERETON	LIMESTONE	-	326.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1756.0	
-1768.0			LIMESTONE	-	2154.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502921000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.65518 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.827892 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 338.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	MODESTO	PIASA	LIMESTONE	5.0	230.0	
151.0	MODESTO		SHALE	8.0	235.0	
143.0	CARBONDALE	DANVILLE	COAL	1.0	243.0	
142.0	CARBONDALE		SHALE & SANDSTONE	16.0	244.0	
126.0	CARBONDALE	ALLENBY	COAL	0.5	260.0	
125.5	CARBONDALE		CLAYSTONE & SHALE	9.5	260.5	
116.0	CARBONDALE	LAWSON	SHALE	21.0	270.0	
95.0	CARBONDALE	LAWSON	SANDSTONE	35.0	291.0	
60.0	CARBONDALE	JAMESTOWN	COAL	0.5	326.0	
59.5	CARBONDALE		SHALE	3.5	326.5	
56.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	330.0	
54.0	CARBONDALE	ANNA	BLACK SHALE	1.0	332.0	
53.0	CARBONDALE	HERRIN	COAL	5.0	333.0	

MAPID: 16502921000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.65518 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.827892 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 338.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., BAKER "H" **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	520.0	
-179.0	CARBONDALE	SURVANT	COAL	1.0	565.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-299.0	CARBONDALE	DEKOVEN	COAL	3.5	685.0	
-314.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	700.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-324.0	CARBONDALE	DAVIS	COAL	4.5	710.0	
-366.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	752.0	
-371.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	757.0	
-409.0	TRADEWATER	MT. RORAH	COAL	3.0	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502923000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.655177 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82607 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., BAKER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	528.0	
-188.0	CARBONDALE	SURVANT	COAL	1.5	575.0	
-260.0	CARBONDALE	COLCHESTER	COAL	0.5	647.0	
-305.0	CARBONDALE	DEKOVEN	COAL	3.3	692.0	
-318.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	705.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-327.0	CARBONDALE	DAVIS	COAL	4.5	714.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	759.0	
-375.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	762.0	
-421.0	TRADEWATER	MT. RORAH	COAL	1.8	808.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502923000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.655177 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82607 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1761.0	
-1767.0			LIMESTONE	-	2154.0	
-2192.0		BASE BARLOW	LIMESTONE	-	2579.0	

MAPID: 16502927000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657467 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824264 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, MARBLE ADELAIDE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	515.0	
-179.0	CARBONDALE	SURVANT	COAL	2.0	567.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-294.0	CARBONDALE	DEKOVEN	COAL	4.0	682.0	
-402.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	790.0	
-412.0	CARBONDALE	DAVIS	COAL	4.5	800.0	
-481.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	869.0	
-489.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	877.0	
-527.8	TRADEWATER	MT. RORAH	COAL	1.3	915.8	

MAPID: 16502927000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657467 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824264 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1762.0			LIMESTONE	-	2150.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2578.0	

MAPID: 16502931000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657493 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83337 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:** Electric Log
SOURCE: STRICKLAND, FRANK L., MENKOSKY J L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-147.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	530.0	
-191.0	CARBONDALE	SURVANT	COAL	1.5	574.0	
-266.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-306.0	CARBONDALE	DEKOVEN	COAL	3.0	689.0	
-321.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	704.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	4.5	713.0	
-367.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-372.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	755.0	
-412.0	TRADEWATER	MT. RORAH	COAL	2.5	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502931000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657493 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83337 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: STRICKLAND, FRANK L. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
27.0	CARBONDALE	BRERETON	LIMESTONE	-	356.0	
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1787.0			LIMESTONE	-	2170.0	
-2199.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16502932000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.65517 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824248 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., BAKER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	2.8	522.0	
-178.0	CARBONDALE	SURVANT	COAL	1.5	570.0	
-244.0	CARBONDALE	COLCHESTER	COAL	0.5	636.0	
-298.0	CARBONDALE	DEKOVEN	COAL	2.5	690.0	
-308.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	700.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-317.0	CARBONDALE	DAVIS	COAL	3.5	709.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	704.0	
-317.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	709.0	
-413.0	TRADEWATER	MT. RORAH	COAL	1.5	805.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502932000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.65517 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824248 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	BRERETON	LIMESTONE	-	326.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1762.0	
-1764.0			LIMESTONE	-	2156.0	
-2184.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502945000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657477 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827906 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., REYNOLDS-BURNS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.6	522.0	
-182.0	CARBONDALE	SURVANT	COAL	1.3	569.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	639.0	
-299.0	CARBONDALE	DEKOVEN	COAL	4.0	686.0	
-311.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	698.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	4.0	707.0	
-362.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	749.0	
-364.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	751.0	
-404.0	TRADEWATER	MT. RORAH	COAL	1.5	791.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502945000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657477 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1775.0			LIMESTONE	-	2162.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2575.0	

MAPID: 16502947000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.652918 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826053 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., REYNOLDS-BURNS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	524.0	
-189.0	CARBONDALE	SURVANT	COAL	2.0	575.0	
-254.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-301.0	CARBONDALE	DEKOVEN	COAL	3.0	687.0	
-314.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	700.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-324.0	CARBONDALE	DAVIS	COAL	4.5	710.0	
-366.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	752.0	
-416.0	TRADEWATER	MT. RORAH	COAL	2.5	802.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502947000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.652918 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
42.0	CARBONDALE	BRERETON	LIMESTONE	-	344.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1768.0			LIMESTONE	-	2154.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502948000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657493 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83337 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., REYNOLDS-BURNS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	523.0	
-183.0	CARBONDALE	SURVANT	COAL	2.5	570.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	632.0	
-296.0	CARBONDALE	DEKOVEN	COAL	3.0	683.0	
-308.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	695.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-318.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-359.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	746.0	
-363.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	750.0	
-402.0	TRADEWATER	MT. RORAH	COAL	1.5	789.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502948000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657493 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83337 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
62.0	CARBONDALE	BRERETON	LIMESTONE	-	325.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1772.0			LIMESTONE	-	2159.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502957000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657474 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826084 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., REYNOLDS-BURNS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-183.0	CARBONDALE	SURVANT	COAL	1.3	570.0	
-253.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-303.0	CARBONDALE	DEKOVEN	COAL	3.3	690.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	700.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-323.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-363.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502957000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.657474 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826084 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1770.0			LIMESTONE	-	2157.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502958000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.652922 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824242 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., REYNOLDS-BURNS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-183.0	CARBONDALE	SURVANT	COAL	1.0	568.0	
-251.0	CARBONDALE	COLCHESTER	COAL	0.5	636.0	
-251.0	CARBONDALE	DEKOVEN	COAL	3.5	636.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	700.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-323.0	CARBONDALE	DAVIS	COAL	3.8	708.0	
-367.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	752.0	
-373.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	758.0	
-415.0	TRADEWATER	MT. RORAH	COAL	2.0	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502958000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.652922 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824242 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1767.0			LIMESTONE	-	2152.0	
-2182.0		BASE BARLOW	LIMESTONE	-	2567.0	

MAPID: 16502997000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.66207 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831587 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, CASTLETON C 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	5.0	530.0	
-185.0	CARBONDALE	SURVANT	COAL	1.3	574.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	641.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.5	693.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	702.0	
-323.0	CARBONDALE	DAVIS	COAL	4.0	712.0	
-363.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	752.0	
-367.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	756.0	

MAPID: 16502997000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.66207 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831587 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
52.0	CARBONDALE	BRERETON	LIMESTONE	-	337.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1788.0			LIMESTONE	-	2177.0	
-2204.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503231000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.662029 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.826115 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**

SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1772.0			LIMESTONE	-	2160.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16503231000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.662029 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.826115 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 3092.0 **LOG TYPE:** Electric Log

SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	HERRIN	COAL	5.0	329.0	
-56.0	CARBONDALE	SPRINGFIELD	COAL	4.0	444.0	
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	-	523.0	

MAPID: 16503231000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.662029 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826115 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, CAMPBELL RALPH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	528.0	
-182.0	CARBONDALE	SURVANT	COAL	1.3	570.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-309.0	CARBONDALE	DEKOVEN	COAL	3.0	697.0	
-319.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	707.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-328.0	CARBONDALE	DAVIS	COAL	4.0	716.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-377.0	TRADEWATER	STONEFORT	LIMESTONE	3.3	765.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503238000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.664267 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824301 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, CAMPBELL RALPH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	526.0	
-185.0	CARBONDALE	SURVANT	COAL	2.0	574.0	
-253.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-308.0	CARBONDALE	DEKOVEN	COAL	3.3	697.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	704.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-324.0	CARBONDALE	DAVIS	COAL	4.0	713.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-374.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	763.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503238000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.664267 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824301 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1775.0			LIMESTONE	-	2164.0	
-2197.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16503239000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.662043 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827937 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, DORRIS ANNA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	528.0	
-182.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-253.0	CARBONDALE	COLCHESTER	COAL	0.5	641.0	
-307.0	CARBONDALE	DEKOVEN	COAL	3.5	695.0	
-316.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	704.0	
-327.0	CARBONDALE	DAVIS	COAL	3.3	715.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	757.0	
-372.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	760.0	

MAPID: 16503239000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.662043 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827937 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
64.0	CARBONDALE	BRERETON	LIMESTONE	-	324.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1774.0			LIMESTONE	-	2162.0	
-2194.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16503240000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.66654 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82249 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2606.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, GILL EARL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-175.0	CARBONDALE	SURVANT	COAL	2.3	583.0	
-250.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.0	712.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	720.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-321.0	CARBONDALE	DAVIS	COAL	3.0	729.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	773.0	
-371.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	779.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503240000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.66654 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2606.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	343.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1782.0			LIMESTONE	-	2190.0	
-2198.0		BASE BARLOW	LIMESTONE	-	2606.0	

MAPID: 16503241000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.666564 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824312 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, MILEY-GILL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-190.0	CARBONDALE	SURVANT	COAL	1.5	590.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	659.0	
-312.0	CARBONDALE	DEKOVEN	COAL	3.3	712.0	
-321.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	721.0	
-333.0	CARBONDALE	DAVIS	COAL	3.5	733.0	
-379.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	779.0	

MAPID: 16503241000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.666564 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824312 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	BRERETON	LIMESTONE	-	345.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1780.0			LIMESTONE	-	2180.0	
-2203.0		BASE BARLOW	LIMESTONE	-	2603.0	

MAPID: 16503283000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.65293 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:**
SOURCE: MAY T R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1761.0			LIMESTONE	-	2169.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2585.0	

MAPID: 16503296000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.668878 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827984 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, WARD M H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	533.0	
-182.0	CARBONDALE	SURVANT	COAL	1.0	575.0	
-256.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-311.0	CARBONDALE	DEKOVEN	COAL	3.0	704.0	
-319.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	712.0	
-329.0	CARBONDALE	DAVIS	COAL	3.0	722.0	
-373.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	766.0	

MAPID: 16503296000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.668878 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827984 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1797.0			LIMESTONE	-	2190.0	
-2200.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503299000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668813 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824323 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:** Electric Log
SOURCE: SCHICK MILFORD T, MILEY-GILL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	554.0	
-189.0	CARBONDALE	SURVANT	COAL	1.0	600.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-315.0	CARBONDALE	DEKOVEN	COAL	3.0	726.0	
-323.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	734.0	
-334.0	CARBONDALE	DAVIS	COAL	4.5	745.0	
-374.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	785.0	
-439.0	TRADEWATER	MT. RORAH	COAL	0.5	850.0	

MAPID: 16503299000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668813 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824323 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:**
SOURCE: SCHICK MILFORD T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1799.0			LIMESTONE	-	2210.0	
-2201.0		BASE BARLOW	LIMESTONE	-	2612.0	

MAPID: 16503307000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.659732 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8261 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1765.0			LIMESTONE	-	2151.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2565.0	

MAPID: 16503490000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.666585 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826145 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1795.0			LIMESTONE	-	2192.0	
-2211.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16503493000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 480' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668322 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826158 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2610.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	354.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1793.0			LIMESTONE	-	2195.0	
-2208.0		BASE BARLOW	LIMESTONE	-	2610.0	

MAPID: 16503634000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.661989 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820637 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16503638000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.664285 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 587.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS, EUGENE F. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.0	CARBONDALE	HERRIN	COAL	5.5	298.0	
58.0	CARBONDALE	BRIAR HILL	COAL	-	320.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	4.0	396.0	
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	-	474.0	
-209.0	CARBONDALE	COLCHESTER	COAL	-	587.0	

MAPID: 16503638000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.664285 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2594.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	328.0	
-1762.0			LIMESTONE	-	2176.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2594.0	

MAPID: 16503641000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.659719 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824276 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
74.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1756.0			LIMESTONE	-	2150.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2563.0	

MAPID: 16503642000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 60' N line, 60' E line of NW SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.654255 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830444 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 349.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Service Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	BRERETON	LIMESTONE	-	349.0	

MAPID: 16523972000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.660969 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.819724 **DATE COLLECTED:** 4 / 20 / 1977

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 323.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1012-C **WELL TYPE:** Coal Test

COMMENT: (I-17) ON Sline 2640' FROM Eline OF SEC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	307.3	0.0	TOP 307.3' ABSENT FROM LOG
-			GRAY SANDSTONE	1.1	307.3	
-			SANDSTONE	0.2	308.4	
-			DARK GRAY SHALE	1.9	308.6	
-			GRAY SANDSTONE	1.6	310.5	
-			LIMESTONE	0.4	312.1	LIMESTONE AND SHALE - MIXED
-			BONE COAL	0.2	312.5	COAL AND BONE
-			LIMESTONE	0.9	312.7	
-			BLACK SHALE	2.9	313.6	
-			LIMESTONE	0.4	316.5	LIMESTONE AND SHALE - MIXED
-			LIMESTONE	5.3	316.9	
-			DARK GRAY SHALE	0.7	322.2	
-			BLACK SHALE	0.2	322.9	

MAPID: 16590883000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.669115 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.820162 **DATE COLLECTED:** 10 / 18 / 1978

SURFACE ELEVATION (FT.): 402.1 **LOGGED (FT.):** 457.0 **LOG TYPE:** Drillers Log

SOURCE: BRUSHY CREEK COAL CO. 1036C **WELL TYPE:** Coal Test

COMMENT: REV #3 PERMIT #60 BRUSHY CREEK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.1	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
383.1	PLEISTOCENE		SAND	8.0	19.0	
375.1	PLEISTOCENE		CLAY	15.0	27.0	
360.1	MODESTO		GRAY SHALE	36.0	42.0	
324.1	MODESTO		SHALE & SANDSTONE	22.0	78.0	
302.1	MODESTO		SANDY SHALE	40.0	100.0	
262.1	MODESTO		GRAY SHALE	17.7	140.0	
244.4	MODESTO		COAL	0.5	157.7	
243.9	MODESTO		UNDERCLAY	1.0	158.2	
242.9	MODESTO		SANDSTONE	11.8	159.2	
231.1	MODESTO		GRAY SHALE	7.0	171.0	SANDSTONE BAND
224.1	MODESTO		SANDY SHALE	7.0	178.0	
217.1	MODESTO		BLACK SHALE	3.5	185.0	
213.6	MODESTO		COAL	0.4	188.5	
213.2	MODESTO		SILTSTONE	5.6	188.9	
207.6	MODESTO		SANDSTONE	23.0	194.5	
184.6	MODESTO		SANDY SHALE	18.5	217.5	
166.1	MODESTO		LIMESTONE	0.5	236.0	
165.6	MODESTO		SANDSTONE	2.0	236.5	
163.6	MODESTO	PIASA	LIMESTONE	3.0	238.5	
160.6	MODESTO		GRAY SHALE	8.2	241.5	
152.4	MODESTO		BLACK SHALE	0.7	249.7	
151.7	CARBONDALE	DANVILLE	COAL	1.8	250.4	
149.9	CARBONDALE		UNDERCLAY	1.0	252.2	
148.9	CARBONDALE		SANDY SHALE	8.8	253.2	
140.1	CARBONDALE		SANDSTONE	3.5	262.0	
136.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	265.5	
132.6	CARBONDALE		SANDY SHALE	1.0	269.5	
131.6	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	270.5	
121.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	280.5	
109.6	CARBONDALE	ANVIL ROCK	SANDSTONE	19.7	292.5	
89.9	CARBONDALE		SANDY SHALE	6.5	312.2	SANDSTONE STREAKS
83.4	CARBONDALE		CALCAREOUS SHALE	0.6	318.7	
82.8	CARBONDALE	JAMESTOWN	COAL	0.1	319.3	
82.7	CARBONDALE		CALCAREOUS SHALE	0.8	319.4	
81.9	CARBONDALE		BLACK SHALE	3.0	320.2	
78.9	CARBONDALE	BRERETON	LIMESTONE	6.6	323.2	
72.2	CARBONDALE	HERRIN	COAL	0.3	329.9	
71.9	CARBONDALE	HERRIN	COAL	1.7	330.2	

70.3	CARBONDALE	HERRIN	COAL	0.6	331.8	
69.7	CARBONDALE	HERRIN	PYRITE	0.0	332.4	
69.7	CARBONDALE	HERRIN	SHALE	0.0	332.4	
69.7	CARBONDALE	HERRIN	COAL	0.9	332.4	
68.8	CARBONDALE	HERRIN	SHALE	0.1	333.3	
68.8	CARBONDALE	HERRIN	COAL	0.5	333.3	
68.3	CARBONDALE	HERRIN	SHALE	0.0	333.8	
68.2	CARBONDALE	HERRIN	COAL	0.3	333.9	
68.0	CARBONDALE	HERRIN	SHALE	0.1	334.1	
67.9	CARBONDALE	HERRIN	COAL	0.4	334.2	
67.5	CARBONDALE	HERRIN	SHALE	0.0	334.6	
67.5	CARBONDALE	HERRIN	COAL	0.9	334.6	
66.6	CARBONDALE		SILTSTONE	11.8	335.5	
54.8	CARBONDALE		SANDSTONE	60.0	347.3	
-5.2	CARBONDALE		SANDY SHALE	24.9	407.3	
-30.1	CARBONDALE	SPRINGFIELD	COAL	4.9	432.2	
-35.1	CARBONDALE		SILTSTONE	2.0	437.2	
-37.1	CARBONDALE		SILTSTONE	5.7	439.2	LS NODS
-42.8	CARBONDALE		SILTSTONE	2.0	444.9	
-44.8	CARBONDALE		SANDSTONE	10.1	446.9	

MAPID: 16590910000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.660811 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.819861 **DATE COLLECTED:** 4 / 26 / 1977

SURFACE ELEVATION (FT.): 405.6 **LOGGED (FT.):** 440.8 **LOG TYPE:** Drillers Log

SOURCE: BRUSHY CREEK COAL CO. 1012C **WELL TYPE:** Coal Test

COMMENT: REV #3 PERMIT #60 BRUSHY CREEK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.6	PLEISTOCENE		UNCONSOLIDATED	33.5	0.0	
372.1	PLEISTOCENE		CLAY	13.0	33.5	
359.1	MODESTO		GRAY SHALE	6.0	46.5	SOFT
353.1	MODESTO		GRAY SHALE	4.5	52.5	
348.6	MODESTO		SANDSTONE	58.0	57.0	GRAY
290.6	MODESTO		GRAY SHALE	41.0	115.0	
249.6	MODESTO		SANDSTONE	7.5	156.0	GRAY
242.1	MODESTO		GRAY SHALE	17.5	163.5	
224.6	MODESTO		BLACK SHALE	1.5	181.0	
223.1	MODESTO		COAL	1.0	182.5	
222.1	MODESTO		UNDERCLAY	3.5	183.5	
218.6	MODESTO		LIMESTONE	6.3	187.0	
212.3	MODESTO		GRAY SHALE	4.7	193.3	
207.6	MODESTO		SANDSTONE	31.0	198.0	SHALE STREAKS
176.6	MODESTO	PIASA	LIMESTONE	2.6	229.0	
174.0	MODESTO		GRAY SHALE	7.0	231.6	
167.0	CARBONDALE	DANVILLE	COAL	1.4	238.6	
165.6	CARBONDALE		GRAY SHALE	6.0	240.0	
159.6	CARBONDALE		SANDSTONE	8.0	246.0	GRAY
151.6	CARBONDALE		SANDY SHALE	9.0	254.0	
142.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	263.0	
138.1	CARBONDALE		GRAY SHALE	2.5	267.5	
135.6	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	270.0	GRAY
125.6	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	29.3	280.0	
96.3	CARBONDALE		GRAY SHALE	1.2	309.3	
95.1	CARBONDALE	CONANT	LIMESTONE	2.0	310.5	
93.1	CARBONDALE	JAMESTOWN	COAL	0.1	312.5	
93.0	CARBONDALE		DARK SHALE	0.1	312.6	
92.9	CARBONDALE		LIMESTONE	0.6	312.7	
92.3	CARBONDALE		GRAY SHALE	3.1	313.3	
89.2	CARBONDALE	BRERETON	LIMESTONE	5.6	316.4	
83.6	CARBONDALE		GRAY SHALE	1.1	322.0	
82.5	CARBONDALE	HERRIN	COAL	1.2	323.1	HARD
81.3	CARBONDALE	HERRIN	COAL W/ PYRITE	0.4	324.3	
80.9	CARBONDALE	HERRIN	COAL W/ PYRITE	2.0	324.7	
78.9	CARBONDALE	HERRIN	PYRITE	0.1	326.7	
78.8	CARBONDALE	HERRIN	COAL	1.6	326.8	
77.3	CARBONDALE		GRAY SHALE	10.0	328.3	
67.3	CARBONDALE		SHALY SANDSTONE	15.7	338.3	

51.6	CARBONDALE		SANDY SHALE	10.0	354.0	
41.6	CARBONDALE		SANDSTONE	40.3	364.0	GRAY
1.3	CARBONDALE		SANDY SHALE	10.5	404.3	
-9.2	CARBONDALE		GRAY SHALE	19.8	414.8	
-29.0	CARBONDALE	SPRINGFIELD	COAL	4.7	434.6	
-33.7	CARBONDALE		GRAY SHALE	1.5	439.3	

MAPID: 16503242000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678011 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.822479 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 3163.0 **LOG TYPE:** Electric Log

SOURCE: REHN, E. E. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	HERRIN	COAL	5.0	348.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	4.0	445.0	
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	-	520.0	

MAPID: 16503242000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678011 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.822479 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	MODESTO	PIASA	LIMESTONE	4.0	246.0	
148.0	MODESTO		SHALE	10.0	250.0	
138.0	CARBONDALE	DANVILLE	COAL	1.0	260.0	
137.0	CARBONDALE		SILTY SHALE	19.0	261.0	
118.0	CARBONDALE	LAWSON	SHALE	20.0	280.0	
98.0	CARBONDALE	LAWSON	SANDSTONE	40.0	300.0	
58.0	CARBONDALE	BRERETON	LIMESTONE	4.0	340.0	
54.0	CARBONDALE	ANNA	BLACK SHALE	4.0	344.0	
50.0	CARBONDALE	HERRIN	COAL	5.0	348.0	

MAPID: 16503242000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.678011 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822479 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: REHN, E. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1785.0			LIMESTONE	-	2183.0	
-2210.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16503242000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.678011 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.822479 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 1700.0 **LOG TYPE:** Electric Log
SOURCE: REHN, E. E. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-242.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	640.0	
-322.0	SPOON	DAVIS	UNCLASSIFIED	-	720.0	
-1302.0	BASE OF PENN.		UNCLASSIFIED	-	1700.0	

MAPID: 16503242000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.678011 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822479 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Electric Log
SOURCE: REHN, E. E., EDWARDS ALDA ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	525.0	
-168.0	CARBONDALE	SURVANT	COAL	0.5	568.0	
-247.0	CARBONDALE	COLCHESTER	COAL	0.6	647.0	
-305.0	CARBONDALE	DEKOVEN	COAL	2.5	705.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	713.0	
-322.0	CARBONDALE	DAVIS	COAL	6.0	722.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	

MAPID: 16503510000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.671078 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822503 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:**
SOURCE: EXPLOR. & DEVEL., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1808.0			LIMESTONE	-	2218.0	
-2202.0		BASE BARLOW	LIMESTONE	-	2612.0	

MAPID: 16524419000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678081 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831614 **DATE COLLECTED:** 5 / 25 / 1981
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 730.0 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W., ANDERSON ETAL COMM. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-187.0	CARBONDALE	SURVANT	COAL	2.0	587.0	
-262.0	CARBONDALE	COLCHESTER	COAL	0.5	662.0	
-309.0	CARBONDALE	DEKOVEN	COAL	3.0	709.0	
-318.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	718.0	
-326.0	CARBONDALE	DAVIS	COAL	4.0	726.0	

MAPID: 16500030000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 50' N line, 1070' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.692076 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.834193 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 548.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	DANVILLE	COAL	2.0	343.0	
90.0	CARBONDALE	SS BELOW NO. 7		5.0	350.0	
79.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	361.0	
42.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	8.0	398.0	
18.0	CARBONDALE	HERRIN	COAL	5.5	422.0	
1.0	CARBONDALE	BRIAR HILL	COAL	0.4	439.0	
-102.0	CARBONDALE	SPRINGFIELD	COAL	5.3	542.0	

MAPID: 16500030000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 50' N line, 1070' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.692076 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.834193 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 427.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.3	MODESTO	PIASA	LIMESTONE	3.0	332.7	
104.3	MODESTO		DARK GRAY SHALE	7.0	335.7	
97.3	CARBONDALE	DANVILLE	COAL	2.0	342.7	
95.3	CARBONDALE		SHALE & SANDSTONE	16.0	344.7	
79.3	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	360.7	
70.3	CARBONDALE	LAWSON	SILTY SHALE	28.0	369.7	
42.3	CARBONDALE	LAWSON	SANDSTONE	8.0	397.7	
34.3	CARBONDALE	LAWSON	SILTY SHALE	5.0	405.7	
29.3	CARBONDALE	BRERETON	LIMESTONE	3.0	410.7	
26.3	CARBONDALE	ANNA	BLACK SHALE	8.3	413.7	
18.0	CARBONDALE	HERRIN	COAL	5.5	422.0	

MAPID: 16500030000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 50' N line, 1070' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.692076 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.834193 **DATE COLLECTED:** 5 / 17 / 1920

SURFACE ELEVATION (FT.): 439.6 **LOGGED (FT.):** 548.4 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.6			UNCONSOLIDATED	25.0	0.0	
414.6			SHALE	11.3	25.0	
403.3			COAL	0.9	36.3	
402.3			SHALE	1.8	37.3	
400.6			SHALE	11.0	39.0	SH AND SS
389.6			SHALE	15.0	50.0	BLUE
374.6			SHALE	56.0	65.0	
318.6			BLACK SHALE	2.0	121.0	
316.6			LIMESTONE	1.0	123.0	
315.6			SHALE	26.0	124.0	BLUE
289.6			SHALE	0.7	150.0	DARK
288.9			COAL	1.2	150.7	
287.8			BLACK SHALE	0.5	151.8	
287.3			CALCAREOUS SHALE	3.7	152.3	CALC
283.6			SANDY SHALE	14.0	156.0	
269.6			SANDSTONE	42.0	170.0	
227.6			SHALE	38.8	212.0	BLUE
188.8			COAL	0.2	250.8	
188.6			LIMESTONE	6.0	251.0	
182.6			SANDSTONE	4.0	257.0	
178.6			SANDY SHALE	2.0	261.0	
176.6			SHALE	16.0	263.0	DARK
160.6			BLACK SHALE	4.7	279.0	
155.9			COAL	0.5	283.7	
155.4			BLACK SHALE	0.8	284.2	
154.6			SHALE	7.0	285.0	
147.6			LIMESTONE	1.0	292.0	
146.6			SANDSTONE	10.0	293.0	
136.6			SHALY SANDSTONE	10.0	303.0	
126.6			SHALE	8.0	313.0	BLUE
118.6	MODESTO		SHALE	12.0	321.0	DARK
106.6	MODESTO	PIASA	LIMESTONE	3.0	333.0	
103.6	MODESTO		SHALE	7.0	336.0	DARK
96.6	CARBONDALE	DANVILLE	COAL	2.0	343.0	
94.6	CARBONDALE		SANDY SHALE	5.0	345.0	
89.6	CARBONDALE		SANDSTONE	5.0	350.0	
84.6	CARBONDALE		SANDY SHALE	6.0	355.0	
78.6	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	361.0	
69.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	28.0	370.0	

41.6	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	398.0	
33.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	406.0	
28.6	CARBONDALE	BRERETON	LIMESTONE	3.0	411.0	
25.6	CARBONDALE	ANNA	BLACK SHALE	8.3	414.0	
17.3	CARBONDALE	HERRIN	COAL	5.5	422.3	
11.8	CARBONDALE		UNDERCLAY	4.2	427.8	
7.6	CARBONDALE		LIMESTONE	3.0	432.0	
4.6	CARBONDALE		SHALE	4.6	435.0	
0.0	CARBONDALE		BONE COAL	0.4	439.6	
-0.4	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	440.0	
-15.4	CARBONDALE	DYKERSBURG	SHALE	3.0	455.0	
-18.4	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	458.0	
-38.4	CARBONDALE	DYKERSBURG	SHALE	64.2	478.0	BLUE
-102.6	CARBONDALE	SPRINGFIELD	COAL	5.3	542.2	
-107.8	CARBONDALE		UNDERCLAY	1.0	547.4	

MAPID: 16500031000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.698825 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.826138 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 375.2 **LOG TYPE:** Drillers Log

SOURCE: MADISON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	15.0	0.0	
421.0			SANDSTONE	42.0	15.0	
379.0			SHALE	7.0	57.0	BLUE
372.0			LIMESTONE	4.0	64.0	
368.0			BLACK SHALE	1.0	68.0	
367.0			SHALE	22.0	69.0	BLUE
345.0			SANDSTONE	10.0	91.0	
335.0			SANDY SHALE	11.0	101.0	
324.0			SHALE	3.0	112.0	BLUE
321.0			BLACK SHALE	4.0	115.0	
317.0			SANDY SHALE	2.0	119.0	
315.0			BLACK SHALE	24.0	121.0	
291.0			SANDSTONE	30.5	145.0	
260.5			SANDSTONE	4.0	175.5	
256.5			SHALE	2.5	179.5	BLUE
254.0			SANDSTONE	17.0	182.0	
237.0			SANDY SHALE	45.5	199.0	
191.5			SANDSTONE	12.5	244.5	
179.0			SHALE	3.0	257.0	BLUE
176.0			BLACK SHALE	2.6	260.0	
173.4			SHALE	0.9	262.6	BLUE
172.5			BLACK SHALE	30.5	263.5	
142.0			SANDSTONE	28.0	294.0	
114.0			SHALE	38.0	322.0	
76.0	CARBONDALE	ANNA	BLACK SHALE	7.5	360.0	
68.5	CARBONDALE	HERRIN	COAL	7.7	367.5	ANALYSED

MAPID: 16502942000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.689516 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2650.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
37.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1821.0			LIMESTONE	-	2233.0	
-2238.0		BASE BARLOW	LIMESTONE	-	2650.0	

MAPID: 16502942000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.689516 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.829744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 3145.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	5.0	377.0	
14.0	CARBONDALE	BRIAR HILL	COAL	-	398.0	
-61.0	CARBONDALE	SPRINGFIELD	COAL	5.0	473.0	
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	-	550.0	

MAPID: 16502942000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.689516 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.829744 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 755.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-263.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	675.0	
-343.0	SPOON	DAVIS	UNCLASSIFIED	-	755.0	

MAPID: 16502942000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689516 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829744 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2650.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	558.0	
-188.0	CARBONDALE	SURVANT	COAL	0.5	600.0	
-260.0	CARBONDALE	COLCHESTER	COAL	0.6	672.0	
-323.0	CARBONDALE	DEKOVEN	COAL	3.0	735.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	742.0	
-342.0	CARBONDALE	DAVIS	COAL	5.0	754.0	
-368.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	780.0	

MAPID: 16500032000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.691942 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.815116 **DATE COLLECTED:** 4 / 5 / 1906

SURFACE ELEVATION (FT.): 411.4 **LOGGED (FT.):** 422.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.4			UNCONSOLIDATED	30.0	0.0	
381.4	MODESTO		SANDY SHALE	10.0	30.0	
371.4	MODESTO	CHAPEL	COAL	1.5	40.0	
369.9	MODESTO		SHALE	5.5	41.5	
364.4	MODESTO		SANDSTONE	53.0	47.0	
311.4	MODESTO		SHALE	50.0	100.0	
261.4	MODESTO		SHALE	20.0	150.0	DARK
241.4	MODESTO		COAL	0.5	170.0	
240.9	MODESTO		SHALE	20.5	170.5	
220.4	MODESTO		SANDY SHALE	25.0	191.0	
195.4	MODESTO	PIASA	LIMESTONE	3.5	216.0	
191.9	MODESTO		SHALE	9.5	219.5	DARK
182.4	CARBONDALE	DANVILLE	COAL	1.5	229.0	
180.9	CARBONDALE		SANDY SHALE	11.0	230.5	
169.9	CARBONDALE		VARRIGATED SHALE	10.5	241.5	VARIGATED SHALE, VARIG
159.4	CARBONDALE	ANVIL ROCK	SANDSTONE	53.0	252.0	
106.4	CARBONDALE	ANVIL ROCK	SHALE	1.0	305.0	DARK
105.4	CARBONDALE	BRERETON	LIMESTONE	2.5	306.0	BLACK
102.9	CARBONDALE	ANNA	SHALE	13.0	308.5	DARK
89.9	CARBONDALE	HERRIN	COAL	5.7	321.5	
84.2	CARBONDALE		UNDERCLAY	2.8	327.2	
81.4	CARBONDALE	DYKERSBURG	SHALE	20.0	330.0	
61.4	CARBONDALE	DYKERSBURG	SANDY SHALE	40.0	350.0	
21.4	CARBONDALE	DYKERSBURG	SHALE	25.8	390.0	DARK
-4.4	CARBONDALE	SPRINGFIELD	COAL	4.5	415.8	
-8.9	CARBONDALE		UNDERCLAY	1.7	420.3	

MAPID: 16500033000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2000' N line, 2000' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.700057 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.81419 **DATE COLLECTED:** 10 / 4 / 1906

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	21.0	0.0	
401.0			CLAY	4.0	21.0	
397.0	MODESTO		BONE COAL	1.3	25.0	
395.7	MODESTO		UNDERCLAY	10.0	26.3	
385.7	MODESTO		SANDY SHALE	20.8	36.3	
365.0	MODESTO		SANDSTONE	38.0	57.0	
327.0	MODESTO		SHALE	11.5	95.0	DARK
315.5	MODESTO		BLACK SHALE	17.5	106.5	
298.0	MODESTO		COAL	0.2	124.0	
297.8	MODESTO		UNDERCLAY	4.0	124.2	
293.8	MODESTO		SANDY SHALE	4.8	128.2	
289.0	MODESTO		SHALE	23.0	133.0	DARK
266.0	MODESTO		COAL	0.5	156.0	
265.5	MODESTO		UNDERCLAY	5.0	156.5	
260.5	MODESTO		SHALE	3.5	161.5	
257.0	MODESTO		CLAYSTONE	11.0	165.0	
246.0	MODESTO		SHALE	10.0	176.0	
236.0	MODESTO		SANDY SHALE	10.0	186.0	
226.0	MODESTO		SANDSTONE	4.5	196.0	
221.5	MODESTO		SHALE	3.0	200.5	DARK
218.5	MODESTO	PIASA	LIMESTONE	5.0	203.5	
213.5	MODESTO		BLACK SHALE	7.5	208.5	
206.0	CARBONDALE	DANVILLE	COAL	1.7	216.0	
204.3	CARBONDALE		UNDERCLAY	3.0	217.7	
201.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.3	220.7	
187.0	CARBONDALE	ANVIL ROCK	SANDSTONE	54.5	235.0	
132.5	CARBONDALE	BRERETON	LIMESTONE	5.0	289.5	
127.5	CARBONDALE	ANNA	BLACK SHALE	9.0	294.5	
118.5	CARBONDALE	HERRIN	COAL	5.7	303.5	
112.8	CARBONDALE		UNDERCLAY	3.3	309.2	
109.5	CARBONDALE		VARRIGATED SHALE	5.0	312.5	VARIG
104.5	CARBONDALE		LIMESTONE	4.5	317.5	
100.0	CARBONDALE		SHALE	2.0	322.0	
98.0	CARBONDALE	BRIAR HILL	SHALY COAL	0.1	324.0	
97.9	CARBONDALE	DYKERSBURG	SANDY SHALE	49.4	324.1	
48.5	CARBONDALE	DYKERSBURG	BLACK SHALE	22.5	373.5	
26.0	CARBONDALE	SPRINGFIELD	COAL	4.5	396.0	
21.5	CARBONDALE		UNDERCLAY	2.5	400.5	

MAPID: 16500033000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2000' N line, 2000' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.700057 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.81419 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 309.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
218.0	MODESTO	PIASA	LIMESTONE	5.0	204.0	
213.0	MODESTO		BLACK SHALE	7.5	209.0	
205.5	CARBONDALE	DANVILLE	COAL	1.7	216.5	
203.8	CARBONDALE	LAWSON	CLAYSTONE	3.0	218.2	
200.8	CARBONDALE	LAWSON	SILTY SHALE	14.3	221.2	
186.5	CARBONDALE	LAWSON	SANDSTONE	54.5	235.5	
132.0	CARBONDALE	BRERETON	LIMESTONE	5.0	290.0	
127.0	CARBONDALE	ANNA	BLACK SHALE	9.0	295.0	
118.0	CARBONDALE	HERRIN	COAL	5.7	304.0	

MAPID: 16500034000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.690845 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.810522 **DATE COLLECTED:** 3 / 5 / 1906

SURFACE ELEVATION (FT.): 409.1 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.1			UNCONSOLIDATED	83.0	0.0	
326.1	MODESTO		SANDSTONE	11.0	83.0	SS AND SH
315.1	MODESTO		SHALE	28.4	94.0	
286.7	MODESTO		COAL	0.2	122.4	
286.6	MODESTO		UNDERCLAY	11.8	122.5	
274.8	MODESTO		SHALE	14.8	134.3	
260.0	MODESTO		SHALE	5.4	149.1	
254.6	MODESTO		COAL	0.7	154.5	
253.9	MODESTO		UNDERCLAY	8.8	155.2	
245.1	MODESTO		SANDSTONE	26.8	164.0	SS AND GREEN SH
218.3	MODESTO		SHALE	7.2	190.8	
211.2	MODESTO		SHALE	1.5	197.9	GREEN
209.7	MODESTO	PIASA	LIMESTONE	3.3	199.4	
206.3	MODESTO		SHALE	5.9	202.8	
200.4	CARBONDALE	DANVILLE	COAL	1.5	208.7	
198.9	CARBONDALE		ARGILACEOUS SHALE	12.2	210.2	SH/CLAY/SS, ARG
186.8	CARBONDALE		SHALE	9.4	222.3	
177.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	231.8	
173.3	CARBONDALE	ANVIL ROCK	SANDSTONE	18.4	235.8	SS AND GREEN SH
154.9	CARBONDALE	ANVIL ROCK	SANDSTONE	34.3	254.2	
120.6	CARBONDALE	ANNA	COAL	0.0	288.5	
120.6	CARBONDALE	ANNA	BLACK SHALE	14.3	288.5	
106.3	CARBONDALE	HERRIN	COAL	5.2	302.8	
101.1	CARBONDALE		UNDERCLAY	15.1	308.0	
86.0	CARBONDALE	DYKERSBURG	SHALE	25.8	323.1	
160.2	CARBONDALE	DYKERSBURG	SANDY SHALE	348.9	248.9	
40.0	CARBONDALE	DYKERSBURG	SANDY SHALE	28.2	369.1	
11.9	CARBONDALE	SPRINGFIELD	COAL	4.3	397.2	
7.7	CARBONDALE		UNDERCLAY	1.6	401.4	

MAPID: 16500034000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.690845 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.810522 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.0	CARBONDALE	DANVILLE	COAL	1.5	229.0	
157.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	53.0	252.0	
87.0	CARBONDALE	HERRIN	COAL	5.7	322.0	
-7.0	CARBONDALE	SPRINGFIELD	COAL	4.5	416.0	

MAPID: 16500035000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.70016 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.806828 **DATE COLLECTED:** 10 / 17 / 1905

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 394.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	34.0	0.0	
401.0			CLAY	10.0	34.0	
391.0			SANDSTONE	31.0	44.0	
360.0			BLACK SHALE	29.0	75.0	
331.0	MODESTO	NEW HAVEN	COAL	0.4	104.0	
330.6	MODESTO		UNDERCLAY	2.6	104.4	
328.0	MODESTO		CALCAREOUS SHALE	4.0	107.0	CALC
324.0	MODESTO		SANDY SHALE	5.0	111.0	
319.0	MODESTO		BLACK SHALE	6.0	116.0	
313.0	MODESTO		CALCAREOUS SHALE	10.0	122.0	CALC
303.0	MODESTO		COAL	0.7	132.0	
302.3	MODESTO		UNDERCLAY	1.3	132.7	
301.0	MODESTO		COAL	0.5	134.0	
300.5	MODESTO		SHALE	5.5	134.5	
295.0	MODESTO		SANDSTONE	3.0	140.0	
292.0	MODESTO		SHALE	10.0	143.0	DARK
282.0	MODESTO		SANDSTONE	30.0	153.0	
252.0	MODESTO		BLACK SHALE	3.0	183.0	
249.0	MODESTO	PIASA	LIMESTONE	6.0	186.0	
243.0	MODESTO		BLACK SHALE	5.0	192.0	
238.0	CARBONDALE	DANVILLE	COAL	1.7	197.0	
236.3	CARBONDALE		UNDERCLAY	0.3	198.7	
236.0	CARBONDALE		SANDY SHALE	11.5	199.0	
224.5	CARBONDALE		BLACK SHALE	5.5	210.5	
219.0	CARBONDALE	ALLENBY	COAL	0.2	216.0	
218.8	CARBONDALE		UNDERCLAY	1.7	216.2	
217.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	217.8	
213.0	CARBONDALE	ANVIL ROCK	SANDSTONE	54.0	222.0	
159.0	CARBONDALE	BRERETON	LIMESTONE	3.7	276.0	BLACK
155.3	CARBONDALE	ANNA	BLACK SHALE	11.0	279.7	
144.3	CARBONDALE	HERRIN	COAL	5.4	290.7	
138.9	CARBONDALE		UNDERCLAY	4.0	296.1	
134.9	CARBONDALE		LIMESTONE	1.9	300.1	
133.0	CARBONDALE		SHALE	10.0	302.0	
123.0	CARBONDALE		SHALE	5.0	312.0	DARK
118.0	CARBONDALE	BRIAR HILL	BONE COAL	0.1	317.0	
117.9	CARBONDALE	DYKERSBURG	SANDY SHALE	36.4	317.1	
81.5	CARBONDALE	DYKERSBURG	BLACK SHALE	35.0	353.5	
46.5	CARBONDALE	SPRINGFIELD	COAL	4.4	388.5	

42.1	CARBONDALE		UNDERCLAY	1.6	392.9

MAPID: 16525822000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.699394 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.806858 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 296.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION GT 171 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
144.4	CARBONDALE	HERRIN	COAL	5.4	290.6	

MAPID: 16525823000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.700796 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.812831 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 406.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION A **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
116.6	CARBONDALE	HERRIN	COAL	5.7	308.4	
22.8	CARBONDALE	SPRINGFIELD	COAL	3.8	402.2	

MAPID: 16500036000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.68611 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.817879 **DATE COLLECTED:** 2 / 2 / 1906

SURFACE ELEVATION (FT.): 406.7 **LOGGED (FT.):** 442.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.7			UNCONSOLIDATED	33.8	0.0	
372.9	MODESTO		SHALE	23.0	33.8	
349.9	MODESTO	CHAPEL	COAL	1.0	56.8	
348.9	MODESTO		ARGILACEOUS SHALE	6.7	57.8	ARG
342.2	MODESTO		SHALE	20.4	64.5	
321.8	MODESTO		SANDSTONE	14.6	84.9	
307.2	MODESTO		SANDSTONE	18.0	99.5	
289.2	MODESTO		SHALE	42.3	117.5	
246.9	MODESTO		SANDSTONE	11.1	159.8	W/GREEN SH
235.9	MODESTO		SHALE	19.9	170.8	
215.9	MODESTO		COAL	0.7	190.8	
215.3	MODESTO		ARGILACEOUS SHALE	0.9	191.4	ARG, GREEN
214.4	MODESTO		LIMESTONE	3.4	192.3	
210.9	MODESTO		SHALE	2.6	195.8	W/SS, GREEN
208.4	MODESTO		SANDSTONE	11.4	198.3	
196.9	MODESTO		SHALE	22.8	209.8	GREEN
174.2	MODESTO		SHALE	4.0	232.5	
170.2	MODESTO	PIASA	LIMESTONE	3.3	236.5	
166.9	MODESTO		SHALE	7.2	239.8	GREEN
159.7	CARBONDALE	DANVILLE	COAL	1.8	247.0	
157.9	CARBONDALE		ARGILACEOUS SHALE	15.1	248.8	ARG
142.8	CARBONDALE	ALLENBY	COAL	0.2	263.9	
142.6	CARBONDALE		SHALE	3.8	264.1	
138.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	267.8	
131.9	CARBONDALE	ANVIL ROCK	SHALE	9.0	274.8	W/SS
122.9	CARBONDALE	ANVIL ROCK	SANDSTONE	33.5	283.8	
89.4	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	317.3	
82.4	CARBONDALE	BRERETON	LIMESTONE	0.8	324.3	
81.5	CARBONDALE	ANNA	BLACK SHALE	12.7	325.2	
68.9	CARBONDALE	ANNA	SHALE	0.3	337.8	
68.6	CARBONDALE	HERRIN	COAL	5.9	338.1	
62.7	CARBONDALE		UNDERCLAY	26.7	344.0	
36.0	CARBONDALE	DYKERSBURG	SANDY SHALE	39.3	370.7	
-3.3	CARBONDALE	DYKERSBURG	SANDY SHALE	26.6	410.0	
-29.9	CARBONDALE	SPRINGFIELD	COAL	4.1	436.6	
-34.0	CARBONDALE		UNDERCLAY	2.1	440.7	

MAPID: 16500037000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.679136 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.819732 **DATE COLLECTED:** 2 / 14 / 1906

SURFACE ELEVATION (FT.): 396.6 **LOGGED (FT.):** 436.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.6			UNCONSOLIDATED	50.0	0.0	
346.6	MODESTO	CHAPEL	COAL	0.5	50.0	
346.1	MODESTO		SHALE	127.0	50.5	
219.1	MODESTO		COAL	0.7	177.5	
218.4	MODESTO		UNDERCLAY	10.0	178.2	
208.4	MODESTO		SHALE	36.0	188.2	
172.4	MODESTO	PIASA	LIMESTONE	4.0	224.2	
168.4	MODESTO		CLAYSTONE	2.0	228.2	
166.4	MODESTO		SHALE	5.0	230.2	
161.4	CARBONDALE	DANVILLE	COAL	2.0	235.2	
159.4	CARBONDALE		UNDERCLAY	3.0	237.2	
156.4	CARBONDALE		SHALE	10.0	240.2	
146.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	250.2	
141.9	CARBONDALE	ANVIL ROCK	SHALE	8.0	254.7	
133.9	CARBONDALE	ANVIL ROCK	SANDSTONE	55.0	262.7	
78.9	CARBONDALE		BLACK SHALE	2.0	317.7	
76.9	CARBONDALE	BRERETON	LIMESTONE	4.3	319.7	
72.6	CARBONDALE	ANNA	BLACK SHALE	1.0	324.0	
71.6	CARBONDALE	HERRIN	COAL	6.0	325.0	
65.6	CARBONDALE		UNDERCLAY	20.0	331.0	
45.6	CARBONDALE	DYKERSBURG	SHALE	3.0	351.0	
42.6	CARBONDALE	DYKERSBURG	SHALE	35.0	354.0	
7.6	CARBONDALE	DYKERSBURG	SHALE	19.0	389.0	
-11.4	CARBONDALE	DYKERSBURG	SHALE	14.0	408.0	
-25.4	CARBONDALE	DYKERSBURG	BLACK SHALE	7.0	422.0	
-32.4	CARBONDALE	SPRINGFIELD	COAL	5.2	429.0	
-37.6	CARBONDALE		UNDERCLAY	2.5	434.2	

MAPID: 16500038000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.681537 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.814205 **DATE COLLECTED:** 1 / 20 / 1906

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 422.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	35.0	0.0	
362.0	MODESTO		SHALE	5.0	35.0	
357.0	MODESTO		SHALE	36.0	40.0	
321.0	MODESTO		SANDY SHALE	6.0	76.0	
315.0	MODESTO		SANDSTONE	14.0	82.0	
301.0	MODESTO		SANDY SHALE	4.0	96.0	DARK
297.0	MODESTO		SANDY SHALE	20.0	100.0	
277.0	MODESTO		SHALE	45.0	120.0	
232.0	MODESTO		COAL	0.7	165.0	
231.3	MODESTO		UNDERCLAY	10.0	165.7	
221.3	MODESTO		SANDSTONE	10.0	175.7	
211.3	MODESTO		SHALE	30.0	185.7	
181.3	MODESTO	PIASA	LIMESTONE	4.0	215.7	
177.3	MODESTO		SHALE	3.7	219.7	
173.7	CARBONDALE	DANVILLE	COAL	1.8	223.3	
171.8	CARBONDALE		UNDERCLAY	4.0	225.2	
167.8	CARBONDALE		SANDSTONE	3.0	229.2	
164.8	CARBONDALE		SHALE	10.0	232.2	
154.8	CARBONDALE	ALLENBY	COAL	0.3	242.2	
154.6	CARBONDALE		SHALE	4.0	242.4	
150.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	246.4	
147.0	CARBONDALE	ANVIL ROCK	SANDSTONE	48.0	250.0	
99.0	CARBONDALE		BLACK SHALE	4.0	298.0	
95.0	CARBONDALE	BRERETON	LIMESTONE	8.0	302.0	
87.0	CARBONDALE	ANNA	BLACK SHALE	1.0	310.0	
86.0	CARBONDALE	HERRIN	COAL	6.8	311.0	
79.2	CARBONDALE		UNDERCLAY	12.2	317.8	
67.0	CARBONDALE		SHALE	8.0	330.0	
59.0	CARBONDALE	BRIAR HILL	COAL	0.4	338.0	
58.6	CARBONDALE		UNDERCLAY	12.0	338.4	
46.6	CARBONDALE	DYKERSBURG	SHALE	30.0	350.4	
16.6	CARBONDALE	DYKERSBURG	SANDY SHALE	16.0	380.4	
0.6	CARBONDALE	DYKERSBURG	BLACK SHALE	20.0	396.4	
-19.4	CARBONDALE	SPRINGFIELD	COAL	4.8	416.4	
-24.3	CARBONDALE		UNDERCLAY	1.0	421.3	

MAPID: 16500038000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.681537 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.814205 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 422.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.0	CARBONDALE	DANVILLE	COAL	1.8	223.0	
168.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	3.0	229.0	
151.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	246.0	
147.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	48.0	250.0	
86.0	CARBONDALE	HERRIN	COAL	6.8	311.0	
59.0	CARBONDALE	BRIAR HILL	COAL	0.4	338.0	
-19.0	CARBONDALE	SPRINGFIELD	COAL	4.8	416.0	

MAPID: 16500039000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.683963 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.808651 **DATE COLLECTED:** 1 / 29 / 1906

SURFACE ELEVATION (FT.): 416.1 **LOGGED (FT.):** 415.4 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.1			UNCONSOLIDATED	33.8	0.0	
382.3	MODESTO		SANDY SHALE	18.5	33.8	
363.8	MODESTO		SANDSTONE	36.8	52.3	
326.9	MODESTO		SHALE	43.5	89.2	
283.4	MODESTO		SHALE	13.8	132.7	GREEN
269.6	MODESTO		SHALE	12.8	146.5	
256.8	MODESTO		COAL	0.8	159.3	
256.0	MODESTO		SHALE	20.6	160.1	GREEN
235.4	MODESTO		SHALE	6.3	180.7	GREEN
229.2	MODESTO		SANDSTONE	15.2	186.9	
214.0	MODESTO		SHALE	3.3	202.1	
210.7	MODESTO		SHALE	1.8	205.4	GREEN
208.8	MODESTO	PIASA	LIMESTONE	2.3	207.3	
206.6	MODESTO		SHALE	6.8	209.5	GREEN
199.8	CARBONDALE	DANVILLE	COAL	1.5	216.3	
198.3	CARBONDALE		UNDERCLAY	1.3	217.8	
196.9	CARBONDALE		SANDSTONE	10.7	219.2	W/GREEN SH
186.3	CARBONDALE		SANDY SHALE	4.8	229.8	
181.4	CARBONDALE	ALLENBY	COAL	0.3	234.7	
181.1	CARBONDALE		UNDERCLAY	4.2	235.0	
176.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	239.2	
171.5	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	244.6	W/SH
155.0	CARBONDALE	ANVIL ROCK	SANDSTONE	28.3	261.1	
126.8	CARBONDALE	JAMESTOWN	BONE COAL	0.1	289.3	
126.7	CARBONDALE	BRERETON	LIMESTONE	1.2	289.4	
125.5	CARBONDALE	ANNA	BLACK SHALE	13.3	290.6	
112.2	CARBONDALE	HERRIN	COAL	5.9	303.9	
106.3	CARBONDALE		UNDERCLAY	19.0	309.8	W/SH
87.3	CARBONDALE	DYKERSBURG	SANDSTONE	40.0	328.8	
47.3	CARBONDALE	DYKERSBURG	SANDSTONE	8.8	368.8	S/SANDY SH
38.4	CARBONDALE	DYKERSBURG	SANDY SHALE	31.7	377.7	
6.8	CARBONDALE	SPRINGFIELD	COAL	4.3	409.3	
2.4	CARBONDALE		UNDERCLAY	1.8	413.7	

MAPID: 16500039000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.683963 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.808651 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 309.9 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.5	MODESTO	PIASA	LIMESTONE	2.3	207.5	
206.3	MODESTO		GRAY SHALE	6.8	209.7	
199.5	CARBONDALE	DANVILLE	COAL	1.5	216.5	
198.0	CARBONDALE		SHALE & SANDSTONE	16.8	218.0	
181.1	CARBONDALE	ALLENBY	COAL	0.3	234.9	
180.8	CARBONDALE		CLAYSTONE	4.2	235.2	
176.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	239.4	
171.2	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	16.5	244.8	
154.7	CARBONDALE	LAWSON	SANDSTONE	28.3	261.3	
126.5	CARBONDALE	BRERETON	LIMESTONE	1.1	289.5	
125.3	CARBONDALE	ANNA	BLACK SHALE	13.3	290.7	
112.0	CARBONDALE	HERRIN	COAL	5.9	304.0	

MAPID: 16501351000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 14' S line, 296' W line of SW SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.687577 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.805052 **DATE COLLECTED:** 1 / 29 / 1954
SURFACE ELEVATION (FT.): 422.6 **LOGGED (FT.):** 400.9 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 40-20 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.6			CLAY	33.0	0.0	YELLOW CLAY AND GLACIAL DRIFT
389.6			SANDSTONE	15.0	33.0	
374.6			GRAY SHALE	88.0	48.0	
286.6			BLACK SHALE	4.0	136.0	
282.6			GRAY SANDSTONE	36.0	140.0	
246.6			GRAY SHALE	13.0	176.0	
233.6			LIMESTONE	3.5	189.0	
230.1			BLACK SHALE	2.5	192.5	
227.6			COAL	0.3	195.0	
227.3			DARK GRAY SHALE	24.7	195.3	
202.6			LIMESTONE	6.0	220.0	
196.6			GRAY SHALE	42.0	226.0	
154.6			SANDSTONE	7.0	268.0	
147.6			GRAY SHALE	40.0	275.0	
107.6			SANDSTONE	35.0	315.0	
72.6			SILTY SHALE	4.0	350.0	
68.6			SANDSTONE	17.9	354.0	
50.7			SILTY SHALE	4.1	371.9	
46.6			GRAY SANDSTONE	14.0	376.0	
32.6			DARK GRAY SHALE	6.7	390.0	
25.9			COAL	3.8	396.7	
22.2			UNDERCLAY	0.5	400.4	

MAPID: 16502959000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.680416 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2602.0 **LOG TYPE:**
SOURCE: FITCH BROTHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	296.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1781.0			LIMESTONE	-	2185.0	
-2198.0		BASE BARLOW	LIMESTONE	-	2602.0	

MAPID: 16502959000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.680416 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.811456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 3125.0 **LOG TYPE:** Electric Log
SOURCE: FITCH BROTHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	HERRIN	COAL	5.0	305.0	
-6.0	CARBONDALE	SPRINGFIELD	COAL	4.0	410.0	
-86.0	CARBONDALE	HOUCHIN CREEK	COAL	-	490.0	

MAPID: 16502959000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.680416 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.811456 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 1630.0 **LOG TYPE:** Electric Log
SOURCE: FITCH BROTHERS **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	615.0	
-276.0	SPOON	DAVIS	UNCLASSIFIED	-	680.0	
-1226.0	BASE OF PENN.		UNCLASSIFIED	-	1630.0	

MAPID: 16502959000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.680416 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811456 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2602.0 **LOG TYPE:** Electric Log
SOURCE: FITCH BROTHERS, BOND 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	497.0	
-135.0	CARBONDALE	SURVANT	COAL	0.5	539.0	
-208.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-260.0	CARBONDALE	DEKOVEN	COAL	3.0	664.0	
-266.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	670.0	
-274.0	CARBONDALE	DAVIS	COAL	4.0	678.0	
-325.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	729.0	

MAPID: 16503141000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.687341 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813275 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2599.0 **LOG TYPE:**
SOURCE: FITCH BROTHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1781.0	
-1785.0			LIMESTONE	-	2190.0	
-2194.0		BASE BARLOW	LIMESTONE	-	2599.0	

MAPID: 16503162000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.671199 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809589 **DATE COLLECTED:** 11 / 0 / 1957
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, CLARIDA JESS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-89.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	496.0	
-135.0	CARBONDALE	SURVANT	COAL	1.0	542.0	
-214.0	CARBONDALE	COLCHESTER	COAL	0.5	621.0	
-256.0	CARBONDALE	DEKOVEN	COAL	2.5	663.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	670.0	
-273.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	719.0	

MAPID: 16503162000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.671199 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809589 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	BRERETON	LIMESTONE	-	303.0	
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1756.0			LIMESTONE	-	2163.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2596.0	

MAPID: 16503165000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.67588 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.805907 **DATE COLLECTED:** 3 / 0 / 1958

SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2621.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., BOND **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-64.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	496.0	
-108.0	CARBONDALE	SURVANT	COAL	1.0	540.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	613.0	
-234.0	CARBONDALE	DEKOVEN	COAL	2.8	666.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	670.0	
-248.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	725.0	
-298.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	730.0	

MAPID: 16503165000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.67588 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.805907 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2621.0 **LOG TYPE:**

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	303.0	
-1356.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1788.0	
-			LIMESTONE	-		
-2189.0		BASE BARLOW	LIMESTONE	-	2621.0	

MAPID: 16503191000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675764 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81328 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: WAUSAU PETRO. CORP., JOHNSON J R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	500.0	
-146.0	CARBONDALE	SURVANT	COAL	1.5	546.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	617.0	
-277.0	CARBONDALE	DEKOVEN	COAL	3.3	677.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	681.0	
-294.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	719.0	

MAPID: 16503191000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675764 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81328 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1795.0			LIMESTONE	-	2195.0	
-2190.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16503200000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.673583 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805902 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:** Electric Log
SOURCE: PEARSON, CHRIS SR., EST., REYNOLDS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	486.0	
-110.0	CARBONDALE	SURVANT	COAL	0.8	530.0	
-183.0	CARBONDALE	COLCHESTER	COAL	0.5	603.0	
-237.0	CARBONDALE	DEKOVEN	COAL	3.0	657.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	661.0	
-252.0	CARBONDALE	DAVIS	COAL	4.0	672.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	715.0	
-300.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	720.0	

MAPID: 16503200000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.673583 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805902 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:**
SOURCE: PEARSON, CHRIS SR., EST. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1356.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1750.0			LIMESTONE	-	2170.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2603.0	

MAPID: 16503363000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67123 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807768 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
101.0	CARBONDALE	BRERETON	LIMESTONE	-	306.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1756.0			LIMESTONE	-	2163.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16503633000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.671047 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818842 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-2191.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16503639000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.682828 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805916 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	292.0	
-1753.0			LIMESTONE	-	2177.0	
-2176.0		BASE BARLOW	LIMESTONE	-	2600.0	

MAPID: 16503640000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.673527 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809593 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1360.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-			LIMESTONE	-		
-2173.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503645000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.671139 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813327 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2574.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
96.0	CARBONDALE	BRERETON	LIMESTONE	-	308.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1766.0			LIMESTONE	-	2170.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2574.0	

MAPID: 16503661000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.671107 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815149 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16525827000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.686013 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.815035 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 426.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION B **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.8	CARBONDALE	HERRIN	COAL	5.8	323.2	
-19.7	CARBONDALE	SPRINGFIELD	COAL	4.4	421.7	

MAPID: 16525909000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.684143 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.818815 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 350.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R4 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.9	CARBONDALE	HERRIN	COAL	5.9	334.1	

MAPID: 16525910000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.681815 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.808747 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 316.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R1 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.9	CARBONDALE	HERRIN	COAL	5.9	310.1	

MAPID: 16525911000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.677435 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.814408 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 325.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R3 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.8	CARBONDALE	HERRIN	COAL	5.9	319.2	

MAPID: 16525912000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.671249 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.816097 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 337.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R2 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	HERRIN	COAL	6.0	331.0	

MAPID: 16503069000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.659761 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81145 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2142.0 **LOG TYPE:**
SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	
-1745.0			LIMESTONE	-	2142.0	

MAPID: 16503069000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.659761 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.81145 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3016.0 **LOG TYPE:** Electric Log

SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
94.0	CARBONDALE	HERRIN	COAL	5.0	303.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	4.0	409.0	
-95.0	CARBONDALE	HOUCHIN CREEK	COAL	-	492.0	

MAPID: 16503069000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.659761 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81145 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2142.0 **LOG TYPE:** Electric Log

SOURCE: LOBREE & LOBREE LISZ, MARTIN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	496.0	
-146.0	CARBONDALE	SURVANT	COAL	0.8	543.0	
-228.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-271.0	CARBONDALE	DEKOVEN	COAL	3.3	668.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	675.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-291.0	CARBONDALE	DAVIS	COAL	4.5	688.0	
-303.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-316.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	713.0	
-378.0	TRADEWATER	MT. RORAH	COAL	1.8	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503089000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652938 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.816937 **DATE COLLECTED:** 1 / 0 / 1957

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log

SOURCE: WALTON HOWARD E **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-224.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	625.0	
-289.0	SPOON	DAVIS	UNCLASSIFIED	-	690.0	
-1189.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	

MAPID: 16503089000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652938 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.816937 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:**

SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
116.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1354.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	
-1756.0			LIMESTONE	-	2157.0	
-2174.0		BASE BARLOW	LIMESTONE	-	2575.0	

MAPID: 16503089000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652938 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.816937 **DATE COLLECTED:** 1 / 0 / 1957

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:** Electric Log

SOURCE: WALTON HOWARD E, RYAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	504.0	
-149.0	CARBONDALE	SURVANT	COAL	2.5	550.0	
-223.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-270.0	CARBONDALE	DEKOVEN	COAL	2.5	671.0	
-282.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	683.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-289.0	CARBONDALE	DAVIS	COAL	3.0	690.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	
-344.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	745.0	
-388.0	TRADEWATER	MT. RORAH	COAL	1.5	789.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503100000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668843 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.81328 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:**

SOURCE: STRICKLAND, FRANK L. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1759.0			LIMESTONE	-	2160.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2578.0	

MAPID: 16503100000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668843 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.81328 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 324.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
178.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	223.0	
173.0	MODESTO		GRAY SHALE	6.5	228.0	
166.5	CARBONDALE	DANVILLE	COAL	1.5	234.5	
165.0	CARBONDALE		SHALE & SANDSTONE	17.0	236.0	
148.0	CARBONDALE	ALLENBY	COAL	0.5	253.0	
147.5	CARBONDALE		CLAYSTONE	6.5	253.5	
141.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	260.0	
135.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	266.0	
125.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	20.0	276.0	
105.0	CARBONDALE	LAWSON	SHALE	10.0	296.0	
95.0	CARBONDALE	JAMESTOWN	BONE COAL	1.0	306.0	
94.0	CARBONDALE		CLAYSTONE & SHALE	4.0	307.0	
90.0	CARBONDALE	BRERETON	LIMESTONE	5.0	311.0	
85.0	CARBONDALE	ANNA	BLACK SHALE	3.0	316.0	
82.0	CARBONDALE	HERRIN	COAL	5.0	319.0	

MAPID: 16503100000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668843 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81328 **DATE COLLECTED:** 3 / 0 / 1957

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 324.0 **LOG TYPE:** Electric Log

SOURCE: STRICKLAND, FRANK L., CLARIDA JESS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	505.0	
-104.0	CARBONDALE	SURVANT	COAL	0.8	505.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	623.0	
-279.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	687.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-297.0	CARBONDALE	DAVIS	COAL	5.0	698.0	
-334.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	
-338.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	739.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503163000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 382' W line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668753 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807769 **DATE COLLECTED:** 2 / 0 / 1958
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, GOGUE J B 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-92.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-137.0	CARBONDALE	SURVANT	COAL	0.8	550.0	
-220.0	CARBONDALE	COLCHESTER	COAL	0.5	633.0	
-257.0	CARBONDALE	DEKOVEN	COAL	2.5	670.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	678.0	
-276.0	CARBONDALE	DAVIS	COAL	4.0	689.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	
-317.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	730.0	

MAPID: 16503163000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 382' W line of SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668753 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807769 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1752.0			LIMESTONE	-	2165.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2600.0	

MAPID: 16503279000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657461 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818801 **DATE COLLECTED:** 3 / 0 / 1959
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:** Electric Log
SOURCE: PYRAMID OIL CO, MEDLIN G 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	523.0	
-151.0	CARBONDALE	SURVANT	COAL	0.8	565.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	632.0	
-276.0	CARBONDALE	DEKOVEN	COAL	3.3	690.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	700.0	
-294.0	CARBONDALE	DAVIS	COAL	3.3	708.0	
-341.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	
-346.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	760.0	

MAPID: 16503279000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.657461 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818801 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**
SOURCE: PYRAMID OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1763.0			LIMESTONE	-	2177.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16503282000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.652934 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818784 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: PFLASTERER P J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2172.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16503324000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.652956 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807775 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: POWERS ROY H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1330.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1742.0			LIMESTONE	-	2158.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16503619000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.661926 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818817 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1767.0			LIMESTONE	-	2172.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16503628000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.668888 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8105 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: LOBREE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1739.0			LIMESTONE	-	2170.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16503629000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664244 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.817001 **DATE COLLECTED:** 10 / 0 / 1969
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 1620.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-214.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	610.0	
-289.0	SPOON	DAVIS	UNCLASSIFIED	-	685.0	
-1224.0	BASE OF PENN.		UNCLASSIFIED	-	1620.0	

MAPID: 16503629000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664244 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1766.0			LIMESTONE	-	2162.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16503629000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664244 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817001 **DATE COLLECTED:** 10 / 0 / 1969
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS, EUGENE F., ABNEY HERBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-147.0	CARBONDALE	SURVANT	COAL	1.0	543.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	611.0	
-271.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-276.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	672.0	
-288.0	CARBONDALE	DAVIS	COAL	3.5	684.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	727.0	

MAPID: 16503648000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668811 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815149 **DATE COLLECTED:** 10 / 0 / 1970

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS, EUGENE F., GARNER WAYMAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	508.0	
-153.0	CARBONDALE	SURVANT	COAL	0.8	553.0	
-224.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-285.0	CARBONDALE	DEKOVEN	COAL	3.0	685.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	694.0	
-306.0	CARBONDALE	DAVIS	COAL	4.0	706.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	731.0	

MAPID: 16503648000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668811 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.815149 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**

SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1764.0			LIMESTONE	-	2164.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16526126000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.655971 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.811444 **DATE COLLECTED:** 8 / 19 / 1992

SURFACE ELEVATION (FT.): 396.2 **LOGGED (FT.):** 430.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. BC1992-5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.2	PLEISTOCENE		SOIL	7.0	0.0	
389.2	PLEISTOCENE		CLAY	9.0	7.0	SANDY
380.2	PLEISTOCENE		CLAY	20.0	16.0	SANDY WITH GRAVEL
360.2	PLEISTOCENE		CLAY	10.0	36.0	SANDY
350.2			SHALE	12.0	46.0	SANDY
338.2			SANDSTONE	22.0	58.0	
316.2			SHALE	50.0	80.0	SANDY
266.2			SHALE	7.0	130.0	DARK
259.2			COAL	1.0	137.0	
258.2	MODESTO		UNDERCLAY	2.0	138.0	
256.2	MODESTO		LIMESTONE	2.0	140.0	SANDY
254.2	MODESTO		SANDSTONE	6.0	142.0	
248.2	MODESTO		SHALE	8.0	148.0	SANDY
240.2	MODESTO		LIMESTONE	1.0	156.0	DARK
239.2	MODESTO		SHALE	3.0	157.0	
236.2	MODESTO		SHALE	8.0	160.0	DARK
228.2	MODESTO		COAL	2.0	168.0	
226.2	MODESTO		SHALE	3.0	170.0	
223.2	MODESTO		SHALE	7.0	173.0	SANDY
216.2	MODESTO		SANDSTONE	10.0	180.0	
206.2	MODESTO		SHALE	27.0	190.0	SANDY
179.2	MODESTO	PIASA	LIMESTONE	2.0	217.0	
177.2	MODESTO		SHALE	3.0	219.0	GRAY
174.2	MODESTO		SHALE	6.0	222.0	DARK
168.2	CARBONDALE	DANVILLE	COAL	1.0	228.0	
167.2	CARBONDALE		SHALE	2.0	229.0	
165.2	CARBONDALE		SHALE	2.0	231.0	SANDY
163.2	CARBONDALE		SANDSTONE	7.0	233.0	
156.2	CARBONDALE		SHALE	6.0	240.0	GRAY
150.2	CARBONDALE		SANDSTONE	8.0	246.0	
142.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	254.0	
138.2	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	258.0	SHALEY
137.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	259.0	
135.2	CARBONDALE		SANDSTONE	7.0	261.0	
128.2	CARBONDALE		SHALE	4.0	268.0	
124.2	CARBONDALE		SANDSTONE	6.0	272.0	
118.2	CARBONDALE	CONANT	LIMESTONE	2.0	278.0	SANDY
116.2	CARBONDALE		SANDSTONE	3.0	280.0	
113.2	CARBONDALE		SHALE	12.0	283.0	SANDY

101.2	CARBONDALE		LIMESTONE	1.0	295.0	
100.2	CARBONDALE		LIMESTONE	0.4	296.0	HARD; GRAY-BLACK
99.8	CARBONDALE		SHALE	4.1	296.4	CALCAREOUS, MINOR FRACTURES; BLACK
95.7	CARBONDALE	BRERETON	LIMESTONE	4.0	300.5	DARK GRAY, COAL STREAKS AT BASE
91.6	CARBONDALE	HERRIN	COAL	5.8	304.6	BLACK
85.9	CARBONDALE		UNDERCLAY	3.3	310.3	SOFT, LIGHT TO MEDIUM GRAY
82.6	CARBONDALE	DYKERSBURG	SILTSTONE	2.4	313.6	CALCAREOUS, LIMESTONE; GRAY
80.2	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	316.0	
76.2	CARBONDALE	DYKERSBURG	SHALE	6.0	320.0	SANDY
70.2	CARBONDALE	DYKERSBURG	SHALE	7.0	326.0	SANDY; DARK
63.2	CARBONDALE	DYKERSBURG	SANDSTONE	28.0	333.0	
35.2	CARBONDALE	DYKERSBURG	SHALE	39.0	361.0	SANDY
-3.8	CARBONDALE	DYKERSBURG	SILTSTONE	9.5	400.0	GRAY, WITH LIMESTONE AND SANDSTONE
-13.3	CARBONDALE	DYKERSBURG	SHALE	0.2	409.5	CARBONACEOUS; BLACK
-13.5	CARBONDALE	SPRINGFIELD	COAL	4.8	409.7	PYRITIC
-18.3	CARBONDALE		UNDERCLAY	1.9	414.5	GREENISH TO DARK BROWN, SOFT
-20.2	CARBONDALE		SILTSTONE	3.6	416.4	DARK
-23.8	CARBONDALE		SILTSTONE	10.0	420.0	

MAPID: 16526126000C **VERSION:** 2 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.655971 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.811444 **DATE COLLECTED:** 8 / 19 / 1992

SURFACE ELEVATION (FT.): 396.2 **LOGGED (FT.):** 430.0 **LOG TYPE:** Multiple log types

SOURCE: GOFF & PRUITT DRILLING, INC. BC1992-5 **WELL TYPE:** Coal Test

COMMENT: PERMIT #60; DRILLERS LOG & CORE DESCRIP.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.2	PLEISTOCENE		SOIL	7.0	0.0	
389.2	PLEISTOCENE		SANDY CLAY	9.0	7.0	
380.2	PLEISTOCENE		SANDY CLAY	20.0	16.0	WITH GRAVEL
360.2	PLEISTOCENE		SANDY CLAY	10.0	36.0	
350.2	MODESTO		SANDY SHALE	12.0	46.0	
338.2	MODESTO		SANDSTONE	22.0	58.0	
316.2	MODESTO		SANDY SHALE	50.0	80.0	
266.2	MODESTO		SHALE	7.0	130.0	
259.2	MODESTO		COAL	1.0	137.0	
258.2	MODESTO		UNDERCLAY	2.0	138.0	
256.2	MODESTO		SANDY LIMESTONE	2.0	140.0	
254.2	MODESTO		SANDSTONE	6.0	142.0	
248.2	MODESTO		SANDY SHALE	8.0	148.0	
240.2	MODESTO		LIMESTONE	1.0	156.0	
239.2	MODESTO		SHALE	11.0	157.0	
228.2	MODESTO		COAL	2.0	168.0	
226.2	MODESTO		SHALE	3.0	170.0	
223.2	MODESTO		SANDY SHALE	7.0	173.0	
216.2	MODESTO		SANDSTONE	10.0	180.0	
206.2	MODESTO		SHALE	27.0	190.0	
179.2	MODESTO	PIASA	LIMESTONE	2.0	217.0	
177.2	MODESTO		SHALE	9.0	219.0	
168.2	CARBONDALE	DANVILLE	COAL	1.0	228.0	
167.2	CARBONDALE		SHALE	2.0	229.0	
165.2	CARBONDALE		SANDY SHALE	2.0	231.0	
163.2	CARBONDALE		SANDSTONE	7.0	233.0	
156.2	CARBONDALE		SHALE	6.0	240.0	
150.2	CARBONDALE		SANDSTONE	8.0	246.0	
142.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	254.0	
138.2	CARBONDALE	BANKSTON FORK	SHALE WITH LIMESTONE	1.0	258.0	
137.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	259.0	
135.2	CARBONDALE		SANDSTONE	7.0	261.0	
128.2	CARBONDALE		SHALE	4.0	268.0	
124.2	CARBONDALE		SANDSTONE	6.0	272.0	
118.2	CARBONDALE		SANDY LIMESTONE	2.0	278.0	
116.2	CARBONDALE		SANDSTONE	3.0	280.0	
113.2	CARBONDALE		SANDY SHALE	12.0	283.0	
101.2	CARBONDALE		LIMESTONE	1.0	295.0	
100.2	CARBONDALE		LIMESTONE	0.4	296.0	BEGIN CORE DESC. #1

99.8	CARBONDALE		SHALE	4.1	296.4	
95.7	CARBONDALE	BRERETON	LIMESTONE	4.0	300.5	
91.6	CARBONDALE	HERRIN	COAL	5.8	304.6	
85.9	CARBONDALE		UNDERCLAY	3.3	310.3	
82.6	CARBONDALE	DYKERSBURG	SILTSTONE	2.4	313.6	END CORE #1; LOG SHOWS DEPTH OF 315.5'
80.2	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	316.0	
76.2	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	320.0	
63.2	CARBONDALE	DYKERSBURG	SANDSTONE	28.0	333.0	
35.2	CARBONDALE	DYKERSBURG	SANDY SHALE	39.0	361.0	
-3.8	CARBONDALE	DYKERSBURG	SILTSTONE	9.5	400.0	BEGIN CORE DESC. #2
-13.3	CARBONDALE	DYKERSBURG	CARBONACEOUS SHALE	0.2	409.5	
-13.5	CARBONDALE	SPRINGFIELD	COAL	4.8	409.7	
-18.3	CARBONDALE		UNDERCLAY	1.9	414.5	
-20.2	CARBONDALE		SILTSTONE	3.6	416.4	END CORE DESC. #2
-23.8	CARBONDALE		SILTSTONE	10.0	420.0	

MAPID: 16502810000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643858 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.811412 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2551.0 **LOG TYPE:**

SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1319.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1724.0	
-1757.0			LIMESTONE	-	2162.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2551.0	

MAPID: 16502810000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643858 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.811412 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 3122.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	HERRIN	COAL	5.0	276.0	
12.0	CARBONDALE	SPRINGFIELD	COAL	7.0	393.0	
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	-	458.0	

MAPID: 16502810000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.643858 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811412 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2551.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO., BROWN MAUDE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	458.0	
-100.0	CARBONDALE	SURVANT	COAL	1.3	505.0	
-123.0	CARBONDALE	COLCHESTER	COAL	0.5	528.0	
-231.0	CARBONDALE	DEKOVEN	COAL	1.3	636.0	
-244.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	649.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-257.0	CARBONDALE	DAVIS	COAL	4.5	662.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	699.0	
-335.0	TRADEWATER	MT. RORAH	COAL	4.0	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503002000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 380' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.636966 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818579 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:** Electric Log
SOURCE: STRICKLAND, FRANK L., KRISULI **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	490.0	
-124.0	CARBONDALE	SURVANT	COAL	1.3	532.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	601.0	
-239.0	CARBONDALE	DEKOVEN	COAL	2.0	647.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	667.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	3.5	675.0	
-313.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	721.0	
-349.0	TRADEWATER	MT. RORAH	COAL	0.5	757.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503002000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 380' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.636966 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818579 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: STRICKLAND, FRANK L. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
98.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1760.0			LIMESTONE	-	2168.0	
-2149.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16503015000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.650637 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818775 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE & LOBREE LISZ, KEOWN-BONNA-BAKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-110.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-155.0	CARBONDALE	SURVANT	COAL	1.3	560.0	
-224.0	CARBONDALE	COLCHESTER	COAL	0.5	629.0	
-271.0	CARBONDALE	DEKOVEN	COAL	2.5	676.0	
-285.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	690.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	3.0	699.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	747.0	
-348.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	753.0	
-393.0	TRADEWATER	MT. RORAH	COAL	1.8	798.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503015000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.650637 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818775 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.0	CARBONDALE	BRERETON	LIMESTONE	-	325.0	
-1340.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1745.0	
-1755.0			LIMESTONE	-	2160.0	
-2176.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16503213000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 400' N line, 330' W line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.641522 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1318.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1701.0	
-1753.0			LIMESTONE	-	2136.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16503213000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 400' N line, 330' W line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.641522 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.818545 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
187.0	MODESTO	PIASA	LIMESTONE	5.0	196.0	
182.0	MODESTO		SHALE	8.0	201.0	
174.0	CARBONDALE	DANVILLE	COAL	2.0	209.0	
172.0	CARBONDALE		SHALE & SANDSTONE	18.0	211.0	
154.0	CARBONDALE	ALLENBY	COAL	1.0	229.0	
153.0	CARBONDALE		CLAYSTONE	8.0	230.0	
145.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	238.0	
137.0	CARBONDALE	LAWSON	CLAYSTONE	6.0	246.0	
131.0	CARBONDALE	LAWSON	GRAY SHALE	20.0	252.0	
111.0	CARBONDALE	BRERETON	LIMESTONE	7.0	272.0	
104.0	CARBONDALE	ANNA	BLACK SHALE	2.0	279.0	
102.0	CARBONDALE	HERRIN	COAL	5.0	281.0	

MAPID: 16503213000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 400' N line, 330' W line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.641522 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818545 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., THOMPSON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	465.0	
-125.0	CARBONDALE	SURVANT	COAL	1.5	508.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-237.0	CARBONDALE	DEKOVEN	COAL	2.5	620.0	
-256.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	639.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	3.3	647.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-352.0	TRADEWATER	MT. RORAH	COAL	1.3	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503519000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 335' S line, 380' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650481 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.809606 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 1610.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-185.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	620.0	
-285.0	SPOON	DAVIS	UNCLASSIFIED	-	720.0	
-1175.0	BASE OF PENN.		UNCLASSIFIED	-	1610.0	

MAPID: 16503519000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 335' S line, 380' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650481 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2591.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1329.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1745.0			LIMESTONE	-	2180.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2591.0	

MAPID: 16503519000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 335' S line, 380' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.650481 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809606 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2591.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BROWN CALVIN HRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	510.0	
-129.0	CARBONDALE	SURVANT	COAL	1.3	564.0	
-185.0	CARBONDALE	COLCHESTER	COAL	0.6	620.0	
-265.0	CARBONDALE	DEKOVEN	COAL	2.0	700.0	
-273.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	708.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-285.0	CARBONDALE	DAVIS	COAL	5.0	720.0	
-315.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-363.0	TRADEWATER	MT. RORAH	COAL	1.3	798.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503585000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.65065 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1336.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1732.0	
-1754.0			LIMESTONE	-	2150.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16524645000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.634726 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815037 **DATE COLLECTED:** 9 / 9 / 1982
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 13.5 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W., KRUCULI, JOHN #1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-93.0	CARBONDALE	SURVANT	COAL	1.5	493.0	
-166.0	CARBONDALE	COLCHESTER	COAL	0.5	566.0	
-220.0	CARBONDALE	DEKOVEN	COAL	2.0	620.0	
-240.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	640.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-252.0	CARBONDALE	DAVIS	COAL	5.0	652.0	
-280.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	680.0	
-320.0	TRADEWATER	MT. RORAH	COAL	2.0	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500040000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.628987 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.815935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 411.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
202.0	CARBONDALE	DANVILLE	COAL	3.0	196.0	
198.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	16.0	200.0	
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	223.0	
142.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	16.0	256.0	
119.0	CARBONDALE	HERRIN	COAL	5.0	279.0	
109.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	8.0	289.0	
101.0	CARBONDALE	BRIAR HILL	COAL	1.0	297.0	
2.0	CARBONDALE	SPRINGFIELD	COAL	7.3	396.0	

MAPID: 16500040000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.628987 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.815935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
212.0	MODESTO	PIASA	LIMESTONE	3.0	186.0	
209.0	MODESTO		GRAY SHALE	7.0	189.0	
202.0	CARBONDALE	DANVILLE	COAL	3.0	196.0	
199.0	CARBONDALE		SHALE & SANDSTONE	24.0	199.0	
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	223.0	
169.0	CARBONDALE	LAWSON	SILTY SHALE	27.0	229.0	
142.0	CARBONDALE	LAWSON	SANDSTONE	16.0	256.0	
126.0	CARBONDALE	BRERETON	LIMESTONE	6.0	272.0	
120.0	CARBONDALE	ANNA	BLACK SHALE	1.0	278.0	
119.0	CARBONDALE	HERRIN	COAL	5.0	279.0	

MAPID: 16500040000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.628987 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.815935 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN,ORIG LOG HAD 411' AS TD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	25.0	0.0	
373.0	MODESTO		SANDSTONE	25.0	25.0	
348.0	MODESTO		SHALE	36.0	50.0	
312.0	MODESTO		CALCAREOUS SHALE	29.0	86.0	CALC
283.0	MODESTO		SANDSTONE	15.0	115.0	
268.0	MODESTO		SHALE	7.0	130.0	
261.0	MODESTO		BLACK SHALE	5.0	137.0	
256.0	MODESTO		CLAYSTONE	1.0	142.0	
255.0	MODESTO		CALCAREOUS SHALE	9.0	143.0	CALC
246.0	MODESTO		SANDSTONE	20.0	152.0	
226.0	MODESTO		SANDY SHALE	13.0	172.0	
213.0	MODESTO		COAL	0.5	185.0	
212.5	MODESTO		UNDERCLAY	0.5	185.5	
212.0	MODESTO	PIASA	LIMESTONE	3.0	186.0	
209.0	MODESTO		SHALE	7.0	189.0	
202.0	CARBONDALE	DANVILLE	COAL	3.0	196.0	
199.0	CARBONDALE		UNDERCLAY	1.0	199.0	
198.0	CARBONDALE		SANDSTONE	10.0	200.0	
188.0	CARBONDALE		SANDSTONE	6.0	210.0	BLACK
182.0	CARBONDALE		CALCAREOUS SHALE	7.0	216.0	CALC
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	223.0	
169.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	27.0	229.0	
142.0	CARBONDALE	ANVIL ROCK	SHALE	16.0	256.0	
126.0	CARBONDALE	BRERETON	LIMESTONE	6.0	272.0	
120.0	CARBONDALE	ANNA	BLACK SHALE	1.0	278.0	
119.0	CARBONDALE	HERRIN	COAL	5.0	279.0	
114.0	CARBONDALE		UNDERCLAY	5.0	284.0	
109.0	CARBONDALE	VERMILIONVILLE	SANDSTONE	8.0	289.0	
101.0	CARBONDALE	VERMILIONVILLE	SANDY SHALE	1.0	297.0	
100.0	CARBONDALE	BRIAR HILL	COAL	1.0	298.0	
99.0	CARBONDALE	DYKERSBURG	SANDY SHALE	49.0	299.0	
50.0	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	348.0	
37.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	361.0	GRAY
27.0	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	371.0	
13.0	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	385.0	GRAY
4.0	CARBONDALE	DYKERSBURG	SHALE	2.0	394.0	
2.0	CARBONDALE	SPRINGFIELD	COAL	7.3	396.0	LOG REPORTED 7.25',396 TO 410.25
-5.3	CARBONDALE		UNDERCLAY	0.8	403.3	T.D., LOG REPORTED TD AT 411'

MAPID: 16501394000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.632488 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.809521 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log

SOURCE: MILLER, DEE DRLG. CO., BONA JULIUS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-77.0	CARBONDALE	SURVANT	COAL	1.0	494.0	
-139.0	CARBONDALE	COLCHESTER	COAL	0.5	556.0	
-196.0	CARBONDALE	DEKOVEN	COAL	2.5	613.0	
-217.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	634.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-230.0	CARBONDALE	DAVIS	COAL	6.0	647.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	674.0	
-261.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	678.0	
-295.0	TRADEWATER	MT. RORAH	COAL	1.3	712.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501394000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.632488 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.809521 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**

SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1313.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1739.0			LIMESTONE	-	2156.0	
-2151.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16501394000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.632488 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809521 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 554.0 **LOG TYPE:** Electric Log
SOURCE: MILLER DEE DRLG CO 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	HERRIN	COAL	-	285.0	
95.0	CARBONDALE	BRIAR HILL	COAL	4.0	322.0	
11.0	CARBONDALE	SPRINGFIELD	COAL	7.0	406.0	
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	
-137.0	CARBONDALE	COLCHESTER	COAL	-	554.0	

MAPID: 16501520000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625315 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1329.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1713.0			LIMESTONE	-	2114.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16501520000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.625315 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.813135 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 3075.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
205.0	CARBONDALE	DANVILLE	COAL	-	196.0	
184.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	217.0	
157.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	26.0	244.0	
124.0	CARBONDALE	HERRIN	COAL	4.0	277.0	
97.0	CARBONDALE	BRIAR HILL	COAL	-	304.0	
5.0	CARBONDALE	SPRINGFIELD	COAL	5.0	396.0	
-46.0	CARBONDALE	HOUCHIN CREEK	COAL	-	447.0	

MAPID: 16501520000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.625315 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813135 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., BONA J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	445.0	
-91.0	CARBONDALE	SURVANT	COAL	1.3	492.0	
-159.0	CARBONDALE	COLCHESTER	COAL	0.6	560.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.3	610.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	632.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	5.0	647.0	
-369.0	TRADEWATER	MT. RORAH	COAL	1.0	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501520000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625315 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 558.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	HERRIN	COAL	-	277.0	
5.0	CARBONDALE	SPRINGFIELD	COAL	6.5	396.0	
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	-	449.0	
-157.0	CARBONDALE	COLCHESTER	COAL	-	558.0	

MAPID: 16502190000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.632439 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.815031 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1552.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-169.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	553.0	
-255.0	SPOON	DAVIS	UNCLASSIFIED	-	639.0	
-1168.0	BASE OF PENN.		UNCLASSIFIED	-	1552.0	

MAPID: 16502190000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.632439 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815031 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1326.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	
-1746.0			LIMESTONE	-	2130.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502190000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.632439 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815031 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BONA COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-104.0	CARBONDALE	SURVANT	COAL	1.5	488.0	
-120.0	CARBONDALE	COLCHESTER	COAL	0.5	504.0	
-219.0	CARBONDALE	DEKOVEN	COAL	2.0	603.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	625.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-254.0	CARBONDALE	DAVIS	COAL	4.5	638.0	
-286.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	
-326.0	TRADEWATER	MT. RORAH	COAL	1.3	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502190000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.632439 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.815031 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 554.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	HERRIN	COAL	-	274.0	
-16.0	CARBONDALE	SPRINGFIELD	COAL	8.0	400.0	
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	
-170.0	CARBONDALE	COLCHESTER	COAL	-	554.0	

MAPID: 16503146000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 270' E line of NW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.629801 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.816833 **DATE COLLECTED:** 12 / 0 / 1957
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BONA J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	467.0	
-109.0	CARBONDALE	SURVANT	COAL	1.5	494.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.5	563.0	
-227.0	CARBONDALE	DEKOVEN	COAL	1.8	612.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	638.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	3.5	650.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	678.0	
-329.0	TRADEWATER	MT. RORAH	COAL	1.5	714.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503146000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 270' E line of NW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.629801 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816833 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	272.0	
-1319.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1704.0	
-1731.0			LIMESTONE	-	2116.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16503146000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 270' E line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.629801 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.816833 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 563.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. 2 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	HERRIN	COAL	-	277.0	
-22.5	CARBONDALE	SPRINGFIELD	COAL	7.0	407.5	
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	-	456.0	
-178.0	CARBONDALE	COLCHESTER	COAL	-	563.0	

MAPID: 16503346000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.620592 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818601 **DATE COLLECTED:** 2 / 0 / 1961

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:** Electric Log

SOURCE: GENTLES, ALBERT, HENN OTTO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	488.0	
-119.0	CARBONDALE	SURVANT	COAL	2.0	496.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-223.0	CARBONDALE	DEKOVEN	COAL	1.0	600.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	622.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	3.5	632.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	669.0	
-296.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	673.0	
-335.0	TRADEWATER	MT. RORAH	COAL	0.8	712.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503346000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620592 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:**
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	248.0	
-1327.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1704.0	
-1731.0			LIMESTONE	-	2108.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2529.0	

MAPID: 16503346000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620592 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.818601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 557.0 **LOG TYPE:** Electric Log
SOURCE: ALBERT GENTLES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
121.0	CARBONDALE	HERRIN	COAL	-	256.0	
97.0	CARBONDALE	BRIAR HILL	COAL	-	280.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	7.0	420.0	
-180.0	CARBONDALE	COLCHESTER	COAL	-	557.0	

MAPID: 16503514000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615882 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.816726 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 420.0 **LOG TYPE:** Electric Log
SOURCE: MONO CORPORATION 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.5	CARBONDALE	HERRIN	COAL	-	274.5	
106.0	CARBONDALE	BRIAR HILL	COAL	-	300.0	
-14.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	420.0	CHANNEL - COAL MISSING

MAPID: 16503514000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615882 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816726 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: MONO CORPORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1716.0	
-1704.0			LIMESTONE	-	2110.0	
-2116.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16523913000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.623 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.818619 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 550.0 **LOG TYPE:** Electric Log
SOURCE: PACIFIC EXPLORATION CORP 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.5	CARBONDALE	HERRIN	COAL	-	262.5	
8.0	CARBONDALE	SPRINGFIELD	COAL	8.0	378.0	
-164.0	CARBONDALE	COLCHESTER	COAL	-	550.0	

MAPID: 16525775000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618301 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.807604 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 403.5 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HERRIN	COAL	5.0	275.0	
122.0	CARBONDALE	BRIAR HILL	COAL	-	303.0	
28.0	CARBONDALE	SPRINGFIELD	COAL	6.5	397.0	

MAPID: 16525779000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618299 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809426 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 571.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
142.0	CARBONDALE	HERRIN	COAL	-	277.0	
116.0	CARBONDALE	BRIAR HILL	COAL	-	303.0	
20.0	CARBONDALE	SPRINGFIELD	COAL	6.0	399.0	
-152.0	CARBONDALE	COLCHESTER	COAL	-	571.0	

MAPID: 16525790000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615867 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809407 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.5 **LOGGED (FT.):** 564.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.5	CARBONDALE	HERRIN	COAL	-	260.0	
127.5	CARBONDALE	BRIAR HILL	COAL	-	284.0	
11.5	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	6.0	400.0	
-152.5	CARBONDALE	COLCHESTER	COAL	-	564.0	

MAPID: 16525800000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618302 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805765 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 406.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HERRIN	COAL	5.0	285.0	
121.0	CARBONDALE	BRIAR HILL	COAL	-	314.0	
35.0	CARBONDALE	SPRINGFIELD	COAL	6.0	400.0	

MAPID: 16525805000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618298 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.811262 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 378.0 **LOG TYPE:** Nuclear Log
SOURCE: MITCHELL, GEO. N. PROD. 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	HERRIN	COAL	5.0	254.0	
128.5	CARBONDALE	BRIAR HILL	COAL	2.5	279.5	
35.0	CARBONDALE	SPRINGFIELD	COAL	5.0	373.0	

MAPID: 16525814000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618296 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813084 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 395.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	HERRIN	COAL	-	273.0	
96.0	CARBONDALE	BRIAR HILL	COAL	-	299.0	
5.0	CARBONDALE	SPRINGFIELD	COAL	5.0	390.0	

MAPID: 16525816000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618295 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.814906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 409.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.0	CARBONDALE	HERRIN	COAL	-	247.0	
103.0	CARBONDALE	BRIAR HILL	COAL	-	280.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	3.0	397.0	
-17.0	CARBONDALE	SPRINGFIELD	SHALE	4.0	400.0	
-21.0	CARBONDALE	SPRINGFIELD	COAL	5.0	404.0	

MAPID: 16525817000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615875 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813068 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 427.5 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.5	CARBONDALE	HERRIN	COAL	4.5	281.5	
-30.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	0.5	427.0	

MAPID: 16525830000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620594 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.81128 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 387.5 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	HERRIN	COAL	-	262.0	
115.0	CARBONDALE	BRIAR HILL	COAL	2.0	287.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	6.5	381.0	

MAPID: 16525832000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 355' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.62068 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 644.5 **LOG TYPE:** Nuclear Log
SOURCE: MITCHELL, GEO. N. PROD. CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.5	CARBONDALE	HERRIN	COAL	4.5	257.5	
107.0	CARBONDALE	BRIAR HILL	COAL	3.0	282.0	
6.0	CARBONDALE	SPRINGFIELD	COAL	5.0	383.0	
-169.0	CARBONDALE	COLCHESTER	COAL	-	558.0	
-251.5	SPOON	DAVIS	COAL	4.0	640.5	

MAPID: 16525856000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.625302 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.816798 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 551.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	HERRIN	COAL	-	267.0	
-2.0	CARBONDALE	SPRINGFIELD	COAL	7.0	391.0	
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	-	442.0	
-162.0	CARBONDALE	COLCHESTER	COAL	-	551.0	

MAPID: 16502690000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.61359 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818558 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E., GRIFFIN 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	520.0	
-205.0	CARBONDALE	COLCHESTER	COAL	0.6	583.0	
-242.0	CARBONDALE	DEKOVEN	COAL	2.0	620.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	639.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-366.0	TRADEWATER	MT. RORAH	COAL	1.5	744.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502690000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.61359 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818558 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1713.0	
-1720.0			LIMESTONE	-	2098.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2500.0	

MAPID: 16502690000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.61359 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.818558 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Electric Log
SOURCE: A. B. BUCHMAN & ONEAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	HERRIN	COAL	5.5	260.0	
95.0	CARBONDALE	BRIAR HILL	COAL	-	283.0	
-2.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	380.0	CHANNEL - COAL MISSING

MAPID: 16502926000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611322 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805767 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., SMALL JOHN C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	477.0	
-84.0	CARBONDALE	SURVANT	COAL	1.5	514.0	
-150.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-191.0	CARBONDALE	DEKOVEN	COAL	2.5	621.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	648.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-224.0	CARBONDALE	DAVIS	COAL	4.0	654.0	
-265.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-332.0	TRADEWATER	MT. RORAH	COAL	2.5	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502926000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611322 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805767 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	272.0	
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1712.0			LIMESTONE	-	2142.0	
-2108.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16502926000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611322 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805767 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 659.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. A-1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HERRIN	COAL	-	280.0	
125.0	CARBONDALE	BRIAR HILL	COAL	-	305.0	
25.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	405.0	CHANNEL - COAL MISSING
-46.0	CARBONDALE	HOUCHIN CREEK	COAL	-	476.0	
-225.0	SPOON	DAVIS	COAL	4.0	655.0	

MAPID: 16502962000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609026 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.805785 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1571.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	580.0	
-243.0	SPOON	DAVIS	UNCLASSIFIED	-	658.0	
-1156.0	BASE OF PENN.		UNCLASSIFIED	-	1571.0	

MAPID: 16502962000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609026 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805785 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2517.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1311.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1726.0	
-1706.0			LIMESTONE	-	2121.0	
-2102.0		BASE BARLOW	LIMESTONE	-	2517.0	

MAPID: 16502962000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609026 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805785 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2517.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, ADAMS ROSE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	475.0	
-99.0	CARBONDALE	SURVANT	COAL	1.0	514.0	
-165.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-213.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-236.0	CARBONDALE	LOWER DEKOVEN	COAL	3.5	651.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-243.0	CARBONDALE	DAVIS	COAL	3.0	658.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	693.0	
-335.0	TRADEWATER	MT. RORAH	COAL	0.5	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502962000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609026 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805785 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 579.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.0	CARBONDALE	HERRIN	COAL	6.0	278.0	
110.0	CARBONDALE	BRIAR HILL	COAL	-	305.0	
-5.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	420.0	CHANNEL - COAL MISSING
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	-	474.0	
-164.0	CARBONDALE	COLCHESTER	COAL	-	579.0	

MAPID: 16502978000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606788 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8058 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
121.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1317.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	
-1709.0			LIMESTONE	-	2110.0	
-2108.0		BASE BARLOW	LIMESTONE	-	2509.0	

MAPID: 16502978000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606788 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.8058 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 293.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	MODESTO	PIASA	LIMESTONE & SHALE	6.0	197.0	
198.0	MODESTO		GRAY SHALE	11.0	203.0	
187.0	CARBONDALE	DANVILLE	COAL	1.5	214.0	
185.5	CARBONDALE		SHALE & SANDSTONE	19.0	215.5	
166.5	CARBONDALE	ALLENBY	COAL	0.5	234.5	
166.0	CARBONDALE		CLAYSTONE & SHALE	7.0	235.0	
159.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	242.0	
153.0	CARBONDALE	LAWSON	CLAYSTONE	3.0	248.0	
150.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	15.0	251.0	
135.0	CARBONDALE	LAWSON	SHALE	15.0	266.0	
120.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	281.0	
117.0	CARBONDALE	ANNA	BLACK SHALE	3.0	284.0	
114.0	CARBONDALE	HERRIN	COAL	6.0	287.0	

MAPID: 16502978000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606788 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8058 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 293.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, ADAMS ROSE 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	458.0	
-99.0	CARBONDALE	SURVANT	COAL	1.0	500.0	
-162.0	CARBONDALE	COLCHESTER	COAL	0.5	563.0	
-204.0	CARBONDALE	DEKOVEN	COAL	1.8	605.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	632.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-239.0	CARBONDALE	DAVIS	COAL	3.0	640.0	
-277.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	678.0	
-284.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	685.0	
-341.0	TRADEWATER	MT. RORAH	COAL	2.0	742.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502978000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606788 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.8058 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 457.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
114.5	CARBONDALE	HERRIN	COAL	-	286.5	
83.0	CARBONDALE	BRIAR HILL	COAL	-	318.0	
-16.0	CARBONDALE	SPRINGFIELD	COAL	8.0	417.0	
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	-	457.0	

MAPID: 16502988000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609028 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807615 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2521.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, ADAMS ROSE 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	470.0	
-99.0	CARBONDALE	SURVANT	COAL	1.5	510.0	
-161.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-215.0	CARBONDALE	DEKOVEN	COAL	2.0	626.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	3.5	650.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-247.0	CARBONDALE	DAVIS	COAL	4.0	658.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-287.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	698.0	
-347.0	TRADEWATER	MT. RORAH	COAL	2.5	758.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502988000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609028 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807615 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2521.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1315.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1726.0	
-1717.0			LIMESTONE	-	2128.0	
-2110.0		BASE BARLOW	LIMESTONE	-	2521.0	

MAPID: 16502988000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609028 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.807615 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 470.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.0	CARBONDALE	HERRIN	COAL	6.0	280.0	
106.5	CARBONDALE	BRIAR HILL	COAL	-	304.5	
-7.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	418.0	CHANNEL - COAL MISSING
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	-	470.0	

MAPID: 16503010000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606786 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807631 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, ADAMS ROSE 4 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	460.0	
-95.0	CARBONDALE	SURVANT	COAL	1.5	500.0	
-155.0	CARBONDALE	COLCHESTER	COAL	0.6	560.0	
-207.0	CARBONDALE	DEKOVEN	COAL	1.8	612.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	635.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-239.0	CARBONDALE	DAVIS	COAL	3.5	644.0	
-275.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	
-344.0	TRADEWATER	MT. RORAH	COAL	1.8	749.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503010000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606786 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	286.0	
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1728.0	
-1720.0			LIMESTONE	-	2125.0	
-2118.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16503010000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606786 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.807631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 460.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
111.0	CARBONDALE	HERRIN	COAL	5.0	294.0	
82.0	CARBONDALE	BRIAR HILL	COAL	-	323.0	
-1.0	CARBONDALE	SPRINGFIELD	COAL	7.0	406.0	
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	-	460.0	

MAPID: 16503190000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608852 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2493.0 **LOG TYPE:**
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	BRERETON	LIMESTONE	-	257.0	
-1322.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1702.0	
-1720.0			LIMESTONE	-	2100.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2493.0	

MAPID: 16503190000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608852 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.809438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	HERRIN	COAL	4.0	260.0	
100.0	CARBONDALE	BRIAR HILL	COAL	-	280.0	
-5.0	CARBONDALE	SPRINGFIELD	COAL	3.0	385.0	
-58.0	CARBONDALE	HOUCHIN CREEK	COAL	-	438.0	

MAPID: 16503190000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608852 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809438 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2493.0 **LOG TYPE:** Electric Log
SOURCE: GENTLES, ALBERT, COMER COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-62.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	442.0	
-101.0	CARBONDALE	SURVANT	COAL	1.5	481.0	
-126.0	CARBONDALE	COLCHESTER	COAL	0.5	506.0	
-218.0	CARBONDALE	DEKOVEN	COAL	2.0	598.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	622.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-252.0	CARBONDALE	DAVIS	COAL	4.0	632.0	
-280.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-300.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	680.0	
-348.0	TRADEWATER	MT. RORAH	COAL	1.5	728.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503190000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608852 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 442.0 **LOG TYPE:** Electric Log
SOURCE: ALBERT GENTLES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	HERRIN	COAL	6.5	258.0	
99.0	CARBONDALE	BRIAR HILL	COAL	-	281.0	
-3.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	3.0	383.0	
-62.0	CARBONDALE	HOUCHIN CREEK	COAL	-	442.0	

MAPID: 16523900000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.599957 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805852 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 453.0 **LOG TYPE:** Electric Log
SOURCE: PACIFIC EXPLORATION CORP 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	HERRIN	COAL	-	272.0	
83.0	CARBONDALE	BRIAR HILL	COAL	-	299.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	6.0	400.0	
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	-	453.0	

MAPID: 16524647000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606771 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 396.0 **LOG TYPE:** Electric Log
SOURCE: L. A. KAPP JR. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	HERRIN	COAL	-	276.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	6.0	390.0	

MAPID: 16525792000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 290' S line, 430' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.598044 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809398 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 643.0 **LOG TYPE:** Nuclear Log
SOURCE: CHARLES T. EVANS 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	HERRIN	COAL	5.0	266.0	
79.0	CARBONDALE	BRIAR HILL	COAL	2.0	296.0	
-27.0	CARBONDALE	SPRINGFIELD	SANDSTONE & MUDSTONE	4.5	402.0	
-184.0	CARBONDALE	HOUCHIN CREEK	COAL	-	559.0	
-264.0	SPOON	DAVIS	COAL	4.0	639.0	

MAPID: 16525809000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.59994 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809496 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 638.0 **LOG TYPE:** Electric Log
SOURCE: CHARLES T. EVANS 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
114.0	CARBONDALE	HERRIN	COAL	6.0	265.0	
85.0	CARBONDALE	BRIAR HILL	COAL	2.0	294.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	4.0	397.0	
-74.0	CARBONDALE	HOUCHIN CREEK	COAL	-	453.0	
-255.0	SPOON	DAVIS	COAL	4.0	634.0	

MAPID: 16525818000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.807686 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 4444.0 **LOG TYPE:** Electric Log
SOURCE: EVANS, C. T. & C. T. EVANS TRU3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	HERRIN	COAL	6.0	256.0	
90.0	CARBONDALE	BRIAR HILL	COAL	1.5	285.0	
-15.0	CARBONDALE	SPRINGFIELD	COAL	4.5	390.0	
-4069.0	CARBONDALE	HOUCHIN CREEK	COAL	-	4444.0	
-182.0	CARBONDALE	COLCHESTER	COAL	-	557.0	
-247.5	SPOON	DAVIS	COAL	3.5	622.5	
-532.0	SPOON		COAL	4.0	907.0	

MAPID: 16525835000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602219 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.813125 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 642.5 **LOG TYPE:** Nuclear Log
SOURCE: EVANS, C. T. & C. T. EVANS TRU1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
98.0	CARBONDALE	HERRIN	COAL	5.5	276.0	
71.0	CARBONDALE	BRIAR HILL	COAL	2.0	303.0	
-34.0	CARBONDALE	SPRINGFIELD	COAL	4.0	408.0	
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	-	456.0	
-266.0	SPOON	DAVIS	COAL	2.5	640.0	

MAPID: 16525858000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597683 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.811328 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 836.0 **LOG TYPE:** Electric Log
SOURCE: EVANS, C. T. & C. T. EVANS TRU4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
114.0	CARBONDALE	HERRIN	COAL	6.0	264.0	
86.0	CARBONDALE	BRIAR HILL	COAL	2.0	292.0	
-20.0	CARBONDALE	SPRINGFIELD	COAL	4.0	398.0	
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	-	454.0	
-256.0	SPOON	DAVIS	COAL	3.0	634.0	
-454.0	SPOON		COAL	4.0	832.0	

MAPID: 16500042000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.612421 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.803025 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 500.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	HERRIN	COAL	5.8	249.0	
122.0	CARBONDALE	BRIAR HILL	COAL	1.5	278.0	
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	459.0	

MAPID: 16500042000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 660' N line, 660' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.612421 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.803025 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 255.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
238.5	MODESTO	PIASA	LIMESTONE	4.5	161.5	
234.0	MODESTO		CLAYSTONE & SHALE	11.0	166.0	
223.0	CARBONDALE	DANVILLE	COAL	1.8	177.0	
221.2	CARBONDALE		SHALE & SANDSTONE	23.5	178.8	
197.7	CARBONDALE	ALLENBY	COAL	0.2	202.3	
197.5	CARBONDALE		CLAYSTONE	1.0	202.5	
196.5	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	203.5	
187.5	CARBONDALE	LAWSON	SANDSTONE	6.0	212.5	
181.5	CARBONDALE	LAWSON	SHALE	10.0	218.5	
171.5	CARBONDALE	LAWSON	CLAYSTONE & SHALE	11.0	228.5	
160.5	CARBONDALE		BLACK SHALE	5.0	239.5	
155.5	CARBONDALE	BRERETON	LIMESTONE	5.0	244.5	
150.5	CARBONDALE	ANNA	BLACK SHALE	0.5	249.5	
150.0	CARBONDALE	HERRIN	COAL	5.8	250.0	

MAPID: 16500042000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 660' N line, 660' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.612421 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.803025 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.7 **LOGGED (FT.):** 499.9 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN-LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.7			UNCONSOLIDATED	35.0	0.0	
364.7	MODESTO		SHALE	40.0	35.0	
324.7	MODESTO		ARGILACEOUS SHALE	15.0	75.0	ARG
309.7	MODESTO		COAL	0.2	90.0	
309.5	MODESTO		UNDERCLAY	6.0	90.2	
303.5	MODESTO		BLACK SHALE	10.0	96.2	
293.5	MODESTO		ARGILACEOUS SHALE	14.0	106.2	ARG
279.5	MODESTO		COAL	0.8	120.2	
278.7	MODESTO		UNDERCLAY	7.0	121.0	
271.7	MODESTO		LIMESTONE	5.0	128.0	
266.7	MODESTO		SANDSTONE	6.0	133.0	
260.7	MODESTO		ARGILACEOUS SHALE	22.0	139.0	ARG
238.7	MODESTO	PIASA	LIMESTONE	4.5	161.0	
234.2	MODESTO		ARGILACEOUS SHALE	11.0	165.5	ARG
223.2	CARBONDALE	DANVILLE	COAL	1.8	176.5	
221.4	CARBONDALE		UNDERCLAY	2.0	178.3	
219.4	CARBONDALE		SANDSTONE	4.0	180.3	
215.4	CARBONDALE		BLACK SHALE	11.0	184.3	
204.4	CARBONDALE	"Allenby rider"	SHALE	0.5	195.3	BONEY
203.9	CARBONDALE		CLAYSTONE	6.0	195.8	
197.9	CARBONDALE	ALLENBY	COAL	0.2	201.8	
197.7	CARBONDALE		UNDERCLAY	1.0	202.0	
196.7	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	203.0	
187.7	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	212.0	
181.7	CARBONDALE	ANVIL ROCK	SHALE	10.0	218.0	
171.7	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	11.0	228.0	ARG
160.7	CARBONDALE		BLACK SHALE	5.0	239.0	
155.7	CARBONDALE	BRERETON	LIMESTONE	5.0	244.0	
150.7	CARBONDALE	ANNA	BLACK SHALE	0.5	249.0	
150.2	CARBONDALE	HERRIN	COAL	5.8	249.5	
144.4	CARBONDALE		UNDERCLAY	2.8	255.3	
141.7	CARBONDALE		ARGILACEOUS SHALE	20.0	258.0	ARG
121.7	CARBONDALE	BRIAR HILL	COAL	1.5	278.0	
120.2	CARBONDALE		SHALE	78.0	279.5	DARK
42.2	CARBONDALE		ARGILACEOUS SHALE	26.0	357.5	ARG
16.2	CARBONDALE		SANDSTONE	28.6	383.5	SPRINGFIELD COAL REPLACED BY CHANNEL
-12.3	CARBONDALE		SANDSTONE	33.0	412.0	
-45.3	CARBONDALE		BLACK SHALE	4.0	445.0	
-49.3	CARBONDALE		SANDSTONE	10.0	449.0	

-59.3	CARBONDALE	HOUCHIN CREEK	COAL	0.5	459.0	
-59.8	CARBONDALE		LIMESTONE	3.0	459.5	
-62.8	CARBONDALE		SANDSTONE	31.5	462.5	
-94.3	CARBONDALE		BLACK SHALE	0.3	494.0	
-94.6	CARBONDALE	SURVANT - UPPER	COAL	0.2	494.3	
-94.7	CARBONDALE		SANDSTONE	0.5	494.4	
-95.2	CARBONDALE	SURVANT - LOWER	COAL	0.1	494.9	
-95.3	CARBONDALE	SURVANT - LOWER	COAL	4.9	495.0	W/SS

MAPID: 16500043000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.605693 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.797606 **DATE COLLECTED:** 11 / 8 / 1905

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	20.0	0.0	
360.0	MODESTO		SANDSTONE	2.0	20.0	
358.0	MODESTO		SANDSTONE	38.0	22.0	
320.0	MODESTO		SHALE	49.0	60.0	BLUE
271.0	MODESTO		COAL	0.3	109.0	
270.7	MODESTO		SHALE	25.0	109.3	
245.7	MODESTO		BLACK SHALE	1.0	134.3	
244.7	MODESTO		SHALE	3.0	135.3	BLUE
241.6	MODESTO		BLACK SHALE	4.0	138.4	
237.7	MODESTO		COAL	0.7	142.3	
237.0	MODESTO		UNDERCLAY	3.0	143.0	
234.0	MODESTO		LIMESTONE	5.0	146.0	
229.0	MODESTO		SANDSTONE	12.0	151.0	
217.0	MODESTO		LIMESTONE	2.0	163.0	
215.0	MODESTO		SANDY SHALE	8.0	165.0	
207.0	MODESTO		SANDSTONE	7.0	173.0	
200.0	MODESTO		SHALE	4.0	180.0	BLUE
196.0	MODESTO		BLACK SHALE	1.0	184.0	
195.0	MODESTO		LIMESTONE	6.0	185.0	
189.0	MODESTO		ARGILACEOUS SHALE	1.0	191.0	ARG
188.0	MODESTO		BLACK SHALE	1.0	192.0	
187.0	MODESTO		SHALE	5.0	193.0	BLUE
182.0	MODESTO		BLACK SHALE	1.0	198.0	
181.0	MODESTO		SHALE	3.0	199.0	BLUE
178.0	MODESTO		BLACK SHALE	1.7	202.0	
176.3	MODESTO		COAL	1.3	203.7	
175.0	MODESTO		SHALE	2.0	205.0	
173.0	MODESTO		SANDSTONE	3.0	207.0	
170.0	MODESTO		SHALE	2.0	210.0	BLUE
168.0	MODESTO		SANDSTONE	3.0	212.0	
165.0	MODESTO		SHALE	2.0	215.0	BLUE
163.0	MODESTO		BLACK SHALE	1.0	217.0	
162.0	CARBONDALE	DANVILLE	COAL	3.0	218.0	
159.0	CARBONDALE		SANDSTONE	3.0	221.0	
156.0	CARBONDALE	ALLENBY	COAL	1.5	224.0	
154.5	CARBONDALE		UNDERCLAY	1.5	225.5	
153.0	CARBONDALE		SHALE	7.0	227.0	BLUE
146.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	234.0	
143.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	237.0	

139.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.0	241.0	BLUE
115.0	CARBONDALE	BRERETON	LIMESTONE	3.0	265.0	
112.0	CARBONDALE	BRERETON	LIMESTONE	3.0	268.0	
109.0	CARBONDALE	ANNA	BLACK SHALE	3.0	271.0	
106.0	CARBONDALE	HERRIN	COAL	5.7	274.0	
100.3	CARBONDALE		UNDERCLAY	0.5	279.7	
99.8	CARBONDALE		CALCAREOUS SHALE	2.8	280.2	CALC
97.0	CARBONDALE		LIMESTONE	4.0	283.0	
93.0	CARBONDALE		LIMESTONE	2.5	287.0	
90.5	CARBONDALE		SANDY SHALE	16.8	289.5	BLACK
73.7	CARBONDALE	BRIAR HILL	COAL	1.3	306.3	
72.3	CARBONDALE		UNDERCLAY	0.3	307.7	
72.0	CARBONDALE	DYKERSBURG	SHALE	1.1	308.0	BLUE
70.9	CARBONDALE	DYKERSBURG	SANDY SHALE	82.6	309.1	
-11.7	CARBONDALE	SPRINGFIELD	COAL	2.1	391.7	
-13.8	CARBONDALE	SPRINGFIELD	SHALE	0.8	393.8	
-14.5	CARBONDALE	SPRINGFIELD	COAL	3.3	394.5	
-17.8	CARBONDALE		SHALE	2.2	397.8	DARK

MAPID: 16500043000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.605693 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.797606 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.0	CARBONDALE	DANVILLE	COAL	1.3	204.0	
173.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	8.0	207.0	
146.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	234.0	
106.0	CARBONDALE	HERRIN	COAL	5.7	274.0	
74.0	CARBONDALE	BRIAR HILL	COAL	1.3	306.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	6.2	392.0	

MAPID: 16502653000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613609 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796646 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2523.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, UPTON GEORGE O **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SURVANT	COAL	1.5	528.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-	CARBONDALE	DEKOVEN	COAL	2.5	640.0	
-	CARBONDALE	LOWER DEKOVEN	COAL	1.5	655.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-	CARBONDALE	DAVIS	COAL	4.0	664.0	
-	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-	TRADEWATER	MT. RORAH	COAL	2.5	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502653000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613609 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	BRERETON	LIMESTONE	-	255.0	
-1694.0			LIMESTONE	-	2108.0	
-2109.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16502653000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613609 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 600.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.5	CARBONDALE	HERRIN	COAL	6.0	258.5	
127.0	CARBONDALE	BRIAR HILL	COAL	-	287.0	
4.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-186.0	CARBONDALE	COLCHESTER	COAL	-	600.0	

MAPID: 16502659000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611336 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798481 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMITH-FED LND BN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	SURVANT	COAL	1.5	519.0	
-175.0	CARBONDALE	COLCHESTER	COAL	0.5	586.0	
-211.0	CARBONDALE	DEKOVEN	COAL	2.5	622.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	650.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-249.0	CARBONDALE	DAVIS	COAL	4.8	660.0	
-270.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	681.0	
-351.0	TRADEWATER	MT. RORAH	COAL	1.3	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502659000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611336 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.0	CARBONDALE	BRERETON	LIMESTONE	-	248.0	
-1299.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	
-1698.0			LIMESTONE	-	2109.0	
-2094.0		BASE BARLOW	LIMESTONE	-	2505.0	

MAPID: 16502659000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611336 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
157.0	CARBONDALE	HERRIN	COAL	5.5	254.0	
128.0	CARBONDALE	BRIAR HILL	COAL	-	283.0	
11.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		
-176.0	CARBONDALE	COLCHESTER	COAL	-	587.0	

MAPID: 16502738000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611391 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.79484 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, UPTON GEORGE O **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-101.0	CARBONDALE	SURVANT	COAL	1.5	533.0	
-166.0	CARBONDALE	COLCHESTER	COAL	0.5	598.0	
-210.0	CARBONDALE	DEKOVEN	COAL	3.0	642.0	
-228.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	660.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-234.0	CARBONDALE	DAVIS	COAL	5.0	666.0	
-268.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-326.0	TRADEWATER	MT. RORAH	COAL	1.5	758.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502738000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611391 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.79484 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
166.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1697.0			LIMESTONE	-	2129.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2539.0	

MAPID: 16502738000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611391 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.79484 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	HERRIN	COAL	6.0	267.0	
137.0	CARBONDALE	BRIAR HILL	COAL	-	295.0	
22.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16502826000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613589 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800288 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, MELER ROBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-102.0	CARBONDALE	SURVANT	COAL	1.5	511.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-221.0	CARBONDALE	DEKOVEN	COAL	2.5	630.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	648.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	4.5	655.0	
-281.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-348.0	TRADEWATER	MT. RORAH	COAL	2.5	757.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502826000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613589 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800288 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	BRERETON	LIMESTONE	-	245.0	
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1716.0	
-1708.0			LIMESTONE	-	2117.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16502826000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613589 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800288 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	HERRIN	COAL	-	254.0	
128.0	CARBONDALE	BRIAR HILL	COAL	-	281.0	
19.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	390.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16502924000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609059 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800319 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2493.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMITH-FED LND BN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	464.0	
-111.0	CARBONDALE	SURVANT	COAL	1.3	508.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-218.0	CARBONDALE	DEKOVEN	COAL	2.5	615.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	3.3	638.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-247.0	CARBONDALE	DAVIS	COAL	5.0	644.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	675.0	
-335.0	TRADEWATER	MT. RORAH	COAL	1.3	732.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502924000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609059 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800319 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2493.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	257.0	
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1704.0	
-1697.0			LIMESTONE	-	2094.0	
-2096.0		BASE BARLOW	LIMESTONE	-	2493.0	

MAPID: 16502933000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613601 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798468 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2519.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, MELER ROBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	CARBONDALE	SURVANT	COAL	1.5	519.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	589.0	
-218.0	CARBONDALE	DEKOVEN	COAL	2.0	634.0	
-244.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	660.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-252.0	CARBONDALE	DAVIS	COAL	5.0	668.0	
-352.0	TRADEWATER	MT. RORAH	COAL	1.5	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502933000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613601 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2519.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
-1306.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1722.0	
-1694.0			LIMESTONE	-	2110.0	
-2103.0		BASE BARLOW	LIMESTONE	-	2519.0	

MAPID: 16502933000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613601 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	HERRIN	COAL	5.0	260.0	
127.0	CARBONDALE	BRIAR HILL	COAL	-	289.0	
16.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING

MAPID: 16502964000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609046 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802141 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2503.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, WOODIEL-LAND **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	469.0	
-114.0	CARBONDALE	SURVANT	COAL	2.0	512.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-232.0	CARBONDALE	DEKOVEN	COAL	2.5	630.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	652.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	5.0	660.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	692.0	
-351.0	TRADEWATER	MT. RORAH	COAL	3.3	749.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502964000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609046 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802141 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2503.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1708.0	
-1704.0			LIMESTONE	-	2102.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2503.0	

MAPID: 16502964000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609046 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802141 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 469.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
126.0	CARBONDALE	HERRIN	COAL	-	272.0	
99.0	CARBONDALE	BRIAR HILL	COAL	-	299.0	
-12.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	-	469.0	

MAPID: 16502965000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611331 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.803945 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMALL J C ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-92.0	CARBONDALE	SURVANT	COAL	1.3	510.0	
-160.0	CARBONDALE	COLCHESTER	COAL	0.5	578.0	
-205.0	CARBONDALE	DEKOVEN	COAL	2.5	623.0	
-229.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	647.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-238.0	CARBONDALE	DAVIS	COAL	3.3	656.0	
-272.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-350.0	TRADEWATER	MT. RORAH	COAL	1.5	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502965000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611331 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.803945 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1706.0			LIMESTONE	-	2124.0	
-2104.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16502965000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803945 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	HERRIN	COAL	-	269.0	
125.0	CARBONDALE	BRIAR HILL	COAL	-	293.0	
18.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		
-159.0	CARBONDALE	COLCHESTER	COAL	-	577.0	

MAPID: 16502966000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611343 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802125 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMALL J C ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	CARBONDALE	SURVANT	COAL	2.5	510.0	
-175.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	655.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-258.0	CARBONDALE	DAVIS	COAL	5.0	662.0	
-291.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-299.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	703.0	
-355.0	TRADEWATER	MT. RORAH	COAL	1.5	759.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502966000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611343 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802125 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	BRERETON	LIMESTONE	-	249.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1716.0	
-1702.0			LIMESTONE	-	2106.0	
-2120.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16502966000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611343 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802125 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	HERRIN	COAL	-	256.0	
122.0	CARBONDALE	BRIAR HILL	COAL	-	282.0	
4.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		
-173.0	CARBONDALE	COLCHESTER	COAL	-	577.0	

MAPID: 16502967000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613577 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80211 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMALL J C ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-90.0	CARBONDALE	SURVANT	COAL	1.3	510.0	
-160.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-210.0	CARBONDALE	DEKOVEN	COAL	4.5	630.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	650.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-238.0	CARBONDALE	DAVIS	COAL	4.0	658.0	
-274.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	694.0	
-287.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	707.0	
-342.0	TRADEWATER	MT. RORAH	COAL	2.5	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502967000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613577 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80211 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.0	CARBONDALE	BRERETON	LIMESTONE	-	253.0	
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1736.0	
-1710.0			LIMESTONE	-	2130.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502967000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613577 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.80211 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
160.0	CARBONDALE	HERRIN	COAL	-	260.0	
134.0	CARBONDALE	BRIAR HILL	COAL	-	286.0	
20.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING

MAPID: 16502968000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611355 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	HERRIN	COAL	-	248.0	
121.0	CARBONDALE	BRIAR HILL	COAL	-	276.0	
-3.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16502968000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611355 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	BRERETON	LIMESTONE	-	248.0	
-1301.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1698.0	
-1699.0			LIMESTONE	-	2096.0	
-2100.0		BASE BARLOW	LIMESTONE	-	2497.0	

MAPID: 16502981000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609034 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.803963 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1558.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-177.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	580.0	
-255.0	SPOON	DAVIS	UNCLASSIFIED	-	658.0	
-1155.0	BASE OF PENN.		UNCLASSIFIED	-	1558.0	

MAPID: 16502981000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609034 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.803963 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1712.0	
-1705.0			LIMESTONE	-	2108.0	
-2101.0		BASE BARLOW	LIMESTONE	-	2504.0	

MAPID: 16502981000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609034 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.803963 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, ADAMS COMM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	470.0	
-97.0	CARBONDALE	SURVANT	COAL	1.3	500.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.6	579.0	
-223.0	CARBONDALE	DEKOVEN	COAL	3.0	626.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	646.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-253.0	CARBONDALE	DAVIS	COAL	5.0	656.0	
-291.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	694.0	
-347.0	TRADEWATER	MT. RORAH	COAL	1.5	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502981000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609034 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803963 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 470.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	HERRIN	COAL	-	268.0	
105.0	CARBONDALE	BRIAR HILL	COAL	-	298.0	
8.0	CARBONDALE	SPRINGFIELD	COAL	5.0	395.0	
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	-	470.0	

MAPID: 16503016000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609071 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798497 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2495.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SMITH-FED LND BN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	470.0	
-108.0	CARBONDALE	SURVANT	COAL	2.5	511.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	573.0	
-215.0	CARBONDALE	DEKOVEN	COAL	3.5	618.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	638.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-244.0	CARBONDALE	DAVIS	COAL	4.5	647.0	
-272.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	675.0	
-342.0	TRADEWATER	MT. RORAH	COAL	1.3	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503016000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609071 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2495.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	BRERETON	LIMESTONE	-	255.0	
-1697.0			LIMESTONE	-	2100.0	
-2092.0		BASE BARLOW	LIMESTONE	-	2495.0	

MAPID: 16503016000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609071 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2495.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.0	CARBONDALE	HERRIN	COAL	6.0	267.0	
117.0	CARBONDALE	BRIAR HILL	COAL	-	286.0	
-7.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16503047000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602319 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796716 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2472.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1691.0			LIMESTONE	-	2088.0	
-2075.0		BASE BARLOW	LIMESTONE	-	2472.0	

MAPID: 16503047000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602319 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.796716 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2924.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
114.0	CARBONDALE	HERRIN	COAL	6.0	283.0	
81.0	CARBONDALE	BRIAR HILL	COAL	-	316.0	
-13.0	CARBONDALE	SPRINGFIELD	COAL	7.0	410.0	
-65.0	CARBONDALE	HOUCHIN CREEK	COAL	-	462.0	

MAPID: 16503047000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602319 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796716 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2472.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, DROIT-HUTCHINSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	467.0	
-117.0	CARBONDALE	SURVANT	COAL	2.0	514.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	589.0	
-213.0	CARBONDALE	DEKOVEN	COAL	2.5	610.0	
-234.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	631.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-241.0	CARBONDALE	DAVIS	COAL	4.5	638.0	
-274.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	671.0	
-323.0	TRADEWATER	MT. RORAH	COAL	1.8	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503047000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602319 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796716 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 466.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	HERRIN	COAL	-	282.0	
80.0	CARBONDALE	BRIAR HILL	COAL	-	317.0	
-13.0	CARBONDALE	SPRINGFIELD	COAL	6.0	410.0	
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	-	466.0	

MAPID: 16503056000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609083 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796675 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT DEAN, DROIT ALFRED J 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	SURVANT	COAL	2.0	516.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	582.0	
-220.0	CARBONDALE	DEKOVEN	COAL	3.5	625.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	643.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-249.0	CARBONDALE	DAVIS	COAL	5.0	654.0	
-275.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	680.0	
-325.0	TRADEWATER	MT. RORAH	COAL	2.0	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503056000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796675 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:**
SOURCE: KNIGHT DEAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	BRERETON	LIMESTONE	-	254.0	
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1698.0			LIMESTONE	-	2103.0	
-2099.0		BASE BARLOW	LIMESTONE	-	2504.0	

MAPID: 16503056000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609083 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796675 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:** Electric Log
SOURCE: DEAN KNIGHT 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
151.0	CARBONDALE	HERRIN	COAL	-	254.0	
121.0	CARBONDALE	BRIAR HILL	COAL	-	284.0	
5.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16503072000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604512 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802171 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2496.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, RIEGEL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	460.0	
-114.0	CARBONDALE	SURVANT	COAL	1.5	505.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.5	569.0	
-219.0	CARBONDALE	DEKOVEN	COAL	2.0	610.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	632.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-249.0	CARBONDALE	DAVIS	COAL	4.5	640.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	669.0	
-331.0	TRADEWATER	MT. RORAH	COAL	1.8	722.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503072000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604512 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802171 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2496.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	BRERETON	LIMESTONE	-	284.0	
-1322.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1713.0	
-1707.0			LIMESTONE	-	2098.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2496.0	

MAPID: 16503072000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604512 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802171 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 585.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.5	CARBONDALE	HERRIN	COAL	6.5	283.5	
73.0	CARBONDALE	BRIAR HILL	COAL	-	318.0	
7.5	CARBONDALE	SPRINGFIELD	COAL	4.0	383.5	
3.5	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	30.5	387.5	
-27.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	5.0	418.0	
-194.0	CARBONDALE	COLCHESTER	COAL	-	585.0	

MAPID: 16503086000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.60454 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798525 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2476.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., DROIT ALFRED J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	461.0	
-125.0	CARBONDALE	SURVANT	COAL	2.0	505.0	
-197.0	CARBONDALE	COLCHESTER	COAL	0.5	577.0	
-225.0	CARBONDALE	DEKOVEN	COAL	3.5	605.0	
-247.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	627.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-254.0	CARBONDALE	DAVIS	COAL	3.8	634.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	664.0	
-350.0	TRADEWATER	MT. RORAH	COAL	2.0	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503086000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.60454 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798525 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2476.0 **LOG TYPE:**
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	277.0	
-1714.0			LIMESTONE	-	2094.0	
-2096.0		BASE BARLOW	LIMESTONE	-	2476.0	

MAPID: 16503086000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.60454 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798525 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 461.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	HERRIN	COAL	6.5	277.0	
68.0	CARBONDALE	BRIAR HILL	COAL	-	312.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL	4.0	410.0	
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	-	461.0	

MAPID: 16503224000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597789 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796744 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., KNIGHT ELLA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-80.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-126.0	CARBONDALE	SURVANT	COAL	1.5	511.0	
-202.0	CARBONDALE	COLCHESTER	COAL	2.5	587.0	
-221.0	CARBONDALE	DEKOVEN	COAL	2.5	606.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	630.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-252.0	CARBONDALE	DAVIS	COAL	2.5	637.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	669.0	
-335.0	TRADEWATER	MT. RORAH	COAL	1.3	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503224000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597789 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
117.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1336.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1721.0	
-1719.0			LIMESTONE	-	2104.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2497.0	

MAPID: 16503224000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597789 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 466.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	HERRIN	COAL	-	275.0	
78.0	CARBONDALE	BRIAR HILL	COAL	-	307.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	1.0	415.0	
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	-	466.0	

MAPID: 16503306000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.59776 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 455.0 **LOG TYPE:** Electric Log
SOURCE: ALBERT GENTLES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	HERRIN	COAL	-	272.0	
66.0	CARBONDALE	BRIAR HILL	COAL	-	306.0	
-21.0	CARBONDALE	SPRINGFIELD	COAL	7.0	393.0	
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	-	455.0	

MAPID: 16503306000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.59776 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2466.0 **LOG TYPE:**
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	264.0	
-1330.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1702.0	
-1713.0			LIMESTONE	-	2085.0	
-2094.0		BASE BARLOW	LIMESTONE	-	2466.0	

MAPID: 16503308000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.600057 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800381 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 457.0 **LOG TYPE:** Electric Log
SOURCE: ROY H. POWERS 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	HERRIN	COAL	6.0	277.0	
69.0	CARBONDALE	BRIAR HILL	COAL	-	307.0	
-34.0	CARBONDALE	SPRINGFIELD	COAL	5.5	410.0	
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	-	457.0	

MAPID: 16503308000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.600057 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800381 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2474.0 **LOG TYPE:**
SOURCE: POWERS ROY H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1334.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	
-1724.0			LIMESTONE	-	2100.0	
-2098.0		BASE BARLOW	LIMESTONE	-	2474.0	

MAPID: 16523917000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613593 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.799379 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUKE RESOURCES CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	HERRIN	COAL	-	244.0	
133.0	CARBONDALE	BRIAR HILL	COAL	-	270.0	
23.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	380.0	CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	SHALE & SANDSTONE	0.0		

MAPID: 16524168000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597829 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.791261 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 453.0 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
127.0	CARBONDALE	HERRIN	COAL	-	271.0	
92.0	CARBONDALE	BRIAR HILL	COAL	-	306.0	
-12.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	410.0	CHANNEL - COAL MISSING
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	-	453.0	

MAPID: 16500044000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.62423 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.797603 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 434.2 **LOGGED (FT.):** 425.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.2			UNCONSOLIDATED	38.0	0.0	
396.2	MODESTO		SANDSTONE	50.2	38.0	
346.0	MODESTO		SHALE	37.6	88.2	
308.4	MODESTO		SHALE	0.5	125.8	W/COAL
307.9	MODESTO		UNDERCLAY	11.4	126.3	W/GREEN SH
296.5	MODESTO		SHALE	18.3	137.7	
278.2	MODESTO		COAL	0.7	156.0	
277.5	MODESTO		UNDERCLAY	7.4	156.7	
270.1	MODESTO		LIMESTONE	1.6	164.1	
268.5	MODESTO		CLAYSTONE	7.0	165.7	W/GREEN SH
261.5	MODESTO		SANDSTONE	8.5	172.7	W/SH
253.0	MODESTO		SANDSTONE	8.0	181.2	
245.0	MODESTO		SHALE	10.8	189.2	
234.2	MODESTO	PIASA	LIMESTONE	2.3	200.0	
231.9	MODESTO		SHALE	1.5	202.3	GREEN
230.4	MODESTO		BLACK SHALE	1.5	203.8	
228.9	MODESTO		SHALE	7.3	205.3	
221.5	CARBONDALE	DANVILLE	COAL	1.5	212.7	
220.0	CARBONDALE		SANDY SHALE	13.3	214.2	
206.8	CARBONDALE	ALLENBY	COAL	0.4	227.4	
206.4	CARBONDALE		UNDERCLAY	6.8	227.8	W/GREEN SH
199.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	234.7	
196.5	CARBONDALE	ANVIL ROCK	SHALE	1.2	237.7	GREEN
195.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.4	238.8	
176.9	CARBONDALE	ANVIL ROCK	SANDSTONE	24.6	257.3	
152.4	CARBONDALE	ANVIL ROCK	SHALE	0.5	281.8	W/BONY COAL
151.9	CARBONDALE	ANVIL ROCK	SANDSTONE	0.8	282.3	DARK
150.9	CARBONDALE	BRERETON	LIMESTONE	6.7	283.3	
144.3	CARBONDALE	ANNA	BLACK SHALE	0.7	289.9	
143.6	CARBONDALE	HERRIN	COAL	5.3	290.6	W/SULFUR NEAR BOTTOM
138.3	CARBONDALE		UNDERCLAY	12.4	295.9	
125.9	CARBONDALE		SHALE	10.1	308.3	
115.8	CARBONDALE	BRIAR HILL	COAL	1.8	318.4	
114.0	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	320.2	
106.0	CARBONDALE	DYKERSBURG	SANDSTONE	79.0	328.2	W/SH
27.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.4	407.2	W/SH
18.6	CARBONDALE	SPRINGFIELD	COAL	7.1	415.6	
11.5	CARBONDALE		UNDERCLAY	2.5	422.7	W/SH

MAPID: 16500044000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.62423 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.797603 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 425.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
221.0	CARBONDALE	DANVILLE	COAL	-	213.0	
199.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	235.0	
195.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	43.0	239.0	
143.0	CARBONDALE	HERRIN	COAL	5.3	291.0	
116.0	CARBONDALE	BRIAR HILL	COAL	1.8	318.0	
114.0	CARBONDALE	CANTON	SANDSTONE/SHALE	95.0	320.0	
18.0	CARBONDALE	SPRINGFIELD	COAL	7.1	416.0	

MAPID: 16500045000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617111 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.799384 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.4 **LOGGED (FT.):** 452.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN-LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.4			UNCONSOLIDATED	40.0	0.0	
385.4	MODESTO		SANDSTONE	27.0	40.0	
358.4	MODESTO		SHALE	33.0	67.0	
325.4	MODESTO		SHALE	6.0	100.0	
319.4	MODESTO		SHALE	8.0	106.0	
311.4	MODESTO		SHALE	3.0	114.0	DARK
308.4	MODESTO		LIMESTONE	0.3	117.0	
308.1	MODESTO		SANDY SHALE	8.7	117.3	GRAY
299.4	MODESTO		SHALE	4.0	126.0	DARK
295.4	MODESTO		BLACK SHALE	1.3	130.0	
294.1	MODESTO		COAL	0.8	131.3	
293.2	MODESTO		UNDERCLAY	5.8	132.2	
287.5	MODESTO		SHALE	3.7	137.9	
283.8	MODESTO		LIMESTONE	3.0	141.6	
280.8	MODESTO		SHALE	0.7	144.6	
280.1	MODESTO		LIMESTONE	1.1	145.3	
279.1	MODESTO		SHALE	3.8	146.3	
275.2	MODESTO		SHALE	7.0	150.2	THICKNESS CHANGED FROM 8' TO MATCH DEPTH
268.2	MODESTO		SHALE	4.5	157.2	BLUE
263.7	MODESTO		SANDY SHALE	8.0	161.7	GRAY
255.7	MODESTO		BLACK SHALE	4.3	169.7	
251.5	MODESTO		SHALE	6.1	173.9	
245.4	MODESTO		BLACK SHALE	2.0	180.0	
243.4	MODESTO	PIASA	LIMESTONE	4.2	182.0	
239.2	MODESTO		CLAYSTONE	1.5	186.2	
237.7	MODESTO		BLACK SHALE	1.3	187.7	
236.5	MODESTO		SHALE	6.2	188.9	
230.3	CARBONDALE	DANVILLE	COAL	1.3	195.1	
229.0	CARBONDALE		UNDERCLAY	0.7	196.4	
228.3	CARBONDALE		SANDY SHALE	6.3	197.1	GRAY
222.0	CARBONDALE		SHALE	1.3	203.4	DARK
220.7	CARBONDALE		SHALE	3.3	204.7	
217.4	CARBONDALE		SANDSTONE	5.0	208.0	
212.4	CARBONDALE		SHALE	3.3	213.0	
209.1	CARBONDALE		SHALE	2.0	216.3	DARK
207.1	CARBONDALE	"Allenby rider"	COAL	0.2	218.3	
206.9	CARBONDALE		UNDERCLAY	5.0	218.5	
201.9	CARBONDALE		SHALE	1.0	223.5	
200.9	CARBONDALE		BLACK SHALE	0.5	224.5	

200.4	CARBONDALE	ALLENBY	COAL	0.2	225.0	
200.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	225.2	
193.9	CARBONDALE	ANVIL ROCK	CONGLOMERATE	9.0	231.5	W/SS AND SH
184.9	CARBONDALE	ANVIL ROCK	SHALE	3.0	240.5	BROWN
181.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	243.5	GRAY
171.9	CARBONDALE	ANVIL ROCK	SHALE	2.0	253.5	
169.9	CARBONDALE	ANVIL ROCK	SHALE	2.1	255.5	DARK
167.8	CARBONDALE	JAMESTOWN	COAL	0.2	257.6	
167.6	CARBONDALE		BLACK SHALE	0.3	257.8	
167.4	CARBONDALE	BRERETON	LIMESTONE	5.0	258.0	
162.4	CARBONDALE	ANNA	BLACK SHALE	1.0	263.0	
161.4	CARBONDALE	HERRIN	COAL	5.3	264.0	
156.1	CARBONDALE		UNDERCLAY	2.0	269.3	
154.1	CARBONDALE		SANDSTONE	5.0	271.3	
149.1	CARBONDALE		SHALE	8.3	276.3	
140.7	CARBONDALE		SHALE	6.8	284.7	BROWN
134.0	CARBONDALE	BRIAR HILL	COAL	1.3	291.4	
132.7	CARBONDALE		SHALE	3.3	292.7	
129.4	CARBONDALE	DYKERSBURG	SHALE	8.7	296.0	BROWN
120.7	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	304.7	GRAY
108.7	CARBONDALE	DYKERSBURG	SHALE	6.0	316.7	BROWN
102.7	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	322.7	GRAY
87.7	CARBONDALE	DYKERSBURG	SANDY SHALE	4.8	337.7	
82.9	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	342.5	
72.9	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	352.5	GRAY
57.9	CARBONDALE	DYKERSBURG	SHALE	10.0	367.5	BROWN
47.9	CARBONDALE	DYKERSBURG	SHALE	7.0	377.5	
40.9	CARBONDALE	DYKERSBURG	SHALE	1.0	384.5	BROWN
39.9	CARBONDALE	DYKERSBURG	SHALE	3.5	385.5	SPRINGFIELD COAL REPLACED BY CHANNEL, BR
36.4	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	389.0	
32.4	CARBONDALE	DYKERSBURG	SHALE	2.5	393.0	
29.9	CARBONDALE	DYKERSBURG	SANDSTONE	27.0	395.5	
2.9	CARBONDALE	DYKERSBURG	SHALE	1.5	422.5	
1.4	CARBONDALE		CLAYSTONE	0.5	424.0	
0.9	CARBONDALE		SANDSTONE	27.5	424.5	

MAPID: 16500045000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617111 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.799384 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 452.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
161.0	CARBONDALE	HERRIN	COAL	5.3	264.0	
134.0	CARBONDALE	BRIAR HILL	COAL	1.3	291.0	

MAPID: 16500046000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.62683 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.795793 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 429.4 **LOGGED (FT.):** 428.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.4			UNCONSOLIDATED	39.0	0.0	
390.4	MODESTO		SANDSTONE	8.0	39.0	
382.4	MODESTO		SHALE	23.5	47.0	BLUE
358.9	MODESTO		SANDSTONE	41.5	70.5	
317.4	MODESTO		SHALE	6.0	112.0	
311.4	MODESTO		SHALE	24.5	118.0	DARK
286.9	MODESTO		COAL	0.4	142.5	
286.5	MODESTO		UNDERCLAY	1.7	142.9	
284.8	MODESTO		SANDY SHALE	5.5	144.6	GRAY
279.3	MODESTO		SHALE	11.4	150.1	BROWN
267.9	MODESTO		SHALE	1.5	161.5	DARK
266.4	MODESTO		CLAYSTONE	0.5	163.0	
265.9	MODESTO		SHALE	1.3	163.5	
264.6	MODESTO		SHALE	1.0	164.8	BROWN
263.6	MODESTO		SHALE	4.0	165.8	DARK
259.6	MODESTO		BLACK SHALE	0.8	169.8	
258.8	MODESTO		COAL	0.5	170.6	
258.3	MODESTO		UNDERCLAY	4.5	171.1	
253.8	MODESTO		LIMESTONE	3.5	175.6	
250.3	MODESTO		CLAYSTONE	1.5	179.1	
248.8	MODESTO		SHALE	11.4	180.6	
237.4	MODESTO		SHALE	8.0	192.0	
229.4	MODESTO		SHALE	6.0	200.0	
223.4	MODESTO		SANDSTONE	1.5	206.0	
221.9	MODESTO		SHALE	2.0	207.5	
219.9	MODESTO		SHALE	3.0	209.5	DARK
216.9	MODESTO		BLACK SHALE	0.5	212.5	
216.4	MODESTO		CLAYSTONE	1.0	213.0	
215.4	MODESTO		SHALE	2.0	214.0	
213.4	MODESTO		SHALE	2.5	216.0	
210.9	MODESTO	PIASA	LIMESTONE	3.5	218.5	
207.4	MODESTO		CLAYSTONE	2.0	222.0	
205.4	MODESTO		SHALE	1.0	224.0	DARK
204.4	MODESTO		BLACK SHALE	0.8	225.0	
203.6	MODESTO		CLAYSTONE	0.5	225.8	
203.1	MODESTO		SHALE	3.2	226.3	
199.9	MODESTO		SHALE	1.3	229.5	
198.6	CARBONDALE	DANVILLE	COAL	3.2	230.8	
195.5	CARBONDALE		SHALE	2.0	233.9	

193.4	CARBONDALE		SHALE	5.0	236.0	
188.5	CARBONDALE		SHALE	0.7	240.9	DARK
187.8	CARBONDALE	ALLENBY	COAL	0.3	241.6	
187.6	CARBONDALE		UNDERCLAY	0.2	241.8	
187.4	CARBONDALE		SHALE	5.0	242.0	
182.4	CARBONDALE		SANDSTONE	4.0	247.0	
178.4	CARBONDALE		SHALE	4.0	251.0	
174.4	CARBONDALE		CLAYSTONE	0.5	255.0	
173.9	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	255.5	
164.9	CARBONDALE		CLAYSTONE	0.5	264.5	
164.4	CARBONDALE	ANVIL ROCK	SHALE	0.5	265.0	
163.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	265.5	GRAY
153.9	CARBONDALE	ANVIL ROCK	SHALE	3.5	275.5	
150.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.5	279.0	GRAY
148.9	CARBONDALE	ANVIL ROCK	SHALE	12.0	280.5	
136.9	CARBONDALE	JAMESTOWN	COAL	0.1	292.5	
136.8	CARBONDALE		UNDERCLAY	0.4	292.6	
136.4	CARBONDALE		SHALE	1.0	293.0	DARK
135.4	CARBONDALE	BRERETON	LIMESTONE	6.5	294.0	
128.9	CARBONDALE		SHALE	0.5	300.5	
128.4	CARBONDALE	ANNA	BLACK SHALE	1.0	301.0	
127.4	CARBONDALE	HERRIN	COAL	5.1	302.0	
122.3	CARBONDALE		UNDERCLAY	3.0	307.1	
119.3	CARBONDALE		SANDY SHALE	8.0	310.1	GRAY
111.3	CARBONDALE		SHALE	3.2	318.1	
108.1	CARBONDALE		CLAYSTONE	1.0	321.3	
107.1	CARBONDALE		SHALE	9.0	322.3	
98.1	CARBONDALE	BRIAR HILL	COAL	2.3	331.3	
95.8	CARBONDALE		SHALE	6.5	333.6	
89.3	CARBONDALE	DYKERSBURG	SANDY SHALE	5.5	340.1	GRAY
83.8	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	345.6	
81.8	CARBONDALE	DYKERSBURG	SHALE	3.0	347.6	
78.8	CARBONDALE	DYKERSBURG	SHALE	5.5	350.6	
73.3	CARBONDALE	DYKERSBURG	SHALE	10.0	356.1	
63.3	CARBONDALE	DYKERSBURG	SANDY SHALE	3.5	366.1	GRAY
59.8	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	369.6	GRAY
57.8	CARBONDALE	DYKERSBURG	SHALE	4.0	371.6	
53.8	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	375.6	GRAY
38.8	CARBONDALE	DYKERSBURG	SHALE	0.4	390.6	DARK
38.4	CARBONDALE	DYKERSBURG	SANDY SHALE	6.0	391.0	GRAY
32.4	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	397.0	
29.4	CARBONDALE	DYKERSBURG	SANDY SHALE	9.5	400.0	GRAY
19.9	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	409.5	GRAY
17.9	CARBONDALE	DYKERSBURG	SHALE	4.0	411.5	
13.9	CARBONDALE	DYKERSBURG	SANDY SHALE	6.5	415.5	GRAY
7.4	CARBONDALE	SPRINGFIELD	COAL	6.3	422.0	

MAPID: 16500046000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.62683 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.795793 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 307.1 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.4	MODESTO	PIASA	LIMESTONE	3.5	218.6	
206.9	MODESTO		DARK GRAY SHALE	8.8	222.1	
198.2	CARBONDALE	DANVILLE	COAL	3.2	230.8	
195.0	CARBONDALE		SILTY SHALE	7.7	234.0	
187.3	CARBONDALE	ALLENBY	COAL	0.3	241.7	
187.1	CARBONDALE		SHALE & SANDSTONE	13.7	241.9	
173.4	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	255.6	
164.4	CARBONDALE	LAWSON	CLAYSTONE & SHALE	1.0	264.6	
163.4	CARBONDALE	LAWSON	SILTY SHALE	10.0	265.6	
153.4	CARBONDALE	LAWSON	GRAY SHALE	3.5	275.6	
149.9	CARBONDALE	LAWSON	SILTY SHALE	1.5	279.1	
148.4	CARBONDALE	LAWSON	DARK GRAY SHALE	12.0	280.6	
136.4	CARBONDALE		DARK GRAY SHALE	1.4	292.6	
135.0	CARBONDALE	BRERETON	LIMESTONE	6.5	294.0	
128.5	CARBONDALE	ANNA	DARK GRAY SHALE	1.5	300.5	
127.0	CARBONDALE	HERRIN	COAL	5.1	302.0	

MAPID: 16500047000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.62661 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.795794 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 433.3 **LOGGED (FT.):** 414.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR R. R. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.3			UNCONSOLIDATED	21.0	0.0	
412.3	MODESTO		SANDSTONE	9.0	21.0	
403.3	MODESTO		SANDSTONE	55.0	30.0	W/GRAY SH PARTINGS
348.3	MODESTO		SANDSTONE	11.0	85.0	
337.3	MODESTO		SHALE	14.0	96.0	
323.3	MODESTO		SHALE	15.0	110.0	DARK
308.3	MODESTO		SHALE	8.8	125.0	BLUE
299.5	MODESTO		COAL	0.4	133.8	
299.1	MODESTO		SHALE	18.8	134.2	
280.3	MODESTO		SHALE	5.0	153.0	DARK
275.3	MODESTO		BLACK SHALE	2.5	158.0	
272.8	MODESTO		SHALY COAL	0.3	160.5	
272.5	MODESTO		CALCAREOUS SHALE	6.3	160.8	CALC
266.3	MODESTO		LIMESTONE	3.5	167.0	
262.8	MODESTO		CALCAREOUS SHALE	6.5	170.5	CALC
256.3	MODESTO		SANDY SHALE	26.0	177.0	
230.3	MODESTO		SHALE	10.5	203.0	BLUE
219.8	MODESTO		CALCAREOUS SHALE	2.0	213.5	CALC
217.8	MODESTO	PIASA	LIMESTONE	3.5	215.5	
214.3	MODESTO		CALCAREOUS SHALE	1.0	219.0	CALC
213.3	MODESTO		SHALE	10.8	220.0	BLUE
202.5	CARBONDALE	DANVILLE	COAL	2.5	230.8	
200.0	CARBONDALE		SHALE	1.0	233.3	
199.0	CARBONDALE		SANDY SHALE	3.8	234.3	
195.2	CARBONDALE	"Allenby rider"	COAL	0.8	238.1	
194.5	CARBONDALE		SHALE	2.0	238.8	
192.5	CARBONDALE	ALLENBY	COAL	0.7	240.8	
191.8	CARBONDALE		SHALE	0.5	241.5	
191.3	CARBONDALE		SHALE	2.0	242.0	
189.3	CARBONDALE	BANKSTON FORK	LIMESTONE	11.0	244.0	
178.3	CARBONDALE		SHALE	1.0	255.0	
177.3	CARBONDALE		SANDY SHALE	4.0	256.0	
173.3	CARBONDALE		SHALE	20.0	260.0	BLUE
153.3	CARBONDALE		BLACK SHALE	3.0	280.0	
150.3	CARBONDALE		SHALE	2.8	283.0	BLUE
147.5	CARBONDALE	HERRIN	COAL	5.9	285.8	
141.5	CARBONDALE		SHALE	5.3	291.8	BLUE
136.3	CARBONDALE		SHALE	20.0	297.0	W/BROWN BANDS, BLUE
116.3	CARBONDALE	BRIAR HILL	COAL	2.0	317.0	

114.3	CARBONDALE		SHALE	7.0	319.0	BLUE
107.3	CARBONDALE	DYKERSBURG	SANDY SHALE	59.0	326.0	
48.3	CARBONDALE	DYKERSBURG	SHALE	19.0	385.0	BLUE
29.3	CARBONDALE	DYKERSBURG	SHALE	2.0	404.0	DARK
27.3	CARBONDALE	SPRINGFIELD	COAL	7.1	406.0	
20.2	CARBONDALE		UNDERCLAY	0.9	413.1	

MAPID: 16500048000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.624246 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.793957 **DATE COLLECTED:** 11 / 10 / 1905

SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 432.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	39.0	0.0	
406.0			SANDY SHALE	18.0	39.0	
388.0			SANDSTONE	9.0	57.0	
379.0			SANDSTONE	19.5	66.0	
359.5			SANDSTONE	8.5	85.5	VARIGATED, VARIG
351.0			SANDSTONE	14.5	94.0	
336.5			SHALE	9.5	108.5	
327.0			SHALE	22.5	118.0	DARK
304.5			COAL	0.1	140.5	
304.4			UNDERCLAY	2.4	140.6	
302.0			SANDY SHALE	6.5	143.0	
295.5			SHALE	20.5	149.5	DARK
275.0			COAL	0.6	170.0	
274.4			UNDERCLAY	2.4	170.6	
272.0			SHALE	10.0	173.0	VARIG
262.0			SANDY SHALE	41.0	183.0	
221.0			SANDY SHALE	8.0	224.0	
213.0			SHALE	4.5	232.0	
208.5	CARBONDALE	DANVILLE	COAL	1.1	236.5	
207.4	CARBONDALE		UNDERCLAY	1.4	237.6	
206.0	CARBONDALE		SANDY SHALE	3.0	239.0	
203.0	CARBONDALE		SANDY SHALE	11.0	242.0	
192.0	CARBONDALE	"Allenby rider"	COAL	0.1	253.0	
191.9	CARBONDALE		SHALE	2.2	253.1	
189.7	CARBONDALE	ALLENBY	COAL	0.3	255.3	
189.5	CARBONDALE		UNDERCLAY	2.0	255.5	
187.5	CARBONDALE		SHALE	4.0	257.5	
183.5	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	261.5	
175.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.6	270.0	
148.4	CARBONDALE	JAMESTOWN	COAL	0.3	296.6	
148.2	CARBONDALE		SANDY SHALE	2.7	296.8	
145.5	CARBONDALE	ANNA	SHALE	3.5	299.5	DARK
142.0	CARBONDALE	HERRIN	COAL	6.5	303.0	
135.5	CARBONDALE		UNDERCLAY	2.0	309.5	
133.5	CARBONDALE		SHALE	9.3	311.5	
124.2	CARBONDALE		SHALE	11.2	320.8	DARK
113.0	CARBONDALE		SHALE	2.8	332.0	DARK
110.2	CARBONDALE	BRIAR HILL	COAL	1.0	334.8	
109.2	CARBONDALE		UNDERCLAY	0.5	335.8	

108.7	CARBONDALE	DYKERSBURG	SANDY SHALE	74.2	336.3	
34.5	CARBONDALE	DYKERSBURG	SHALE	11.5	410.5	DARK
23.0	CARBONDALE	DYKERSBURG	SHALE	1.5	422.0	DARK
21.5	CARBONDALE	SPRINGFIELD	COAL	7.0	423.5	
14.5	CARBONDALE		UNDERCLAY	1.5	430.5	

MAPID: 16502096000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615908 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-81.0	CARBONDALE	SURVANT	COAL	2.0	520.0	
-152.0	CARBONDALE	COLCHESTER	COAL	0.5	591.0	
-206.0	CARBONDALE	DEKOVEN	COAL	4.0	645.0	
-219.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	658.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-221.0	CARBONDALE	DAVIS	COAL	4.5	660.0	
-261.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-341.0	TRADEWATER	MT. RORAH	COAL	0.5	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502739000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615897 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798467 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, REYNOLDS JUSTIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	SURVANT	COAL	1.8	518.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	589.0	
-214.0	CARBONDALE	DEKOVEN	COAL	3.0	633.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	650.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-241.0	CARBONDALE	DAVIS	COAL	4.5	660.0	
-271.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-349.0	TRADEWATER	MT. RORAH	COAL	3.0	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502739000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615897 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798467 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.0	CARBONDALE	BRERETON	LIMESTONE	-	252.0	
-1300.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1719.0	
-1705.0			LIMESTONE	-	2124.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16502739000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615897 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798467 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 664.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	HERRIN	COAL	7.0	260.0	
132.0	CARBONDALE	BRIAR HILL	COAL	-	287.0	
39.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	380.0	CHANNEL - COAL MISSING
-165.0	CARBONDALE	COLCHESTER	COAL	-	584.0	
-241.0	SPOON	DAVIS	COAL	4.0	660.0	

MAPID: 16502760000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615885 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800286 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2543.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, REYNOLDS JUSTIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	SURVANT	COAL	1.5	530.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-213.0	CARBONDALE	DEKOVEN	COAL	2.0	643.0	
-233.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	663.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-242.0	CARBONDALE	DAVIS	COAL	4.0	672.0	
-275.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	705.0	
-344.0	TRADEWATER	MT. RORAH	COAL	2.0	774.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502760000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615885 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2543.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
166.0	CARBONDALE	BRERETON	LIMESTONE	-	264.0	
-1313.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1743.0	
-1706.0			LIMESTONE	-	2136.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2543.0	

MAPID: 16502760000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615885 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 675.5 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
160.0	CARBONDALE	HERRIN	COAL	-	270.0	
130.0	CARBONDALE	BRIAR HILL	COAL	4.0	300.0	
50.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	380.0	CHANNEL - COAL MISSING
-168.0	CARBONDALE	COLCHESTER	COAL	-	598.0	
-242.0	SPOON	DAVIS	COAL	3.5	672.0	

MAPID: 16502906000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615873 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 591.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 5 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	HERRIN	COAL	-	280.0	
133.0	CARBONDALE	BRIAR HILL	COAL	-	306.0	
39.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-152.0	CARBONDALE	COLCHESTER	COAL	-	591.0	

MAPID: 16502906000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615873 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2555.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
169.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1762.0	
-1705.0			LIMESTONE	-	2144.0	
-2116.0		BASE BARLOW	LIMESTONE	-	2555.0	

MAPID: 16502970000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620635 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798495 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	SURVANT	COAL	3.3	525.0	
-148.0	CARBONDALE	COLCHESTER	COAL	0.5	591.0	
-194.0	CARBONDALE	DEKOVEN	COAL	3.3	637.0	
-209.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	652.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	4.0	660.0	
-246.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	689.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502970000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620635 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798495 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1302.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1745.0	
-1707.0			LIMESTONE	-	2150.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2575.0	

MAPID: 16502970000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620635 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.798495 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 420.0 **LOG TYPE:** Electric Log
SOURCE: PURE OIL & CALVERT&SUN 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
29.5	CARBONDALE	SPRINGFIELD	COAL	6.5	413.5	

MAPID: 16503017000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.625382 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796698 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: MASSAC PET ENTERPRIS, GALLEHER P **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-40.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	476.0	
-84.0	CARBONDALE	SURVANT	COAL	1.8	520.0	
-154.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-198.0	CARBONDALE	DEKOVEN	COAL	3.0	634.0	
-209.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	645.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-218.0	CARBONDALE	DAVIS	COAL	3.7	654.0	
-252.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	688.0	
-314.0	TRADEWATER	MT. RORAH	COAL	1.8	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503017000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.625382 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796698 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: MASSAC PET ENTERPRIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1305.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1741.0	
-1708.0			LIMESTONE	-	2144.0	
-2116.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16503048000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615917 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794826 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, REYNOLDS JUSTIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	SURVANT	COAL	1.8	534.0	
-175.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-221.0	CARBONDALE	DEKOVEN	COAL	2.5	646.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	660.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-243.0	CARBONDALE	DAVIS	COAL	4.0	668.0	
-280.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503048000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615917 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794826 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	CARBONDALE	BRERETON	LIMESTONE	-	234.0	
-1298.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1723.0	
-1696.0			LIMESTONE	-	2121.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16503048000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615917 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.794826 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 600.0 **LOG TYPE:** Electric Log
SOURCE: SUN OIL COMPANY 5 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	HERRIN	COAL	6.0	276.0	
120.0	CARBONDALE	BRIAR HILL	COAL	-	305.0	
35.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	390.0	CHANNEL - COAL MISSING
-175.0	CARBONDALE	COLCHESTER	COAL	-	600.0	

MAPID: 16503066000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.627824 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796711 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: MASSAC PET ENTERPRIS, GALLEHER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-42.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	483.0	
-84.0	CARBONDALE	SURVANT	COAL	1.3	525.0	
-159.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-208.0	CARBONDALE	DEKOVEN	COAL	3.3	649.0	
-219.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	660.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-229.0	CARBONDALE	DAVIS	COAL	6.5	670.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	698.0	
-267.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	708.0	
-302.0	TRADEWATER	MT. RORAH	COAL	4.5	743.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503066000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.627824 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796711 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: MASSAC PET ENTERPRIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1712.0			LIMESTONE	-	2153.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16503079000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 325' N line, 285' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627964 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.800373 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 1605.0 **LOG TYPE:** Electric Log
SOURCE: MASSAC PET ENTERPRIS **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	580.0	
-227.0	SPOON	DAVIS	UNCLASSIFIED	-	665.0	
-1167.0	BASE OF PENN.		UNCLASSIFIED	-	1605.0	

MAPID: 16503079000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 325' N line, 285' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627964 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800373 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 2595.0 **LOG TYPE:**
SOURCE: MASSAC PET ENTERPRIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1718.0			LIMESTONE	-	2156.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2595.0	

MAPID: 16503079000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 325' N line, 285' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627964 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800373 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 2595.0 **LOG TYPE:** Electric Log
SOURCE: MASSAC PET ENTERPRIS, CISCO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-36.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	474.0	
-74.0	CARBONDALE	SURVANT	COAL	2.5	512.0	
-146.0	CARBONDALE	COLCHESTER	COAL	0.5	584.0	
-194.0	CARBONDALE	DEKOVEN	COAL	3.0	632.0	
-207.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	645.0	
-215.0	CARBONDALE	DAVIS	COAL	3.5	653.0	
-261.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	699.0	
-312.0	TRADEWATER	MT. RORAH	COAL	2.0	750.0	

MAPID: 16523892000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 340' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.61594 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Electric Log
SOURCE: PACIFIC EXPLORATION CORP 1-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	HERRIN	COAL	-	268.0	
130.0	CARBONDALE	BRIAR HILL	COAL	-	296.0	
46.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	380.0	CHANNEL - COAL MISSING

MAPID: 16523932000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618348 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796658 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 389.0 **LOG TYPE:** Electric Log
SOURCE: DUKE RESOURCES CORP. 2-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRIAR HILL	COAL	-	300.0	
36.0	CARBONDALE	SPRINGFIELD	COAL	6.0	383.0	

MAPID: 16525791000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 360' N line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.615862 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803844 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 597.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD. B-1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	HERRIN	COAL	-	280.0	
138.0	CARBONDALE	BRIAR HILL	COAL	-	306.0	
44.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-153.0	CARBONDALE	COLCHESTER	COAL	-	597.0	

MAPID: 16525839000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.62079 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 458.0 **LOG TYPE:** Electric Log
SOURCE: MAVERICK NATURAL GAS CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	HERRIN	COAL	5.5	280.0	
111.0	CARBONDALE	BRIAR HILL	COAL	-	310.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	6.0	400.0	
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	-	458.0	

MAPID: 16525841000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 300' N line, 660' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617202 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796735 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 382.0 **LOG TYPE:** Electric Log
SOURCE: MAVERICK NATURAL GAS CO. W-1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	HERRIN	COAL	6.0	278.0	
119.5	CARBONDALE	BRIAR HILL	COAL	3.0	310.5	
51.0	CARBONDALE	SPRINGFIELD	COAL	3.0	379.0	

MAPID: 16525937000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624979 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.794663 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION L **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.7	CARBONDALE	HERRIN	COAL	5.8	309.3	

MAPID: 16525938000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.622465 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.796792 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R8 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.5	CARBONDALE	HERRIN	COAL	6.5	308.5	

MAPID: 16525939000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.618844 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.803881 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R9 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.5	CARBONDALE	HERRIN	COAL	5.5	295.5	

MAPID: 16525940000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.616048 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.798048 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R10 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.5	CARBONDALE	HERRIN	COAL	5.5	269.5	

MAPID: 16525941000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.62142 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.793488 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION Q 255 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
147.8	CARBONDALE	HERRIN	COAL	5.9	280.2	

MAPID: 16500049000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.650678 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.8041 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 433.6 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN-LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.6			UNCONSOLIDATED	41.2	0.0	
392.4	MODESTO		SANDSTONE	35.0	41.2	
357.4	MODESTO		SANDY SHALE	3.0	76.2	
354.4	MODESTO		SANDSTONE	7.6	79.2	
346.8	MODESTO		SHALE	32.0	86.8	
314.8	MODESTO		COAL	0.2	118.8	
314.7	MODESTO		SHALE	11.0	118.9	W/SS
303.7	MODESTO		SANDY SHALE	10.1	129.9	
293.6	MODESTO		SANDY SHALE	7.3	140.0	
286.3	MODESTO		COAL	0.7	147.3	
285.6	MODESTO		UNDERCLAY	14.3	148.0	
271.3	MODESTO		SHALE	7.3	162.3	W/SS, GREEN
263.9	MODESTO		SANDSTONE	7.7	169.7	W/SANDY SH
256.3	MODESTO		SANDY SHALE	19.3	177.3	
236.9	MODESTO		CLAYSTONE	1.5	196.7	
235.4	MODESTO	PIASA	LIMESTONE	2.8	198.2	
232.7	MODESTO		SHALE	0.8	200.9	GREEN
231.9	MODESTO		SHALE	6.6	201.7	
225.3	MODESTO		SHALE	1.7	208.3	
223.7	CARBONDALE	DANVILLE	COAL	1.6	209.9	
222.1	CARBONDALE		UNDERCLAY	9.6	211.5	W/GREEN SH
212.5	CARBONDALE		SANDSTONE	6.8	221.1	W/SH
205.7	CARBONDALE	ALLENBY	BONE COAL	0.4	227.9	
205.3	CARBONDALE		UNDERCLAY	2.8	228.3	
202.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	231.2	
198.8	CARBONDALE		SHALE	6.1	234.8	W/SS, GREEN
192.8	CARBONDALE	ANVIL ROCK	SANDSTONE	32.4	240.8	
160.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.3	273.3	
156.0	CARBONDALE	JAMESTOWN	BONE COAL	0.3	277.6	W/SS
155.7	CARBONDALE		SANDSTONE	1.2	277.9	W/SANDY SH
154.5	CARBONDALE		BLACK SHALE	3.3	279.1	
151.2	CARBONDALE	BRERETON	LIMESTONE	1.4	282.4	
149.8	CARBONDALE	ANNA	BLACK SHALE	2.3	283.8	
147.5	CARBONDALE	HERRIN	COAL	5.3	286.1	
142.2	CARBONDALE		UNDERCLAY	2.0	291.4	
140.2	CARBONDALE		UNDERCLAY	11.6	293.4	W/SH
128.6	CARBONDALE	DYKERSBURG	SANDSTONE	54.0	305.0	
74.6	CARBONDALE	DYKERSBURG	SANDSTONE	13.2	359.0	W/SANDY SH
61.4	CARBONDALE	DYKERSBURG	SANDY SHALE	23.9	372.2	

37.5	CARBONDALE	SPRINGFIELD	COAL	4.6	396.1
32.9	CARBONDALE		UNDERCLAY	2.3	400.7

MAPID: 16500049000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.650678 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.8041 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
224.0	CARBONDALE	DANVILLE	COAL	1.6	210.0	
213.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	7.0	221.0	
203.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	231.0	
193.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	38.0	241.0	
148.0	CARBONDALE	HERRIN	COAL	5.3	286.0	
129.0	CARBONDALE	CANTON	SANDSTONE/SHALE	67.0	305.0	
38.0	CARBONDALE	SPRINGFIELD	COAL	4.6	396.0	

MAPID: 16500050000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.640489 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.799502 **DATE COLLECTED:** 12 / 7 / 1905

SURFACE ELEVATION (FT.): 431.9 **LOGGED (FT.):** 412.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.9			UNCONSOLIDATED	40.0	0.0	
391.9	MODESTO		SANDSTONE	64.0	40.0	
327.9	MODESTO		ARGILACEOUS SHALE	30.0	104.0	ARG
297.9	MODESTO		BONE COAL	0.3	134.0	
297.6	MODESTO		UNDERCLAY	2.8	134.3	
294.9	MODESTO		ARGILACEOUS SHALE	20.0	137.0	ARG
274.9	MODESTO		COAL	0.7	157.0	
274.2	MODESTO		UNDERCLAY	2.3	157.7	
271.9	MODESTO		SHALE	34.0	160.0	
237.9	MODESTO		SHALE	30.5	194.0	
207.4	MODESTO		ARGILACEOUS SHALE	2.5	224.5	ARG
204.9	CARBONDALE	DANVILLE	COAL	1.8	227.0	
203.1	CARBONDALE		UNDERCLAY	6.0	228.8	
197.1	CARBONDALE		ARGILACEOUS SHALE	9.0	234.8	ARG
188.1	CARBONDALE	ALLENBY	COAL	0.2	243.8	
187.9	CARBONDALE		UNDERCLAY	7.0	244.0	
180.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	251.0	
174.9	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	3.0	257.0	ARG
171.9	CARBONDALE	ANVIL ROCK	SHALE	17.0	260.0	
154.9	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	14.0	277.0	ARG
140.9	CARBONDALE	BRERETON	LIMESTONE	10.0	291.0	
130.9	CARBONDALE	ANNA	BLACK SHALE	2.0	301.0	
128.9	CARBONDALE	HERRIN	COAL	6.0	303.0	
122.9	CARBONDALE		UNDERCLAY	7.0	309.0	
115.9	CARBONDALE		ARGILACEOUS SHALE	6.0	316.0	ARG
109.9	CARBONDALE	BRIAR HILL	COAL	0.3	322.0	
109.6	CARBONDALE		UNDERCLAY	2.0	322.3	
107.6	CARBONDALE	DYKERSBURG	SHALE	43.0	324.3	DARK
64.6	CARBONDALE	DYKERSBURG	SANDSTONE	22.0	367.3	
42.6	CARBONDALE	DYKERSBURG	SHALE	6.0	389.3	DARK
36.6	CARBONDALE	DYKERSBURG	BLACK SHALE	10.3	395.3	
26.4	CARBONDALE	SPRINGFIELD	COAL	5.5	405.5	
20.9	CARBONDALE		UNDERCLAY	1.5	411.0	

MAPID: 16500051000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.635963 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.799487 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.8 **LOGGED (FT.):** 430.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN-LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.8			UNCONSOLIDATED	29.5	0.0	
389.3	MODESTO		CALCAREOUS SHALE	1.5	29.5	CALC
387.8	MODESTO		SHALE	0.7	31.0	
387.1	MODESTO		CALCAREOUS SHALE	1.2	31.7	CALC
385.9	MODESTO		SHALE	1.0	32.9	
385.0	MODESTO		SHALE	5.0	33.8	
380.0	MODESTO		SHALE	5.5	38.8	
374.5	MODESTO		SHALE	1.2	44.3	
373.3	MODESTO		SHALE	8.0	45.5	DARK
365.3	MODESTO		SHALE	19.5	53.5	DARK
345.8	MODESTO		SANDSTONE	2.0	73.0	
343.8	MODESTO		SANDSTONE	10.0	75.0	VARIGATED
333.8	MODESTO		SHALE	8.0	85.0	
325.8	MODESTO		SANDSTONE	10.5	93.0	
315.3	MODESTO		SANDSTONE	22.3	103.5	
293.0	MODESTO		BLACK SHALE	1.3	125.8	
291.7	MODESTO		COAL	0.1	127.1	
291.6	MODESTO		UNDERCLAY	3.5	127.2	
288.1	MODESTO		SANDSTONE	4.0	130.7	
284.1	MODESTO		SANDY SHALE	16.0	134.7	
268.1	MODESTO		BLACK SHALE	5.5	150.7	
262.6	MODESTO		COAL	0.3	156.2	
262.4	MODESTO		UNDERCLAY	0.6	156.4	
261.8	MODESTO		UNDERCLAY	2.0	157.0	
259.8	MODESTO		SANDSTONE	4.0	159.0	
255.8	MODESTO		SANDSTONE	10.5	163.0	
245.3	MODESTO		SANDSTONE	18.5	173.5	
226.8	MODESTO		SANDY SHALE	22.0	192.0	
204.8	MODESTO		SANDSTONE	2.0	214.0	
202.8	MODESTO		SANDY SHALE	1.0	216.0	
201.8	MODESTO		SHALE	6.4	217.0	DARK
195.4	MODESTO		BLACK SHALE	1.8	223.4	
193.6	CARBONDALE	DANVILLE	COAL	1.8	225.2	
191.8	CARBONDALE		UNDERCLAY	3.0	227.0	
188.8	CARBONDALE		SANDY SHALE	7.0	230.0	
181.8	CARBONDALE		BLACK SHALE	7.0	237.0	
174.8	CARBONDALE	"Allenby rider"	COAL	0.3	244.0	
174.5	CARBONDALE		SHALE	2.3	244.3	DARK
172.3	CARBONDALE	ALLENBY	COAL	0.3	246.5	

172.0	CARBONDALE		UNDERCLAY	2.0	246.8	
170.0	CARBONDALE		VARRIGATED SHALE	1.3	248.8	VARIG
168.8	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	250.0	
160.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	258.0	
155.8	CARBONDALE		BLACK SHALE	10.0	263.0	
145.8	CARBONDALE		SHALE	13.4	273.0	DARK
132.4	CARBONDALE	JAMESTOWN	COAL	0.1	286.4	
132.3	CARBONDALE	BRERETON	LIMESTONE	7.3	286.5	
125.0	CARBONDALE	ANNA	SHALE	1.6	293.8	DARK
123.4	CARBONDALE	HERRIN	COAL	5.4	295.4	
118.0	CARBONDALE		UNDERCLAY	4.2	300.8	
113.8	CARBONDALE		SANDY SHALE	10.0	305.0	DARK
103.8	CARBONDALE		SHALE	10.8	315.0	DARK
93.0	CARBONDALE	BRIAR HILL	COAL	0.8	325.8	
92.2	CARBONDALE		UNDERCLAY	0.9	326.6	
91.3	CARBONDALE	DYKERSBURG	SANDY SHALE	92.2	327.5	
-0.9	CARBONDALE	DYKERSBURG	SHALE	1.8	419.7	DARK
-2.7	CARBONDALE	SPRINGFIELD	COAL	6.7	421.5	
-9.4	CARBONDALE		UNDERCLAY	1.8	428.2	

MAPID: 16500052000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.640498 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.795849 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 423.3 **LOGGED (FT.):** 421.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR R. R. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.3			UNCONSOLIDATED	30.0	0.0	
393.3	MODESTO		SANDSTONE	19.0	30.0	
374.3	MODESTO		SHALE	49.0	49.0	
325.3	MODESTO		SANDSTONE	4.0	98.0	
321.3	MODESTO		SHALE	18.0	102.0	
303.3	MODESTO		SANDY SHALE	1.0	120.0	
302.3	MODESTO		SHALE	6.6	121.0	DARK
295.7	MODESTO		COAL	0.3	127.6	
295.5	MODESTO		UNDERCLAY	3.2	127.8	
292.3	MODESTO		SANDY SHALE	9.0	131.0	
283.3	MODESTO		BLACK SHALE	16.2	140.0	
267.1	MODESTO		COAL	0.8	156.2	
266.3	MODESTO		UNDERCLAY	2.0	157.0	
264.3	MODESTO		CALCAREOUS SHALE	3.0	159.0	CALC
261.3	MODESTO		LIMESTONE	1.0	162.0	
260.3	MODESTO		SHALE	2.0	163.0	W/CS BANDS
258.3	MODESTO		SHALE	42.0	165.0	W/SS BANDS
216.3	MODESTO		SANDY SHALE	13.0	207.0	
203.3	MODESTO		SHALE	7.0	220.0	DARK
196.3	CARBONDALE	DANVILLE	COAL	0.8	227.0	
195.5	CARBONDALE		UNDERCLAY	2.2	227.8	
193.3	CARBONDALE		SHALE	10.0	230.0	
183.3	CARBONDALE		SANDSTONE	4.0	240.0	
179.3	CARBONDALE		SHALE	1.8	244.0	
177.5	CARBONDALE	ALLENBY	COAL	0.7	245.8	
176.8	CARBONDALE		UNDERCLAY	6.0	246.5	
170.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	252.5	
163.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.5	259.8	GRAY
157.0	CARBONDALE	ANVIL ROCK	SHALE	4.7	266.3	BLUE
152.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	271.0	
145.3	CARBONDALE		SHALE	11.0	278.0	DARK
134.3	CARBONDALE	JAMESTOWN	COAL	0.1	289.0	
134.2	CARBONDALE		SHALE	0.2	289.1	
134.0	CARBONDALE	BRERETON	LIMESTONE	6.4	289.3	
127.6	CARBONDALE	ANNA	BLACK SHALE	1.3	295.7	
126.3	CARBONDALE	HERRIN	COAL	6.3	297.0	
120.0	CARBONDALE		UNDERCLAY	3.4	303.3	
116.6	CARBONDALE		SANDY SHALE	11.0	306.7	GRAY
105.6	CARBONDALE		SHALE	8.0	317.7	BLUE

97.6	CARBONDALE	BRIAR HILL	COAL	2.3	325.7	
95.3	CARBONDALE	DYKERSBURG	SANDSTONE	13.0	328.0	W/SH
82.3	CARBONDALE	DYKERSBURG	SANDY SHALE	72.0	341.0	
10.3	CARBONDALE	DYKERSBURG	SHALE	1.2	413.0	
9.1	CARBONDALE	SPRINGFIELD	COAL	5.3	414.2	
3.8	CARBONDALE		SANDY CLAYSTONE	1.5	419.5	SANDY

MAPID: 16500053000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.648412 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.796784 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 418.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO QUARTERS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.0			UNCONSOLIDATED	24.0	0.0	
410.0	MODESTO		SHALE	37.0	24.0	
373.0	MODESTO		SANDSTONE	27.0	61.0	
346.0	MODESTO		SHALE	25.0	88.0	
321.0	MODESTO		ARGILACEOUS SHALE	15.5	113.0	ARG
305.5	MODESTO		COAL	0.5	128.5	
305.0	MODESTO		UNDERCLAY	4.7	129.0	
300.3	MODESTO		LIMESTONE	0.5	133.7	
299.8	MODESTO		ARGILACEOUS SHALE	13.0	134.2	ARG
286.8	MODESTO		SHALE	22.0	147.2	DARK
264.8	MODESTO		SANDSTONE	12.5	169.2	
252.3	MODESTO		SHALE	11.0	181.7	DARK
241.3	MODESTO		SHALE	5.0	192.7	DARK
236.3	CARBONDALE	DANVILLE	COAL	2.2	197.7	
234.2	CARBONDALE		UNDERCLAY	3.0	199.8	
231.2	CARBONDALE		ARGILACEOUS SHALE	10.0	202.8	ARG
221.2	CARBONDALE	ANVIL ROCK	SHALE	20.0	212.8	W/SS
201.2	CARBONDALE	ANVIL ROCK	SANDSTONE	48.0	232.8	
153.2	CARBONDALE		BLACK SHALE	4.2	280.8	
149.0	CARBONDALE	BRERETON	LIMESTONE	4.0	285.0	
145.0	CARBONDALE	HERRIN	COAL	5.8	289.0	
139.2	CARBONDALE		UNDERCLAY	6.0	294.8	
133.2	CARBONDALE		ARGILACEOUS SHALE	10.0	300.8	ARG
123.2	CARBONDALE	DYKERSBURG	SANDSTONE	20.3	310.8	4" ADDED TO THICKNESS
102.8	CARBONDALE	DYKERSBURG	SHALE	6.0	331.2	
96.8	CARBONDALE	DYKERSBURG	SHALE	29.0	337.2	DARK
67.8	CARBONDALE	DYKERSBURG	SHALE	32.0	366.2	DARK
35.8	CARBONDALE	DYKERSBURG	BLACK SHALE	12.5	398.2	
23.3	CARBONDALE	SPRINGFIELD	COAL	6.0	410.7	
17.3	CARBONDALE		UNDERCLAY	2.0	416.7	

MAPID: 16500054000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.633745 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.790363 **DATE COLLECTED:** 11 / 1 / 1905

SURFACE ELEVATION (FT.): 420.1 **LOGGED (FT.):** 390.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.1			UNCONSOLIDATED	26.0	0.0	
394.1			SANDSTONE	4.0	26.0	
390.1			SANDSTONE	33.0	30.0	
357.1			SHALE	33.3	63.0	
323.8			COAL	0.1	96.3	
323.7			BLACK SHALE	0.8	96.4	
322.9			CLAYSTONE	0.5	97.2	
322.4			SANDSTONE	5.0	97.7	
317.4			SHALE	19.2	102.7	
298.3	MODESTO		BLACK SHALE	3.7	121.8	
294.6	MODESTO		COAL	0.5	125.5	
294.1	MODESTO		SHALE	4.3	126.0	
289.8	MODESTO		CLAYSTONE	1.0	130.3	
288.8	MODESTO		BLACK SHALE	5.0	131.3	
283.8	MODESTO		LIMESTONE	1.5	136.3	
282.3	MODESTO		SHALE	2.1	137.8	
280.3	MODESTO		LIMESTONE	1.0	139.8	
279.3	MODESTO		SHALE	2.6	140.8	
276.7	MODESTO		SHALE	15.3	143.4	
261.4	MODESTO		BLACK SHALE	1.5	158.7	
259.9	MODESTO		SHALE	4.5	160.2	
255.4	MODESTO		SANDSTONE	12.8	164.7	
242.7	MODESTO		SHALE	5.0	177.4	
237.7	MODESTO	PIASA	LIMESTONE	3.1	182.4	
234.6	MODESTO		BLACK SHALE	3.7	185.5	
230.9	MODESTO		SHALE	4.3	189.2	
226.6	MODESTO		BLACK SHALE	0.1	193.5	
226.5	CARBONDALE	DANVILLE	COAL	1.6	193.6	
224.9	CARBONDALE		SHALE	2.0	195.2	
222.9	CARBONDALE		SANDSTONE	2.3	197.2	
220.7	CARBONDALE		SHALE	4.0	199.4	
216.7	CARBONDALE		SANDY SHALE	6.7	203.4	
210.0	CARBONDALE		BLACK SHALE	0.2	210.1	
209.8	CARBONDALE	"Allenby rider"	COAL	0.1	210.3	
209.8	CARBONDALE		SANDSTONE	4.8	210.3	
204.9	CARBONDALE		SHALE	2.0	215.2	
202.9	CARBONDALE		BLACK SHALE	0.2	217.2	
202.8	CARBONDALE	ALLENBY	COAL	0.7	217.3	
202.1	CARBONDALE		UNDERCLAY	1.2	218.0	

200.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	219.2
194.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.5	225.3
192.3	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	227.8
188.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.3	231.8
185.1	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	235.0
181.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.9	239.0
165.2	CARBONDALE		BLACK SHALE	0.5	254.9
164.7	CARBONDALE	JAMESTOWN	COAL	0.1	255.4
164.6	CARBONDALE		BLACK SHALE	2.3	255.5
162.3	CARBONDALE	BRERETON	LIMESTONE	6.1	257.8
156.3	CARBONDALE	ANNA	BLACK SHALE	1.3	263.8
155.0	CARBONDALE	HERRIN	COAL	5.1	265.1
149.9	CARBONDALE		UNDERCLAY	3.6	270.2
146.3	CARBONDALE		SANDSTONE	4.3	273.8
142.1	CARBONDALE		SANDY SHALE	4.0	278.0
138.1	CARBONDALE		SANDY SHALE	8.0	282.0
130.1	CARBONDALE		SHALE	6.0	290.0
124.1	CARBONDALE	BRIAR HILL	COAL	1.5	296.0
122.6	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	297.5
116.6	CARBONDALE	DYKERSBURG	SANDY SHALE	70.3	303.5
46.3	CARBONDALE	DYKERSBURG	COAL	0.1	373.8
46.3	CARBONDALE	DYKERSBURG	SANDY SHALE	8.3	373.8
38.0	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	382.1
36.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.0	384.1
35.9	CARBONDALE	SPRINGFIELD	COAL	6.0	384.2

MAPID: 16500055000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.645026 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.792209 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 432.5 **LOGGED (FT.):** 406.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR R. R. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.5			UNCONSOLIDATED	33.0	0.0	
399.5	MODESTO		SANDSTONE	17.0	33.0	
382.5	MODESTO		SANDY SHALE	18.0	50.0	
364.5	MODESTO		BLACK SHALE	18.0	68.0	
346.5	MODESTO		LIMESTONE	2.0	86.0	
344.5	MODESTO		BLACK SHALE	32.5	88.0	
312.0	MODESTO		COAL	0.3	120.5	
311.7	MODESTO		UNDERCLAY	5.2	120.8	
306.5	MODESTO		CALCAREOUS SHALE	4.0	126.0	CALC
302.5	MODESTO		LIMESTONE	1.0	130.0	
301.5	MODESTO		SANDY SHALE	7.0	131.0	
294.5	MODESTO		SANDSTONE	50.0	138.0	
244.5	MODESTO		SHALE	3.0	188.0	DARK
241.5	MODESTO	PIASA	LIMESTONE	4.0	191.0	
237.5	MODESTO		BLACK SHALE	8.0	195.0	
229.5	CARBONDALE	DANVILLE	COAL	2.0	203.0	
227.5	CARBONDALE		SHALE	14.0	205.0	DARK
213.5	CARBONDALE	"Allenby rider"	COAL	0.5	219.0	
213.0	CARBONDALE		SHALE	3.5	219.5	DARK
209.5	CARBONDALE		SHALE	0.4	223.0	
209.1	CARBONDALE	ALLENBY	COAL	0.8	223.4	
208.2	CARBONDALE		UNDERCLAY	2.8	224.3	
205.5	CARBONDALE		CALCAREOUS SHALE	3.0	227.0	CALC
202.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	230.0	
198.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	234.0	
180.5	CARBONDALE		BLACK SHALE	18.0	252.0	
162.5	CARBONDALE		SHALE	1.3	270.0	
161.2	CARBONDALE	HERRIN	COAL	5.1	271.3	
156.2	CARBONDALE		UNDERCLAY	2.1	276.3	
154.1	CARBONDALE		SHALE	23.6	278.4	DARK
130.5	CARBONDALE	BRIAR HILL	COAL	0.6	302.0	
129.9	CARBONDALE	DYKERSBURG	SHALE	23.4	302.6	DARK
106.5	CARBONDALE	DYKERSBURG	SANDY SHALE	23.0	326.0	W/SS, DARK
83.5	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	349.0	DARK
68.5	CARBONDALE	DYKERSBURG	SANDY SHALE	34.7	364.0	BLACK
33.8	CARBONDALE	SPRINGFIELD	COAL	6.5	398.7	
27.3	CARBONDALE		UNDERCLAY	0.8	405.2	

MAPID: 16500056000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' S line, 660' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.636026 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.792188 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 411.8 **LOGGED (FT.):** 770.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COLLIERIES **WELL TYPE:** Coal Test

COMMENT: CORE #27, 39 -770FT, CONDENSED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.8			UNCONSOLIDATED	30.0	0.0	
381.8	MODESTO		SHALE	16.0	30.0	
365.8	MODESTO		SANDSTONE	27.0	46.0	
338.8	MODESTO		SHALE	1.8	73.0	
337.0	MODESTO		COAL	0.3	74.8	
336.7	MODESTO		UNDERCLAY	4.0	75.1	
332.7	MODESTO		SHALE	18.0	79.1	
314.7	MODESTO		DARK SHALE	3.1	97.1	
311.6	MODESTO		COAL	0.5	100.2	
311.1	MODESTO		UNDERCLAY	4.8	100.7	
306.3	MODESTO		SHALE	16.5	105.5	
289.8	MODESTO		SANDSTONE	49.5	122.0	
240.3	MODESTO		LIMESTONE	2.0	171.5	
238.3	MODESTO		DARK SHALE	1.5	173.5	
236.8	MODESTO		COAL	0.1	175.0	
236.7	MODESTO		GRAY SHALE	3.3	175.1	
233.4	CARBONDALE	DANVILLE	COAL	1.8	178.4	
231.5	CARBONDALE		SHALE	12.7	180.3	
218.9	CARBONDALE		SANDSTONE	3.3	192.9	
215.6	CARBONDALE		SHALE	1.1	196.2	
214.5	CARBONDALE		COAL	0.8	197.3	
213.7	CARBONDALE		UNDERCLAY	5.7	198.1	
208.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	203.8	
202.8	CARBONDALE		SHALE	18.0	209.0	
184.8	CARBONDALE		SANDSTONE	25.0	227.0	
159.8	CARBONDALE		COAL	0.1	252.0	
159.7	CARBONDALE		BLACK SHALE	3.3	252.1	
156.4	CARBONDALE	BRERETON	LIMESTONE	4.0	255.4	
152.4	CARBONDALE	ANNA	BLACK SHALE	0.7	259.4	
151.7	CARBONDALE	HERRIN	COAL	5.2	260.1	
146.5	CARBONDALE		UNDERCLAY	4.7	265.3	
141.8	CARBONDALE		SHALE	12.0	270.0	
129.8	CARBONDALE		DARK SHALE	6.0	282.0	
123.8	CARBONDALE	BRIAR HILL	COAL	1.8	288.0	UNCERTAIN CORRELATION
122.0	CARBONDALE		SHALE	14.3	289.8	
107.6	CARBONDALE		COAL	0.2	304.2	
107.5	CARBONDALE		SANDSTONE	10.0	304.3	
97.5	CARBONDALE		SHALE	53.7	314.3	
43.8	CARBONDALE	TURNER MINE	DARK SHALE	1.5	368.0	UNCERTAIN CORRELATION

42.3	CARBONDALE	SPRINGFIELD	COAL	4.0	369.5
38.3	CARBONDALE		UNDERCLAY	0.8	373.5
37.5	CARBONDALE		UNCLASSIFIED	65.5	374.3
-28.0	CARBONDALE		DARK SHALE	0.2	439.8
-28.2	CARBONDALE	EXCELLO	BLACK SHALE	3.7	440.0
-31.9	CARBONDALE	HOUCHIN CREEK	COAL	2.3	443.7
-34.1	CARBONDALE		SHALE	40.8	445.9
-75.0	CARBONDALE		COAL	1.3	486.8
-76.2	CARBONDALE		SHALE	6.2	488.0
-82.4	CARBONDALE		COAL	0.5	494.2
-82.9	CARBONDALE		SHALE	29.8	494.7
-112.7	CARBONDALE		SANDSTONE	9.5	524.5
-122.2	CARBONDALE		SHALE	21.0	534.0
-143.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.7	555.0
-144.9	CARBONDALE	COLCHESTER	COAL	0.3	556.7
-145.2	SPOON		UNDERCLAY	3.0	557.0
-148.2	SPOON		SHALE	5.0	560.0
-153.2	SPOON		SANDSTONE	14.0	565.0
-167.2	SPOON		SHALE	5.0	579.0
-172.2	SPOON		BLACK SHALE	21.8	584.0
-194.0	SPOON	DEKOVEN	COAL	2.5	605.8
-196.5	SPOON		DARK SHALE	4.7	608.3
-201.2	SPOON		BLACK SHALE	0.6	613.0
-201.8	SPOON		COAL	1.6	613.6
-203.4	SPOON		SHALE	5.5	615.2
-208.9	SPOON		COAL	0.7	620.7
-209.5	SPOON		SHALE	1.3	621.3
-210.8	SPOON	DAVIS	COAL	2.7	622.6
-213.5	SPOON		UNDERCLAY	1.8	625.3
-215.2	SPOON		SHALE	5.0	627.0
-220.2	SPOON		SANDSTONE	18.0	632.0
-238.2	SPOON		SHALE	15.7	650.0
-253.9	SPOON		COAL	0.8	665.7
-254.6	SPOON		SHALE	63.6	666.4
-318.2	ABBOTT		SANDSTONE	40.0	730.0

MAPID: 16500056000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' S line, 660' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.636026 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.792188 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 268.3 **LOG TYPE:** Survey Core Study
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
239.9	MODESTO	PIASA	LIMESTONE	2.0	172.1	
237.9	MODESTO		DARK GRAY SHALE	7.7	174.1	
230.2	CARBONDALE	DANVILLE	COAL	1.0	181.8	
229.2	CARBONDALE		SHALE & SANDSTONE	17.4	182.8	
211.8	CARBONDALE	ALLENBY	COAL	0.4	200.2	
211.4	CARBONDALE		GRAY SHALE	3.0	200.6	
208.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.6	203.6	
201.8	CARBONDALE	LAWSON	SILTY SHALE	21.6	210.2	
180.2	CARBONDALE	LAWSON	SHALE & SANDSTONE	2.6	231.8	
177.7	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	19.1	234.3	
158.6	CARBONDALE	JAMESTOWN	BONE COAL	0.2	253.4	
158.4	CARBONDALE		BLACK SHALE	3.1	253.6	
155.3	CARBONDALE	BRERETON	LIMESTONE	4.0	256.7	
151.3	CARBONDALE	ANNA	BLACK SHALE	0.3	260.7	
151.0	CARBONDALE	HERRIN	COAL	7.3	261.0	

MAPID: 16500056000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' S line, 660' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.636026 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.792188 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 770.0 **LOG TYPE:** Drillers Log
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT: CORE #27, 39 -770FT, CONDENSED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.0	CARBONDALE	DANVILLE	COAL	1.0	181.0	
221.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	1.3	191.0	
210.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	202.0	
181.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	22.0	231.0	
151.0	CARBONDALE	HERRIN	COAL	7.3	261.0	
123.0	CARBONDALE	BRIAR HILL	COAL	1.5	289.0	
93.0	CARBONDALE	CANTON	SANDSTONE/SHALE	22.0	319.0	
43.0	CARBONDALE	SPRINGFIELD	COAL	6.0	369.0	
30.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	4.3	382.0	
-32.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	444.0	

MAPID: 16500056000C **VERSION:** 4 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' S line, 660' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.636026 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.792188 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 411.8 **LOGGED (FT.):** 770.0 **LOG TYPE:** Drillers Log
SOURCE: BIG FOUR RAILROAD **WELL TYPE:** Coal Test
COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.8			UNCONSOLIDATED	35.0	0.0	
376.8	MODESTO		SHALE	11.0	35.0	
365.8	MODESTO		SANDSTONE	27.0	46.0	
338.8	MODESTO		SHALE	1.8	73.0	SANDY
337.0	MODESTO		COAL	0.3	74.8	
336.7	MODESTO		UNDERCLAY	4.0	75.1	
332.7	MODESTO		SANDY SHALE	5.0	79.1	
327.7	MODESTO		SHALE	13.0	84.1	BLUE
314.7	MODESTO		SHALE	3.1	97.1	DARK
311.6	MODESTO		COAL	0.5	100.2	
311.1	MODESTO		UNDERCLAY	4.8	100.7	
306.3	MODESTO		SANDY SHALE	16.5	105.5	
289.8	MODESTO		SANDSTONE	49.5	122.0	
240.3	MODESTO	PIASA	LIMESTONE	2.0	171.5	
238.3	MODESTO		SHALE	1.5	173.5	DARK
236.8	MODESTO		COAL	0.1	175.0	
236.7	MODESTO		SHALE	3.3	175.1	
233.4	CARBONDALE	DANVILLE	COAL	1.8	178.4	
231.5	CARBONDALE		SANDY SHALE	12.7	180.3	
218.9	CARBONDALE		SANDSTONE	3.3	192.9	
215.6	CARBONDALE		SHALE	1.1	196.2	BLUE
214.5	CARBONDALE	ALLENBY	COAL	0.8	197.3	
213.7	CARBONDALE		UNDERCLAY	5.7	198.1	
208.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	203.8	
202.8	CARBONDALE	ANVIL ROCK	SHALE	6.0	209.0	
196.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	215.0	
184.8	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	227.0	
159.8	CARBONDALE	JAMESTOWN	COAL	0.1	252.0	
159.7	CARBONDALE		BLACK SHALE	3.3	252.1	
156.4	CARBONDALE	BRERETON	LIMESTONE	4.0	255.4	
152.4	CARBONDALE	ANNA	BLACK SHALE	0.7	259.4	
151.7	CARBONDALE	HERRIN	COAL	5.2	260.1	
146.5	CARBONDALE		UNDERCLAY	4.8	265.3	1' ADDED TO AGREE WITH DEPTH
141.8	CARBONDALE		SHALE	7.0	270.0	
134.8	CARBONDALE		SANDY SHALE	5.0	277.0	
129.8	CARBONDALE		SHALE	6.0	282.0	DARK
123.8	CARBONDALE	BRIAR HILL	COAL	1.8	288.0	
122.0	CARBONDALE	DYKERSBURG	SANDY SHALE	14.3	289.8	
107.6	CARBONDALE	DYKERSBURG	COAL	0.2	304.2	

107.5	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	304.3	
97.5	CARBONDALE	DYKERSBURG	SANDY SHALE	53.7	314.3	
43.8	CARBONDALE	DYKERSBURG	SHALE	1.5	368.0	DARK
42.3	CARBONDALE	SPRINGFIELD	COAL	4.0	369.5	
38.3	CARBONDALE		UNDERCLAY	0.8	373.5	
37.5	CARBONDALE		SANDY SHALE	2.7	374.3	W/LIME SPOTS
34.8	CARBONDALE		LIMESTONE	4.0	377.0	
30.8	CARBONDALE		SANDSTONE	12.0	381.0	W/SH BANDS
18.8	CARBONDALE		SHALE	29.0	393.0	BLUE
-10.2	CARBONDALE		SHALE	17.8	422.0	BLUE
-28.0	CARBONDALE		SHALE	0.2	439.8	DARK
-28.2	CARBONDALE		BLACK SHALE	0.3	440.0	
-28.5	CARBONDALE		SHALE	1.0	440.3	
-29.5	CARBONDALE	EXCELLO	BLACK SHALE	2.4	441.3	
-31.9	CARBONDALE	HOUCHIN CREEK	COAL	2.3	443.7	
-34.1	CARBONDALE		SANDY SHALE	3.1	445.9	
-37.2	CARBONDALE		SHALE	37.8	449.0	BLUE
-75.0	CARBONDALE	SURVANT - UPPER	COAL	1.3	486.8	
-76.2	CARBONDALE		SHALE	1.0	488.0	
-77.2	CARBONDALE		SANDY SHALE	5.2	489.0	
-82.4	CARBONDALE	SURVANT - LOWER	COAL	0.5	494.2	
-82.9	CARBONDALE		SANDY SHALE	0.3	494.7	GRAY
-83.2	CARBONDALE		SHALE	7.0	495.0	W/SS STREAKS
-90.2	CARBONDALE		SANDY SHALE	8.5	502.0	
-98.7	CARBONDALE		SHALE	4.5	510.5	BLUE
-103.2	CARBONDALE		SHALE	9.5	515.0	BLUE
-112.7	CARBONDALE		SANDSTONE	9.5	524.5	W/SH PARTINGS
-122.2	CARBONDALE		SANDSTONE	1.0	534.0	
-123.2	CARBONDALE		SANDY SHALE	20.0	535.0	
-143.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.7	555.0	
-144.9	CARBONDALE	COLCHESTER	COAL	0.3	556.7	
-145.2	SPOON		UNDERCLAY	3.0	557.0	
-148.2	SPOON		LIMESTONE	5.0	560.0	
-153.2	SPOON		SANDSTONE	14.0	565.0	
-167.2	SPOON		SANDY SHALE	5.0	579.0	
-172.2	SPOON		BLACK SHALE	21.8	584.0	
-194.0	SPOON	DEKOVEN	COAL	2.5	605.8	
-196.5	SPOON		SHALE	4.7	608.3	DARK
-201.2	SPOON		BLACK SHALE	0.6	613.0	
-201.8	SPOON	DAVIS	COAL	1.6	613.6	
-203.4	SPOON	DAVIS	SHALE	5.5	615.2	
-208.9	SPOON	DAVIS	COAL	0.7	620.7	
-209.5	SPOON	DAVIS	SHALE	1.3	621.3	
-210.8	SPOON	DAVIS	COAL	2.7	622.6	
-213.5	SPOON		UNDERCLAY	1.8	625.3	
-215.2	SPOON		CALCAREOUS SHALE	5.0	627.0	CALC
-220.2	SPOON		SANDSTONE	18.0	632.0	
-238.2	SPOON		SANDY SHALE	15.7	650.0	

-253.9	SPOON	COAL	0.8	665.7	
-254.6	SPOON	SANDY SHALE	17.6	666.4	
-272.2	SPOON	SHALE	18.0	684.0	BLUE
-290.2	SPOON	SHALE	28.0	702.0	
-318.2	SPOON	SANDSTONE	1.0	730.0	
-319.2	SPOON	SANDSTONE	29.0	731.0	W/SH BANDS
-348.2	SPOON	SANDSTONE	10.0	760.0	

MAPID: 16500056000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' S line, 660' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.636026 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.792188 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 770.0 **LOG TYPE:** Survey Core Study

SOURCE: HRSBRG SALINE CLRS, **WELL TYPE:** Coal Test

COMMENT: CORE #27, 39 -770FT, CONDENSED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	444.0	
-75.0	CARBONDALE	SURVANT	COAL	0.7	486.0	
-145.0	CARBONDALE	COLCHESTER	COAL	0.2	556.0	
-197.0	CARBONDALE	DEKOVEN	COAL	2.5	608.0	
-204.0	CARBONDALE	DAVIS	COAL	1.7	615.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	668.0	
-260.0	TRADEWATER	MT. RORAH	COAL	0.8	671.0	

MAPID: 16501078000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 650' S line, 510' W line of SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.64551 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.792177 **DATE COLLECTED:** 10 / 27 / 1953

SURFACE ELEVATION (FT.): 422.9 **LOGGED (FT.):** 294.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.9			CLAY	12.0	0.0	
410.9	MODESTO		SANDSTONE	4.0	12.0	
406.9	MODESTO		SANDSTONE	5.0	16.0	
401.9	MODESTO		SHALE	13.0	21.0	
388.9	MODESTO		SANDSTONE	47.0	34.0	
341.9	MODESTO		SHALE	15.0	81.0	
326.9	MODESTO		GRAY SHALE	40.0	96.0	
286.9	MODESTO		GRAY SHALE	20.0	136.0	LGY SH W/ LS STREAKS
266.9	MODESTO		SANDSTONE	42.0	156.0	
224.9	MODESTO		SHALE	5.0	198.0	
219.9	MODESTO	PIASA	LIMESTONE	3.5	203.0	
216.4	MODESTO		SHALE	6.0	206.5	
210.4	CARBONDALE	DANVILLE	COAL	0.5	212.5	
209.9	CARBONDALE		UNDERCLAY	1.0	213.0	
208.9	CARBONDALE		SHALE	16.0	214.0	
192.9	CARBONDALE		LIMESTONE	1.5	230.0	
191.4	CARBONDALE		SHALE	6.5	231.5	
184.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	238.0	
179.9	CARBONDALE		GRAY SHALE	38.0	243.0	
141.9	CARBONDALE	BRERETON	LIMESTONE	5.5	281.0	
136.4	CARBONDALE	ANNA	BLACK SHALE	1.2	286.5	
135.2	CARBONDALE	HERRIN	COAL	3.6	287.7	
131.6	CARBONDALE		UNDERCLAY	2.8	291.3	

MAPID: 16501108000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 20' N line, 570' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.644742 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.797631 **DATE COLLECTED:** 10 / 30 / 1953

SURFACE ELEVATION (FT.): 444.6 **LOGGED (FT.):** 319.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.6			CLAY	10.0	0.0	
434.6			SANDY CLAY	4.0	10.0	
430.6			SANDSTONE	5.0	14.0	
425.6			SANDSTONE	6.0	19.0	
419.6			SHALE	9.0	25.0	
410.6			SANDSTONE	37.0	34.0	
373.6			SANDSTONE	49.0	71.0	SS W/ SH STREAKS
324.6			SHALE	28.0	120.0	
296.6			SANDSTONE	21.0	148.0	
275.6			LIMESTONE	3.0	169.0	
272.6			SHALE	24.0	172.0	
248.6			SHALE	53.0	196.0	
195.6			SHALE	2.5	249.0	SH W/ LS NODS
193.1			LIMESTONE	0.5	251.5	
192.6			SHALE	1.5	252.0	
191.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	253.5	
190.1	CARBONDALE	BANKSTON FORK	SHALE	2.5	254.5	
187.6	CARBONDALE	BANKSTON FORK	LIMESTONE	1.2	257.0	
186.4	CARBONDALE		SHALE	13.8	258.2	
172.6	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	272.0	
155.6	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.3	289.0	
153.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.8	291.3	
142.6	CARBONDALE		DARK GRAY SHALE	4.0	302.0	
138.6	CARBONDALE	BRERETON	LIMESTONE	5.8	306.0	
132.8	CARBONDALE	ANNA	BLACK SHALE	0.8	311.8	
132.1	CARBONDALE	ANNA	BLACK SHALE	1.0	312.5	
131.1	CARBONDALE	HERRIN	COAL	4.4	313.5	
126.7	CARBONDALE		UNDERCLAY	1.5	317.9	

MAPID: 16501108000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 20' N line, 570' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.644742 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.797631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 318.3 **LOG TYPE:** Survey Core Study
SOURCE: PEABODY COAL CO. 47-5 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.4	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	5.7	306.6	
132.7	CARBONDALE	ANNA	BLACK SHALE	1.8	312.3	
131.0	CARBONDALE	HERRIN	COAL	4.3	314.0	

MAPID: 16503128000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 310' N line, 190' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.651146 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:** 7 / 0 / 1957
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 1608.0 **LOG TYPE:** Electric Log
SOURCE: POWERS & HENDRICKS **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	590.0	
-218.0	SPOON	DAVIS	UNCLASSIFIED	-	660.0	
-1166.0	BASE OF PENN.		UNCLASSIFIED	-	1608.0	

MAPID: 16503128000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 310' N line, 190' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.651146 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:**
SOURCE: POWERS & HENDRICKS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1321.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1767.0			LIMESTONE	-	2209.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2604.0	

MAPID: 16503128000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 310' N line, 190' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.651146 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:** 7 / 0 / 1957
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:** Electric Log
SOURCE: POWERS & HENDRICKS, PEABODY COAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-40.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	482.0	
-78.0	CARBONDALE	SURVANT	COAL	0.5	520.0	
-148.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-205.0	CARBONDALE	DEKOVEN	COAL	2.5	647.0	
-211.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	653.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-219.0	CARBONDALE	DAVIS	COAL	4.5	661.0	
-267.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	709.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503223000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.639384 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.79676 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:** Electric Log
SOURCE: REHN, E. E., PATTERSON-PEABODY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	485.0	
-110.0	CARBONDALE	SURVANT	COAL	1.8	530.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	601.0	
-240.0	CARBONDALE	DEKOVEN	COAL	2.5	660.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	669.0	
-263.0	CARBONDALE	DAVIS	COAL	6.0	683.0	
-285.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	

MAPID: 16503223000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.639384 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.79676 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:**
SOURCE: REHN, E. E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1326.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1730.0			LIMESTONE	-	2150.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2567.0	

MAPID: 16503320000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.650664 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804102 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2606.0 **LOG TYPE:** Electric Log
SOURCE: POWERS ROY H, REYNOLDS E ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-64.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	489.0	
-105.0	CARBONDALE	SURVANT	COAL	1.0	530.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-237.0	CARBONDALE	DEKOVEN	COAL	3.0	662.0	
-244.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	669.0	
-252.0	CARBONDALE	DAVIS	COAL	3.8	677.0	
-304.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	729.0	

MAPID: 16503320000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.650664 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2606.0 **LOG TYPE:**
SOURCE: POWERS ROY H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
130.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1334.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1759.0	
-1771.0			LIMESTONE	-	2196.0	
-2181.0		BASE BARLOW	LIMESTONE	-	2606.0	

MAPID: 16503429000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.63936 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804062 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: IL BASIN OIL ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	296.0	
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1748.0	
-1747.0			LIMESTONE	-	2172.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16523974000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.634844 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796748 **DATE COLLECTED:** 5 / 0 / 1977
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 714.5 **LOG TYPE:** Nuclear Log
SOURCE: POWERS, ROY W., REYNOLDS MARY E 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	498.0	
-98.0	CARBONDALE	SURVANT	COAL	2.0	543.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.5	623.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.0	661.0	
-226.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	671.0	
-236.0	CARBONDALE	DAVIS	COAL	4.5	681.0	
-269.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	714.0	

MAPID: 16523976000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.63711 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794929 **DATE COLLECTED:** 4 / 0 / 1977
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 4.0 **LOG TYPE:** Electric Log
SOURCE: POWERS, ROY W., REYNOLDS MARY E 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	1.9	496.0	
-100.0	CARBONDALE	SURVANT	COAL	1.0	547.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	627.0	
-217.0	CARBONDALE	DEKOVEN	COAL	2.8	664.0	
-226.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	673.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-242.0	CARBONDALE	DAVIS	COAL	5.0	689.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	704.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525929000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647818 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797652 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION J317Y **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	HERRIN	COAL	5.0	295.0	

MAPID: 16525930000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647994 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.804522 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 296.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R16 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.3	CARBONDALE	HERRIN	COAL	5.4	290.7	

MAPID: 16525931000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.648883 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.801088 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION H **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.9	CARBONDALE	HERRIN	COAL	5.9	294.1	

MAPID: 16525932000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.645231 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.79721 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R13 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	HERRIN	COAL	5.0	295.0	

MAPID: 16525933000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638684 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.794265 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 297.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION K **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.4	CARBONDALE	HERRIN	COAL	5.5	291.6	

MAPID: 16525934000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638484 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.803109 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R114 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	HERRIN	COAL	6.0	309.0	

MAPID: 16525935000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.635919 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797353 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 309.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R11 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.2	CARBONDALE	HERRIN	COAL	6.3	302.8	

MAPID: 16525936000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.632261 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.799249 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R17 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.4	CARBONDALE	HERRIN	COAL	5.4	300.6	

MAPID: 16525942000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.636272 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.793126 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R15 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.1	CARBONDALE	HERRIN	COAL	5.1	270.9	

MAPID: 16525943000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641586 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.792688 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 282.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R18 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.1	CARBONDALE	HERRIN	COAL	5.1	276.9	

MAPID: 16525944000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.647356 **GEOLOGIST:** COATS

CONFIDENTIAL: N **LATITUDE:** 37.792262 **DATE COLLECTED:** 6 / 27 / 1984

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 271.0 **LOG TYPE:** Company map

SOURCE: MIDWEST MINING & CONSTRUCTION R12 **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
146.2	CARBONDALE	HERRIN	COAL	5.3	265.8	

MAPID: 16500057000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2600' N line, 100' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.669762 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.79781 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 408.6 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	41.3	0.0	
393.7	MODESTO		SANDSTONE	25.5	41.3	
368.2	MODESTO		SHALE	14.3	66.8	
353.9	MODESTO		SANDSTONE	4.0	81.1	
349.9	MODESTO		SANDY SHALE	21.3	85.1	
328.7	MODESTO		SHALE	13.3	106.3	
315.4	MODESTO		SANDSTONE	10.1	119.6	
305.3	MODESTO		SHALE	18.6	129.7	
286.7	MODESTO		COAL	0.7	148.3	
286.1	MODESTO		UNDERCLAY	5.3	148.9	
280.7	MODESTO		SANDY SHALE	11.3	154.3	
269.4	MODESTO		SANDSTONE	33.8	165.6	
235.7	MODESTO		SHALE	1.5	199.3	
234.2	MODESTO	PIASA	LIMESTONE	2.5	200.8	
231.7	MODESTO		SHALE	4.1	203.3	
227.6	MODESTO		CLAYSTONE	3.3	207.4	
224.2	CARBONDALE	DANVILLE	COAL	1.6	210.8	
222.7	CARBONDALE		UNDERCLAY	15.9	212.3	
206.7	CARBONDALE	"Allenby rider"	COAL	0.2	228.3	
206.6	CARBONDALE		UNDERCLAY	4.3	228.4	
202.2	CARBONDALE	ALLENBY	COAL	0.5	232.8	
201.7	CARBONDALE		UNDERCLAY	2.8	233.3	
198.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	236.1	
191.9	CARBONDALE		CLAYSTONE	3.0	243.1	
188.9	CARBONDALE	ANVIL ROCK	SANDSTONE	28.7	246.1	
160.2	CARBONDALE	ANVIL ROCK	SANDSTONE	10.6	274.8	
149.7	CARBONDALE	JAMESTOWN	COAL	0.3	285.3	
149.4	CARBONDALE		SHALE	0.2	285.6	
149.2	CARBONDALE	BRERETON	LIMESTONE	3.5	285.8	
145.7	CARBONDALE	ANNA	BLACK SHALE	3.9	289.3	
141.8	CARBONDALE	HERRIN	COAL	5.3	293.2	W/SULFUR
136.5	CARBONDALE		UNDERCLAY	12.7	298.5	
123.8	CARBONDALE	DYKERSBURG	SANDY SHALE	14.9	311.2	
108.9	CARBONDALE	DYKERSBURG	SANDSTONE	6.7	326.1	W/SH
102.2	CARBONDALE	DYKERSBURG	SANDSTONE	46.6	332.8	
55.6	CARBONDALE	DYKERSBURG	SANDY SHALE	22.8	379.4	
32.8	CARBONDALE	SPRINGFIELD	COAL	4.3	402.2	
28.6	CARBONDALE		UNDERCLAY	2.2	406.4	

MAPID: 16500057000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2600' N line, 100' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.669762 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.79781 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 298.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.3	MODESTO	PIASA	LIMESTONE	2.5	200.7	
231.8	MODESTO		CLAYSTONE & SHALE	7.4	203.2	
224.4	CARBONDALE	DANVILLE	COAL	1.6	210.6	
222.8	CARBONDALE		SHALE & SANDSTONE	20.4	212.2	
202.4	CARBONDALE	ALLENBY	COAL	0.5	232.6	
201.9	CARBONDALE		CLAYSTONE	2.8	233.1	
199.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	235.9	
192.1	CARBONDALE	LAWSON	CLAYSTONE	3.0	242.9	
189.1	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	28.7	245.9	
160.4	CARBONDALE	LAWSON	SILTY SHALE	10.6	274.6	
149.8	CARBONDALE	JAMESTOWN	COAL	0.3	285.2	
149.6	CARBONDALE		BLACK SHALE	0.2	285.4	
149.4	CARBONDALE	BRERETON	LIMESTONE	3.5	285.6	
145.9	CARBONDALE	ANNA	BLACK SHALE	3.9	289.1	
142.0	CARBONDALE	HERRIN	COAL	5.3	293.0	

MAPID: 16500058000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.663243 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.795935 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.6 **LOGGED (FT.):** 431.6 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.6			UNCONSOLIDATED	58.1	0.0	
367.5	MODESTO		SHALE	8.9	58.1	
358.6	MODESTO		SANDY SHALE	10.2	67.0	
348.4	MODESTO		SANDSTONE	23.5	77.2	
324.9	MODESTO		SANDY SHALE	24.0	100.7	
300.9	MODESTO		COAL	0.1	124.7	
300.8	MODESTO		UNDERCLAY	1.9	124.8	
298.9	MODESTO		SHALE	9.2	126.7	
289.8	MODESTO		SANDY SHALE	16.8	135.8	
273.0	MODESTO		COAL	0.8	152.6	
272.3	MODESTO		UNDERCLAY	7.2	153.3	
265.1	MODESTO		SHALE	28.2	160.5	
236.9	MODESTO		SANDY SHALE	4.7	188.7	
232.3	MODESTO		SANDY SHALE	10.2	193.3	W/SS
222.1	MODESTO		SANDSTONE	23.8	203.5	
198.3	CARBONDALE	DANVILLE	COAL	1.7	227.3	
196.7	CARBONDALE		UNDERCLAY	10.6	228.9	W/SH
186.1	CARBONDALE	"Allenby rider"	COAL	0.1	239.5	
185.9	CARBONDALE		SANDSTONE	5.8	239.7	
180.2	CARBONDALE		SANDY SHALE	2.7	245.4	
177.5	CARBONDALE	ALLENBY	COAL	0.5	248.1	
177.0	CARBONDALE		UNDERCLAY	3.3	248.6	
173.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	251.8	
168.6	CARBONDALE	ANVIL ROCK	SANDSTONE	32.8	257.0	
135.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.7	289.8	
125.1	CARBONDALE	JAMESTOWN	COAL	0.3	300.5	
124.8	CARBONDALE		BLACK SHALE	5.5	300.8	
119.3	CARBONDALE	BRERETON	LIMESTONE	4.8	306.3	
114.5	CARBONDALE		SHALE	0.8	311.1	
113.8	CARBONDALE	HERRIN	COAL	5.2	311.8	
108.6	CARBONDALE		UNDERCLAY	4.8	317.0	
103.8	CARBONDALE		SHALE	14.3	321.8	
89.4	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	336.2	
83.4	CARBONDALE	DYKERSBURG	SANDSTONE	60.3	342.2	
23.2	CARBONDALE	DYKERSBURG	SANDY SHALE	22.5	402.4	
0.7	CARBONDALE	SPRINGFIELD	COAL	4.3	424.9	
-3.6	CARBONDALE		UNDERCLAY	2.4	429.2	

MAPID: 16500059000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.659813 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.796827 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 412.1 **LOGGED (FT.):** 401.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR R. R. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.1			UNCONSOLIDATED	47.0	0.0	
365.1	MODESTO		ARGILACEOUS SHALE	4.0	47.0	ARG
361.1	MODESTO		SHALE	25.0	51.0	
336.1	MODESTO		SANDSTONE	1.0	76.0	
335.1	MODESTO		SHALE	26.2	77.0	
308.9	MODESTO		COAL	0.3	103.2	
308.6	MODESTO		UNDERCLAY	1.5	103.5	
307.1	MODESTO		SHALE	23.0	105.0	DARK
284.1	MODESTO		BLACK SHALE	4.3	128.0	
279.8	MODESTO		COAL	0.7	132.3	
279.1	MODESTO		SANDY SHALE	25.0	133.0	
254.1	MODESTO		SANDSTONE	4.0	158.0	
250.1	MODESTO		SANDSTONE	30.0	162.0	
220.1	MODESTO		SANDY SHALE	6.8	192.0	
213.3	CARBONDALE	DANVILLE	COAL	2.0	198.8	
211.3	CARBONDALE		SHALE	30.2	200.8	
181.1	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	231.0	
177.1	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	235.0	
153.1	CARBONDALE		SHALE	13.3	259.0	DARK
139.8	CARBONDALE	JAMESTOWN	COAL	0.3	272.3	
139.5	CARBONDALE		LIMESTONE	1.4	272.6	FOSSILIFEROUS
138.1	CARBONDALE		SHALE	3.0	274.0	DARK
135.1	CARBONDALE	BRERETON	LIMESTONE	5.6	277.0	
129.5	CARBONDALE	HERRIN	COAL	5.6	282.6	
123.9	CARBONDALE		UNDERCLAY	2.8	288.2	
121.1	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	291.0	GRAY
112.1	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	300.0	
94.1	CARBONDALE	DYKERSBURG	SANDSTONE	58.0	318.0	
36.1	CARBONDALE	DYKERSBURG	SHALE	12.0	376.0	
24.1	CARBONDALE	DYKERSBURG	SHALE	6.0	388.0	DARK
18.1	CARBONDALE	SPRINGFIELD	COAL	4.3	394.0	
13.8	CARBONDALE		UNDERCLAY	2.8	398.3	

MAPID: 16500059000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.659813 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.796827 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 401.0 **LOG TYPE:** Drillers Log

SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.0	CARBONDALE	DANVILLE	COAL	2.0	199.0	
181.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	231.0	
177.0	CARBONDALE	ANVIL ROCK		24.0	235.0	
129.0	CARBONDALE	HERRIN	COAL	5.6	283.0	
94.0	CARBONDALE	CANTON		58.0	318.0	
18.0	CARBONDALE	SPRINGFIELD	COAL	4.3	394.0	

MAPID: 16500060000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.663236 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.79231 **DATE COLLECTED:** 11 / 18 / 1905

SURFACE ELEVATION (FT.): 443.1 **LOGGED (FT.):** 408.4 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.1			UNCONSOLIDATED	40.0	0.0	
403.1	MODESTO		SANDSTONE	4.5	40.0	
398.6	MODESTO		SHALE	20.0	44.5	
378.6	MODESTO		ARGILACEOUS SHALE	37.0	64.5	ARG
341.6	MODESTO		CLAYSTONE	6.0	101.5	
335.6	MODESTO		ARGILACEOUS SHALE	19.0	107.5	ARG
316.6	MODESTO		BLACK SHALE	6.0	126.5	
310.6	MODESTO		COAL	0.8	132.5	
309.8	MODESTO		UNDERCLAY	10.0	133.3	
299.8	MODESTO		ARGILACEOUS SHALE	16.0	143.3	ARG
283.8	MODESTO		SHALE	15.0	159.3	
268.8	MODESTO		ARGILACEOUS SHALE	15.3	174.3	ARG
253.6	MODESTO		CLAYSTONE	6.0	189.5	
247.6	MODESTO		ARGILACEOUS SHALE	6.8	195.5	ARG
240.8	CARBONDALE	DANVILLE	COAL	1.7	202.3	
239.1	CARBONDALE		SHALE	12.0	204.0	
227.1	CARBONDALE		CLAYSTONE	2.5	216.0	
224.6	CARBONDALE		ARGILACEOUS SHALE	7.0	218.5	ARG
217.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	225.5	
214.1	CARBONDALE	ANVIL ROCK	SHALE	12.0	229.0	
202.1	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	241.0	
196.1	CARBONDALE	JAMESTOWN	BONE COAL	0.2	247.0	
195.9	CARBONDALE		SHALE	29.5	247.2	
166.4	CARBONDALE		BLACK SHALE	2.0	276.7	
164.4	CARBONDALE	BRERETON	LIMESTONE	5.5	278.7	
158.9	CARBONDALE	ANNA	BLACK SHALE	2.5	284.2	
156.4	CARBONDALE	HERRIN	BONE COAL	0.2	286.7	
156.3	CARBONDALE	HERRIN	COAL	5.8	286.8	
150.5	CARBONDALE		UNDERCLAY	12.0	292.6	
138.5	CARBONDALE		ARGILACEOUS SHALE	7.0	304.6	ARG
131.5	CARBONDALE		SHALE	34.0	311.6	
97.5	CARBONDALE	DYKERSBURG	SANDSTONE	30.0	345.6	
67.5	CARBONDALE	DYKERSBURG	SHALE	15.0	375.6	DARK
52.5	CARBONDALE	DYKERSBURG	BLACK SHALE	12.2	390.6	
40.3	CARBONDALE	SPRINGFIELD	COAL	5.2	402.8	
35.3	CARBONDALE		UNDERCLAY	0.5	407.8	

MAPID: 16502999000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 358' S line, 984' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666689 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798749 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:** Electric Log
SOURCE: LAUDERDALE OIL PROP, DUTY J B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-90.0	CARBONDALE	SURVANT	COAL	2.0	536.0	
-175.0	CARBONDALE	COLCHESTER	COAL	3.3	621.0	
-214.0	CARBONDALE	DEKOVEN	COAL	3.5	660.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	668.0	
-233.0	CARBONDALE	DAVIS	COAL	5.0	679.0	
-259.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	

MAPID: 16502999000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 358' S line, 984' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.666689 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798749 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:**
SOURCE: LAUDERDALE OIL PROP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1327.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-			LIMESTONE	-		
-2158.0		BASE BARLOW	LIMESTONE	-	2604.0	

MAPID: 16503018000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 211' S line, 303' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664488 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.801957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2607.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	BRERETON	LIMESTONE	-	317.0	
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1743.0			LIMESTONE	-	2178.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2607.0	

MAPID: 16503018000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 211' S line, 303' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664488 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.801957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 3099.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	HERRIN	COAL	5.0	325.0	
-1.0	CARBONDALE	SPRINGFIELD	COAL	5.0	436.0	
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	-	517.0	

MAPID: 16503018000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 211' S line, 303' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664488 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.801957 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 1632.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-202.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	637.0	
-278.0	SPOON	DAVIS	UNCLASSIFIED	-	713.0	
-1197.0	BASE OF PENN.		UNCLASSIFIED	-	1632.0	

MAPID: 16503018000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 211' S line, 303' W line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.664488 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.801957 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2607.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-86.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	521.0	
-135.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-201.0	CARBONDALE	COLCHESTER	COAL	0.5	636.0	
-264.0	CARBONDALE	DEKOVEN	COAL	3.0	699.0	
-268.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	703.0	
-279.0	CARBONDALE	DAVIS	COAL	4.8	714.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	755.0	

MAPID: 16503578000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 605' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.66211 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.799414 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2618.0 **LOG TYPE:**
SOURCE: EVANS, ROBERT H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1337.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-			LIMESTONE	-		
-2177.0		BASE BARLOW	LIMESTONE	-	2618.0	

MAPID: 16503589000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 370' S line, 420' W line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.659504 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2607.0 **LOG TYPE:**
SOURCE: EVANS, ROBERT H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2171.0		BASE BARLOW	LIMESTONE	-	2607.0	

MAPID: 16523930000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.666666 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791433 **DATE COLLECTED:** 6 / 0 / 1977
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 717.5 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO., TANNER BUELL ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	493.0	
-94.0	CARBONDALE	SURVANT	COAL	1.5	538.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-224.0	CARBONDALE	DEKOVEN	COAL	1.8	668.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	674.0	
-242.0	CARBONDALE	DAVIS	COAL	5.0	686.0	
-272.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	716.0	

MAPID: 16525924000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.666373 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.798768 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 303.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R21 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.3	CARBONDALE	HERRIN	COAL	5.4	297.7	

MAPID: 16525925000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.659498 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.804717 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 364.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION F **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
62.1	CARBONDALE	HERRIN	COAL	6.1	357.9	

MAPID: 16525926000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.658739 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797633 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 322.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R22 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.2	CARBONDALE	HERRIN	COAL	5.3	316.8	

MAPID: 16525927000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.660073 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.791489 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 308.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R20 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.7	CARBONDALE	HERRIN	COAL	5.8	302.3	

MAPID: 16525928000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.657007 **GEOLOGIST:** COATS

CONFIDENTIAL: N **LATITUDE:** 37.796684 **DATE COLLECTED:** 6 / 27 / 1984

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 294.0 **LOG TYPE:** Company map

SOURCE: MIDWEST MINING & CONSTRUCTION R19 **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.6	CARBONDALE	HERRIN	COAL	5.6	288.4	

MAPID: 16500061000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.672435 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.803183 **DATE COLLECTED:** 9 / 9 / 1905

SURFACE ELEVATION (FT.): 417.4 **LOGGED (FT.):** 306.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.4			UNCONSOLIDATED	41.2	0.0	
376.2	MODESTO		SHALE	14.6	41.2	
361.6	MODESTO		SANDSTONE	39.0	55.8	
322.6	MODESTO		SANDY SHALE	10.7	94.8	
312.0	MODESTO		SANDY SHALE	12.3	105.4	W/SS
299.6	MODESTO		BONE COAL	0.2	117.8	
299.5	MODESTO		UNDERCLAY	11.6	117.9	
287.9	MODESTO		SHALE	20.5	129.5	
267.4	MODESTO		COAL	0.8	150.0	
266.6	MODESTO		UNDERCLAY	6.9	150.8	
259.7	MODESTO		SANDY SHALE	6.1	157.7	
253.6	MODESTO		SHALE	18.4	163.8	W/SS
235.2	MODESTO		SHALE	14.3	182.2	W/SULPHUR BALLS
221.0	MODESTO		SHALE	1.6	196.4	
219.4	MODESTO	PIASA	LIMESTONE	3.1	198.0	
216.3	MODESTO		SHALE	4.6	201.1	
211.7	MODESTO		SHALE	5.9	205.7	
205.8	CARBONDALE	DANVILLE	COAL	1.8	211.6	
204.0	CARBONDALE		UNDERCLAY	6.8	213.4	
197.2	CARBONDALE		SHALE	8.2	220.2	
189.1	CARBONDALE	ALLENBY	COAL	0.3	228.3	
188.7	CARBONDALE		UNDERCLAY	7.1	228.7	
181.6	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	235.8	
173.6	CARBONDALE	ANVIL ROCK	SHALE	9.8	243.8	W/SS
163.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	0.7	253.5	W/SS,LOG REPORTED 10.67,253.5 TO 254.17
163.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.3	254.2	W/SS
150.0	CARBONDALE	JAMESTOWN	BONE COAL	0.3	267.4	
149.6	CARBONDALE		SHALE	2.2	267.8	
147.5	CARBONDALE	BRERETON	LIMESTONE	3.4	269.9	
144.1	CARBONDALE	ANNA	BLACK SHALE	2.8	273.3	
141.2	CARBONDALE	HERRIN	COAL	5.4	276.2	
135.8	CARBONDALE		SHALE	4.8	281.6	W/SULPHUR
131.0	CARBONDALE		UNDERCLAY	9.0	286.4	
122.0	CARBONDALE		SHALE	10.9	295.4	

MAPID: 16500062000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.677059 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.803183 **DATE COLLECTED:** 12 / 0 / 1905

SURFACE ELEVATION (FT.): 435.3 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.3			UNCONSOLIDATED	37.0	0.0	
398.3	MODESTO		SANDSTONE	43.1	37.0	
355.2	MODESTO		SHALE	48.1	80.1	
307.1	MODESTO		COAL	0.2	128.2	
307.0	MODESTO		UNDERCLAY	14.3	128.3	
292.7	MODESTO		SHALE	18.6	142.6	W/SS
274.1	MODESTO		COAL	0.8	161.2	
273.3	MODESTO		UNDERCLAY	13.8	162.0	
259.5	MODESTO		SHALE	9.4	175.8	
250.1	MODESTO		SANDSTONE	16.8	185.2	
233.3	MODESTO		SHALE	7.8	202.0	
225.5	MODESTO	PIASA	LIMESTONE	2.5	209.8	
223.0	MODESTO		SHALE	8.2	212.3	
214.8	CARBONDALE	DANVILLE	COAL	1.9	220.5	
212.9	CARBONDALE		UNDERCLAY	13.9	222.4	
199.0	CARBONDALE	ALLENBY	BONE COAL	0.3	236.3	
198.6	CARBONDALE		UNDERCLAY	3.2	236.7	
195.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	239.8	
189.5	CARBONDALE	ANVIL ROCK	SANDSTONE	39.9	245.8	
149.5	CARBONDALE	JAMESTOWN	BONE COAL	0.3	285.8	
149.3	CARBONDALE	BRERETON	LIMESTONE	3.8	286.0	
145.5	CARBONDALE	ANNA	BLACK SHALE	5.2	289.8	
140.3	CARBONDALE	HERRIN	COAL	6.2	295.0	W/SULPHUR
134.1	CARBONDALE		UNDERCLAY	20.3	301.2	
113.9	CARBONDALE	DYKERSBURG	SANDSTONE	47.7	321.4	
66.2	CARBONDALE	DYKERSBURG	SANDY SHALE	33.3	369.1	
33.0	CARBONDALE	SPRINGFIELD	COAL	4.3	402.3	W/SULFUR
28.7	CARBONDALE		UNDERCLAY	3.4	406.6	

MAPID: 16500062000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.677059 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.803183 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
215.0	CARBONDALE	DANVILLE	COAL	1.9	220.0	
195.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	240.0	
189.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	40.0	246.0	
140.0	CARBONDALE	HERRIN	COAL	6.2	295.0	
114.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	48.0	321.0	
33.0	CARBONDALE	SPRINGFIELD	COAL	4.3	402.0	

MAPID: 16500063000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' N line, 660' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.686324 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.803188 **DATE COLLECTED:** 10 / 10 / 1905

SURFACE ELEVATION (FT.): 430.7 **LOGGED (FT.):** 407.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.7			UNCONSOLIDATED	21.0	0.0	
409.7			CLAY	16.0	21.0	
393.7	MODESTO		SANDSTONE	25.0	37.0	
368.7	MODESTO		SANDY SHALE	28.0	62.0	
340.7	MODESTO		SHALE	32.0	90.0	
308.7	MODESTO		COAL	0.1	122.0	
308.6	MODESTO		UNDERCLAY	1.9	122.1	
306.7	MODESTO		SHALE	12.0	124.0	
294.7	MODESTO		SHALE	18.0	136.0	
276.7	MODESTO		COAL	0.7	154.0	
276.0	MODESTO		UNDERCLAY	6.3	154.7	
269.7	MODESTO		SHALE	7.0	161.0	
262.7	MODESTO		SANDSTONE	30.0	168.0	
232.7	MODESTO		SHALE	10.0	198.0	
222.7	MODESTO	PIASA	LIMESTONE	3.0	208.0	
219.7	MODESTO		SHALE	7.5	211.0	
212.2	CARBONDALE	DANVILLE	COAL	1.7	218.5	
210.5	CARBONDALE		UNDERCLAY	1.8	220.2	
208.7	CARBONDALE		SHALE	9.0	222.0	
199.7	CARBONDALE		SHALE	5.5	231.0	
194.2	CARBONDALE	"Allenby rider"	COAL	0.5	236.5	
193.7	CARBONDALE		UNDERCLAY	1.0	237.0	
192.7	CARBONDALE	ALLENBY	COAL	0.3	238.0	
192.4	CARBONDALE		UNDERCLAY	4.0	238.3	
188.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	242.3	
181.2	CARBONDALE	ANVIL ROCK	SHALE	28.5	249.5	
152.7	CARBONDALE	ANVIL ROCK	SHALE	2.0	278.0	
150.7	CARBONDALE	CONANT	LIMESTONE	0.3	280.0	
150.4	CARBONDALE	JAMESTOWN	COAL	0.2	280.3	
150.2	CARBONDALE	BRERETON	LIMESTONE	1.5	280.5	
148.7	CARBONDALE		BLACK SHALE	4.5	282.0	
144.2	CARBONDALE		SHALE	2.5	286.5	
141.7	CARBONDALE		SHALE	4.0	289.0	
137.7	CARBONDALE	HERRIN	COAL	6.3	293.0	
131.4	CARBONDALE		UNDERCLAY	7.7	299.3	
123.7	CARBONDALE		LIMESTONE	1.0	307.0	
122.7	CARBONDALE		SHALE	4.0	308.0	
118.7	CARBONDALE	DYKERSBURG	SANDSTONE	67.0	312.0	
51.7	CARBONDALE	DYKERSBURG	SHALE	23.0	379.0	

28.7	CARBONDALE	SPRINGFIELD	COAL	4.3	402.0
24.4	CARBONDALE		UNDERCLAY	0.7	406.3

MAPID: 16500063000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' N line, 660' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.686324 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.803188 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 299.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
223.0	MODESTO	PIASA	LIMESTONE	3.0	208.0	
220.0	MODESTO		BLACK SHALE	7.5	211.0	
212.5	CARBONDALE	DANVILLE	COAL	1.7	218.5	
210.9	CARBONDALE		SHALE	16.3	220.1	
194.5	CARBONDALE	ALLENBY	COAL WITH SHALE PARTINGS	1.8	236.5	
192.8	CARBONDALE		CLAYSTONE	4.0	238.2	
188.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	242.2	
181.5	CARBONDALE	LAWSON	SHALE	28.5	249.5	
153.0	CARBONDALE	LAWSON	BLACK SHALE	2.0	278.0	
151.0	CARBONDALE	CONANT	LIMESTONE	0.3	280.0	
150.7	CARBONDALE	JAMESTOWN	COAL	0.2	280.3	
150.5	CARBONDALE	BRERETON	LIMESTONE	1.5	280.5	
149.0	CARBONDALE	ANNA	BLACK SHALE	11.0	282.0	
138.0	CARBONDALE	HERRIN	COAL	6.3	293.0	

MAPID: 16500064000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.679379 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.797728 **DATE COLLECTED:** 11 / 1 / 1905

SURFACE ELEVATION (FT.): 454.3 **LOGGED (FT.):** 406.9 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.3			UNCONSOLIDATED	27.0	0.0	
427.3	MODESTO		COAL	0.7	27.0	
426.6	MODESTO		UNDERCLAY	4.3	27.7	
422.3	MODESTO		SHALE	80.0	32.0	
342.3	MODESTO		SHALE	12.5	112.0	
329.8	MODESTO		COAL	0.3	124.5	
329.5	MODESTO		UNDERCLAY	4.0	124.8	
325.5	MODESTO		SHALE	14.2	128.8	
311.3	MODESTO		SHALE	12.0	143.0	
299.3	MODESTO		COAL	0.8	155.0	
298.5	MODESTO		UNDERCLAY	9.3	155.8	
289.3	MODESTO		SANDSTONE	40.0	165.0	
249.3	MODESTO		SHALE	4.0	205.0	
245.3	MODESTO		COAL	0.1	209.0	
245.2	MODESTO		UNDERCLAY	2.0	209.1	
243.2	MODESTO	PIASA	LIMESTONE	4.0	211.1	
239.2	MODESTO		SHALE	6.0	215.1	
233.2	CARBONDALE	DANVILLE	COAL	1.8	221.1	
231.4	CARBONDALE		UNDERCLAY	4.1	222.9	
227.3	CARBONDALE		SHALE	13.0	227.0	
214.3	CARBONDALE	ALLENBY	COAL	0.6	240.0	
213.7	CARBONDALE		UNDERCLAY	1.4	240.6	
212.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	242.0	
205.8	CARBONDALE	ANVIL ROCK	SHALE	38.5	248.5	
167.3	CARBONDALE	CONANT	LIMESTONE	0.3	287.0	
167.0	CARBONDALE	JAMESTOWN	COAL	0.2	287.3	
166.8	CARBONDALE	BRERETON	LIMESTONE	3.5	287.5	
163.3	CARBONDALE	ANNA	SHALE	4.0	291.0	
159.3	CARBONDALE		SHALE	1.5	295.0	
157.8	CARBONDALE	HERRIN	COAL	5.6	296.5	
152.2	CARBONDALE		UNDERCLAY	3.9	302.1	
148.3	CARBONDALE	DYKERSBURG	SHALE	20.0	306.0	
128.3	CARBONDALE	DYKERSBURG	SANDSTONE	38.0	326.0	
90.3	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	364.0	
78.3	CARBONDALE	DYKERSBURG	SHALE	22.4	376.0	
55.9	CARBONDALE	DYKERSBURG	SHALE	4.0	398.4	
51.9	CARBONDALE	SPRINGFIELD	COAL	4.4	402.4	
47.5	CARBONDALE		UNDERCLAY	0.1	406.8	

MAPID: 16500065000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.688696 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.79034 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 457.5 **LOGGED (FT.):** 265.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
457.5			UNCONSOLIDATED	40.0	0.0	
417.5	MODESTO		SHALE	46.0	40.0	
371.5	MODESTO		COAL	0.2	86.0	
371.3	MODESTO		UNDERCLAY	0.8	86.2	
370.5	MODESTO		SHALE	26.0	87.0	
344.5	MODESTO		COAL	0.2	113.0	
344.3	MODESTO		BONE COAL	0.1	113.2	
344.2	MODESTO		COAL	0.4	113.3	
343.8	MODESTO		UNDERCLAY	8.3	113.7	
335.5	MODESTO		SHALE	28.0	122.0	
307.5	MODESTO		SANDSTONE	24.0	150.0	
283.5	MODESTO	PIASA	LIMESTONE	3.0	174.0	
280.5	MODESTO		SHALE	4.0	177.0	
276.5	CARBONDALE	DANVILLE	COAL	1.7	181.0	
274.8	CARBONDALE		UNDERCLAY	4.3	182.7	
270.5	CARBONDALE		SHALE	13.0	187.0	
257.5	CARBONDALE	"Allenby rider"	COAL	0.3	200.0	
257.2	CARBONDALE		UNDERCLAY	1.8	200.3	
255.5	CARBONDALE	ALLENBY	COAL	0.4	202.0	
255.1	CARBONDALE		UNDERCLAY	2.0	202.4	
253.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.6	204.4	
245.5	CARBONDALE	ANVIL ROCK	SHALE	11.0	212.0	
234.5	CARBONDALE	ANVIL ROCK	SHALE	27.0	223.0	
207.5	CARBONDALE	BRERETON	LIMESTONE	6.0	250.0	
201.5	CARBONDALE	ANNA	BLACK SHALE	2.0	256.0	
199.5	CARBONDALE	HERRIN	COAL	5.5	258.0	
194.0	CARBONDALE		UNDERCLAY	1.5	263.5	

MAPID: 16503143000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.671255 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796855 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.0 **LOGGED (FT.):** 2614.0 **LOG TYPE:**
SOURCE: DAY WALTER L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-2155.0		BASE BARLOW	LIMESTONE	-	2614.0	

MAPID: 16503159000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.680517 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.804091 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 1750.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-188.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	615.0	
-248.0	SPOON	DAVIS	UNCLASSIFIED	-	675.0	
-1323.0	BASE OF PENN.		UNCLASSIFIED	-	1750.0	

MAPID: 16503159000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.680517 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804091 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2615.0 **LOG TYPE:**
SOURCE: GEORGE, T. W. TRUST **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1763.0			LIMESTONE	-	2190.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2615.0	

MAPID: 16503159000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.680517 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804091 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2615.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST, BOND N S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-64.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	491.0	
-112.0	CARBONDALE	SURVANT	COAL	1.0	539.0	
-186.0	CARBONDALE	COLCHESTER	COAL	2.5	613.0	
-228.0	CARBONDALE	DEKOVEN	COAL	3.3	655.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	662.0	
-246.0	CARBONDALE	DAVIS	COAL	4.5	673.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	719.0	
-296.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	723.0	

MAPID: 16503166000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675893 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804085 **DATE COLLECTED:** 2 / 0 / 1958
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, SOMERS W H 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-62.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	490.0	
-111.0	CARBONDALE	SURVANT	COAL	1.5	539.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	657.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	663.0	
-246.0	CARBONDALE	DAVIS	COAL	5.0	674.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	720.0	

MAPID: 16503166000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675893 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804085 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	CARBONDALE	BRERETON	LIMESTONE	-	294.0	
-1352.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1752.0			LIMESTONE	-	2180.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16503169000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678231 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798642 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:**
SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1321.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-			LIMESTONE	-		
-2170.0		BASE BARLOW	LIMESTONE	-	2634.0	

MAPID: 16503199000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 280' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.673599 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804218 **DATE COLLECTED:** 5 / 0 / 1958
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, EMPSON 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	480.0	
-110.0	CARBONDALE	SURVANT	COAL	1.3	530.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-235.0	CARBONDALE	DEKOVEN	COAL	2.8	655.0	
-240.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	660.0	
-251.0	CARBONDALE	DAVIS	COAL	5.0	671.0	
-290.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	710.0	

MAPID: 16503199000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 280' N line, 330' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.673599 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804218 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.0	CARBONDALE	BRERETON	LIMESTONE	-	283.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1771.0	
-1744.0			LIMESTONE	-	2164.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16503229000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.682859 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800444 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2640.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	BRERETON	LIMESTONE	-	311.0	
-1344.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1750.0			LIMESTONE	-	2211.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2640.0	

MAPID: 16503232000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678221 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804088 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2620.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, SOMERS W H 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-54.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-102.0	CARBONDALE	SURVANT	COAL	2.0	538.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-219.0	CARBONDALE	DEKOVEN	COAL	3.0	655.0	
-224.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	660.0	
-234.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	715.0	

MAPID: 16503232000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678221 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804088 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2620.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	BRERETON	LIMESTONE	-	301.0	
-1356.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1773.0			LIMESTONE	-	2209.0	
-2184.0		BASE BARLOW	LIMESTONE	-	2620.0	

MAPID: 16503235000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678224 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802275 **DATE COLLECTED:** 10 / 0 / 1958
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 2626.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, SOMERS W H 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-96.0	CARBONDALE	SURVANT	COAL	1.5	549.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	622.0	
-214.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	673.0	
-230.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-277.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	730.0	

MAPID: 16503235000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678224 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802275 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 2626.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	BRERETON	LIMESTONE	-	304.0	
-1352.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1750.0			LIMESTONE	-	2203.0	
-2173.0		BASE BARLOW	LIMESTONE	-	2626.0	

MAPID: 16503251000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678228 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800453 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2618.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1337.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1746.0			LIMESTONE	-	2193.0	
-2171.0		BASE BARLOW	LIMESTONE	-	2618.0	

MAPID: 16503251000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678228 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.800453 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2970.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	HERRIN	COAL	6.0	306.0	
118.0	CARBONDALE	BRIAR HILL	COAL	-	329.0	
43.0	CARBONDALE	SPRINGFIELD	COAL	4.0	404.0	
-36.0	CARBONDALE	HOUCHIN CREEK	COAL	-	483.0	

MAPID: 16503251000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.678228 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800453 **DATE COLLECTED:** 2 / 0 / 1960
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2618.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., SOMERS W H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-43.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-91.0	CARBONDALE	SURVANT	COAL	2.0	538.0	
-162.0	CARBONDALE	COLCHESTER	COAL	0.5	609.0	
-208.0	CARBONDALE	DEKOVEN	COAL	2.5	655.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	662.0	
-225.0	CARBONDALE	DAVIS	COAL	4.5	672.0	
-273.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	720.0	

MAPID: 16503261000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.680521 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802272 **DATE COLLECTED:** 1 / 0 / 1959
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2617.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST, BOND N S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	500.0	
-108.0	CARBONDALE	SURVANT	COAL	1.3	549.0	
-193.0	CARBONDALE	COLCHESTER	COAL	2.0	634.0	
-220.0	CARBONDALE	DEKOVEN	COAL	3.7	661.0	
-226.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	667.0	
-236.0	CARBONDALE	DAVIS	COAL	4.0	677.0	
-286.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	727.0	

MAPID: 16503261000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.680521 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802272 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2617.0 **LOG TYPE:**
SOURCE: GEORGE, T. W. TRUST **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1354.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1751.0			LIMESTONE	-	2192.0	
-2176.0		BASE BARLOW	LIMESTONE	-	2617.0	

MAPID: 16503297000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 400' S line, 260' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.673842 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802478 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, EMPSON 1-B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	482.0	
-104.0	CARBONDALE	SURVANT	COAL	1.8	530.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	607.0	
-223.0	CARBONDALE	DEKOVEN	COAL	3.0	649.0	
-228.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	654.0	
-239.0	CARBONDALE	DAVIS	COAL	4.7	665.0	
-287.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	713.0	

MAPID: 16503297000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 400' S line, 260' W line of NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.673842 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802478 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2603.0 **LOG TYPE:**
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	286.0	
-1349.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1740.0			LIMESTONE	-	2166.0	
-2177.0		BASE BARLOW	LIMESTONE	-	2603.0	

MAPID: 16525918000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.687387 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.790999 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 269.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R27 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.5	CARBONDALE	HERRIN	COAL	5.5	263.5	

MAPID: 16525919000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.683876 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.802483 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R24 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.3	CARBONDALE	HERRIN	COAL	6.4	298.7	

MAPID: 16525920000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.676973 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.804008 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R25 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.1	CARBONDALE	HERRIN	COAL	6.2	298.9	

MAPID: 16525921000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.676557 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797431 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 307.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R23 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.6	CARBONDALE	HERRIN	COAL	5.6	301.4	

MAPID: 16525922000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.668254 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.803925 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 287.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R26 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.4	CARBONDALE	HERRIN	COAL	5.4	281.6	

MAPID: 16525923000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.673677 **GEOLOGIST:** COATS

CONFIDENTIAL: N **LATITUDE:** 37.794713 **DATE COLLECTED:** 6 / 27 / 1984

SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 312.0 **LOG TYPE:** Company map

SOURCE: MIDWEST MINING & CONSTRUCTION G **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.9	CARBONDALE	HERRIN	COAL	6.0	306.1	

MAPID: 16500066000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.697906 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.79766 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 466.0 **LOGGED (FT.):** 394.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
466.0			UNCONSOLIDATED	22.1	0.0	
443.9	MODESTO		SANDSTONE	41.8	22.1	
402.2	MODESTO		SANDY SHALE	37.6	63.8	
364.6	MODESTO		SHALE	9.3	101.4	
355.3	MODESTO		COAL	0.2	110.7	
355.2	MODESTO		UNDERCLAY	1.8	110.8	
353.3	MODESTO		SHALE	4.0	112.7	
349.3	MODESTO		SANDSTONE	6.5	116.7	
342.8	MODESTO		SANDSTONE	6.0	123.2	
336.8	MODESTO		SHALE	10.7	129.2	DARK
326.2	MODESTO		BLACK SHALE	3.5	139.8	
322.7	MODESTO		COAL	0.7	143.3	
322.0	MODESTO		UNDERCLAY	7.8	144.0	
314.2	MODESTO		SHALE	15.8	151.8	
298.4	MODESTO		SANDSTONE	27.1	167.6	
271.3	MODESTO		SHALE	3.8	194.7	
267.5	MODESTO		CLAYSTONE	1.2	198.5	
266.3	MODESTO	PIASA	LIMESTONE	3.0	199.7	
263.3	MODESTO		SHALE	0.7	202.7	
262.7	MODESTO		SHALE	5.6	203.3	
257.0	CARBONDALE	DANVILLE	COAL	1.7	209.0	
255.4	CARBONDALE		SHALE	1.2	210.6	
254.2	CARBONDALE		SANDSTONE	8.0	211.8	
246.2	CARBONDALE		BLACK SHALE	2.1	219.8	
244.1	CARBONDALE		LIMESTONE	0.4	221.9	
243.7	CARBONDALE		SANDY SHALE	5.8	222.3	
237.9	CARBONDALE	"Allenby rider"	COAL	0.3	228.1	
237.7	CARBONDALE		SANDY SHALE	2.0	228.3	
235.7	CARBONDALE		SHALE	0.4	230.3	
235.2	CARBONDALE	ALLENBY	COAL	0.5	230.8	
234.7	CARBONDALE		UNDERCLAY	1.0	231.3	
233.8	CARBONDALE		UNDERCLAY	2.4	232.2	
231.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	234.6	
224.6	CARBONDALE		SANDSTONE	2.8	241.4	
221.8	CARBONDALE		BLACK SHALE	2.0	244.2	
219.8	CARBONDALE		BONE COAL	0.1	246.2	
219.7	CARBONDALE	ANVIL ROCK	SHALE	6.1	246.3	W/SS
213.6	CARBONDALE	ANVIL ROCK	SANDSTONE	1.7	252.4	
211.9	CARBONDALE	ANVIL ROCK	SHALE	17.3	254.1	W/SS

194.7	CARBONDALE		SHALE	0.3	271.3	FOSSILIFEROUS
194.3	CARBONDALE	JAMESTOWN	COAL	0.2	271.7	
194.2	CARBONDALE	BRERETON	LIMESTONE	3.2	271.8	
191.0	CARBONDALE	ANNA	BLACK SHALE	10.5	275.0	
180.5	CARBONDALE	HERRIN	BONE COAL	0.2	285.5	
180.3	CARBONDALE	HERRIN	COAL	5.5	285.7	
174.8	CARBONDALE		UNDERCLAY	0.4	291.2	
174.4	CARBONDALE		UNDERCLAY	4.5	291.6	
169.9	CARBONDALE		SHALE	6.3	296.1	
163.6	CARBONDALE	DYKERSBURG	SHALE	15.1	302.4	W/SS
148.5	CARBONDALE	DYKERSBURG	SANDSTONE	29.8	317.5	
118.7	CARBONDALE	DYKERSBURG	SHALE	18.7	347.3	
100.0	CARBONDALE	DYKERSBURG	SANDY SHALE	23.7	366.0	
76.4	CARBONDALE	SPRINGFIELD	COAL	4.6	389.6	
71.8	CARBONDALE		UNDERCLAY	0.6	394.2	

MAPID: 16500066000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.697906 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.79766 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 466.0 **LOGGED (FT.):** 395.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	DANVILLE	COAL	1.7	209.0	
254.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	212.0	
232.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	234.0	
220.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	25.0	246.0	
180.0	CARBONDALE	HERRIN	COAL	5.5	286.0	
148.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	30.0	318.0	
77.0	CARBONDALE	SPRINGFIELD	COAL	4.6	389.0	

MAPID: 16500067000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.703685 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.798568 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 417.5 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
496.0			UNCONSOLIDATED	16.0	0.0	
480.0	MODESTO		SANDSTONE	46.0	16.0	
434.0	MODESTO		SHALE	18.0	62.0	
416.0	MODESTO		SANDSTONE	47.0	80.0	
369.0	MODESTO		SHALE	15.0	127.0	
354.0	MODESTO		BLACK SHALE	13.4	142.0	
340.6	MODESTO		COAL	0.3	155.4	
340.3	MODESTO		UNDERCLAY	4.0	155.7	
336.3	MODESTO		SHALE	34.0	159.7	
302.3	MODESTO		SANDSTONE	42.1	193.7	
260.2	MODESTO		BLACK SHALE	0.2	235.8	
260.1	CARBONDALE	DANVILLE	COAL	1.8	235.9	
258.2	CARBONDALE		SANDY SHALE	10.3	237.8	
247.9	CARBONDALE	"Allenby rider"	COAL	0.3	248.1	
247.7	CARBONDALE		SANDSTONE	4.7	248.3	
243.0	CARBONDALE	ALLENBY	COAL	0.3	253.0	
242.7	CARBONDALE		SHALE	3.8	253.3	
238.9	CARBONDALE	BANKSTON FORK	LIMESTONE	2.8	257.1	
236.2	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	259.8	
234.7	CARBONDALE		SHALE	8.8	261.3	
225.8	CARBONDALE		COAL	0.7	270.2	
225.2	CARBONDALE		SHALE	2.7	270.8	
222.5	CARBONDALE		SHALE	5.0	273.5	
217.5	CARBONDALE	ANVIL ROCK	SANDSTONE	14.2	278.5	LOG REPORTED 14',278.5 TO 292.67
203.3	CARBONDALE	ANVIL ROCK	SHALE	12.1	292.7	
191.2	CARBONDALE	CONANT	LIMESTONE	1.0	304.8	
190.2	CARBONDALE		SHALE	4.5	305.8	
185.7	CARBONDALE	BRERETON	LIMESTONE	1.0	310.3	
184.7	CARBONDALE	BRERETON	LIMESTONE	1.3	311.3	
183.4	CARBONDALE	BRERETON	LIMESTONE	0.8	312.6	
182.7	CARBONDALE	ANNA	BLACK SHALE	3.4	313.3	
179.2	CARBONDALE	HERRIN	COAL	5.0	316.8	
174.3	CARBONDALE		UNDERCLAY	4.0	321.7	
170.3	CARBONDALE		SANDY SHALE	12.3	325.7	
158.0	CARBONDALE		SANDY SHALE	4.0	338.0	
154.0	CARBONDALE	BRIAR HILL	COAL	0.7	342.0	
153.4	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	342.6	
152.4	CARBONDALE	DYKERSBURG	SANDY SHALE	66.8	343.6	
85.5	CARBONDALE	SPRINGFIELD	COAL	4.0	410.5	

81.5	CARBONDALE		SHALE	3.1	414.5

MAPID: 16500908000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 45' S line, 54' E line of NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.698073 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.801449 **DATE COLLECTED:** 2 / 17 / 1948

SURFACE ELEVATION (FT.): 446.1 **LOGGED (FT.):** 387.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 40-2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
446.1			CLAY	17.0	0.0	
429.1			SANDSTONE	6.0	17.0	
423.1			SHALE	11.0	23.0	
412.1			LIMESTONE	4.0	34.0	
408.1			SHALE	157.0	38.0	
251.1			LIMESTONE	2.0	195.0	
249.1			SHALE	21.0	197.0	
228.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	218.0	
221.6	CARBONDALE		SHALE	10.5	224.5	
211.1	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	235.0	
204.1	CARBONDALE	ANVIL ROCK	SHALE	1.0	242.0	
203.1	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	243.0	
179.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.5	267.0	
175.6	CARBONDALE	BRERETON	LIMESTONE	4.0	270.5	
171.6	CARBONDALE		DARK SHALE	7.7	274.5	
163.9	CARBONDALE	HERRIN	COAL	5.3	282.2	
158.6	CARBONDALE		UNDERCLAY	1.0	287.5	
157.6	CARBONDALE		SHALE	93.8	288.5	
63.8	CARBONDALE	SPRINGFIELD	COAL	4.0	382.3	
59.8	CARBONDALE		UNDERCLAY	1.0	386.3	

MAPID: 16500908000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 45' S line, 54' E line of NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.698073 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.801449 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 287.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 40-2 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
228.3			LIMESTONE	6.5	217.7	
221.8	CARBONDALE	LAWSON	SHALE	10.5	224.2	
211.3	CARBONDALE	LAWSON	SANDSTONE	7.0	234.7	
204.3	CARBONDALE	LAWSON	SHALE	1.0	241.7	
203.3	CARBONDALE	LAWSON	SANDSTONE	24.0	242.7	
179.3	CARBONDALE	LAWSON	SILTY SHALE	3.5	266.7	
175.8	CARBONDALE	BRERETON	LIMESTONE	4.0	270.2	
171.8	CARBONDALE	ANNA	DARK GRAY SHALE	7.8	274.2	
164.0	CARBONDALE	HERRIN	COAL	5.3	282.0	

MAPID: 16501350000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 41' S line, 300' E line of SE SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689697 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.797788 **DATE COLLECTED:** 1 / 29 / 1954

SURFACE ELEVATION (FT.): 467.3 **LOGGED (FT.):** 403.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 40-19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.3			CLAY	5.0	0.0	
462.3			CLAY	2.5	5.0	
459.8			CLAY	17.5	7.5	
442.3			SANDSTONE	10.5	25.0	
431.8			GRAY SANDSTONE	13.0	35.5	
418.8			GRAY SHALE	3.5	48.5	
415.3			GRAY SANDSTONE	1.0	52.0	
414.3			GRAY SHALE	17.5	53.0	
396.8			SANDSTONE	0.8	70.5	
396.0			DARK GRAY SHALE	50.8	71.3	
345.3			SILTY SHALE	24.0	122.0	
321.3			DARK SHALE	3.0	146.0	
318.3			COAL	1.2	149.0	
317.1			SILTY SHALE	39.8	150.2	
277.3			SANDSTONE	16.8	190.0	
260.5			LIMESTONE	2.6	206.8	
258.0			SILTY SHALE	4.8	209.3	
253.1			COAL	1.5	214.2	
251.6			GRAY SHALE	1.8	215.7	
249.8			GRAY SANDSTONE	8.1	217.5	
241.7			GRAY SHALE	9.2	225.6	
232.5			GRAY SANDSTONE	1.8	234.8	
230.8			GRAY SHALE	4.4	236.5	
226.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	240.9	
219.0	CARBONDALE		DARK GRAY SHALE	11.2	248.3	
207.8	CARBONDALE		LIMESTONE	1.0	259.5	
206.8	CARBONDALE		SILTY SHALE	19.0	260.5	
187.8	CARBONDALE	BRERETON	LIMESTONE	2.3	279.5	
185.5	CARBONDALE	ANNA	BLACK SHALE	4.2	281.8	
181.3	CARBONDALE	ENERGY	GRAY SHALE	5.9	286.0	
175.4	CARBONDALE	ENERGY	DARK GRAY SHALE	1.9	291.9	
173.5	CARBONDALE	HERRIN	COAL	5.4	293.8	
168.1	CARBONDALE		UNDERCLAY	1.5	299.2	
166.6	CARBONDALE		GRAY SHALE	10.6	300.7	
156.0	CARBONDALE		DARK SHALE	15.0	311.3	
141.0	CARBONDALE		SANDSTONE	17.0	326.3	
124.0	CARBONDALE		DARK SHALE	7.4	343.3	
116.6	CARBONDALE		SANDSTONE	10.3	350.7	
106.3	CARBONDALE		GRAY SHALE	13.0	361.0	

93.3	CARBONDALE		GRAY SHALE	6.0	374.0
87.3	CARBONDALE		GRAY SHALE	16.7	380.0
70.6	CARBONDALE	SPRINGFIELD	COAL	4.2	396.7
66.5	CARBONDALE		UNDERCLAY	2.2	400.8

MAPID: 16501352000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 55' N line, 51' W line of NW NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.69769 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.804842 **DATE COLLECTED:** 2 / 5 / 1954

SURFACE ELEVATION (FT.): 430.9 **LOGGED (FT.):** 382.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 40-21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.9			CLAY	31.0	0.0	
399.9	MODESTO		LIMESTONE	1.0	31.0	
398.9	MODESTO		GRAY SHALE	4.8	32.0	
394.1	MODESTO		GRAY SANDSTONE	1.2	36.8	
392.9	MODESTO		GRAY SHALE	31.0	38.0	
361.9	MODESTO		GRAY SANDSTONE	4.7	69.0	
357.2	MODESTO		GRAY SHALE	28.2	73.7	
329.1	MODESTO		GRAY SANDSTONE	3.1	101.8	
326.0	MODESTO		GRAY SHALE	20.9	104.9	
305.1	MODESTO		BLACK SHALE	1.5	125.8	
303.6	MODESTO		COAL	0.2	127.3	
303.4	MODESTO		GRAY SHALE	50.5	127.5	
252.9	MODESTO	PIASA	LIMESTONE	3.2	178.0	
249.7	MODESTO		BLACK SHALE	2.0	181.2	
247.7	CARBONDALE	DANVILLE	COAL	1.1	183.2	
246.6	CARBONDALE		GRAY SHALE	26.8	184.3	
219.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	211.0	
214.6	CARBONDALE		GRAY SHALE	15.0	216.3	
199.6	CARBONDALE	ANVIL ROCK	SILTY SHALE	16.8	231.3	
182.9	CARBONDALE	ANVIL ROCK	SANDSTONE	19.8	248.0	
163.1	CARBONDALE	BRERETON	LIMESTONE	6.1	267.8	
157.1	CARBONDALE	ANNA	BLACK SHALE	4.4	273.8	
152.6	CARBONDALE	HERRIN	COAL	5.1	278.3	
147.6	CARBONDALE		UNDERCLAY	3.7	283.3	
143.9	CARBONDALE		GRAY SHALE	12.0	287.0	
131.9	CARBONDALE		SANDSTONE	8.6	299.0	
123.3	CARBONDALE		GRAY SHALE	69.0	307.6	
54.3	CARBONDALE	SPRINGFIELD	COAL	4.1	376.6	
50.2	CARBONDALE		UNDERCLAY	1.4	380.7	

MAPID: 16502749000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699057 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1291.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1712.0			LIMESTONE	-	2173.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2596.0	

MAPID: 16502749000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699057 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.796746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 3145.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	HERRIN	COAL	4.0	286.0	
81.0	CARBONDALE	SPRINGFIELD	COAL	4.0	380.0	
-4.0	CARBONDALE	HOUCHIN CREEK	COAL	-	465.0	

MAPID: 16502749000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699057 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.796746 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	590.0	
-189.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1139.0	BASE OF PENN.		UNCLASSIFIED	-	1600.0	

MAPID: 16502749000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699057 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796746 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., SMITH-HUNSAKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-9.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	470.0	
-28.0	CARBONDALE	SURVANT	COAL	1.5	489.0	
-128.0	CARBONDALE	COLCHESTER	COAL	3.5	589.0	
-174.0	CARBONDALE	DEKOVEN	COAL	3.0	635.0	
-179.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	640.0	
-189.0	CARBONDALE	DAVIS	COAL	4.5	650.0	
-244.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.5	705.0	

MAPID: 16525913000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.703333 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.798971 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 327.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R28 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.0	CARBONDALE	HERRIN	COAL	5.0	322.0	

MAPID: 16525914000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.697314 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.801469 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 386.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION NO.2WAB **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.3	CARBONDALE	HERRIN	COAL	5.4	282.7	
64.0	CARBONDALE	SPRINGFIELD	COAL	4.0	382.0	

MAPID: 16525915000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.6921 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.80477 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 393.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION C **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.5	CARBONDALE	HERRIN	COAL	5.6	288.5	
51.3	CARBONDALE	SPRINGFIELD	COAL	4.4	388.7	

MAPID: 16525916000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.689967 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797632 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION I 324 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
179.5	CARBONDALE	HERRIN	COAL	5.5	290.5	
72.3	CARBONDALE	SPRINGFIELD	COAL	4.4	397.7	

MAPID: 16525917000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.688627 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.797065 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 466.0 **LOGGED (FT.):** 297.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R29 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.5	CARBONDALE	HERRIN	COAL	5.5	291.5	

MAPID: 16525963000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.691167 **GEOLOGIST:** COATS

CONFIDENTIAL: N **LATITUDE:** 37.794524 **DATE COLLECTED:** 6 / 27 / 1984

SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Company map

SOURCE: MIDWEST MINING & CONSTRUCTION E **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.3	CARBONDALE	HERRIN	COAL	5.4	298.7	
81.3	CARBONDALE	SPRINGFIELD	COAL	4.4	399.7	

MAPID: 16500068000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.695639 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788512 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 335.6 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	22.0	0.0	
416.0	MODESTO		SHALE	33.0	22.0	
383.0	MODESTO		COAL	0.5	55.0	
382.5	MODESTO		UNDERCLAY	4.0	55.5	
378.5	MODESTO		SHALE	26.0	59.5	
352.5	MODESTO		BLACK SHALE	5.0	85.5	
347.5	MODESTO		UNDERCLAY	3.5	90.5	
344.0	MODESTO		SANDY SHALE	51.0	94.0	
293.0	MODESTO	PIASA	LIMESTONE	5.0	145.0	
288.0	MODESTO		BLACK SHALE	2.0	150.0	
286.0	MODESTO		CLAYSTONE	4.0	152.0	
282.0	CARBONDALE	DANVILLE	COAL	1.0	156.0	
281.0	CARBONDALE		SANDSTONE	10.0	157.0	
271.0	CARBONDALE		SHALE	7.0	167.0	
264.0	CARBONDALE		BLACK SHALE	1.0	174.0	
263.0	CARBONDALE		UNDERCLAY	2.0	175.0	
261.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	177.0	
253.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	185.0	
249.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	29.0	189.0	GRAY
220.0	CARBONDALE		BLACK SHALE	4.0	218.0	
216.0	CARBONDALE	BRERETON	LIMESTONE	5.0	222.0	
211.0	CARBONDALE	ANNA	BLACK SHALE	4.0	227.0	
207.0	CARBONDALE	HERRIN	COAL	5.3	231.0	
201.7	CARBONDALE		UNDERCLAY	4.0	236.3	
197.7	CARBONDALE		SHALE	14.0	240.3	
183.7	CARBONDALE		BLACK SHALE	1.0	254.3	
182.7	CARBONDALE	DYKERSBURG	SHALE	39.0	255.3	
143.7	CARBONDALE	DYKERSBURG	SHALE	36.1	294.3	DARK
107.6	CARBONDALE	SPRINGFIELD	COAL	4.5	330.4	
103.1	CARBONDALE		UNDERCLAY	0.7	334.9	

MAPID: 16500069000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.700262 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788511 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 342.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN,LOG REPORTED TD AT 351.54

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
448.0			UNCONSOLIDATED	10.5	0.0	
437.5	MODESTO		SANDSTONE	22.3	10.5	
415.2	MODESTO		SANDSTONE	31.2	32.8	
384.0	MODESTO		SHALE	17.8	64.0	
366.2	MODESTO		SHALE	12.8	81.8	
353.5	MODESTO		BLACK SHALE	3.5	94.5	
350.0	MODESTO		LIMESTONE	0.4	98.0	
349.5	MODESTO		COAL	0.7	98.5	
348.9	MODESTO		SHALE	0.4	99.1	
348.5	MODESTO		SHALE	11.5	99.5	
337.0	MODESTO		SANDSTONE	39.5	111.0	
297.5	MODESTO		SHALE	0.5	150.5	
297.0	MODESTO		COAL	0.2	151.0	
296.8	MODESTO		UNDERCLAY	1.8	151.2	
295.0	MODESTO	PIASA	LIMESTONE	4.0	153.0	
291.0	MODESTO		SHALE	7.0	157.0	
283.9	CARBONDALE	DANVILLE	COAL	2.0	164.1	
281.9	CARBONDALE		SHALE	0.1	166.1	
281.8	CARBONDALE		SANDSTONE	2.7	166.2	
279.1	CARBONDALE		SHALE	7.6	168.9	
271.5	CARBONDALE		SHALE	2.7	176.5	W/SS
268.8	CARBONDALE		SHALE	1.2	179.2	
267.6	CARBONDALE	ALLENBY	COAL	0.5	180.4	
267.1	CARBONDALE		UNDERCLAY	2.6	180.9	
264.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	183.5	
261.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	186.8	
256.9	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	191.1	
251.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	30.8	196.1	W/SS
221.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	226.8	
220.2	CARBONDALE	CONANT	LIMESTONE	0.7	227.8	W/FOSSILIFEROUS SH
219.5	CARBONDALE	JAMESTOWN	COAL	0.1	228.5	
219.4	CARBONDALE		LIMESTONE	0.3	228.6	
219.0	CARBONDALE		BLACK SHALE	4.5	229.0	
214.5	CARBONDALE	BRERETON	LIMESTONE	4.5	233.5	
210.0	CARBONDALE	ANNA	BLACK SHALE	3.0	238.0	
207.1	CARBONDALE	HERRIN	COAL	5.4	240.9	
201.7	CARBONDALE		UNDERCLAY	4.2	246.3	
197.5	CARBONDALE		SHALE	9.4	250.5	
188.1	CARBONDALE	BRIAR HILL	COAL	0.7	259.9	

187.4	CARBONDALE		BONE COAL	0.4	260.6	
187.0	CARBONDALE		SHALE	0.4	261.0	
186.6	CARBONDALE		BONE COAL	0.2	261.4	
186.4	CARBONDALE		SHALE	0.8	261.6	
185.6	CARBONDALE		SHALE	0.4	262.4	
185.2	CARBONDALE	DYKERSBURG	SANDSTONE	4.5	262.8	
180.6	CARBONDALE	DYKERSBURG	SANDSTONE	1.1	267.4	
179.5	CARBONDALE	DYKERSBURG	SANDY SHALE	24.4	268.5	
155.1	CARBONDALE	DYKERSBURG	SANDSTONE	14.7	292.9	W/STREAK OF SH
140.5	CARBONDALE	DYKERSBURG	SANDY SHALE	28.4	307.5	
112.0	CARBONDALE	SPRINGFIELD	COAL	4.6	336.0	LOG REPORTED 4.58',335.96 TO 339.54
107.5	CARBONDALE		UNDERCLAY	2.0	340.5	LOG REPORTED TD AT 341.54

MAPID: 16500070000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.695639 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788512 **DATE COLLECTED:** 3 / 0 / 1921

SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 351.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.0			UNCONSOLIDATED	40.0	0.0	
409.0	MODESTO		SANDSTONE	6.0	40.0	
403.0	MODESTO		SHALE	12.0	46.0	
391.0	MODESTO		COAL	0.5	58.0	
390.5	MODESTO		UNDERCLAY	0.5	58.5	
390.0	MODESTO		SANDY SHALE	26.0	59.0	GRAY
364.0	MODESTO		BLACK SHALE	2.0	85.0	
362.0	MODESTO		COAL	1.0	87.0	
361.0	MODESTO		UNDERCLAY	3.0	88.0	
358.0	MODESTO		SANDSTONE	74.0	91.0	
284.0	MODESTO		SHALE	3.0	165.0	
281.0	CARBONDALE	DANVILLE	COAL	2.0	168.0	
279.0	CARBONDALE		UNDERCLAY	1.0	170.0	
278.0	CARBONDALE		SANDY SHALE	14.0	171.0	GRAY
264.0	CARBONDALE	ALLENBY	COAL	1.0	185.0	
263.0	CARBONDALE		UNDERCLAY	2.0	186.0	
261.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	188.0	
252.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	197.0	
247.0	CARBONDALE	ANVIL ROCK	SHALE	30.0	202.0	
217.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	232.0	
216.0	CARBONDALE	JAMESTOWN	COAL	0.2	233.0	
215.9	CARBONDALE		LIMESTONE	0.5	233.1	
215.3	CARBONDALE		BLACK SHALE	2.7	233.7	
212.7	CARBONDALE	BRERETON	LIMESTONE	3.8	236.3	
208.8	CARBONDALE	BRERETON	LIMESTONE	1.2	240.2	
207.7	CARBONDALE	ANNA	BLACK SHALE	1.7	241.3	
206.0	CARBONDALE	ANNA	PYRITE	0.5	243.0	
205.5	CARBONDALE	ANNA	BLACK SHALE	1.3	243.5	
204.2	CARBONDALE	HERRIN	COAL	5.4	244.8	
198.7	CARBONDALE		UNDERCLAY	4.0	250.3	
194.7	CARBONDALE	DYKERSBURG	SHALE	17.0	254.3	
177.7	CARBONDALE	DYKERSBURG	BLACK SHALE	0.8	271.3	
177.0	CARBONDALE	DYKERSBURG	SHALE	38.0	272.0	
139.0	CARBONDALE	DYKERSBURG	SHALE	34.8	310.0	DARK
104.2	CARBONDALE	SPRINGFIELD	COAL	4.2	344.8	
100.0	CARBONDALE		UNDERCLAY	2.0	349.0	

MAPID: 16500071000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.697974 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.783062 **DATE COLLECTED:** 0 / 0 / 1921

SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO QUARTERS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.0			UNCONSOLIDATED	30.0	0.0	
404.0			CLAY	33.0	30.0	
371.0	MODESTO		SANDSTONE	7.0	63.0	
364.0	MODESTO		SHALE	28.0	70.0	DARK
336.0	MODESTO		SHALE	33.0	98.0	
303.0	MODESTO		SANDSTONE	11.0	131.0	
292.0	MODESTO		SHALE	4.0	142.0	
288.0	MODESTO		LIMESTONE	5.0	146.0	
283.0	MODESTO		BLACK SHALE	1.0	151.0	
282.0	CARBONDALE	DANVILLE	COAL	1.0	152.0	
281.0	CARBONDALE		SHALE	25.0	153.0	
256.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	178.0	
249.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	185.0	
245.0	CARBONDALE	ANVIL ROCK	SHALE	29.0	189.0	DARK
216.0	CARBONDALE	BRERETON	LIMESTONE	2.0	218.0	
214.0	CARBONDALE	ANNA	BLACK SHALE	1.0	220.0	
213.0	CARBONDALE	HERRIN	COAL	5.0	221.0	
208.0	CARBONDALE		UNDERCLAY	2.0	226.0	
206.0	CARBONDALE	DYKERSBURG	SHALE	42.0	228.0	
164.0	CARBONDALE	DYKERSBURG	SHALE	20.0	270.0	DARK
144.0	CARBONDALE	DYKERSBURG	SHALE	3.0	290.0	DARK
141.0	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	293.0	
134.0	CARBONDALE	DYKERSBURG	SHALE	17.0	300.0	DARK
117.0	CARBONDALE	DYKERSBURG	SHALE	8.8	317.0	
108.2	CARBONDALE	DYKERSBURG	BLACK SHALE	0.7	325.8	
107.5	CARBONDALE	SPRINGFIELD	COAL	5.5	326.5	

MAPID: 16500905000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.6899 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.776681 **DATE COLLECTED:** 3 / 12 / 1947

SURFACE ELEVATION (FT.): 430.7 **LOGGED (FT.):** 264.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.7			CLAY	11.0	0.0	
419.7	MODESTO		SANDSTONE	9.0	11.0	
410.7	MODESTO		GRAY SHALE	12.0	20.0	
398.7	MODESTO		SHALE	3.0	32.0	
395.7	MODESTO		SHALE	31.0	35.0	
364.7	MODESTO		GRAY SHALE	4.0	66.0	
360.7	MODESTO	PIASA	LIMESTONE	3.5	70.0	
357.2			SANDY SHALE	28.5	73.5	
328.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	102.0	
322.2	CARBONDALE		SHALE	0.5	108.5	
321.7	CARBONDALE		SANDY SHALE	5.0	109.0	
316.7	CARBONDALE		LIMESTONE	0.8	114.0	
315.9	CARBONDALE		DARK SHALE	6.6	114.8	
309.4	CARBONDALE		SANDSTONE	3.0	121.3	
306.4	CARBONDALE		DARK SHALE	11.7	124.3	
294.7	CARBONDALE		BLACK SHALE	4.9	136.0	
289.8	CARBONDALE	BRERETON	LIMESTONE	4.1	140.9	
285.7	CARBONDALE		BLACK SHALE	4.0	145.0	
281.7	CARBONDALE		GRAY SHALE	2.8	149.0	
278.9	CARBONDALE		BLACK SHALE	2.8	151.8	
276.1	CARBONDALE	HERRIN	COAL	6.5	154.6	
269.6	CARBONDALE		UNDERCLAY	3.6	161.1	
266.0	CARBONDALE		CALCAREOUS SHALE	10.0	164.7	
256.0	CARBONDALE		DARK SHALE	6.8	174.7	
249.2	CARBONDALE		SHALE	3.2	181.5	SH W/ SS STREAKS
246.0	CARBONDALE		DARK GRAY SHALE	9.0	184.7	
237.0	CARBONDALE		SANDSTONE	12.5	193.7	SS W/ SH STREAKS
224.5	CARBONDALE		GRAY SHALE	7.0	206.2	GY SH W/ SS STREAKS
217.5	CARBONDALE		SHALE	33.8	213.2	
183.7	CARBONDALE		DARK GRAY SHALE	12.3	247.0	
171.4	CARBONDALE	SPRINGFIELD	COAL	3.5	259.3	
167.9	CARBONDALE		UNDERCLAY	1.3	262.8	

MAPID: 16500907000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 67' N line, 71' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.688948 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.790152 **DATE COLLECTED:** 2 / 10 / 1948

SURFACE ELEVATION (FT.): 479.2 **LOGGED (FT.):** 384.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 40-1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.2			CLAY	7.8	0.0	
471.4			SANDSTONE	18.2	7.8	
453.2			SHALE	19.0	26.0	
434.2			LIMESTONE	3.5	45.0	
430.7			SHALE	179.5	48.5	
251.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	228.0	
246.2	CARBONDALE		SHALE	2.0	233.0	
244.2	CARBONDALE		SHALE	1.0	235.0	SHALE WITH SAND STREAKS
243.2	CARBONDALE		DARK SHALE	10.0	236.0	
233.2	CARBONDALE		SHALE	4.0	246.0	SHALE WITH SAND STREAKS
229.2	CARBONDALE		GRAY SHALE	5.0	250.0	
224.2	CARBONDALE		DARK GRAY SHALE	9.0	255.0	DARK GRAY SHALE WITH SAND STREAKS
215.2	CARBONDALE	CONANT	LIMESTONE	0.3	264.0	SPOTTED LIME
214.9	CARBONDALE	JAMESTOWN	COAL	0.1	264.3	
214.9	CARBONDALE		LIMESTONE	2.5	264.3	
212.4	CARBONDALE	ANNA	BLACK SHALE	6.2	266.8	
206.2	CARBONDALE	ENERGY	SHALE	5.2	273.0	
201.0	CARBONDALE	HERRIN	COAL	5.3	278.2	
195.7	CARBONDALE		UNDERCLAY	0.5	283.5	
195.2	CARBONDALE		SHALE	95.2	284.0	
100.0	CARBONDALE	SPRINGFIELD	COAL	3.9	379.2	
96.1	CARBONDALE		UNDERCLAY	1.3	383.1	

MAPID: 16500907000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 67' N line, 71' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.688948 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.790152 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 479.0 **LOGGED (FT.):** 283.3 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 40-1 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
251.1			LIMESTONE	5.0	227.9	
246.1	CARBONDALE	LAWSON	SHALE	3.0	232.9	
243.1	CARBONDALE	LAWSON	DARK GRAY SHALE	10.0	235.9	
233.1	CARBONDALE	LAWSON	SILTY SHALE	4.0	245.9	
229.1	CARBONDALE	LAWSON	GRAY SHALE	5.0	249.9	
224.1	CARBONDALE	LAWSON	SILTY SHALE	9.0	254.9	
215.1	CARBONDALE	CONANT	LIMESTONE/UNDERCLAY	0.3	263.9	
214.8	CARBONDALE	BRERETON	LIMESTONE	2.5	264.2	
212.3	CARBONDALE	ANNA	BLACK SHALE	11.3	266.7	
201.0	CARBONDALE	HERRIN	COAL	5.3	278.0	

MAPID: 16502425000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699126 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.782151 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 486.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:**
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
242.0	CARBONDALE	BRERETON	LIMESTONE	-	244.0	
-1250.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1736.0	
-1693.0			LIMESTONE	-	2179.0	
-2099.0		BASE BARLOW	LIMESTONE	-	2585.0	

MAPID: 16502425000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699126 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.782151 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 486.0 **LOGGED (FT.):** 3142.0 **LOG TYPE:** Electric Log
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
233.0	CARBONDALE	HERRIN	COAL	6.0	253.0	
204.0	CARBONDALE	BRIAR HILL	COAL	-	282.0	
134.0	CARBONDALE	SPRINGFIELD	COAL	4.0	352.0	
59.0	CARBONDALE	HOUCHIN CREEK	COAL	-	427.0	

MAPID: 16502425000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699126 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.782151 **DATE COLLECTED:** 12 / 0 / 1941
SURFACE ELEVATION (FT.): 486.0 **LOGGED (FT.):** 1540.0 **LOG TYPE:** Electric Log
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-59.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	545.0	
-134.0	SPOON	DAVIS	UNCLASSIFIED	-	620.0	
-1054.0	BASE OF PENN.		UNCLASSIFIED	-	1540.0	

MAPID: 16502425000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.699126 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.782151 **DATE COLLECTED:** 12 / 0 / 1941
SURFACE ELEVATION (FT.): 486.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:** Electric Log
SOURCE: KINGWOOD OIL CO, GULLETT CHAS A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	434.0	
5.0	CARBONDALE	SURVANT	COAL	3.0	481.0	
-57.0	CARBONDALE	COLCHESTER	COAL	0.5	543.0	
-119.0	CARBONDALE	DEKOVEN	COAL	4.0	605.0	
-132.0	CARBONDALE	DAVIS	COAL	4.0	618.0	
-184.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	

MAPID: 16525945000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.695853 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.789902 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 241.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 32 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
202.3	CARBONDALE	HERRIN	COAL	5.4	235.7	

MAPID: 16525946000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.691717 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.78642 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 256.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 31 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.4	CARBONDALE	HERRIN	COAL	5.4	250.6	

MAPID: 16525947000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.692645 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.784074 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 231.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R30 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.0	CARBONDALE	HERRIN	COAL	5.0	226.0	

MAPID: 16590048000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 800' N line, 200' E line of NE NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.689425 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.780846 **DATE COLLECTED:** 3 / 16 / 1982

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 632.0 **LOG TYPE:** Drillers Log

SOURCE: KENELLIS ENERGIES INC. BE-10RH **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV 1, APPDX 4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	10.0	0.0	
-			SANDY CLAY	9.0	10.0	
-			SAND	18.0	19.0	SD & GRAVEL W/ CLAY
-			CLAY	11.0	37.0	
-			CLAY	7.0	48.0	CLY W/ GRAVEL
-	MODESTO		GRAY SHALE	4.0	55.0	GY SH W/ SS BANDS
-	MODESTO		SANDSTONE	8.0	59.0	
-	MODESTO		SHALE	21.0	67.0	SH W/ SS
-	MODESTO	PIASA	LIMESTONE	4.0	88.0	
-	MODESTO		SANDY SHALE	7.0	92.0	
-	CARBONDALE	DANVILLE	COAL	1.0	99.0	
-	CARBONDALE		SANDY SHALE	21.0	100.0	
-	CARBONDALE		LIMESTONE	7.0	121.0	
-	CARBONDALE		SANDSTONE	9.0	128.0	
-	CARBONDALE		SANDY SHALE	29.0	137.0	
-	CARBONDALE		BLACK SHALE	4.0	166.0	
-	CARBONDALE		SHALE	3.0	170.0	
-	CARBONDALE	HERRIN	COAL	5.0	173.0	
-	CARBONDALE		SANDY SHALE	9.0	178.0	
-	CARBONDALE		SANDSTONE	95.0	187.0	SS W/ SHALE BANDS
-	CARBONDALE	BRIAR HILL	COAL	1.0	282.0	
-	CARBONDALE		SANDSTONE	69.0	283.0	SS W/ SOME CLY
-	CARBONDALE		BLACK SHALE	4.0	352.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	356.0	
-	CARBONDALE		SANDSTONE	20.0	360.0	SS AND SH
-	CARBONDALE		SANDY SHALE	59.0	380.0	
-	CARBONDALE		SANDSTONE	23.0	439.0	
-	CARBONDALE		SANDY SHALE	6.0	462.0	
-	CARBONDALE		SANDSTONE	56.0	468.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	2.0	524.0	
-	CARBONDALE		SHALE	18.0	526.0	SH W/ SS
-	CARBONDALE		COAL	1.0	544.0	CO W/ SS MIXED
-	CARBONDALE		SANDSTONE	42.0	545.0	
-	CARBONDALE		SHALE	1.0	587.0	
-	CARBONDALE		BLACK SHALE	4.0	588.0	
-	CARBONDALE		SHALE	40.0	592.0	SHALE W/ SS BANDS

MAPID: 16500072000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.670099 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.790555 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 454.3 **LOGGED (FT.):** 336.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.3			UNCONSOLIDATED	35.2	0.0	
419.1	MODESTO		SANDSTONE	1.8	35.2	
417.4	MODESTO		SANDSTONE	46.5	36.9	W/SH
370.9	MODESTO		SANDY SHALE	25.3	83.4	
345.6	MODESTO		COAL	0.0	108.7	
345.6	MODESTO		UNDERCLAY	12.1	108.7	W/GREEN SH
333.5	MODESTO		SANDY SHALE	11.5	120.8	
322.0	MODESTO		BLACK SHALE	5.6	132.3	
316.4	MODESTO		COAL	0.6	137.9	
315.8	MODESTO		UNDERCLAY	8.4	138.5	
307.4	MODESTO		SHALE	11.7	146.9	
295.7	MODESTO		SHALE	20.9	158.6	W/SS
274.8	MODESTO		SANDSTONE	7.4	179.5	W/SH
267.4	MODESTO		SHALE	10.0	186.9	W/SULPHUR
257.4	MODESTO	PIASA	LIMESTONE	2.8	196.9	
254.5	MODESTO		SHALE	1.0	199.8	
253.5	MODESTO		SANDY SHALE	6.9	200.8	
246.6	CARBONDALE	DANVILLE	COAL	1.7	207.7	
245.0	CARBONDALE		UNDERCLAY	14.3	209.3	W/SH
230.6	CARBONDALE	"Allenby rider"	COAL	0.3	223.7	
230.4	CARBONDALE		UNDERCLAY	2.8	223.9	
227.6	CARBONDALE	ALLENBY	COAL	0.3	226.7	
227.4	CARBONDALE		UNDERCLAY	3.8	226.9	
223.6	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	230.7	
223.1	CARBONDALE	BANKSTON FORK	LIMESTONE	2.7	231.2	
220.5	CARBONDALE		SHALE	4.3	233.8	
216.2	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	238.1	W/SH
205.7	CARBONDALE	ANVIL ROCK	SANDSTONE	19.2	248.6	W/SANDY SH
186.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.1	267.8	W/SS
176.5	CARBONDALE	JAMESTOWN	BONE COAL	0.3	277.8	
176.2	CARBONDALE		SHALE	0.2	278.1	
176.0	CARBONDALE	BRERETON	LIMESTONE	7.5	278.3	
168.5	CARBONDALE	ANNA	BLACK SHALE	2.3	285.8	
166.3	CARBONDALE	HERRIN	COAL	6.0	288.0	W/SULPHUR
160.3	CARBONDALE		UNDERCLAY	21.8	294.0	
138.5	CARBONDALE		SANDSTONE	0.3	315.8	W/SH
138.2	CARBONDALE	BRIAR HILL	COAL	0.8	316.1	
137.5	CARBONDALE	DYKERSBURG	SANDSTONE	19.3	316.8	W/SH

MAPID: 16500073000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678345 **GEOLOGIST:** FINELY

CONFIDENTIAL: N **LATITUDE:** 37.782211 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 341.1 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.0			UNCONSOLIDATED	42.0	0.0	
384.0	MODESTO		SHALE	53.0	42.0	
331.0	MODESTO		BLACK SHALE	4.0	95.0	
327.0	MODESTO		COAL	0.8	99.0	
326.2	MODESTO		UNDERCLAY	6.2	99.8	
320.0	MODESTO		SHALE	16.0	106.0	
304.0	MODESTO		SHALE	29.0	122.0	
275.0	MODESTO	PIASA	LIMESTONE	3.5	151.0	
271.5	MODESTO		SHALE	4.5	154.5	
267.0	CARBONDALE	DANVILLE	COAL	2.5	159.0	
264.5	CARBONDALE		UNDERCLAY	0.5	161.5	
264.0	CARBONDALE		SHALE	12.5	162.0	
251.5	CARBONDALE	ALLENBY	COAL	0.8	174.5	
250.7	CARBONDALE		UNDERCLAY	3.8	175.3	
247.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	179.0	
240.0	CARBONDALE		CLAYSTONE	1.0	186.0	
239.0	CARBONDALE		SHALE	6.0	187.0	
233.0	CARBONDALE		BONE COAL	0.7	193.0	
232.3	CARBONDALE	ANVIL ROCK	SHALE	26.3	193.7	
206.0	CARBONDALE	ANVIL ROCK	SHALE	1.0	220.0	
205.0	CARBONDALE	JAMESTOWN	COAL	0.1	221.0	
205.0	CARBONDALE		SHALE	5.9	221.0	
199.0	CARBONDALE	HERRIN	COAL	5.7	227.0	
193.3	CARBONDALE		UNDERCLAY	8.3	232.7	
185.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	241.0	
182.0	CARBONDALE	DYKERSBURG	SHALE	38.0	244.0	
144.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	282.0	
141.0	CARBONDALE	DYKERSBURG	SHALE	1.0	285.0	
140.0	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	286.0	
120.0	CARBONDALE	DYKERSBURG	SHALE	28.1	306.0	
91.9	CARBONDALE	SPRINGFIELD	COAL	4.0	334.1	
87.9	CARBONDALE		UNDERCLAY	3.0	338.1	

MAPID: 16500073000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678345 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.782211 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 341.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.0	CARBONDALE	DANVILLE	COAL	2.5	159.0	
247.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	179.0	
199.0	CARBONDALE	HERRIN	COAL	5.7	227.0	
185.0	CARBONDALE	VERMILIONVILLE		3.0	241.0	
144.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	24.0	282.0	
92.0	CARBONDALE	SPRINGFIELD	COAL	4.0	334.0	

MAPID: 16500074000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.688741 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.775773 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 174.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.0			UNCONSOLIDATED	44.0	0.0	
393.0	MODESTO		SHALE	6.0	44.0	
387.0	MODESTO		SHALE	14.0	50.0	
373.0	MODESTO		COAL	0.2	64.0	
372.8	MODESTO		UNDERCLAY	3.0	64.2	
369.8	MODESTO		SHALE	10.0	67.2	
359.8	MODESTO	PIASA	LIMESTONE	2.7	77.2	
357.2	MODESTO		SHALE	7.0	79.8	
350.2	CARBONDALE	DANVILLE	COAL	1.8	86.8	
348.3	CARBONDALE		UNDERCLAY	4.3	88.7	
344.1	CARBONDALE		SHALE	10.0	92.9	
334.1	CARBONDALE		SANDSTONE	5.0	102.9	
329.1	CARBONDALE	ALLENBY	COAL	0.5	107.9	
328.6	CARBONDALE		UNDERCLAY	4.0	108.4	
324.6	CARBONDALE		SHALE	3.0	112.4	
321.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	115.4	
314.6	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	28.0	122.4	ARG
286.6	CARBONDALE	BRERETON	LIMESTONE	6.5	150.4	
280.1	CARBONDALE	ANNA	BLACK SHALE	6.4	156.9	
273.7	CARBONDALE	HERRIN	COAL	2.3	163.3	
271.3	CARBONDALE	HERRIN	SHALE	0.2	165.7	
271.2	CARBONDALE	HERRIN	COAL	3.5	165.8	
267.7	CARBONDALE		UNDERCLAY	5.0	169.3	

MAPID: 16500912000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 15' S line, 1300' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67951 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.775831 **DATE COLLECTED:** 9 / 23 / 1948
SURFACE ELEVATION (FT.): 409.4 **LOGGED (FT.):** 232.6 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 47-12 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.4			UNCONSOLIDATED	19.0	0.0	SOIL, SAND, AND CLAY
390.4			SHALE	10.0	19.0	
380.4			LIMESTONE	0.7	29.0	
379.7			SHALE	26.3	29.7	
353.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	56.0	
347.2	CARBONDALE		SHALE	33.8	62.2	
313.4	CARBONDALE	BRERETON	LIMESTONE	1.3	96.0	
312.1	CARBONDALE		BLACK SHALE	3.4	97.3	
308.6	CARBONDALE		DARK SHALE	7.8	100.8	
300.9	CARBONDALE	HERRIN	COAL	6.5	108.5	
294.4	CARBONDALE		UNDERCLAY	1.0	115.0	
293.4	CARBONDALE		SHALE	78.0	116.0	
215.4	CARBONDALE		SHALE	27.0	194.0	
188.4	CARBONDALE		SHALE	5.8	221.0	
182.6	CARBONDALE	SPRINGFIELD	COAL	4.8	226.8	
177.8	CARBONDALE		UNDERCLAY	1.0	231.6	

MAPID: 16500912000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 15' S line, 1300' E line of SW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67951 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.775831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 114.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 47-12 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	MODESTO	PIASA	LIMESTONE	0.7	29.0	
379.3	CARBONDALE		SHALE	26.3	29.7	
353.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	56.0	
346.8	CARBONDALE	LAWSON	SHALE	33.8	62.2	
313.0	CARBONDALE	BRERETON	LIMESTONE	1.3	96.0	
311.7	CARBONDALE	ANNA	BLACK SHALE	3.4	97.3	
308.2	CARBONDALE	ENERGY	DARK GRAY SHALE	7.8	100.8	
301.0	CARBONDALE	HERRIN	COAL	6.5	108.0	

MAPID: 16500931000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 30' S line, 583' W line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.686716 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.775855 **DATE COLLECTED:** 4 / 29 / 1949

SURFACE ELEVATION (FT.): 419.2 **LOGGED (FT.):** 293.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-31 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.2			CLAY	14.0	0.0	
405.2			SANDSTONE	12.0	14.0	
393.2			SANDSTONE	8.0	26.0	
385.2			SHALE	69.0	34.0	
316.2			LIMESTONE	2.7	103.0	
313.5			SHALE	37.3	105.7	
276.2			LIMESTONE	1.0	143.0	
275.2			SHALE	1.0	144.0	
274.2			GRAY SHALE	11.1	145.0	
263.1			BLACK SHALE	2.3	156.1	
260.8			DARK GRAY SHALE	1.4	158.4	
259.4			COAL	0.7	159.8	
258.7			UNDERCLAY	3.7	160.5	
255.0			SANDY SHALE	8.0	164.2	
247.0			SANDSTONE	2.5	172.2	
244.5			SHALE	6.3	174.7	SH W/ CHERT STREAKS
238.2			GRAY SHALE	2.5	181.0	
235.7			DARK SHALE	18.5	183.5	DK SH W/ CHERT STREAKS
217.2			LIMESTONE	0.3	202.0	
216.9			COAL	0.1	202.3	
216.9			GRAY SHALE	1.6	202.3	
215.3			LIMESTONE	4.1	203.9	
211.2			CALCAREOUS SHALE	0.4	208.0	
210.8			DARK SHALE	4.7	208.4	
206.1			LIMESTONE	0.7	213.1	
205.4			COAL	0.7	213.8	
204.8			UNDERCLAY	0.5	214.4	
204.3			SANDY SHALE	1.7	214.9	
202.6			DARK SHALE	0.6	216.6	
202.0			SHALE	3.0	217.2	SH W/ SS STREAKS
199.0			DARK SHALE	3.0	220.2	DK SH W/ CHERT STREAKS
196.0			DARK SHALE	1.1	223.2	
194.9			SANDSTONE	3.0	224.3	
191.9			SHALE	0.8	227.3	
191.2	CARBONDALE	HERRIN	COAL	1.0	228.0	
190.2	CARBONDALE		UNDERCLAY	1.0	229.0	
189.2	CARBONDALE		SHALE	3.0	230.0	
186.2	CARBONDALE		LIMESTONE	6.5	233.0	
179.7	CARBONDALE		SHALE	1.5	239.5	

178.2	CARBONDALE		SANDSTONE	9.0	241.0
169.2	CARBONDALE		DARK SHALE	1.0	250.0
168.2	CARBONDALE		SANDSTONE	6.5	251.0
161.7	CARBONDALE		DARK SHALE	7.5	257.5
154.2	CARBONDALE		DARK SHALE	7.7	265.0
146.5	CARBONDALE	ST. DAVID	LIMESTONE	0.3	272.7
146.2	CARBONDALE	ST. DAVID	LIMESTONE	3.0	273.0
143.2	CARBONDALE		BLACK SHALE	8.3	276.0
134.9	CARBONDALE		SHALE	2.2	284.3
132.7	CARBONDALE	SPRINGFIELD	COAL	4.7	286.5
128.0	CARBONDALE		UNDERCLAY	0.8	291.2
127.2	CARBONDALE		SANDSTONE	1.2	292.0

MAPID: 16525948000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675078 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.78018 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 178.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION J57 JC **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.6	CARBONDALE	HERRIN	COAL	5.6	172.4	

MAPID: 16525949000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.678154 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.782828 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 238.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 36 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.6	CARBONDALE	HERRIN	COAL	5.7	232.4	

MAPID: 16525950000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.675504 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.783046 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION MR **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
216.4	CARBONDALE	HERRIN	COAL	5.5	213.6	

MAPID: 16525951000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.670335 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.790054 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 34 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.0	CARBONDALE	HERRIN	COAL	6.0	234.0	

MAPID: 16525962000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.679556 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.781251 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 196.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION J80 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.8	CARBONDALE	HERRIN	COAL	5.9	190.2	

MAPID: 16526163000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 990' S line, 37' W line of SE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.674669 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.778496 **DATE COLLECTED:** 9 / 29 / 1978
SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. J32CN2 **WELL TYPE:** Water Well
COMMENT: PERMIT 208; OBSERVATION WELL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
407.3	PLEISTOCENE		CLAY	7.0	4.0	
400.3	PLEISTOCENE		SANDY CLAY	4.0	11.0	
396.3	PLEISTOCENE		SAND & GRAVEL	7.0	15.0	
389.3	PLEISTOCENE		SAND	31.0	22.0	
358.3	PLEISTOCENE		UNCONSOLIDATED	6.0	53.0	
352.3			GRAY SHALE	1.0	59.0	

MAPID: 16526164000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 371' N line, 31' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67468 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.78216 **DATE COLLECTED:** 4 / 28 / 1978
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 124.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. J82JD **WELL TYPE:** Water Well
COMMENT: PERMIT 208;"DRILLED TO TOP OF #1 COAL"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
418.0	PLEISTOCENE		CLAY	18.0	4.0	
400.0	PLEISTOCENE		UNCONSOLIDATED	27.0	22.0	
373.0	PLEISTOCENE		SAND & GRAVEL	7.0	49.0	
366.0	PLEISTOCENE		UNCONSOLIDATED	12.0	56.0	
354.0	MODESTO		GRAY SHALE	4.0	68.0	DARK
350.0	MODESTO		GRAY SHALE	9.0	72.0	
341.0	MODESTO		SANDSTONE	4.0	81.0	GRAY
337.0	MODESTO		GRAY SHALE	26.0	85.0	
311.0	MODESTO	PIASA	LIMESTONE	10.0	111.0	GRAY
301.0	MODESTO		GRAY SHALE	3.0	121.0	

MAPID: 16590047000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 960' N line, 300' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.687664 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.787699 **DATE COLLECTED:** 11 / 30 / 1992

SURFACE ELEVATION (FT.): 474.0 **LOGGED (FT.):** 269.8 **LOG TYPE:** Drillers Log

SOURCE: MIDWEST MINING & CONSTRUCTION P-5 **WELL TYPE:** Coal Test

COMMENT: FROM PERMIT 60, REV. 1, APPDX 4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
474.0			UNCONSOLIDATED	26.0	0.0	GLACIAL DRIFT/SURFACE SOIL
448.0	MODESTO		SILTY SHALE	39.0	26.0	
409.0	MODESTO		SHALE	28.7	65.0	
380.3	MODESTO		COAL	0.2	93.7	
380.2	MODESTO		SILTY SHALE	33.4	93.8	
346.7	MODESTO		COAL	1.4	127.3	
345.3	MODESTO		SHALE	10.0	128.7	
335.3	MODESTO		SILTY SHALE	26.0	138.7	
309.3	MODESTO		SHALE	2.7	164.7	SH W/ LS STREAKS
306.6	MODESTO		SHALE	1.5	167.4	
305.1	MODESTO		SANDSTONE	10.8	168.9	
294.3	MODESTO		SILTY SHALE	5.3	179.7	
288.9	MODESTO	PIASA	LIMESTONE	3.3	185.1	
285.7	MODESTO		SHALE	24.9	188.3	
260.8	CARBONDALE	DANVILLE	COAL	0.3	213.2	
260.4	CARBONDALE		CLAYSTONE	1.8	213.6	
258.7	CARBONDALE		COAL	0.3	215.3	
258.4	CARBONDALE		CLAYSTONE	2.5	215.6	
255.9	CARBONDALE		LIMESTONE	9.8	218.1	
246.1	CARBONDALE		SANDSTONE	2.5	227.9	
243.6	CARBONDALE		SHALE	29.5	230.4	
214.1	CARBONDALE		LIMESTONE	3.2	259.9	
210.9	CARBONDALE		SHALE	8.5	263.1	
202.4	CARBONDALE	HERRIN	COAL	4.7	271.6	
197.8	CARBONDALE		SILTY SHALE	24.8	276.2	

MAPID: 16500075000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.665596 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.786839 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 427.6 **LOGGED (FT.):** 322.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR RAILROAD **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.6			UNCONSOLIDATED	40.0	0.0	
387.6	MODESTO		SANDY SHALE	31.0	40.0	
356.6	MODESTO		ARGILACEOUS SHALE	4.0	71.0	ARG
352.6	MODESTO		SANDSTONE	10.0	75.0	
342.6	MODESTO		SHALE	22.0	85.0	DARK
320.6	MODESTO	PIASA	LIMESTONE	2.0	107.0	
318.6	MODESTO		SHALE	2.0	109.0	
316.6	MODESTO		SHALE	8.3	111.0	DARK
308.3	CARBONDALE	DANVILLE	BONE COAL	0.3	119.3	
307.9	CARBONDALE	DANVILLE	COAL	1.8	119.7	
306.2	CARBONDALE		UNDERCLAY	3.6	121.4	
302.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	125.0	GRAY
289.6	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	2.0	138.0	CALC
287.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.0	140.0	
261.6	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	166.0	
243.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	184.0	GRAY
237.6	CARBONDALE	ANVIL ROCK	SHALE	2.1	190.0	DARK
235.5	CARBONDALE	JAMESTOWN	COAL	0.3	192.1	
235.3	CARBONDALE		SHALE	2.7	192.3	DARK
232.6	CARBONDALE	BRERETON	LIMESTONE	7.0	195.0	
225.6	CARBONDALE	ANNA	BLACK SHALE	0.7	202.0	
224.9	CARBONDALE	HERRIN	COAL	5.4	202.7	
219.5	CARBONDALE		UNDERCLAY	2.9	208.1	
216.6	CARBONDALE		SHALE	11.0	211.0	
205.6	CARBONDALE		BLACK SHALE	1.0	222.0	
204.6	CARBONDALE	DYKERSBURG	SHALE	20.0	223.0	
184.6	CARBONDALE	DYKERSBURG	SANDSTONE	51.0	243.0	
133.6	CARBONDALE	DYKERSBURG	SHALE	20.5	294.0	
113.1	CARBONDALE	SPRINGFIELD	COAL	4.7	314.5	
108.4	CARBONDALE		UNDERCLAY	2.8	319.2	

MAPID: 16500076000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2000' S line, 2000' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.658894 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.781352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 309.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	DANVILLE	COAL	1.8	110.0	
240.0	CARBONDALE	ANVIL ROCK		14.0	168.0	
215.0	CARBONDALE	HERRIN	COAL	6.4	193.0	
199.0	CARBONDALE	BRIAR HILL	COAL	0.3	209.0	
188.0	CARBONDALE	CANTON	SHALE	50.0	220.0	
105.0	CARBONDALE	SPRINGFIELD	COAL	5.0	303.0	

MAPID: 16500076000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2000' S line, 2000' E line
QUADRANGLE: HARCO **LONGITUDE:** -88.658894 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.781352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 199.4 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.7	MODESTO	PIASA	LIMESTONE	3.0	98.3	
306.7	MODESTO		CLAYSTONE & SHALE	9.0	101.3	
297.7	CARBONDALE	DANVILLE	COAL	1.8	110.3	
295.9	CARBONDALE		SHALE & SANDSTONE	19.2	112.1	
276.7	CARBONDALE	ALLENBY	COAL	0.3	131.3	
276.4	CARBONDALE		CLAYSTONE	3.0	131.6	
273.4	CARBONDALE	LAWSON	SANDSTONE	16.0	134.6	
257.4	CARBONDALE	LAWSON	SHALE	18.0	150.6	
239.4	CARBONDALE	LAWSON	SANDSTONE	13.5	168.6	
225.9	CARBONDALE	JAMESTOWN	COAL	0.2	182.1	
225.7	CARBONDALE		BLACK SHALE	2.5	182.3	
223.2	CARBONDALE	BRERETON	LIMESTONE	7.0	184.8	
216.2	CARBONDALE	ANNA	BLACK SHALE	1.3	191.8	
215.0	CARBONDALE	HERRIN	COAL	6.4	193.0	

MAPID: 16500076000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2000' S line, 2000' E line

QUADRANGLE: HARCO **LONGITUDE:** -88.658894 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.781352 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 308.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	52.0	0.0	
356.0	MODESTO		ARGILACEOUS SHALE	16.0	52.0	ARG
340.0	MODESTO		SANDSTONE	11.0	68.0	
329.0	MODESTO		SHALE	19.0	79.0	
310.0	MODESTO	PIASA	LIMESTONE	3.0	98.0	
307.0	MODESTO		ARGILACEOUS SHALE	9.0	101.0	ARG
298.0	CARBONDALE	DANVILLE	COAL	1.8	110.0	
296.2	CARBONDALE		UNDERCLAY	4.0	111.8	
292.2	CARBONDALE		ARGILACEOUS SHALE	10.0	115.8	ARG
282.2	CARBONDALE	"Allenby rider"	COAL	0.2	125.8	
282.1	CARBONDALE		ARGILACEOUS SHALE	5.0	125.9	ARG
277.1	CARBONDALE	ALLENBY	COAL	0.3	130.9	
276.7	CARBONDALE		UNDERCLAY	3.0	131.3	
273.7	CARBONDALE		ARGILACEOUS SHALE	16.0	134.3	ARG
257.7	CARBONDALE	ANVIL ROCK	SHALE	18.0	150.3	
239.7	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	168.3	
226.2	CARBONDALE	JAMESTOWN	COAL	0.2	181.8	
226.1	CARBONDALE		BLACK SHALE	2.5	181.9	
223.6	CARBONDALE	BRERETON	LIMESTONE	7.0	184.4	
216.6	CARBONDALE	ANNA	BLACK SHALE	1.3	191.4	
215.3	CARBONDALE	HERRIN	COAL	6.4	192.7	
208.9	CARBONDALE		UNDERCLAY	4.0	199.1	
204.9	CARBONDALE		ARGILACEOUS SHALE	6.3	203.1	ARG
198.6	CARBONDALE	BRIAR HILL	COAL	0.3	209.4	
198.2	CARBONDALE		ARGILACEOUS SHALE	10.0	209.8	ARG
188.2	CARBONDALE	DYKERSBURG	SHALE	14.0	219.8	W/SS
174.2	CARBONDALE	DYKERSBURG	SANDSTONE	36.0	233.8	
138.2	CARBONDALE	DYKERSBURG	BLACK SHALE	33.7	269.8	
104.6	CARBONDALE	SPRINGFIELD	COAL	5.0	303.4	
99.6	CARBONDALE		UNDERCLAY	0.3	308.4	
99.3			UNCLASSIFIED	0.3	308.7	T.D.

MAPID: 16500077000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.663476 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.777656 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.3 **LOGGED (FT.):** 201.2 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.3			UNCONSOLIDATED	20.0	0.0	
383.3	CARBONDALE	DANVILLE	COAL	2.0	20.0	
381.3	CARBONDALE		ARGILACEOUS SHALE	8.0	22.0	ARG
373.3	CARBONDALE		SANDSTONE	8.0	30.0	
365.3	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	38.0	
363.3	CARBONDALE		SHALE	10.0	40.0	
353.3	CARBONDALE		COAL	1.0	50.0	
352.3	CARBONDALE		SANDSTONE	8.3	51.0	
344.0	CARBONDALE		COAL	0.5	59.3	
343.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.3	59.8	
322.1	CARBONDALE	BRERETON	LIMESTONE	9.0	81.2	
313.1	CARBONDALE	HERRIN	COAL	5.5	90.2	
307.6	CARBONDALE		UNDERCLAY	0.5	95.7	
307.1	CARBONDALE	DYKERSBURG	SANDY SHALE	30.0	96.2	
277.1	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	126.2	
272.1	CARBONDALE	DYKERSBURG	BLACK SHALE	17.0	131.2	
255.1	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	148.2	
244.1	CARBONDALE	DYKERSBURG	SANDY SHALE	34.0	159.2	LOG REPORTED 32',159.17 TO 193.17
210.1	CARBONDALE	SPRINGFIELD	COAL	5.0	193.2	
205.1	CARBONDALE		CALCAREOUS SHALE	3.0	198.2	CALC

MAPID: 16503587000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 360' N line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.662114 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 2594.0 **LOG TYPE:**
SOURCE: HERLEY, DAVID F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2142.0		BASE BARLOW	LIMESTONE	-	2594.0	

MAPID: 16523929000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 215' N line, 480' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.668437 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789952 **DATE COLLECTED:** 4 / 0 / 1976
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 703.5 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO., OWEN RALPH L ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-29.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-73.0	CARBONDALE	SURVANT	COAL	2.0	522.0	
-151.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-199.0	CARBONDALE	DEKOVEN	COAL	2.5	648.0	
-205.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	654.0	
-216.0	CARBONDALE	DAVIS	COAL	4.0	665.0	
-254.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	703.0	

MAPID: 16523929000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 215' N line, 480' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.668437 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.789952 **DATE COLLECTED:** 4 / 0 / 1976
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 1610.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-151.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	600.0	
-216.0	SPOON	DAVIS	UNCLASSIFIED	-	665.0	
-1161.0	BASE OF PENN.		UNCLASSIFIED	-	1610.0	

MAPID: 16525952000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.665723 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.782473 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 214.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R39 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
219.4	CARBONDALE	HERRIN	COAL	5.4	208.6	

MAPID: 16525953000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.660288 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.784087 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 217.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION J113J **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.5	CARBONDALE	HERRIN	COAL	5.5	211.5	

MAPID: 16525954000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.657924 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.781615 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 204.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 38 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
209.4	CARBONDALE	HERRIN	COAL	5.4	198.6	

MAPID: 16525955000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.652444 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.787979 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION J **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.6	CARBONDALE	HERRIN	COAL	5.6	278.4	

MAPID: 16500078000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.634277 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.788089 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 403.2 **LOGGED (FT.):** 393.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG SALINE COLLIERIES **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.2			UNCONSOLIDATED	16.5	0.0	
386.7			SANDSTONE	35.5	16.5	
351.2			SANDY SHALE	13.0	52.0	
338.2			SHALE	45.0	65.0	
293.2			SANDY SHALE	43.5	110.0	
249.7			SANDSTONE	1.5	153.5	
248.2			SANDSTONE	45.0	155.0	W/SH
203.2			SHALE	9.0	200.0	
194.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	209.0	
190.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	29.0	213.0	
161.2	CARBONDALE	JAMESTOWN	BONE COAL	1.0	242.0	
160.2	CARBONDALE		SHALE	2.0	243.0	DARK
158.2	CARBONDALE		SHALE	4.8	245.0	
153.4	CARBONDALE	HERRIN	COAL	5.3	249.8	
148.1	CARBONDALE		SANDY SHALE	10.9	255.1	
137.2	CARBONDALE		SHALE	17.7	266.0	
119.5	CARBONDALE	BRIAR HILL	COAL	0.3	283.7	
119.2	CARBONDALE	BRIAR HILL	BONE COAL	1.2	284.0	
118.0	CARBONDALE	DYKERSBURG	SANDY SHALE	101.1	285.2	
16.9	CARBONDALE	SPRINGFIELD	COAL	6.0	386.3	
11.0	CARBONDALE		SHALE	0.8	392.2	

MAPID: 16500078000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.634277 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 386.0 **LOG TYPE:**
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	249.0	
17.0	CARBONDALE	SPRINGFIELD	COAL	-	386.0	

MAPID: 16500079000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.6405 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.784917 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 370.0 **LOG TYPE:**
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	238.0	
26.0	CARBONDALE	SPRINGFIELD	COAL	-	370.0	

MAPID: 16500079000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.6405 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.784917 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 378.0 **LOG TYPE:** Drillers Log
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
240.0	CARBONDALE	DANVILLE	COAL	2.1	156.0	
220.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	176.0	
213.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	45.0	183.0	
158.0	CARBONDALE	HERRIN	COAL	5.3	238.0	
123.0	CARBONDALE	BRIAR HILL	COAL	1.6	273.0	
26.0	CARBONDALE	SPRINGFIELD	COAL	6.4	370.0	

MAPID: 16500079000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.6405 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.784917 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 396.2 **LOGGED (FT.):** 378.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR RAILROAD **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.2			UNCONSOLIDATED	62.0	0.0	
334.2	MODESTO		SHALE	48.0	62.0	
286.2	MODESTO		SANDSTONE	37.0	110.0	
249.2	MODESTO		BLACK SHALE	1.5	147.0	
247.7	MODESTO		SHALE	7.5	148.5	
240.2	CARBONDALE	DANVILLE	COAL	2.1	156.0	
238.1	CARBONDALE		SANDY SHALE	5.9	158.1	
232.2	CARBONDALE		SHALE	1.8	164.0	
230.4	CARBONDALE	ALLENBY	COAL	0.8	165.8	
229.5	CARBONDALE		SHALE	5.3	166.7	
224.2	CARBONDALE		SANDY SHALE	4.0	172.0	
220.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	176.0	
213.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	183.0	
202.2	CARBONDALE	ANVIL ROCK	SANDSTONE	34.5	194.0	W/SH
167.7	CARBONDALE	JAMESTOWN	COAL	0.3	228.5	
167.4	CARBONDALE		SHALE	1.2	228.8	
166.2	CARBONDALE		SANDY SHALE	8.2	230.0	
158.0	CARBONDALE	HERRIN	COAL	5.3	238.2	
152.8	CARBONDALE		UNDERCLAY	4.6	243.4	W/SH
148.2	CARBONDALE		SHALE	24.8	248.0	
123.4	CARBONDALE	BRIAR HILL	COAL	1.6	272.8	
121.8	CARBONDALE	DYKERSBURG	SANDY SHALE	18.6	274.4	
103.2	CARBONDALE	DYKERSBURG	SHALE	47.0	293.0	DARK
56.2	CARBONDALE	DYKERSBURG	SANDY SHALE	30.0	340.0	
26.2	CARBONDALE	SPRINGFIELD	COAL	6.4	370.0	
19.8	CARBONDALE		UNDERCLAY	1.6	376.4	

MAPID: 16500080000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645053 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.784926 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 400.6 **LOGGED (FT.):** 372.0 **LOG TYPE:** Drillers Log
SOURCE: BIG FOUR RAIL ROAD **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.6			UNCONSOLIDATED	50.5	0.0	
350.1			CLAY	29.8	50.5	W/SH
320.3	MODESTO		BONE COAL	0.7	80.3	
319.6	MODESTO		SANDY SHALE	19.0	81.0	
300.6	MODESTO		SANDSTONE	50.0	100.0	
250.6	MODESTO		SHALE	10.5	150.0	
240.1	CARBONDALE	DANVILLE	COAL	1.8	160.5	
238.3	CARBONDALE		UNDERCLAY	2.7	162.3	
235.6	CARBONDALE		SHALE	14.3	165.0	
221.3	CARBONDALE	ALLENBY	COAL	0.7	179.3	
220.6	CARBONDALE		UNDERCLAY	2.0	180.0	
218.6	CARBONDALE	ANVIL ROCK	SANDSTONE	35.0	182.0	
183.6	CARBONDALE	ANVIL ROCK	SHALE	14.7	217.0	
168.9	CARBONDALE	JAMESTOWN	COAL	0.3	231.7	
168.6	CARBONDALE		UNDERCLAY	1.0	232.0	
167.6	CARBONDALE		SHALE	2.0	233.0	
165.6	CARBONDALE	BRERETON	LIMESTONE	5.3	235.0	
160.3	CARBONDALE	HERRIN	COAL	5.7	240.3	
154.6	CARBONDALE		UNDERCLAY	2.0	246.0	
152.6	CARBONDALE		SHALE	24.5	248.0	
128.1	CARBONDALE	BRIAR HILL	COAL	1.5	272.5	
126.6	CARBONDALE	DYKERSBURG	SHALE	91.1	274.0	
35.5	CARBONDALE	SPRINGFIELD	COAL	5.0	365.1	
30.5	CARBONDALE		SHALE	1.9	370.1	

MAPID: 16500080000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645053 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.784926 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 365.0 **LOG TYPE:**
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
161.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	240.0	
36.0	CARBONDALE	SPRINGFIELD	COAL	-	365.0	

MAPID: 16500081000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.649532 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788568 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 382.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	280.0	
53.0	CARBONDALE	SPRINGFIELD	COAL	-	382.0	

MAPID: 16500081000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.649532 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.788568 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 285.3 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.6	CARBONDALE	DANVILLE	COAL	1.6	200.4	
233.0	CARBONDALE		SHALE & SANDSTONE	18.8	202.0	
214.2	CARBONDALE	ALLENBY	COAL	0.6	220.8	
213.7	CARBONDALE		CLAYSTONE & SHALE	5.5	221.3	
208.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	226.8	
202.3	CARBONDALE	LAWSON	SILTY SHALE	24.8	232.7	
177.6	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	12.4	257.4	
165.2	CARBONDALE	CONANT	LIMESTONE W/ SHALE	0.3	269.8	
164.9	CARBONDALE	JAMESTOWN	COAL	0.2	270.1	
164.7	CARBONDALE		BLACK SHALE	2.8	270.3	
162.0	CARBONDALE	BRERETON	LIMESTONE	6.2	273.0	
155.8	CARBONDALE	ANNA	BLACK SHALE	0.8	279.2	
155.0	CARBONDALE	HERRIN	COAL	5.3	280.0	

MAPID: 16500081000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.649532 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.788568 **DATE COLLECTED:** 10 / 0 / 1905
SURFACE ELEVATION (FT.): 435.3 **LOGGED (FT.):** 391.0 **LOG TYPE:** Drillers Log
SOURCE: BIG FOUR RAILROAD **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.3			UNCONSOLIDATED	58.7	0.0	
376.6	MODESTO		SANDY SHALE	8.3	58.7	W/SS STREAKS
368.3	MODESTO		SANDY SHALE	9.0	67.0	
359.3	MODESTO		SANDSTONE	2.4	76.0	
356.9	MODESTO		SANDY SHALE	14.3	78.4	
342.5	MODESTO		COAL	0.1	92.8	
342.5	MODESTO		UNDERCLAY	2.0	92.8	
340.5	MODESTO		SANDY SHALE	22.5	94.8	
318.0	MODESTO		BLACK SHALE	3.2	117.3	
314.8	MODESTO		COAL	0.8	120.5	
314.0	MODESTO		UNDERCLAY	8.0	121.3	
306.0	MODESTO		SHALE	22.2	129.3	W/SS
283.9	MODESTO		SANDSTONE	49.4	151.4	
234.5	CARBONDALE	DANVILLE	COAL	1.6	200.8	
232.9	CARBONDALE		UNDERCLAY	11.4	202.4	
221.5	CARBONDALE	"Allenby rider"	COAL	0.1	213.8	
221.4	CARBONDALE		SHALE	7.3	213.9	W/SS
214.1	CARBONDALE	ALLENBY	COAL	0.6	221.2	
213.5	CARBONDALE		UNDERCLAY	5.5	221.8	
208.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	227.3	
202.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.8	233.1	W/SS
177.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.4	257.8	W/SANDY SH
165.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	0.3	270.3	CALC
164.8	CARBONDALE	JAMESTOWN	COAL	0.2	270.5	
164.6	CARBONDALE		BLACK SHALE	2.8	270.7	
161.9	CARBONDALE	BRERETON	LIMESTONE	6.2	273.4	
155.7	CARBONDALE		SHALE	0.8	279.6	
154.9	CARBONDALE	HERRIN	COAL	5.3	280.4	W/SULPHUR
149.5	CARBONDALE		UNDERCLAY	3.9	285.8	
145.6	CARBONDALE		SHALE	9.2	289.7	
136.5	CARBONDALE		SANDY SHALE	3.3	298.8	
133.1	CARBONDALE	BRIAR HILL	COAL	1.8	302.2	
131.4	CARBONDALE	DYKERSBURG	SANDY SHALE	6.7	303.9	W/SS
124.7	CARBONDALE	DYKERSBURG	SANDSTONE	32.3	310.6	W/SANDY SH
92.5	CARBONDALE	DYKERSBURG	SANDY SHALE	39.8	342.8	
52.6	CARBONDALE	SPRINGFIELD	COAL	5.0	382.7	
47.6	CARBONDALE		UNDERCLAY	3.3	387.7	

MAPID: 16500082000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.645053 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.784926 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 411.2 **LOGGED (FT.):** 378.0 **LOG TYPE:** Drillers Log

SOURCE: BIG FOUR RAILROAD **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.2			UNCONSOLIDATED	13.0	0.0	
398.2	MODESTO		SANDSTONE	10.0	13.0	
388.2	MODESTO		SHALE	27.0	23.0	
361.2	MODESTO		BLACK SHALE	3.0	50.0	
358.2	MODESTO		COAL	0.3	53.0	
357.9	MODESTO		LIMESTONE	2.7	53.3	
355.2	MODESTO		SHALE	26.0	56.0	DARK
329.2	MODESTO		COAL	0.7	82.0	
328.5	MODESTO		SHALE	5.3	82.7	
323.2	MODESTO		SANDY SHALE	18.0	88.0	
305.2	MODESTO		SANDSTONE	55.0	106.0	
250.2	MODESTO		BLACK SHALE	1.0	161.0	
249.2	CARBONDALE	DANVILLE	COAL	1.0	162.0	
248.2	CARBONDALE		SANDSTONE	2.0	163.0	
246.2	CARBONDALE		SHALE	10.0	165.0	DARK
236.2	CARBONDALE		SANDSTONE	5.0	175.0	
231.2	CARBONDALE		SANDY SHALE	2.7	180.0	
228.5	CARBONDALE	ALLENBY	COAL	0.3	182.7	
228.2	CARBONDALE		UNDERCLAY	0.5	183.0	
227.7	CARBONDALE		SANDY SHALE	3.5	183.5	
224.2	CARBONDALE	BANKSTON FORK	UNCLASSIFIED	14.0	187.0	
210.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	201.0	
207.2	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	204.0	
191.2	CARBONDALE		SHALE	14.0	220.0	DARK
177.2	CARBONDALE	JAMESTOWN	COAL	0.1	234.0	
177.1	CARBONDALE		BLACK SHALE	1.9	234.1	
175.2	CARBONDALE	BRERETON	LIMESTONE	5.7	236.0	
169.5	CARBONDALE	ANNA	BLACK SHALE	1.3	241.7	
168.2	CARBONDALE	HERRIN	COAL	5.3	243.0	
162.9	CARBONDALE		UNDERCLAY	0.8	248.3	
162.2	CARBONDALE		LIMESTONE	6.0	249.0	
156.2	CARBONDALE		SANDY SHALE	18.0	255.0	
138.2	CARBONDALE	BRIAR HILL	COAL	0.8	273.0	
137.4	CARBONDALE	DYKERSBURG	SANDY SHALE	19.2	273.8	
118.2	CARBONDALE	DYKERSBURG	SHALE	40.0	293.0	
78.2	CARBONDALE	DYKERSBURG	SHALE	36.8	333.0	DARK
41.4	CARBONDALE	SPRINGFIELD	COAL	6.0	369.8	
35.4	CARBONDALE		SHALE	2.3	375.8	

MAPID: 16500082000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645053 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.784926 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 369.0 **LOG TYPE:**
SOURCE: HRSBRG SALINE CLRS **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	243.0	
42.0	CARBONDALE	SPRINGFIELD	COAL	-	369.0	

MAPID: 16500083000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.634776 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.782177 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 322.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	208.0	
68.0	CARBONDALE	SPRINGFIELD	COAL	-	322.0	

MAPID: 16500083000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.634776 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.782177 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 326.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.0	CARBONDALE	DANVILLE	COAL	3.5	82.0	
304.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	15.0	86.0	
278.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	112.0	
258.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	17.0	132.0	
227.0	CARBONDALE	HERRIN	COAL	6.0	163.0	
183.0	CARBONDALE	BRIAR HILL	COAL	1.0	207.0	
103.0	CARBONDALE	SPRINGFIELD	COAL	5.3	287.0	

MAPID: 16500083000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.634776 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.782177 **DATE COLLECTED:** 11 / 23 / 1905

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 326.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	63.5	0.0	
326.5	MODESTO		SHALE	6.5	63.5	
320.0	MODESTO		SANDY SHALE	34.0	70.0	
286.0	MODESTO		SANDSTONE	23.0	104.0	
263.0	MODESTO		SHALE	11.0	127.0	DARK
252.0	CARBONDALE	DANVILLE	COAL	1.0	138.0	
251.0	CARBONDALE		UNDERCLAY	1.7	139.0	
249.3	CARBONDALE		SHALE	7.3	140.7	
242.0	CARBONDALE		SHALE	6.0	148.0	DARK
236.0	CARBONDALE	"Allenby rider"	COAL	0.3	154.0	
235.7	CARBONDALE		UNDERCLAY	0.3	154.3	
235.5	CARBONDALE		SANDSTONE	2.8	154.5	
232.7	CARBONDALE	ALLENBY	COAL	0.3	157.3	
232.4	CARBONDALE		UNDERCLAY	1.4	157.6	
231.0	CARBONDALE		SHALE	3.2	159.0	
227.8	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	162.2	
219.8	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	170.2	
216.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.5	173.2	
205.3	CARBONDALE		SHALE	10.3	184.7	DARK
195.0	CARBONDALE		SHALE	6.0	195.0	DARK
189.0	CARBONDALE	JAMESTOWN	COAL	0.3	201.0	
188.7	CARBONDALE		SHALE	1.7	201.3	
187.0	CARBONDALE	BRERETON	LIMESTONE	4.6	203.0	
182.4	CARBONDALE	ANNA	BLACK SHALE	0.4	207.6	
182.0	CARBONDALE	HERRIN	COAL	6.2	208.0	
175.8	CARBONDALE		UNDERCLAY	1.5	214.2	
174.3	CARBONDALE		SHALE	10.0	215.7	
164.3	CARBONDALE		SHALE	11.5	225.7	
152.8	CARBONDALE		SHALE	4.8	237.2	DARK
148.0	CARBONDALE	BRIAR HILL	COAL	1.0	242.0	
147.0	CARBONDALE		UNDERCLAY	0.7	243.0	
146.3	CARBONDALE		LIMESTONE	2.0	243.7	
144.3	CARBONDALE	DYKERSBURG	SANDY SHALE	10.3	245.7	
134.0	CARBONDALE	DYKERSBURG	SANDY SHALE	50.5	256.0	
83.5	CARBONDALE	DYKERSBURG	SHALE	15.5	306.5	DARK
68.0	CARBONDALE	SPRINGFIELD	COAL	2.3	322.0	
65.7	CARBONDALE		UNDERCLAY	0.3	324.3	
65.5	CARBONDALE		SHALE	1.7	324.5	

MAPID: 16525956000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.647582 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.788468 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 290.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 40 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.3	CARBONDALE	HERRIN	COAL	5.4	284.7	

MAPID: 16525957000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.64544 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.783955 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R43 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.2	CARBONDALE	HERRIN	COAL	5.3	247.8	

MAPID: 16525958000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.641446 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.786362 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R45 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.6	CARBONDALE	HERRIN	COAL	5.7	246.4	

MAPID: 16525959000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.638161 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.786164 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 248.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 44 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
153.2	CARBONDALE	HERRIN	COAL	5.3	242.8	

MAPID: 16525960000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.631847 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.788192 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 261.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R 41 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
147.2	CARBONDALE	HERRIN	COAL	5.3	255.8	

MAPID: 16500085000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line
QUADRANGLE: HARCO **LONGITUDE:** -88.626738 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781271 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 390.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	266.0	
34.0	CARBONDALE	SPRINGFIELD	COAL	-	390.0	

MAPID: 16500085000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.626738 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.781271 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 264.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
239.1	MODESTO	PIASA	LIMESTONE	3.0	184.9	
236.1	MODESTO		BLACK SHALE	9.0	187.9	
227.1	CARBONDALE	DANVILLE	COAL	1.4	196.9	
225.7	CARBONDALE		SHALE	18.6	198.3	
207.1	CARBONDALE	ALLENBY	COAL	0.3	216.9	
206.8	CARBONDALE		CLAYSTONE	1.0	217.2	
205.8	CARBONDALE	LAWSON	SANDSTONE	1.8	218.2	
204.1	CARBONDALE	LAWSON	DARK GRAY SHALE	2.0	219.9	
202.1	CARBONDALE	LAWSON	BONE COAL	1.8	221.9	
200.2	CARBONDALE	LAWSON	SILTY SHALE	8.2	223.8	
192.1	CARBONDALE	LAWSON	BLACK SHALE	17.0	231.9	
175.1	CARBONDALE	CONANT	CALCAREOUS SHALE	0.3	248.9	
174.7	CARBONDALE		BLACK SHALE	3.6	249.3	
171.2	CARBONDALE	BRERETON	LIMESTONE	6.2	252.8	
165.0	CARBONDALE	HERRIN	COAL	5.2	259.0	

MAPID: 16500085000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.626738 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.781271 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.4 **LOGGED (FT.):** 399.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.4			UNCONSOLIDATED	11.5	0.0	
412.9	MODESTO		SANDSTONE	22.5	11.5	
390.4	MODESTO		SANDY SHALE	30.6	34.0	
359.8	MODESTO		SHALE	30.1	64.6	
329.7	MODESTO		COAL	0.1	94.7	
329.6	MODESTO		UNDERCLAY	1.4	94.8	
328.2	MODESTO		SHALE	20.0	96.2	
308.2	MODESTO		SHALE	9.5	116.2	DARK
298.7	MODESTO		SHALE	5.0	125.7	DARK
293.7	MODESTO		COAL	0.7	130.7	
293.1	MODESTO		UNDERCLAY	1.3	131.3	
291.7	MODESTO		SANDY SHALE	23.0	132.7	
268.7	MODESTO		SANDSTONE	29.0	155.7	
239.7	MODESTO	PIASA	LIMESTONE	3.0	184.7	
236.7	MODESTO		BLACK SHALE	9.0	187.7	
227.7	CARBONDALE	DANVILLE	COAL	1.4	196.7	
226.3	CARBONDALE		UNDERCLAY	2.0	198.1	
224.3	CARBONDALE		SANDY SHALE	15.0	200.1	
209.3	CARBONDALE		SHALE	1.6	215.1	
207.7	CARBONDALE	"Allenby rider"	COAL	0.3	216.7	
207.5	CARBONDALE		UNDERCLAY	1.0	216.9	
206.5	CARBONDALE		SANDSTONE	1.8	217.9	
204.7	CARBONDALE		SHALE	2.0	219.7	DARK
202.7	CARBONDALE	ALLENBY	BONE COAL	1.8	221.7	
200.9	CARBONDALE	ANVIL ROCK	SHALE	4.2	223.5	
196.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	227.7	
192.7	CARBONDALE		BLACK SHALE	17.0	231.7	
175.7	CARBONDALE		CALCAREOUS SHALE	0.3	248.7	CALC
175.4	CARBONDALE	JAMESTOWN	COAL	0.1	249.0	
175.3	CARBONDALE		BLACK SHALE	3.6	249.1	
171.7	CARBONDALE	BRERETON	LIMESTONE	6.2	252.7	
165.6	CARBONDALE	HERRIN	COAL	5.2	258.8	
160.4	CARBONDALE		UNDERCLAY	2.7	264.0	
157.7	CARBONDALE		SHALE	17.5	266.7	
140.2	CARBONDALE		SHALE	11.5	284.2	DARK
128.7	CARBONDALE	BRIAR HILL	COAL	1.5	295.7	
127.2	CARBONDALE	DYKERSBURG	SANDY SHALE	93.5	297.2	
33.7	CARBONDALE	SPRINGFIELD	COAL	6.4	390.7	
27.3	CARBONDALE		UNDERCLAY	2.1	397.1	

MAPID: 16500086000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617315 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781234 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 353.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
173.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	250.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	-	353.0	

MAPID: 16500086000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617315 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.781234 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 361.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.0	CARBONDALE	DANVILLE	COAL	1.7	180.0	
219.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	204.0	
206.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	217.0	
172.0	CARBONDALE	HERRIN	COAL	5.3	251.0	
135.0	CARBONDALE	BRIAR HILL	COAL	1.3	288.0	
108.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	5.4	315.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	5.8	353.0	

MAPID: 16500086000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617315 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.781234 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.9 **LOGGED (FT.):** 361.3 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.9			UNCONSOLIDATED	20.0	0.0	
402.9	MODESTO		SHALE	57.0	20.0	
345.9	MODESTO		SANDY SHALE	17.0	77.0	GRAY
328.9	MODESTO		SANDSTONE	1.0	94.0	
327.9	MODESTO		SHALE	6.0	95.0	
321.9	MODESTO		UNDERCLAY	2.0	101.0	
319.9	MODESTO		LIMESTONE	1.5	103.0	
318.4	MODESTO		SHALE	10.0	104.5	
308.4	MODESTO		SHALE	2.5	114.5	DARK
305.9	MODESTO		SANDY SHALE	17.0	117.0	
288.9	MODESTO		SHALE	3.0	134.0	
285.9	MODESTO		SANDSTONE	13.0	137.0	
272.9	MODESTO		SANDSTONE	21.0	150.0	
251.9	MODESTO		SHALE	3.0	171.0	DARK
248.9	MODESTO		SHALE	6.0	174.0	
242.9	CARBONDALE	DANVILLE	COAL	1.7	180.0	
241.2	CARBONDALE		UNDERCLAY	0.3	181.7	
240.9	CARBONDALE		SANDY SHALE	8.0	182.0	GRAY
232.9	CARBONDALE		SHALE	2.0	190.0	DARK
230.9	CARBONDALE		BLACK SHALE	0.5	192.0	
230.4	CARBONDALE		SANDY SHALE	7.0	192.5	GRAY
223.4	CARBONDALE	ALLENBY	COAL	0.8	199.5	
222.6	CARBONDALE		UNDERCLAY	4.0	200.3	
218.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	204.3	
211.1	CARBONDALE		SANDY SHALE	5.7	211.8	
205.5	CARBONDALE		SANDSTONE	6.0	217.4	
199.5	CARBONDALE		SHALE	2.0	223.4	
197.5	CARBONDALE		LIMESTONE	0.3	225.4	
197.2	CARBONDALE		CLAYSTONE	0.5	225.7	
196.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.8	226.2	GRAY
190.9	CARBONDALE	ANVIL ROCK	SHALE	11.5	232.0	
179.4	CARBONDALE	BRERETON	LIMESTONE	5.0	243.5	
174.4	CARBONDALE	ANNA	BLACK SHALE	2.3	248.5	
172.1	CARBONDALE	HERRIN	COAL	5.3	250.8	
166.7	CARBONDALE		UNDERCLAY	4.5	256.2	
162.2	CARBONDALE		SHALE	17.7	260.7	
144.6	CARBONDALE		SHALE	10.0	278.3	
134.6	CARBONDALE	BRIAR HILL	COAL	1.3	288.3	
133.3	CARBONDALE		UNDERCLAY	0.3	289.6	

133.0	CARBONDALE	DYKERSBURG	SHALE	5.0	289.9	
128.0	CARBONDALE	DYKERSBURG	SHALE	20.0	294.9	W/SS
108.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.4	314.9	
102.6	CARBONDALE	DYKERSBURG	SHALE	6.0	320.3	
96.6	CARBONDALE	DYKERSBURG	SHALE	8.5	326.3	
88.1	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	334.8	
87.1	CARBONDALE	DYKERSBURG	SHALE	17.2	335.8	
69.9	CARBONDALE	SPRINGFIELD	COAL	5.8	353.0	
64.1	CARBONDALE		UNDERCLAY	2.6	358.8	

MAPID: 16500087000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.631262 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.777625 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.7 **LOGGED (FT.):** 324.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.7			UNCONSOLIDATED	71.2	0.0	
311.5	MODESTO		SHALE	3.8	71.2	
307.7	MODESTO		SHALE	30.0	75.0	DARK
277.7	MODESTO		SHALE	15.2	105.0	
262.5	MODESTO	PIASA	LIMESTONE	1.3	120.2	
261.3	CARBONDALE	DANVILLE	COAL	1.5	121.4	
259.8	CARBONDALE		UNDERCLAY	2.1	122.9	
257.7	CARBONDALE		SHALE	15.3	125.0	
242.4	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	140.3	
234.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.5	148.3	
219.9	CARBONDALE	ANVIL ROCK	SHALE	8.0	162.8	DARK
211.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.3	170.8	
202.5	CARBONDALE		SHALE	6.3	180.2	DARK
196.3	CARBONDALE	HERRIN	COAL	6.1	186.4	
190.2	CARBONDALE		UNDERCLAY	4.5	192.5	
185.7	CARBONDALE		SHALE	27.0	197.0	
158.7	CARBONDALE	BRIAR HILL	COAL	1.7	224.0	
157.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	225.7	
147.0	CARBONDALE	DYKERSBURG	SHALE	7.3	235.7	
139.7	CARBONDALE	DYKERSBURG	SANDY SHALE	69.4	243.0	
70.3	CARBONDALE	SPRINGFIELD	COAL	6.7	312.4	
63.6	CARBONDALE		UNDERCLAY	3.6	319.1	
60.0	CARBONDALE		SANDY SHALE	2.0	322.7	

MAPID: 16500087000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.631262 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.777625 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 312.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
196.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	186.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	-	312.0	

MAPID: 16503057000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616079 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.78395 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**
SOURCE: KNIGHT DEAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.0	CARBONDALE	BRERETON	LIMESTONE	-	240.0	
-1670.0			LIMESTONE	-	2086.0	
-2066.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16503057000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616079 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.78395 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT DEAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.0	CARBONDALE	HERRIN	COAL	6.0	240.0	
142.0	CARBONDALE	BRIAR HILL	COAL	-	274.0	
56.0	CARBONDALE	SPRINGFIELD	COAL	6.0	360.0	
-24.0	CARBONDALE	HOUCHIN CREEK	COAL	-	440.0	

MAPID: 16503057000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616079 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.78395 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT DEAN **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	550.0	
-219.0	SPOON	DAVIS	UNCLASSIFIED	-	635.0	
-1274.0	BASE OF PENN.		UNCLASSIFIED	-	1690.0	

MAPID: 16503057000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616079 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.78395 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT DEAN, SMALL JOHN C 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-24.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	440.0	
-74.0	CARBONDALE	SURVANT	COAL	1.8	490.0	
-144.0	CARBONDALE	COLCHESTER	COAL	0.6	560.0	
-199.0	CARBONDALE	DEKOVEN	COAL	4.0	615.0	
-205.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	621.0	
-216.0	CARBONDALE	DAVIS	COAL	4.0	632.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	708.0	

MAPID: 16503057000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616079 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.78395 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 563.0 **LOG TYPE:** Electric Log
SOURCE: DEAN KNIGHT 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	HERRIN	COAL	5.5	241.0	
56.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.0	360.0	
-28.0	CARBONDALE	HOUCHIN CREEK	COAL	-	444.0	
-147.0	CARBONDALE	COLCHESTER	COAL	-	563.0	

MAPID: 16503341000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.616226 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2418.0 **LOG TYPE:** Electric Log
SOURCE: CAHABA OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
206.0	CARBONDALE	HERRIN	COAL	-	175.0	
-	CARBONDALE	SPRINGFIELD		-		
-126.0	CARBONDALE	COLCHESTER	COAL	-	507.0	

MAPID: 16503341000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.616226 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.776715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2418.0 **LOG TYPE:**
SOURCE: CAHABA OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	BRERETON	LIMESTONE	-	140.0	
205.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	176.0	
81.0	CARBONDALE	SPRINGFIELD	COAL	-	300.0	
-1660.0			LIMESTONE	-	2041.0	
-2037.0		BASE BARLOW	LIMESTONE	-	2418.0	

MAPID: 16525806000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 350' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.623077 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.783968 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 392.0 **LOG TYPE:** Electric Log
SOURCE: FINITE RESOURCES, LTD. 1-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	HERRIN	COAL	-	268.0	
31.0	CARBONDALE	SPRINGFIELD	COAL	-	392.0	

MAPID: 16525834000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1500' S line, 410' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.63218 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.779946 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 328.0 **LOG TYPE:** Electric Log
SOURCE: FINITE RESOURCES, LTD. **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	SPRINGFIELD	COAL	-	328.0	

MAPID: 16525961000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.622682 **GEOLOGIST:** COATS
CONFIDENTIAL: N **LATITUDE:** 37.782156 **DATE COLLECTED:** 6 / 27 / 1984
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Company map
SOURCE: MIDWEST MINING & CONSTRUCTION R46 **WELL TYPE:** Coal Test
COMMENT: FROM PERMIT 60, REV 1, APPDX 4, FIG 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.1	CARBONDALE	HERRIN	COAL	5.2	259.9	

MAPID: 16500088000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.612541 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.788458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 408.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	DANVILLE	COAL	2.0	197.0	
222.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	216.0	
215.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	223.0	
179.0	CARBONDALE	HERRIN	COAL	6.4	259.0	
149.0	CARBONDALE	BRIAR HILL	COAL	2.2	289.0	
97.0	CARBONDALE	CANTON	SANDSTONE & BLACK SHALE	67.0	341.0	

MAPID: 16500088000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.612541 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.788458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 265.4 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
240.7	CARBONDALE	DANVILLE	COAL	2.0	197.3	
238.7	CARBONDALE		SHALE & SANDSTONE	14.5	199.3	
224.2	CARBONDALE	ALLENBY	COAL	0.4	213.8	
223.8	CARBONDALE		CALCAREOUS SHALE	2.6	214.2	
221.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	216.8	
214.8	CARBONDALE	LAWSON	SHALE	0.0	223.2	
214.7	CARBONDALE	LAWSON	SANDSTONE	9.7	223.3	
205.1	CARBONDALE	LAWSON	SILTY SHALE	10.2	232.9	
194.9	CARBONDALE	LAWSON	DARK GRAY SHALE	3.6	243.1	
191.3	CARBONDALE	LAWSON	SHALE	12.3	246.7	
179.0	CARBONDALE	HERRIN	COAL	6.4	259.0	

MAPID: 16500088000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.612541 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 259.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
179.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	259.0	

MAPID: 16500088000C **VERSION:** 4 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 660' N line, 660' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.612541 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.788458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 408.1 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	49.3	0.0	
388.7	MODESTO		SHALE	44.3	49.3	
344.5	MODESTO		BLACK SHALE	0.3	93.5	W/COAL
344.1	MODESTO		SHALE	10.2	93.9	
334.0	MODESTO		SHALE	14.4	104.0	
319.6	MODESTO		BLACK SHALE	1.1	118.4	
318.5	MODESTO		BONE COAL	0.7	119.5	
317.8	MODESTO		UNDERCLAY	0.6	120.2	
317.2	MODESTO		SHALE	20.0	120.8	
297.2	MODESTO		SANDSTONE	47.3	140.8	
250.0	MODESTO		SHALE	1.0	188.0	
249.0	MODESTO		BLACK SHALE	1.0	189.0	
248.0	MODESTO		SHALE	2.5	190.0	
245.5	MODESTO		SHALE	3.8	192.5	
241.6	MODESTO	PIASA	LIMESTONE	0.2	196.4	
241.4	MODESTO		SHALE	0.4	196.6	
241.0	CARBONDALE	DANVILLE	BONE COAL	2.0	197.0	
239.0	CARBONDALE		SHALE	10.7	199.0	W/SS
228.4	CARBONDALE		BLACK SHALE	0.3	209.6	
228.1	CARBONDALE	"Allenby rider"	COAL	0.3	209.9	
227.9	CARBONDALE		UNDERCLAY	1.2	210.1	
226.7	CARBONDALE		SHALE	1.4	211.3	
225.3	CARBONDALE		SHALE	0.7	212.7	
224.6	CARBONDALE	ALLENBY	COAL	0.4	213.4	
224.2	CARBONDALE		SHALE	2.6	213.8	W/LS
221.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	216.5	
215.1	CARBONDALE		SHALE	0.0	222.9	
215.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.7	222.9	
205.4	CARBONDALE	ANVIL ROCK	SHALE	10.2	232.6	W/SS
195.2	CARBONDALE	ANVIL ROCK	SHALE	3.6	242.8	
191.6	CARBONDALE		SHALE	0.5	246.4	
191.1	CARBONDALE		SHALE	12.3	246.9	
178.8	CARBONDALE	HERRIN	COAL	6.4	259.2	
172.4	CARBONDALE		UNDERCLAY	2.2	265.6	
170.2	CARBONDALE		SHALE	6.4	267.8	W/LS
163.8	CARBONDALE		SHALE	13.0	274.2	
150.8	CARBONDALE		SHALE	1.9	287.2	DARK
148.9	CARBONDALE	BRIAR HILL	COAL	2.2	289.1	
146.7	CARBONDALE		SHALE	3.0	291.3	

143.8	CARBONDALE	DYKERSBURG	SHALE	46.7	294.2	W/SS
97.1	CARBONDALE	DYKERSBURG	SANDSTONE	40.0	340.9	
57.0	CARBONDALE	DYKERSBURG	SANDSTONE	17.9	381.0	W/SH
39.1	CARBONDALE	SPRINGFIELD	COAL	0.0	398.9	CHANNEL - NO COAL
39.1	CARBONDALE	DYKERSBURG	SANDSTONE	9.2	398.9	

MAPID: 16502759000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.607012 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.782134 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:**
SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
164.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	267.0	
27.0	CARBONDALE	SPRINGFIELD	COAL	-	404.0	
-154.0	CARBONDALE	COLCHESTER	COAL	-	585.0	
-1299.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1697.0			LIMESTONE	-	2128.0	
-2074.0		BASE BARLOW	LIMESTONE	-	2505.0	

MAPID: 16502759000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.607012 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.782134 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2923.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	HERRIN	COAL	6.0	266.0	
131.0	CARBONDALE	BRIAR HILL	COAL	-	300.0	
29.0	CARBONDALE	SPRINGFIELD	COAL	5.0	402.0	

MAPID: 16502759000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.607012 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.782134 **DATE COLLECTED:** 5 / 0 / 1960
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION, GALLEHER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	SURVANT	COAL	1.8	518.0	
-156.0	CARBONDALE	COLCHESTER	COAL	0.5	587.0	
-197.0	CARBONDALE	DEKOVEN	COAL	2.5	628.0	
-208.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	639.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-214.0	CARBONDALE	DAVIS	COAL	5.0	645.0	
-246.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	677.0	
-299.0	TRADEWATER	MT. RORAH	COAL	1.8	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502759000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.607012 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.782134 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 585.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	HERRIN	COAL	5.5	266.0	
131.0	CARBONDALE	BRIAR HILL	COAL	-	300.0	
29.0	CARBONDALE	SPRINGFIELD	COAL	5.5	402.0	
-154.0	CARBONDALE	COLCHESTER	COAL	-	585.0	

MAPID: 16503102000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609331 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.778506 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 1570.0 **LOG TYPE:** Electric Log
SOURCE: EGAN, T. M. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-144.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	600.0	
-184.0	SPOON	DAVIS	UNCLASSIFIED	-	640.0	
-1114.0	BASE OF PENN.		UNCLASSIFIED	-	1570.0	

MAPID: 16503102000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609331 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.778506 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:**
SOURCE: EGAN, T. M. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	CARBONDALE	BRERETON	LIMESTONE	-	253.0	
193.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	263.0	
8.0	CARBONDALE	SPRINGFIELD	COAL	-	448.0	
-140.0	CARBONDALE	COLCHESTER	COAL	-	596.0	
-1264.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1669.0			LIMESTONE	-	2125.0	
-2053.0		BASE BARLOW	LIMESTONE	-	2509.0	

MAPID: 16503102000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609331 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.778506 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:** Electric Log
SOURCE: EGAN, T. M., GALLAGHER COM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-66.0	CARBONDALE	SURVANT	COAL	2.5	522.0	
-143.0	CARBONDALE	COLCHESTER	COAL	2.5	599.0	
-169.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-177.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	633.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-184.0	CARBONDALE	DAVIS	COAL	5.0	640.0	
-216.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	672.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503226000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604634 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787596 **DATE COLLECTED:** 10 / 0 / 1958
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2481.0 **LOG TYPE:** Electric Log
SOURCE: JARVIS VERNON D, PATTERSON KEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-112.0	CARBONDALE	SURVANT	COAL	2.0	510.0	
-190.0	CARBONDALE	COLCHESTER	COAL	2.5	588.0	
-212.0	CARBONDALE	DEKOVEN	COAL	1.5	610.0	
-232.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	630.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-239.0	CARBONDALE	DAVIS	COAL	4.2	637.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503226000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604634 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2481.0 **LOG TYPE:**
SOURCE: JARVIS VERNON D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
144.0	CARBONDALE	BRERETON	LIMESTONE	-	254.0	
134.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	264.0	
0.0	CARBONDALE	SPRINGFIELD	COAL	-	398.0	
-188.0	CARBONDALE	COLCHESTER	COAL	-	586.0	
-1315.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1713.0	
-1712.0			LIMESTONE	-	2110.0	
-2083.0		BASE BARLOW	LIMESTONE	-	2481.0	

MAPID: 16503226000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604634 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.787596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 588.0 **LOG TYPE:** Electric Log
SOURCE: VERNON D. JARVIS 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.0	CARBONDALE	HERRIN	COAL	-	265.0	
99.0	CARBONDALE	BRIAR HILL	COAL	-	299.0	
0.0	CARBONDALE	SPRINGFIELD	COAL	5.5	398.0	
-190.0	CARBONDALE	COLCHESTER	COAL	-	588.0	

MAPID: 16503293000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604745 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.780325 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION, RUSSELL G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-73.0	CARBONDALE	SURVANT	COAL	2.5	513.0	
-140.0	CARBONDALE	COLCHESTER	COAL	0.6	580.0	
-180.0	CARBONDALE	DEKOVEN	COAL	0.0	620.0	
-200.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-207.0	CARBONDALE	DAVIS	COAL	4.0	647.0	
-243.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503293000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604745 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.780325 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
165.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	275.0	
77.0	CARBONDALE	SPRINGFIELD	COAL	-	363.0	
-139.0	CARBONDALE	COLCHESTER	COAL	-	579.0	
-1297.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1737.0	
-1714.0			LIMESTONE	-	2154.0	
-2074.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16503293000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604745 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.780325 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 651.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	HERRIN	COAL	5.0	276.0	
130.0	CARBONDALE	BRIAR HILL	COAL	-	310.0	
78.0	CARBONDALE	SPRINGFIELD	COAL	5.0	362.0	
73.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	33.0	367.0	
40.0	CARBONDALE	SPRINGFIELD	COAL	5.0	400.0	
-207.0	SPOON	DAVIS	COAL	4.0	647.0	

MAPID: 16524169000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609171 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.787582 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Electric Log
SOURCE: J. O. TURNER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
170.0	CARBONDALE	HERRIN	COAL	-	263.0	
138.0	CARBONDALE	BRIAR HILL	COAL	-	295.0	
33.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING

MAPID: 16525186000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.611599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.778529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 370.0 **LOG TYPE:** Electric Log
SOURCE: HEFLIN OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.0	CARBONDALE	HERRIN	COAL	-	240.0	
176.0	CARBONDALE	BRIAR HILL	COAL	-	272.0	
78.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	370.0	CHANNEL - COAL MISSING

MAPID: 16525807000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.607067 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.778505 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 403.0 **LOG TYPE:** Electric Log
SOURCE: GEO N. MITCHELL DRLG CO 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.0	CARBONDALE	HERRIN	COAL	-	275.0	
143.0	CARBONDALE	BRIAR HILL	COAL	-	312.0	
55.0	CARBONDALE	SPRINGFIELD	COAL	3.0	400.0	

MAPID: 16525831000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.613783 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.783948 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 390.0 **LOG TYPE:** Electric Log
SOURCE: QUATRO ENERGY CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
184.0	CARBONDALE	HERRIN	COAL	-	263.0	
156.0	CARBONDALE	BRIAR HILL	COAL	-	291.0	
57.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	390.0	CHANNEL - COAL MISSING

MAPID: 16590136000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.601336 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.779525 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.8 **LOGGED (FT.):** 178.0 **LOG TYPE:** Company map
SOURCE: AMAX Q-65 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
238.8	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	178.0	

MAPID: 16590137000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.604263 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.778524 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.3 **LOGGED (FT.):** 198.0 **LOG TYPE:** Company map
SOURCE: AMAX Q-38I **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.3	CARBONDALE	DANVILLE	COAL	0.8	123.0	
241.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	198.0	

MAPID: 16590682000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488443 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.858603 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		

MAPID: 16590683000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.50198 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841316 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.7		

MAPID: 16590684000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.500856 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803138 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590685000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.496062 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.801832 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.4		

MAPID: 16590686000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494756 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.799159 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.8		

MAPID: 16590687000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490109 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.784699 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.1		

MAPID: 16590689000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.508961 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.788317 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16590690000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.513016 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796082 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590691000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.511959 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.803618 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.3		

MAPID: 16590692000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.50417 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804006 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590693000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.507761 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.811091 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 16590694000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.513054 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.81284 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590695000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.50776 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822057 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.0		

MAPID: 16590696000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.517292 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834819 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		

MAPID: 16590697000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.512804 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846354 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.8		

MAPID: 16590698000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.50831 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.856974 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590699000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.51334 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860331 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590700000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.523259 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848931 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.0		1.40% SULFUR

MAPID: 16590701000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.53127 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.843522 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.7		

MAPID: 16590702000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.53364 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.837068 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		1.44% SULFUR

MAPID: 16590703000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.525003 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.825565 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.2		

MAPID: 16590704000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.528599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822401 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16590705000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.535901 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.818717 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.6		

MAPID: 16590706000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.527384 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804882 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.3		

MAPID: 16590707000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.536145 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.801221 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.0		

MAPID: 16590708000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.530436 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.796022 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 16590709000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.536334 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.794926 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.0		

MAPID: 16590710000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.538074 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776385 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.2		

MAPID: 16590714000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.543066 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776847 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590715000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.55459 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.783905 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.3		0.61% SULFUR

MAPID: 16590716000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.543039 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.79224 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.5		

MAPID: 16590717000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.545367 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.794532 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.2		

MAPID: 16590718000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.550058 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.825881 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	0.7		

MAPID: 16590719000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549258 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.827674 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590720000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.552411 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.828526 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.6		

MAPID: 16590721000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.548363 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.839085 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.4		1.58% SULFUR

MAPID: 16590722000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.553467 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848563 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.3		1.79% SULFUR

MAPID: 16590723000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.544356 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851389 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		1.67% SULFUR

MAPID: 16590724000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.543868 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860615 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.3		1.35% SULFUR

MAPID: 16590725000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.553103 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.859559 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.3		

MAPID: 16590726000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567465 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855373 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.5		

MAPID: 16590727000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563072 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.84218 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590728000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.56706 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.84124 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		1.52% SULFUR

MAPID: 16590729000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.558694 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834035 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590730000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.561409 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.821008 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590731000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.565871 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.819603 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.0		

MAPID: 16590732000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.575508 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.81932 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.1		

MAPID: 16590733000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568115 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804296 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	0.5		

MAPID: 16590734000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.56355 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.801678 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.4		

MAPID: 16590735000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.560542 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.792692 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.0		

MAPID: 16590736000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.575941 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.797513 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		0.67% SULFUR

MAPID: 16590737000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.571068 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.787419 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16590738000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568681 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.785572 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.8		

MAPID: 16590743000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.588035 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.786418 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.0		1.17% SULFUR, THIN SPLITS ABOVE SEAM

MAPID: 16590744000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.589579 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800248 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.4		1.50% SULFUR

MAPID: 16590745000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.59539 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804631 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.2		

MAPID: 16590746000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.595731 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.814589 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	2.4		

MAPID: 16590747000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.581434 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.814428 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.5		0.60% SULFUR

MAPID: 16590748000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.593558 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820836 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.8		

MAPID: 16590749000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.595236 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.827155 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	1.8		1.50% SULFUR

MAPID: 16590750000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577156 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834387 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.0		1.80% SULFUR, SPLIT

MAPID: 16590751000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.594754 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841178 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		0.76% SULFUR

MAPID: 16590752000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.580406 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841608 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	7.0		1.99% SULFUR

MAPID: 16590753000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.580297 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.850151 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.6		2.00% SULFUR

MAPID: 16590754000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.595669 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855889 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.9		

MAPID: 16590755000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.585829 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.861951 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		0.90% SULFUR

MAPID: 16503822000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497581 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853273 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2218.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
22.0	CARBONDALE	BRERETON	LIMESTONE	-	384.0	
-1444.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-1812.0			LIMESTONE	-	2218.0	

MAPID: 16503822000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497581 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.853273 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	316.0	
86.0	CARBONDALE		SHALE	29.0	320.0	
57.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	349.0	
53.0	CARBONDALE	LAWSON	SHALE	27.0	353.0	
26.0	CARBONDALE	LAWSON	LIMESTONE & SHALE	6.0	380.0	
20.0	CARBONDALE	LAWSON	DARK GRAY SHALE	4.0	386.0	
16.0	CARBONDALE	BRERETON	LIMESTONE	5.0	390.0	
11.0	CARBONDALE	ANNA	BLACK SHALE	3.0	395.0	
8.0	CARBONDALE	HERRIN	COAL	4.0	398.0	

MAPID: 16503822000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497581 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853273 **DATE COLLECTED:** 11 / 0 / 1972
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, CAMERON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	605.0	
-242.0	CARBONDALE	SURVANT	COAL	1.8	648.0	
-324.0	CARBONDALE	COLCHESTER	COAL	0.5	730.0	
-344.0	CARBONDALE	DEKOVEN	COAL	0.0	750.0	
-366.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	772.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-372.0	CARBONDALE	DAVIS	COAL	3.0	778.0	
-404.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	
-423.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	829.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523859000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488418 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8586 **DATE COLLECTED:** 6 / 0 / 1974
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 24.8 **LOG TYPE:** Electric Log
SOURCE: FARRAR, FLETCHER F., CAMERON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-197.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-240.0	CARBONDALE	SURVANT	COAL	1.5	633.0	
-307.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-389.0	CARBONDALE	DEKOVEN	COAL	4.0	782.0	
-426.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	819.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-435.0	CARBONDALE	DAVIS	COAL	5.0	828.0	
-441.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	834.0	
-507.0	TRADEWATER	MT. RORAH	COAL	1.5	900.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523859000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488418 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.8586 **DATE COLLECTED:** 6 / 0 / 1974
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 1720.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR, FLETCHER F. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-307.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	700.0	
-387.0	SPOON	DAVIS	UNCLASSIFIED	-	780.0	
-1327.0	BASE OF PENN.		UNCLASSIFIED	-	1720.0	

MAPID: 16500657000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2310' S line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.511739 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.855254 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 442.2 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.2			CLAY	50.0	0.0	
392.2			SANDY CLAY	4.0	50.0	
388.2			CLAY	30.0	54.0	
358.2	MODESTO		BLUE SHALE	8.5	84.0	
349.7	MODESTO		DARK SHALE	2.5	92.5	
347.2	MODESTO		BLUE SHALE	28.0	95.0	
319.2	MODESTO		DARK SHALE	10.0	123.0	
309.2	MODESTO	MOUND CITY	BLACK SHALE	5.2	133.0	
304.0	MODESTO	CHAPEL	COAL	1.2	138.2	
302.9	MODESTO		SANDY SHALE	4.7	139.3	
298.2	MODESTO		SANDSTONE	15.0	144.0	
283.2	MODESTO		SANDSTONE	20.0	159.0	WITH SHALE STREAKS
263.2	MODESTO		SANDSTONE	42.2	179.0	WITH SHALE PARTINGS
221.0	MODESTO		BLUE SHALE	20.8	221.2	WITH LIMESTONE BANDS
200.2	MODESTO		BLUE SHALE	5.8	242.0	
194.4	MODESTO		COAL	0.3	247.8	
194.0	MODESTO		UNDERCLAY	1.8	248.2	
192.2	MODESTO		DARK SHALE	20.0	250.0	
172.2	MODESTO		BLUE SHALE	1.9	270.0	
170.3	MODESTO		COAL	0.9	271.9	
169.4	MODESTO		GRAY SHALE	3.7	272.8	WITH LIME PEBBLE
165.7	MODESTO		LIMESTONE	2.5	276.5	
163.2	MODESTO		CALCAREOUS SHALE	6.5	279.0	
156.7	MODESTO		COAL	1.0	285.5	
155.7	MODESTO		SANDSTONE	4.5	286.5	
151.2	MODESTO		SANDY SHALE	7.0	291.0	
144.2	MODESTO		BLUE SHALE	9.8	298.0	VERY BROKEN
134.4	MODESTO		COAL	0.2	307.8	
134.3	MODESTO		UNDERCLAY	2.0	307.9	
132.3	MODESTO	PIASA	LIMESTONE	2.8	309.9	
129.5	MODESTO		SHALE	2.5	312.7	WITH LIMESTONE BANDS
127.0	MODESTO		BLUE SHALE	11.8	315.2	
115.2	MODESTO		BLUE SHALE	8.2	327.0	WITH BROWN BANDS
107.0	CARBONDALE	DANVILLE	COAL	2.5	335.2	
104.5	CARBONDALE		BLUE SHALE	10.7	337.7	WITH BROWN BANDS
93.9	CARBONDALE		CALCAREOUS SHALE	7.7	348.3	
86.2	CARBONDALE		SHALE	1.7	356.0	
84.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	8.7	357.7	

75.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.7	366.3	
58.2	CARBONDALE		BLUE SHALE	7.4	384.0	
50.8	CARBONDALE	CONANT	LIMESTONE	0.6	391.4	
50.2	CARBONDALE	JAMESTOWN	BLACK SHALE	2.3	392.0	
47.9	CARBONDALE	BRERETON	LIMESTONE	5.0	394.3	
42.9	CARBONDALE	HERRIN	COAL	3.4	399.3	
39.5	CARBONDALE	HERRIN	SHALE	0.1	402.7	BLUE BAND
39.4	CARBONDALE	HERRIN	COAL	1.7	402.8	
37.8	CARBONDALE		UNDERCLAY	3.5	404.4	
34.3	CARBONDALE		CALCAREOUS SHALE	4.1	407.9	
30.2	CARBONDALE		BLUE SHALE	19.6	412.0	
10.6	CARBONDALE	BRIAR HILL	COAL	1.4	431.6	
9.2	CARBONDALE		BLUE SHALE	3.4	433.0	
5.8	CARBONDALE		SANDSTONE	2.3	436.4	
3.5	CARBONDALE		SANDY SHALE	88.3	438.7	
-84.8	CARBONDALE	SPRINGFIELD	COAL	0.0	527.0	
-84.8	CARBONDALE		BLUE SHALE	53.5	527.0	
-138.3	CARBONDALE		SANDSTONE	3.5	580.5	WITH SHALE STREAKS
-141.8	CARBONDALE		SANDSTONE	6.0	584.0	COARSE BROKEN
-147.8	CARBONDALE		BLUE SHALE	8.0	590.0	
-155.8	CARBONDALE	EXCELLO	BLACK SHALE	5.1	598.0	
-160.9	CARBONDALE	HOUCHIN CREEK	COAL	2.0	603.1	
-162.9	CARBONDALE		UNDERCLAY	0.9	605.1	

MAPID: 16500657000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2310' S line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.511739 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855254 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 404.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.3	MODESTO	PIASA	LIMESTONE	2.8	309.7	
129.6	MODESTO		GRAY SHALE	22.5	312.4	
107.1	CARBONDALE	DANVILLE	COAL	2.5	334.9	
104.6	CARBONDALE		SHALE	20.0	337.4	
84.6	CARBONDALE	BANKSTON FORK	LIMESTONE W/ SHALE	8.7	357.4	
75.9	CARBONDALE	LAWSON	SILTY SHALE	17.7	366.1	
58.2	CARBONDALE	LAWSON	GRAY SHALE	7.4	383.8	
50.8	CARBONDALE	CONANT	LIMESTONE	0.6	391.2	
50.2	CARBONDALE		BLACK SHALE	2.3	391.8	
48.0	CARBONDALE	BRERETON	LIMESTONE	5.0	394.0	
43.0	CARBONDALE	HERRIN	COAL	5.2	399.0	

MAPID: 16501395000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515256 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.862062 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2538.0 **LOG TYPE:** Electric Log
SOURCE: SANDERS & FYE OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	368.0	
-	CARBONDALE	BRIAR HILL	COAL	-	400.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	577.0	
-	CARBONDALE	COLCHESTER	COAL	-	678.0	

MAPID: 16501395000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515256 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862062 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: SANDERS & FYE DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	BRERETON	LIMESTONE	-	362.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16501521000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510707 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851496 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 487.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
27.0	CARBONDALE	BRERETON	LIMESTONE	-	460.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1897.0	
-1779.0			LIMESTONE	-	2266.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2634.0	

MAPID: 16501521000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.510707 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.851496 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 487.0 **LOGGED (FT.):** 2687.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	DANVILLE	COAL	-	400.0	
60.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	427.0	
20.0	CARBONDALE	HERRIN	COAL	5.0	467.0	
-19.0	CARBONDALE	BRIAR HILL	COAL	-	506.0	
-83.0	CARBONDALE	SPRINGFIELD	COAL	4.0	570.0	
-123.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	22.0	610.0	
-163.0	CARBONDALE	HOUCHIN CREEK	COAL	-	650.0	

MAPID: 16501521000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.510707 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851496 **DATE COLLECTED:** 5 / 0 / 1954

SURFACE ELEVATION (FT.): 487.0 **LOGGED (FT.):** 2634.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, BLANKENSHIP W 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-168.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.0	
-208.0	CARBONDALE	SURVANT	COAL	2.5	695.0	
-283.0	CARBONDALE	COLCHESTER	COAL	0.6	770.0	
-316.0	CARBONDALE	DEKOVEN	COAL	1.8	803.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	820.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-340.0	CARBONDALE	DAVIS	COAL	4.0	827.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	863.0	
-393.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501521000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851496 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 884.5 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	467.0	
-	CARBONDALE	BRIAR HILL	COAL	-	508.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.5	570.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	655.0	
-	CARBONDALE	COLCHESTER	COAL	-	772.0	
-	SPOON	DAVIS	COAL	4.5	880.0	

MAPID: 16502191000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513005 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851491 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2592.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, BOSWELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-163.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	603.0	
-205.0	CARBONDALE	SURVANT	COAL	2.0	645.0	
-275.0	CARBONDALE	COLCHESTER	COAL	0.5	715.0	
-299.0	CARBONDALE	DEKOVEN	COAL	3.0	739.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	768.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-334.0	CARBONDALE	DAVIS	COAL	4.2	774.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	809.0	
-387.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	827.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502191000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513005 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2592.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	BRERETON	LIMESTONE	-	410.0	
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1848.0	
-1778.0			LIMESTONE	-	2218.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2592.0	

MAPID: 16502191000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513005 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 716.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	417.0	
-	CARBONDALE	BRIAR HILL	COAL	-	456.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	520.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	604.0	
-	CARBONDALE	COLCHESTER	COAL	-	716.0	

MAPID: 16502192000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-290.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	690.0	
-342.0	SPOON	DAVIS	UNCLASSIFIED	-	742.0	
-1310.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 16502192000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
46.0	CARBONDALE	BRERETON	LIMESTONE	-	354.0	
-1421.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1821.0	
-1799.0			LIMESTONE	-	2199.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502192000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS BEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-169.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	569.0	
-214.0	CARBONDALE	SURVANT	COAL	2.5	614.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	685.0	
-305.0	CARBONDALE	DEKOVEN	COAL	3.0	705.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	739.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-343.0	CARBONDALE	DAVIS	COAL	4.0	743.0	
-378.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	778.0	
-385.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502192000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	360.0	
-	CARBONDALE	BRIAR HILL	COAL	-	394.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	569.0	
-	CARBONDALE	COLCHESTER	COAL	-	687.0	
-	SPOON	DAVIS	COAL	5.0	785.0	

MAPID: 16502193000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50601 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862087 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DAVIS BEN CB" **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-174.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	560.0	
-214.0	CARBONDALE	SURVANT	COAL	2.0	600.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	671.0	
-303.0	CARBONDALE	DEKOVEN	COAL	2.8	689.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	719.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-340.0	CARBONDALE	DAVIS	COAL	4.0	726.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	763.0	
-390.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	776.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502193000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50601 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862087 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
1.0	CARBONDALE	BRERETON	LIMESTONE	-	385.0	
-1433.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1809.0			LIMESTONE	-	2195.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502193000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50601 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.862087 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	395.0	
-	CARBONDALE	BRIAR HILL	COAL	-	443.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	560.0	
-	CARBONDALE	COLCHESTER	COAL	-	673.0	
-	SPOON	DAVIS	COAL	6.0	768.0	

MAPID: 16502194000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50836 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8515 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 474.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
32.0	CARBONDALE	BRERETON	LIMESTONE	-	442.0	
-1427.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1901.0	
-1789.0			LIMESTONE	-	2263.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2636.0	

MAPID: 16502194000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.50836 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.8515 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 474.0 **LOGGED (FT.):** 2653.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	HERRIN	COAL	-	402.0	
39.0	CARBONDALE	BRIAR HILL	COAL	-	435.0	
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	

MAPID: 16502194000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.50836 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.8515 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 474.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, DAVIS BEN H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-168.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	642.0	
-196.0	CARBONDALE	SURVANT	COAL	2.0	670.0	
-276.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-309.0	CARBONDALE	DEKOVEN	COAL	0.0	783.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	816.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-351.0	CARBONDALE	DAVIS	COAL	3.0	825.0	
-395.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	869.0	
-400.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	874.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502194000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.50836 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.8515 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 878.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	450.0	
-	CARBONDALE	BRIAR HILL	COAL	-	487.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.0	561.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	643.0	
-	CARBONDALE	COLCHESTER	COAL	-	750.0	
-	SPOON	DAVIS	COAL	5.0	873.0	

MAPID: 16502195000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.517646 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.853303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 684.0 **LOG TYPE:** Electric Log
SOURCE: PEP DRILLING COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	404.0	
-	CARBONDALE	BRIAR HILL	COAL	-	440.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.5	522.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	578.0	
-	CARBONDALE	COLCHESTER	COAL	-	684.0	

MAPID: 16502195000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.517646 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: PEP DRILLING COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.0	CARBONDALE	BRERETON	LIMESTONE	-	397.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502196000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:** 4 / 0 / 1953
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, LEMONS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	564.0	
-204.0	CARBONDALE	SURVANT	COAL	0.5	610.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-294.0	CARBONDALE	DEKOVEN	COAL	2.0	700.0	
-323.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	729.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-332.0	CARBONDALE	DAVIS	COAL	4.0	738.0	
-368.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	774.0	
-379.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502196000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1821.0	
-1794.0			LIMESTONE	-	2200.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2553.0	

MAPID: 16502196000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508336 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.856848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2553.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	363.0	
-	CARBONDALE	BRIAR HILL	COAL	-	395.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	563.0	
-	CARBONDALE	COLCHESTER	COAL	-	681.0	

MAPID: 16502197000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510694 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855021 **DATE COLLECTED:** 6 / 0 / 1953
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, LEMONS WM H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	607.0	
-202.0	CARBONDALE	SURVANT	COAL	1.5	645.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	711.0	
-297.0	CARBONDALE	DEKOVEN	COAL	3.0	740.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	775.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	4.0	782.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	819.0	
-386.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	829.0	
-423.0	TRADEWATER	MT. RORAH	COAL	1.3	866.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502197000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510694 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855021 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	395.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1849.0	
-1786.0			LIMESTONE	-	2229.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16502197000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510694 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855021 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	400.0	
-	CARBONDALE	BRIAR HILL	COAL	-	435.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	606.0	
-	CARBONDALE	COLCHESTER	COAL	-	713.0	

MAPID: 16502198000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510686 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.856843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16502198000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510686 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	373.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1831.0	
-1779.0			LIMESTONE	-	2205.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502199000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.5107 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853318 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 471.0 **LOGGED (FT.):** 2614.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, LEMONS WM H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	642.0	
-211.0	CARBONDALE	SURVANT	COAL	2.0	682.0	
-273.0	CARBONDALE	COLCHESTER	COAL	0.5	744.0	
-307.0	CARBONDALE	DEKOVEN	COAL	1.8	778.0	
-343.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	814.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-348.0	CARBONDALE	DAVIS	COAL	3.0	819.0	
-381.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	852.0	
-397.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	868.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502199000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.5107 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853318 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 471.0 **LOGGED (FT.):** 2614.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
38.0	CARBONDALE	BRERETON	LIMESTONE	-	433.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1880.0	
-1782.0			LIMESTONE	-	2253.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2614.0	

MAPID: 16502199000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.5107 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.853318 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 870.5 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	441.0	
-	CARBONDALE	BRIAR HILL	COAL	-	473.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	4.5	532.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	641.0	
-	CARBONDALE	COLCHESTER	COAL	-	745.0	
-	SPOON	DAVIS	COAL	4.5	866.0	

MAPID: 16502200000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510677 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.858549 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, LEMONS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-192.0	CARBONDALE	SURVANT	COAL	2.0	602.0	
-250.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-292.0	CARBONDALE	DEKOVEN	COAL	4.0	702.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	730.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	5.0	740.0	
-360.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502200000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510677 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.858549 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1776.0			LIMESTONE	-	2186.0	
-2124.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502200000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510677 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.858549 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 5 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16502201000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512984 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856838 **DATE COLLECTED:** 6 / 0 / 1953
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, PARKER FRANK P **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-159.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	583.0	
-201.0	CARBONDALE	SURVANT	COAL	0.5	625.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	683.0	
-301.0	CARBONDALE	DEKOVEN	COAL	2.5	725.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	752.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-338.0	CARBONDALE	DAVIS	COAL	3.7	762.0	
-374.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	798.0	
-385.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	809.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502201000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512984 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856838 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	373.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16502202000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512961 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.86207 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, PARKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	588.0	
-220.0	CARBONDALE	SURVANT	COAL	3.0	629.0	
-281.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-314.0	CARBONDALE	DEKOVEN	COAL	2.0	723.0	
-356.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	765.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-361.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-400.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	809.0	
-410.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	819.0	
-430.0	TRADEWATER	MT. RORAH	COAL	1.3	839.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502202000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512961 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.86207 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
34.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1414.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1823.0	
-1783.0			LIMESTONE	-	2192.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16502202000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512961 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.86207 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2544.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	382.0	
-	CARBONDALE	BRIAR HILL	COAL	-	414.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	588.0	
-	CARBONDALE	COLCHESTER	COAL	-	690.0	

MAPID: 16502203000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512975 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.858541 **DATE COLLECTED:** 2 / 0 / 1954
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, PARKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	580.0	
-205.0	CARBONDALE	SURVANT	COAL	2.0	620.0	
-265.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-309.0	CARBONDALE	DEKOVEN	COAL	2.5	724.0	
-334.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	749.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-345.0	CARBONDALE	DAVIS	COAL	5.0	760.0	
-383.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	798.0	
-395.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	810.0	
-415.0	TRADEWATER	MT. RORAH	COAL	1.3	830.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502203000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512975 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.858541 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
45.0	CARBONDALE	BRERETON	LIMESTONE	-	370.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1785.0			LIMESTONE	-	2200.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502203000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512975 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.858541 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	377.0	
-	CARBONDALE	BRIAR HILL	COAL	-	408.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	580.0	
-	CARBONDALE	COLCHESTER	COAL	-	680.0	
-	SPOON	DAVIS	COAL	4.5	759.0	

MAPID: 16502204000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512967 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860363 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, PARKER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	592.0	
-215.0	CARBONDALE	SURVANT	COAL	2.5	634.0	
-273.0	CARBONDALE	COLCHESTER	COAL	0.5	692.0	
-307.0	CARBONDALE	DEKOVEN	COAL	2.5	726.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	757.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-347.0	CARBONDALE	DAVIS	COAL	4.0	766.0	
-383.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	802.0	
-395.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	814.0	
-416.0	TRADEWATER	MT. RORAH	COAL	1.8	835.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502204000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512967 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.860363 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1821.0	
-1778.0			LIMESTONE	-	2197.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502204000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512967 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860363 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	384.0	
-	CARBONDALE	BRIAR HILL	COAL	-	416.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	592.0	
-	CARBONDALE	COLCHESTER	COAL	-	693.0	
-	SPOON	DAVIS	COAL	4.0	767.0	

MAPID: 16502205000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508343 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855026 **DATE COLLECTED:** 8 / 0 / 1953
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, PERRY COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-211.0	CARBONDALE	SURVANT	COAL	1.3	630.0	
-285.0	CARBONDALE	COLCHESTER	COAL	2.0	704.0	
-300.0	CARBONDALE	DEKOVEN	COAL	2.5	719.0	
-331.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	750.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	5.0	758.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	795.0	
-387.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	806.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502205000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508343 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855026 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1417.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16502205000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508343 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855026 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2562.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.0	385.0	
-	CARBONDALE	BRIAR HILL	COAL	-	415.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	590.0	
-	CARBONDALE	COLCHESTER	COAL	-	704.0	
-	SPOON	DAVIS	COAL	4.5	758.0	

MAPID: 16502206000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.510669 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860368 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, RHINE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-162.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	562.0	
-202.0	CARBONDALE	SURVANT	COAL	2.0	602.0	
-258.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-300.0	CARBONDALE	DEKOVEN	COAL	1.0	700.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	733.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-342.0	CARBONDALE	DAVIS	COAL	4.0	742.0	
-378.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	778.0	
-388.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	788.0	
-408.0	TRADEWATER	MT. RORAH	COAL	1.3	808.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502206000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.510669 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.860368 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1786.0			LIMESTONE	-	2186.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16502206000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510669 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860368 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2533.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	367.0	
-	CARBONDALE	BRIAR HILL	COAL	-	389.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	561.0	
-	CARBONDALE	COLCHESTER	COAL	-	658.0	
-	SPOON	DAVIS	COAL	4.5	740.0	

MAPID: 16502207000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510663 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862075 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, RHINE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	565.0	
-210.0	CARBONDALE	SURVANT	COAL	1.0	605.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	664.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.0	699.0	
-340.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	735.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-355.0	CARBONDALE	DAVIS	COAL	2.0	750.0	
-385.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	70% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-396.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	791.0	
-415.0	TRADEWATER	MT. RORAH	COAL	1.5	810.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502207000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510663 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	BRERETON	LIMESTONE	-	365.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1801.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502207000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510663 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.862075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2532.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	374.0	
-	CARBONDALE	BRIAR HILL	COAL	-	407.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	566.0	
-	CARBONDALE	COLCHESTER	COAL	-	665.0	

MAPID: 16502208000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 390' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508514 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862081 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
21.0	CARBONDALE	BRERETON	LIMESTONE	-	367.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502209000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512992 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855016 **DATE COLLECTED:** 5 / 0 / 1953
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO., SPURLOCK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	595.0	
-202.0	CARBONDALE	SURVANT	COAL	0.5	632.0	
-260.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-298.0	CARBONDALE	DEKOVEN	COAL	2.5	728.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	760.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-338.0	CARBONDALE	DAVIS	COAL	3.5	768.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	802.0	
-385.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	815.0	
-403.0	TRADEWATER	MT. RORAH	COAL	1.5	833.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502209000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512992 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855016 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	BRERETON	LIMESTONE	-	387.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502209000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512992 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855016 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	394.0	
-	CARBONDALE	BRIAR HILL	COAL	-	422.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	594.0	
-	CARBONDALE	COLCHESTER	COAL	-	690.0	

MAPID: 16502210000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512998 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.853313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 828.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	410.0	
-	CARBONDALE	BRIAR HILL	COAL	-	440.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	6.0	518.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	601.0	
-	CARBONDALE	COLCHESTER	COAL	-	699.0	
-	SPOON	DAVIS	COAL	5.0	823.0	

MAPID: 16502210000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512998 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
36.0	CARBONDALE	BRERETON	LIMESTONE	-	402.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1845.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16502211000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 430' S line, 330' E line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512997 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853589 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:** Electric Log

SOURCE: MILLER, DEE DRLG. CO., SPURLOCK RAPP ETA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	600.0	
-204.0	CARBONDALE	SURVANT	COAL	1.0	640.0	
-264.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-304.0	CARBONDALE	DEKOVEN	COAL	2.0	740.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	768.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-341.0	CARBONDALE	DAVIS	COAL	4.0	777.0	
-374.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	
-389.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	825.0	
-407.0	TRADEWATER	MT. RORAH	COAL	1.3	843.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502211000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 430' S line, 330' E line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512997 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.853589 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**

SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
33.0	CARBONDALE	BRERETON	LIMESTONE	-	403.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1846.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16502211000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 430' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512997 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.853589 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 830.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	410.0	
-	CARBONDALE	BRIAR HILL	COAL	-	446.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.5	526.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	
-	CARBONDALE	COLCHESTER	COAL	-	700.0	
-	SPOON	DAVIS	COAL	5.0	825.0	

MAPID: 16503405000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.520003 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849776 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2607.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2.0	CARBONDALE	BRERETON	LIMESTONE	-	426.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2607.0	

MAPID: 16503487000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.514785 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.855012 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2578.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	390.0	
-	CARBONDALE	BRIAR HILL	COAL	-	420.0	
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	587.0	
-	CARBONDALE	COLCHESTER	COAL	-	688.0	

MAPID: 16503487000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.514785 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855012 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	BRERETON	LIMESTONE	-	383.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1826.0	
-2155.0		BASE BARLOW	LIMESTONE	-	2578.0	

MAPID: 16503825000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508315 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.860376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: FARRAR, FLETCHER F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1799.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16590909000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.514171 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.853069 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.2 **LOGGED (FT.):** 575.4 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 862-5 **WELL TYPE:** Coal Test

COMMENT: PERMIT #2 GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
448.2	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	
368.2	MODESTO		DARK SHALE	67.0	80.0	
301.2	MODESTO	CHAPEL	COAL W/ BLACK SHALE	7.0	147.0	
294.2	MODESTO	TRIVOLI	SANDSTONE	21.0	154.0	
273.2	MODESTO		SANDY SHALE	45.0	175.0	
228.2	MODESTO		GRAY SHALE	62.0	220.0	
166.2	MODESTO		SANDY SHALE	62.0	282.0	
104.2	MODESTO		CALCAREOUS SANDSTONE	5.0	344.0	
99.2	MODESTO		GRAY SHALE	21.0	349.0	
78.2	MODESTO	PIASA	LIMESTONE	3.0	370.0	
75.2	MODESTO		GRAY SHALE	23.0	373.0	
52.2	CARBONDALE	DANVILLE	COAL	2.0	396.0	
50.2	CARBONDALE		GRAY SHALE	24.0	398.0	
26.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	422.0	
20.2	CARBONDALE		SANDSTONE	6.0	428.0	
14.2	CARBONDALE		GRAY SHALE	23.0	434.0	
-8.8	CARBONDALE	BRERETON	LIMESTONE	4.0	457.0	
-12.8	CARBONDALE	HERRIN	COAL	5.3	461.0	
-18.1	CARBONDALE		UNDERCLAY	5.0	466.3	
-23.1	CARBONDALE		GRAY SHALE	26.0	471.3	
-49.1	CARBONDALE	BRIAR HILL	COAL	1.0	497.3	
-50.1	CARBONDALE		SANDY SHALE	52.0	498.3	
-102.1	CARBONDALE		GRAY SHALE	15.0	550.3	
-117.1	CARBONDALE	SPRINGFIELD	COAL	4.1	565.3	
-121.2	CARBONDALE		UNDERCLAY	1.0	569.4	
-122.2	CARBONDALE		SANDSTONE	5.0	570.4	

MAPID: 16501396000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.529176 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.857084 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2614.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-10.0	CARBONDALE	BRERETON	LIMESTONE	-	417.0	
-1430.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1837.0	
-1816.0			LIMESTONE	-	2223.0	
-2207.0		BASE BARLOW	LIMESTONE	-	2614.0	

MAPID: 16501396000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.529176 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.857084 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 3125.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	DANVILLE	COAL	-	357.0	
27.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	380.0	
-9.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	19.0	416.0	
-35.0	CARBONDALE	HERRIN	COAL	3.0	442.0	
-63.0	CARBONDALE	BRIAR HILL	COAL	-	470.0	
-77.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	26.0	484.0	
-131.0	CARBONDALE	SPRINGFIELD	COAL	5.0	538.0	
-195.0	CARBONDALE	HOUCHIN CREEK	COAL	-	602.0	

MAPID: 16501396000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529176 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.857084 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-303.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	710.0	
-383.0	SPOON	DAVIS	UNCLASSIFIED	-	790.0	
-1303.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 16501396000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529176 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857084 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 710.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	440.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	6.5	540.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	607.0	
-	CARBONDALE	COLCHESTER	COAL	-	710.0	

MAPID: 16502668000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538368 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.857383 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R., HALL HENRY C ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	628.0	
-252.0	CARBONDALE	SURVANT	COAL	1.3	670.0	
-312.0	CARBONDALE	COLCHESTER	COAL	0.5	730.0	
-354.0	CARBONDALE	DEKOVEN	COAL	1.5	772.0	
-381.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	799.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-390.0	CARBONDALE	DAVIS	COAL	4.0	808.0	
-420.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	838.0	
-433.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	851.0	
-462.0	TRADEWATER	MT. RORAH	COAL	1.3	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502668000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538368 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.857383 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:**
SOURCE: LINDSAY, THEODORE R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	BRERETON	LIMESTONE	-	415.0	
-1450.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1868.0	
-1815.0			LIMESTONE	-	2233.0	
-2230.0		BASE BARLOW	LIMESTONE	-	2648.0	

MAPID: 16502668000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538368 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857383 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 812.5 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	455.0	
-	CARBONDALE	BRIAR HILL	COAL	-	480.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	572.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	629.0	
-	CARBONDALE	COLCHESTER	COAL	-	729.0	
-	SPOON	DAVIS	COAL	4.5	808.0	

MAPID: 16503099000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524599 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851565 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2615.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, CABLE HEIRS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-222.0	CARBONDALE	SURVANT	COAL	1.0	639.0	
-283.0	CARBONDALE	COLCHESTER	COAL	0.6	700.0	
-316.0	CARBONDALE	DEKOVEN	COAL	3.0	733.0	
-348.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	765.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-355.0	CARBONDALE	DAVIS	COAL	4.0	772.0	
-386.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	803.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503099000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524599 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851565 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2615.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-3.0	CARBONDALE	BRERETON	LIMESTONE	-	420.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-1792.0			LIMESTONE	-	2209.0	
-2198.0		BASE BARLOW	LIMESTONE	-	2615.0	

MAPID: 16503099000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851565 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 703.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	423.0	
-	CARBONDALE	BRIAR HILL	COAL	-	454.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	528.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	594.0	
-	CARBONDALE	COLCHESTER	COAL	-	703.0	

MAPID: 16503281000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522272 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.860347 **DATE COLLECTED:** 5 / 0 / 1959
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 381.0 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP., HAYES-SPURLOCK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-234.0	CARBONDALE	SURVANT	COAL	1.3	624.0	
-292.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-330.0	CARBONDALE	DEKOVEN	COAL	2.8	720.0	
-360.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	750.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-370.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-409.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	799.0	
-415.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	805.0	
-450.0	TRADEWATER	MT. RORAH	COAL	3.0	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503281000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522272 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.860347 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 381.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	275.0	
110.0	MODESTO		GRAY SHALE	21.0	280.0	
89.0	CARBONDALE	DANVILLE	COAL	2.0	301.0	
87.0	CARBONDALE		SILTY SHALE	24.0	303.0	
63.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	7.0	327.0	
56.0	CARBONDALE	LAWSON	SANDSTONE	37.0	334.0	
19.0	CARBONDALE	BRERETON	LIMESTONE	4.5	371.0	
14.5	CARBONDALE	ANNA	BLACK SHALE	1.5	375.5	
13.0	CARBONDALE	HERRIN	COAL	4.0	377.0	

MAPID: 16503281000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522272 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.860347 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 763.5 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	377.0	
-	CARBONDALE	BRIAR HILL	COAL	-	407.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	5.5	493.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	580.0	
-	CARBONDALE	COLCHESTER	COAL	-	682.0	
-	SPOON	DAVIS	COAL	3.5	760.0	

MAPID: 16523910000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536046 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.861996 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 634.0 **LOG TYPE:** Electric Log
SOURCE: PETRO-SEARCH ASSOC., INC 1-P **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	466.0	
-	CARBONDALE	BRIAR HILL	COAL	-	492.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	562.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	634.0	

MAPID: 16525275000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522296 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.851617 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 693.0 **LOG TYPE:** Electric Log
SOURCE: ELLIOTT, ELBERT 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	421.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	543.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	591.0	
-	CARBONDALE	COLCHESTER	COAL	-	693.0	

MAPID: 16526145000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.530329 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.855984 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.5 **LOGGED (FT.):** 564.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 863-11 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.5	PLEISTOCENE		UNCONSOLIDATED	29.4	0.0	
381.1	MODESTO		SILTY SHALE	23.3	29.4	
357.8	MODESTO	WOMAC	COAL	2.5	52.7	
355.4	MODESTO		SILTSTONE	25.7	55.1	
329.6	MODESTO		SHALE	73.5	80.9	DARK GRAY
256.1	MODESTO	CHAPEL	COAL	2.5	154.4	
253.7	MODESTO	TRIVOLI	SANDSTONE	35.5	156.8	MEDIUM GRAY, FINE
218.2	MODESTO		SILTY SHALE	44.1	192.3	
174.1	MODESTO		LIMESTONE	2.5	236.4	
171.6	MODESTO		SILTY SHALE	83.3	238.9	
88.3	MODESTO	PIASA	LIMESTONE	6.1	322.2	
82.2	MODESTO		SHALE	15.9	328.3	DARK GRAY
66.2	CARBONDALE	DANVILLE	COAL	2.5	344.3	
63.8	CARBONDALE		SILTY SHALE	23.3	346.7	
40.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	370.0	
34.4	CARBONDALE		SILTY SHALE	9.8	376.1	
24.6	CARBONDALE	ANVIL ROCK	SANDSTONE	44.1	385.9	FINE
-19.5	CARBONDALE	BRERETON	LIMESTONE	3.7	430.0	
-23.2	CARBONDALE	ANNA	BLACK SHALE & COAL	2.5	433.7	
-25.6	CARBONDALE	HERRIN	COAL	6.1	436.1	
-31.8	CARBONDALE		UNDERCLAY	3.7	442.3	
-35.5	CARBONDALE		SILTY SHALE	18.4	446.0	
-53.8	CARBONDALE	BRIAR HILL	COAL	2.5	464.3	
-56.3	CARBONDALE	DYKERSBURG	SILTY SHALE	85.8	466.8	
-142.0	CARBONDALE	SPRINGFIELD	COAL	7.3	552.5	
-149.3	CARBONDALE		SILTY SHALE	4.2	559.8	

MAPID: 16500089000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1490' N line, 1425' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.553024 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.858913 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 612.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL CO. NO. 1006 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	DANVILLE	COAL	3.2	375.0	
40.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	420.0	
-18.0	CARBONDALE	HERRIN	COAL	5.5	478.0	
-44.0	CARBONDALE	BRIAR HILL	COAL	0.9	504.0	
-143.0	CARBONDALE	SPRINGFIELD	COAL	8.4	603.0	

MAPID: 16500089000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1490' N line, 1425' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.553024 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.858913 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 483.5 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL CO. NO. 1006 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
84.7	MODESTO	PIASA	LIMESTONE	3.2	375.3	
81.6	MODESTO		CALCAREOUS SHALE	19.3	378.4	
62.2	CARBONDALE	DANVILLE	COAL	2.3	397.8	
59.9	CARBONDALE		GRAY SHALE	20.7	400.1	
39.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	420.8	
34.7	CARBONDALE	LAWSON	CALCAREOUS SHALE	5.0	425.3	
29.7	CARBONDALE	LAWSON	SILTY SHALE	38.6	430.3	
-8.8	CARBONDALE	LAWSON	BLACK SHALE	1.7	468.8	
-10.5	CARBONDALE	JAMESTOWN	COAL	0.3	470.5	
-10.8	CARBONDALE		BLACK SHALE	2.3	470.8	
-13.0	CARBONDALE	BRERETON	LIMESTONE	3.8	473.0	
-16.8	CARBONDALE	ANNA	BLACK SHALE	1.3	476.8	
-18.0	CARBONDALE	HERRIN	COAL	5.5	478.0	

MAPID: 16500089000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1490' N line, 1425' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.553024 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.858913 **DATE COLLECTED:** 0 / 0 / 1921

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 612.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL CO. NO. 1006 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	65.0	0.0	
395.0	BOND		SHALE	8.0	65.0	
387.0	BOND		SHALE	1.0	73.0	W/FOSSILS
386.0	BOND		BLACK SHALE	3.0	74.0	
383.0	BOND		SANDY SHALE	12.0	77.0	
371.0	BOND		SHALE	4.0	89.0	
367.0	BOND		SHALE	14.5	93.0	
352.5	MODESTO	NEW HAVEN	COAL	1.5	107.5	
351.0	MODESTO		SANDY SHALE	26.0	109.0	
325.0	MODESTO		SHALE	8.0	135.0	BLUE
317.0	MODESTO		SHALE	54.0	143.0	BLUE
263.0	MODESTO		BLACK SHALE	4.0	197.0	
259.0	MODESTO		SHALE	10.4	201.0	
248.6	MODESTO	CHAPEL	COAL	1.5	211.4	
247.1	MODESTO		SANDY SHALE	9.1	212.9	
238.0	MODESTO		SANDSTONE	6.0	222.0	
232.0	MODESTO		SANDY SHALE	34.0	228.0	
198.0	MODESTO		SHALE	18.0	262.0	
180.0	MODESTO		SHALE	32.3	280.0	W/LS
147.7	MODESTO		COAL	0.5	312.3	
147.2	MODESTO		UNDERCLAY	1.2	312.8	
146.0	MODESTO		SANDY SHALE	10.0	314.0	
136.0	MODESTO		SHALE	8.0	324.0	
128.0	MODESTO		SHALE	1.0	332.0	
127.0	MODESTO		SHALE	3.0	333.0	
124.0	MODESTO		SHALE	2.5	336.0	DARK
121.5	MODESTO		COAL	0.8	338.5	
120.7	MODESTO		UNDERCLAY	1.7	339.3	
119.0	MODESTO		CALCAREOUS SHALE	4.0	341.0	CALC
115.0	MODESTO		SANDY SHALE	9.0	345.0	W/LS
106.0	MODESTO		SANDY SHALE	6.0	354.0	
100.0	MODESTO		SHALE	10.0	360.0	
90.0	MODESTO		BLACK SHALE	4.0	370.0	
86.0	MODESTO		SANDY SHALE	1.0	374.0	
85.0	MODESTO	PIASA	LIMESTONE	3.2	375.0	
81.8	MODESTO		CALCAREOUS SHALE	1.5	378.2	CALC
80.3	MODESTO		SHALE	17.8	379.7	W/LS
62.5	CARBONDALE	DANVILLE	COAL	2.3	397.5	
60.1	CARBONDALE		SHALE	20.7	399.9	

39.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	420.5	
35.0	CARBONDALE		CALCAREOUS SHALE	5.0	425.0	CALC
30.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	38.6	430.0	
-8.6	CARBONDALE		BLACK SHALE	1.7	468.6	
-10.3	CARBONDALE	JAMESTOWN	COAL	0.3	470.3	
-10.5	CARBONDALE		BLACK SHALE	2.3	470.5	
-12.8	CARBONDALE	BRERETON	LIMESTONE	3.8	472.8	
-16.5	CARBONDALE	ANNA	BLACK SHALE	1.3	476.5	
-17.8	CARBONDALE	HERRIN	COAL	5.5	477.8	
-23.3	CARBONDALE		UNDERCLAY	1.8	483.3	
-25.0	CARBONDALE		SHALE	5.0	485.0	
-30.0	CARBONDALE		SHALE	10.0	490.0	
-40.0	CARBONDALE		BLACK SHALE	4.0	500.0	
-44.0	CARBONDALE	BRIAR HILL	COAL	0.9	504.0	
-44.9	CARBONDALE	DYKERSBURG	SHALE	5.1	504.9	
-50.0	CARBONDALE	DYKERSBURG	SANDY SHALE	79.0	510.0	
-129.0	CARBONDALE	DYKERSBURG	SANDY SHALE	14.2	589.0	DARK
-143.2	CARBONDALE	SPRINGFIELD	COAL	7.1	603.2	
-150.3	CARBONDALE	SPRINGFIELD	PYRITE	0.0	610.3	
-150.3	CARBONDALE	SPRINGFIELD	COAL	1.0	610.3	
-151.3	CARBONDALE	SPRINGFIELD	SHALE	0.1	611.3	
-151.4	CARBONDALE	SPRINGFIELD	COAL	0.2	611.4	
-151.6	CARBONDALE		UNDERCLAY	0.4	611.6	

MAPID: 16502634000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.542983 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857512 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2657.0 **LOG TYPE:** Electric Log

SOURCE: LINDSAY, THEODORE R., TURNER S J ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	625.0	
-233.0	CARBONDALE	SURVANT	COAL	1.0	662.0	
-301.0	CARBONDALE	COLCHESTER	COAL	0.6	730.0	
-343.0	CARBONDALE	DEKOVEN	COAL	2.0	772.0	
-366.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	795.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-373.0	CARBONDALE	DAVIS	COAL	4.0	802.0	
-403.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	832.0	
-418.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	847.0	
-450.0	TRADEWATER	MT. RORAH	COAL	2.0	879.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502634000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542983 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.857512 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2657.0 **LOG TYPE:**
SOURCE: LINDSAY, THEODORE R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	BRERETON	LIMESTONE	-	443.0	
-1437.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1866.0	
-1821.0			LIMESTONE	-	2250.0	
-2228.0		BASE BARLOW	LIMESTONE	-	2657.0	

MAPID: 16502634000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542983 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857512 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 806.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	449.0	
-	CARBONDALE	BRIAR HILL	COAL	-	476.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.0	570.0	CONTAINS A SHALE PARTING
-	CARBONDALE	HOUCHIN CREEK	COAL	-	625.0	
-	CARBONDALE	COLCHESTER	COAL	-	724.0	
-	SPOON	DAVIS	COAL	4.0	802.0	

MAPID: 16502694000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542987 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.85569 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 1920.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-288.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	710.0	
-368.0	SPOON	DAVIS	UNCLASSIFIED	-	790.0	
-1498.0	BASE OF PENN.		UNCLASSIFIED	-	1920.0	

MAPID: 16502694000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542987 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.85569 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:**
SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	BRERETON	LIMESTONE	-	430.0	
-1818.0			LIMESTONE	-	2240.0	
-2226.0		BASE BARLOW	LIMESTONE	-	2648.0	

MAPID: 16502694000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542987 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.85569 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC., BRADLEY MALLIE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	612.0	
-228.0	CARBONDALE	SURVANT	COAL	1.3	650.0	
-288.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-332.0	CARBONDALE	DEKOVEN	COAL	2.5	754.0	
-358.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	780.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-368.0	CARBONDALE	DAVIS	COAL	4.0	790.0	
-397.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	819.0	
-451.0	TRADEWATER	MT. RORAH	COAL	1.5	873.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502694000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542987 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.85569 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 794.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	436.0	
-	CARBONDALE	BRIAR HILL	COAL	-	464.0	
-	CARBONDALE	SPRINGFIELD	COAL	9.0	557.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	613.0	
-	CARBONDALE	COLCHESTER	COAL	-	710.0	
-	SPOON	DAVIS	COAL	4.0	790.0	

MAPID: 16502939000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545277 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.859392 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2666.0 **LOG TYPE:** Electric Log
SOURCE: ROSSI, PAUL, GREGG GRETTA 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	629.0	
-232.0	CARBONDALE	SURVANT	COAL	2.5	665.0	
-297.0	CARBONDALE	COLCHESTER	COAL	0.5	730.0	
-337.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-362.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	795.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-372.0	CARBONDALE	DAVIS	COAL	4.0	805.0	
-401.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	834.0	
-417.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	850.0	
-447.0	TRADEWATER	MT. RORAH	COAL	0.7	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502939000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545277 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.859392 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2666.0 **LOG TYPE:**
SOURCE: ROSSI, PAUL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-12.0	CARBONDALE	BRERETON	LIMESTONE	-	445.0	
-1453.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1886.0	
-1821.0			LIMESTONE	-	2254.0	
-2233.0		BASE BARLOW	LIMESTONE	-	2666.0	

MAPID: 16502939000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545277 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.859392 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 809.0 **LOG TYPE:** Electric Log
SOURCE: ROSSI, PAUL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	452.0	
-	CARBONDALE	BRIAR HILL	COAL	-	480.0	
-	CARBONDALE	SPRINGFIELD	COAL	9.0	577.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	628.0	
-	CARBONDALE	COLCHESTER	COAL	-	731.0	
-	SPOON	DAVIS	COAL	4.0	805.0	

MAPID: 16503287000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542997 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.852046 **DATE COLLECTED:** 6 / 0 / 1959
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2654.0 **LOG TYPE:** Electric Log
SOURCE: COY OIL, INC., BRADLEY M 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	610.0	
-218.0	CARBONDALE	SURVANT	COAL	1.5	645.0	
-283.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-318.0	CARBONDALE	DEKOVEN	COAL	3.0	745.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	772.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-354.0	CARBONDALE	DAVIS	COAL	4.0	781.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503287000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542997 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.852046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2654.0 **LOG TYPE:**
SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
2.0	CARBONDALE	BRERETON	LIMESTONE	-	425.0	
-1441.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1868.0	
-1818.0			LIMESTONE	-	2245.0	
-2227.0		BASE BARLOW	LIMESTONE	-	2654.0	

MAPID: 16503287000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542997 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.852046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 785.0 **LOG TYPE:** Electric Log
SOURCE: COY OIL, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	431.0	
-	CARBONDALE	BRIAR HILL	COAL	-	460.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	558.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	
-	CARBONDALE	COLCHESTER	COAL	-	711.0	
-	SPOON	DAVIS	COAL	4.0	781.0	

MAPID: 16501522000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561562 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.862185 **DATE COLLECTED:** 1 / 0 / 1954
SURFACE ELEVATION (FT.): 463.0 **LOGGED (FT.):** 1795.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-327.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	790.0	
-412.0	SPOON	DAVIS	UNCLASSIFIED	-	875.0	
-1332.0	BASE OF PENN.		UNCLASSIFIED	-	1795.0	

MAPID: 16501522000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.561562 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.862185 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 463.0 **LOGGED (FT.):** 3298.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	DANVILLE	COAL	-	413.0	
46.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	4.0	417.0	
17.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	446.0	
3.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	30.0	460.0	
-35.0	CARBONDALE	HERRIN	COAL	4.0	498.0	
-57.0	CARBONDALE	BRIAR HILL	COAL	-	520.0	
-77.0	CARBONDALE	CANTON	SILTSTONE	30.0	540.0	
-164.0	CARBONDALE	SPRINGFIELD	COAL	6.0	627.0	
-210.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	18.0	673.0	
-230.0	CARBONDALE	HOUCHIN CREEK	COAL	-	693.0	

MAPID: 16501522000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.561562 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.862185 **DATE COLLECTED:** 1 / 0 / 1954

SURFACE ELEVATION (FT.): 463.0 **LOGGED (FT.):** 878.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	695.0	
-296.0	CARBONDALE	SURVANT	COAL	2.5	759.0	
-327.0	CARBONDALE	COLCHESTER	COAL	0.5	790.0	
-377.0	CARBONDALE	DEKOVEN	COAL	2.5	840.0	
-405.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	868.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-411.0	CARBONDALE	DAVIS	COAL	4.0	874.0	
-444.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	907.0	
-484.0	TRADEWATER	MT. RORAH	COAL	1.8	947.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501522000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561562 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.862185 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 878.5 **LOG TYPE:** Electric Log
SOURCE: 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	495.0	
-	CARBONDALE	BRIAR HILL	COAL	-	521.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.0	627.0	CONTAINS A SHALE PARTING
-	CARBONDALE	COLCHESTER	COAL	-	790.0	
-	SPOON	DAVIS	COAL	4.5	874.0	

MAPID: 16502212000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559128 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.857875 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 3185.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-17.0	CARBONDALE	HERRIN	COAL	5.0	470.0	
-43.0	CARBONDALE	BRIAR HILL	COAL	-	496.0	
-161.0	CARBONDALE	SPRINGFIELD	COAL	8.0	614.0	
-227.0	CARBONDALE	HOUCHIN CREEK	COAL	-	680.0	

MAPID: 16502212000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.559128 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.857875 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 475.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	MODESTO	PIASA	LIMESTONE	5.0	356.0	
92.0	MODESTO		GRAY SHALE	16.0	361.0	
76.0	CARBONDALE	DANVILLE	COAL	2.0	377.0	
74.0	CARBONDALE		SILTY SHALE	14.5	379.0	
59.5	CARBONDALE	ALLENBY	COAL	0.5	393.5	
59.0	CARBONDALE		CLAYSTONE & SHALE	8.0	394.0	
51.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	402.0	
47.0	CARBONDALE	LAWSON	SILTY SHALE	28.0	406.0	
19.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	15.0	434.0	
4.0	CARBONDALE	LAWSON	SANDSTONE	15.0	449.0	
-11.0	CARBONDALE	BRERETON	LIMESTONE	5.0	464.0	
-16.0	CARBONDALE	ANNA	BLACK SHALE	1.0	469.0	
-17.0	CARBONDALE	HERRIN	COAL	5.0	470.0	

MAPID: 16502212000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.559128 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.857875 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 2714.0 **LOG TYPE:**

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-10.0	CARBONDALE	BRERETON	LIMESTONE	-	463.0	
-1462.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1915.0	
-1832.0			LIMESTONE	-	2285.0	
-2261.0		BASE BARLOW	LIMESTONE	-	2714.0	

MAPID: 16502212000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559128 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.857875 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 475.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	685.0	
-282.0	CARBONDALE	SURVANT	COAL	1.5	735.0	
-322.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-367.0	CARBONDALE	DEKOVEN	COAL	1.5	820.0	
-385.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	838.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-394.0	CARBONDALE	DAVIS	COAL	4.0	847.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	882.0	
-437.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	890.0	
-472.0	TRADEWATER	MT. RORAH	COAL	0.5	925.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502212000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559128 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857875 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 850.0 **LOG TYPE:** Electric Log
SOURCE: 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	470.0	
-	CARBONDALE	BRIAR HILL	COAL	-	497.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.5	614.0	CONTAINS A SHALE PARTING
-	CARBONDALE	COLCHESTER	COAL	-	764.0	
-	SPOON	DAVIS	COAL	4.0	846.0	

MAPID: 16503120000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2707.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG., GIROT-QUICK COM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-273.0	CARBONDALE	SURVANT	COAL	0.5	722.0	
-314.0	CARBONDALE	COLCHESTER	COAL	0.5	763.0	
-363.0	CARBONDALE	DEKOVEN	COAL	3.0	812.0	
-391.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	840.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-398.0	CARBONDALE	DAVIS	COAL	4.0	847.0	
-431.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	880.0	
-441.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	890.0	
-486.0	TRADEWATER	MT. RORAH	COAL	0.7	935.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503120000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2707.0 **LOG TYPE:**
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-5.0	CARBONDALE	BRERETON	LIMESTONE	-	454.0	
-1464.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1913.0	
-1827.0			LIMESTONE	-	2276.0	
-2258.0		BASE BARLOW	LIMESTONE	-	2707.0	

MAPID: 16503120000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 850.5 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	462.0	
-	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.0	595.0	CONTAINS A SHALE PARTING
-	CARBONDALE	COLCHESTER	COAL	-	765.0	
-	SPOON	DAVIS	COAL	4.5	846.0	

MAPID: 16503294000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:** 8 / 0 / 1959
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 2688.0 **LOG TYPE:** Electric Log
SOURCE: KEWANEE OIL & GAS, GENE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	618.0	
-200.0	CARBONDALE	SURVANT	COAL	0.5	651.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.6	736.0	
-324.0	CARBONDALE	DEKOVEN	COAL	3.0	775.0	
-349.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	800.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-357.0	CARBONDALE	DAVIS	COAL	4.0	808.0	
-385.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	836.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503294000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 2688.0 **LOG TYPE:**
SOURCE: KEWANEE OIL & GAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
18.0	CARBONDALE	BRERETON	LIMESTONE	-	433.0	
-1449.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1900.0	
-1822.0			LIMESTONE	-	2273.0	
-2237.0		BASE BARLOW	LIMESTONE	-	2688.0	

MAPID: 16503294000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566237 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.85771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 810.5 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	440.0	
-	CARBONDALE	SPRINGFIELD	COAL	9.0	564.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	617.0	
-	CARBONDALE	COLCHESTER	COAL	-	734.0	
-	SPOON	DAVIS	COAL	4.5	806.0	

MAPID: 16525443000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568513 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.854012 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 588.0 **LOG TYPE:** Electric Log
SOURCE: TRISTRAM RESOURCES, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-	446.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	580.0	

MAPID: 16590002000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1380' N line, 2800' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.567734 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.859326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 568.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 865-18 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	87.0	0.0	GLACIAL DRIFT DEPOSITS
280.5	MODESTO	CHAPEL	COAL	1.5	164.5	
149.5	MODESTO		COAL	0.8	295.5	
91.0	CARBONDALE	DANVILLE	COAL	2.0	354.0	
10.0	CARBONDALE	HERRIN	COAL	5.5	435.0	
-18.0	CARBONDALE	BRIAR HILL	COAL	1.5	463.0	
-115.0	CARBONDALE	SPRINGFIELD	COAL	8.0	560.0	

MAPID: 16503137000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590379 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.859296 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 2684.0 **LOG TYPE:**
SOURCE: ATHENE DEV. CO., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-51.0	CARBONDALE	BRERETON	LIMESTONE	-	528.0	
-1459.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1936.0	
-1817.0			LIMESTONE	-	2294.0	
-2207.0		BASE BARLOW	LIMESTONE	-	2684.0	

MAPID: 16503137000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590379 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.859296 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 541.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
54.0	MODESTO	PIASA	LIMESTONE	6.0	423.0	
48.0	MODESTO		GRAY SHALE	12.0	429.0	
36.0	CARBONDALE	DANVILLE	COAL	2.0	441.0	
34.0	CARBONDALE		SILTY SHALE	18.0	443.0	
16.0	CARBONDALE	ALLENBY	COAL	1.0	461.0	
15.0	CARBONDALE		CLAYSTONE & SHALE	6.0	462.0	
9.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	468.0	
5.0	CARBONDALE	LAWSON	SHALE	8.0	472.0	
-3.0	CARBONDALE	LAWSON	SANDSTONE	48.0	480.0	
-51.0	CARBONDALE	LAWSON	SHALE	1.0	528.0	
-52.0	CARBONDALE	BRERETON	LIMESTONE	4.0	529.0	
-56.0	CARBONDALE	ANNA	BLACK SHALE	2.0	533.0	
-58.0	CARBONDALE	HERRIN	COAL	6.0	535.0	

MAPID: 16503137000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590379 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.859296 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 1780.0 **LOG TYPE:** Electric Log
SOURCE: ATHENE DEV. CO., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-363.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	840.0	
-443.0	SPOON	DAVIS	UNCLASSIFIED	-	920.0	
-1303.0	BASE OF PENN.		UNCLASSIFIED	-	1780.0	

MAPID: 16503137000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590379 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.859296 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 541.0 **LOG TYPE:** Electric Log
SOURCE: ATHENE DEV. CO., INC., BENNETT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-233.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	710.0	
-272.0	CARBONDALE	SURVANT	COAL	1.3	749.0	
-361.0	CARBONDALE	COLCHESTER	COAL	0.6	838.0	
-403.0	CARBONDALE	DEKOVEN	COAL	1.8	880.0	
-433.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	910.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	5.0	921.0	
-476.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	953.0	
-482.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	959.0	
-518.0	TRADEWATER	MT. RORAH	COAL	1.3	995.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503137000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590379 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.859296 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 927.5 **LOG TYPE:** Electric Log
SOURCE: ATHENE DEV. CO., INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	6.0	535.0	
-	CARBONDALE	BRIAR HILL	COAL	-	561.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	633.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	710.0	
-	CARBONDALE	COLCHESTER	COAL	-	837.0	
-	SPOON	DAVIS	COAL	5.5	922.0	

MAPID: 16503818000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 475' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.58335 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.850181 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2676.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1459.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1915.0	
-1824.0			LIMESTONE	-	2280.0	
-2220.0		BASE BARLOW	LIMESTONE	-	2676.0	

MAPID: 16525293000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 950' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593181 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.853829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 568.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	4.5	476.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	562.0	

MAPID: 16525417000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.58787 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.852007 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 19.5 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-351.0	CARBONDALE	DEKOVEN	COAL	2.0	808.0	
-379.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	836.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-388.0	CARBONDALE	DAVIS	COAL	5.0	845.0	
-423.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	880.0	
-429.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	886.0	
-458.0	TRADEWATER	MT. RORAH	COAL	2.0	915.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525433000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.592807 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.852007 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 17.6 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	640.0	
-247.0	CARBONDALE	SURVANT	COAL	0.5	700.0	
-321.0	CARBONDALE	COLCHESTER	COAL	0.5	774.0	
-358.0	CARBONDALE	DEKOVEN	COAL	2.0	811.0	
-387.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	840.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-397.0	CARBONDALE	DAVIS	COAL	4.0	850.0	
-432.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	885.0	
-437.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	890.0	
-492.0	TRADEWATER	MT. RORAH	COAL	2.0	945.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525442000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.595276 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85201 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 11.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-319.0	CARBONDALE	COLCHESTER	COAL	0.5	779.0	
-356.0	CARBONDALE	DEKOVEN	COAL	2.5	816.0	
-386.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	846.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-394.0	CARBONDALE	DAVIS	COAL	4.0	854.0	
-430.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	
-435.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	895.0	
-471.0	TRADEWATER	MT. RORAH	COAL	2.0	931.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525449000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595292 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.850188 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 7.7 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-258.0	CARBONDALE	SURVANT	COAL	1.8	698.0	
-312.0	CARBONDALE	COLCHESTER	COAL	0.5	752.0	
-352.0	CARBONDALE	DEKOVEN	COAL	2.0	792.0	
-376.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	816.0	35 PERCENT SANDSTONE IN DEKOVEN SPLIT
-386.0	CARBONDALE	DAVIS	COAL	4.0	826.0	
-423.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	863.0	
-429.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	869.0	
-464.0	TRADEWATER	MT. RORAH	COAL	1.8	904.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525500000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587864 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853826 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 16.2 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-271.0	CARBONDALE	SURVANT	COAL	3.0	746.0	
-338.0	CARBONDALE	COLCHESTER	COAL	0.5	813.0	
-373.0	CARBONDALE	DEKOVEN	COAL	3.0	848.0	
-403.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	878.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-411.0	CARBONDALE	DAVIS	COAL	4.0	886.0	
-450.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	925.0	
-455.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	930.0	
-485.0	TRADEWATER	MT. RORAH	COAL	2.0	960.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525505000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587859 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855648 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 486.0 **LOGGED (FT.):** 18.9 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-249.0	CARBONDALE	SURVANT	COAL	0.0	735.0	
-352.0	CARBONDALE	COLCHESTER	COAL	0.5	838.0	
-394.0	CARBONDALE	DEKOVEN	COAL	2.0	880.0	
-423.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	909.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-434.0	CARBONDALE	DAVIS	COAL	4.0	920.0	
-464.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	950.0	
-469.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	955.0	
-512.0	TRADEWATER	MT. RORAH	COAL	2.0	998.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525720000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 455' S line, 130' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.58617 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.857815 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 890.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	6.0	494.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.5	608.0	
-	CARBONDALE	COLCHESTER	COAL	-	810.0	
-	SPOON	DAVIS	COAL	4.0	886.0	

MAPID: 16525731000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 17' S line, 218' E line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.582467 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.856604 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 755.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0	434.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.5	554.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	-	603.0	
-	CARBONDALE	COLCHESTER	COAL	-	755.0	

MAPID: 16526146000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1100' N line, 700' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.593989 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.860224 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 688.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-12 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0	GLACIAL DRIFT
-	BOND		SANDY SHALE	30.0	30.0	
-	BOND	MT. CARMEL	SANDSTONE	20.0	60.0	FINE
-	MODESTO		SILTY SHALE	90.0	80.0	
-	MODESTO	WOMAC	COAL	1.0	170.0	
-	MODESTO		SILTY SHALE	106.0	171.0	
-	MODESTO	CHAPEL	COAL	1.0	277.0	
-	MODESTO	TRIVOLI	SANDSTONE	44.0	278.0	FINE
-	MODESTO		SILTY SHALE	58.0	322.0	
-	MODESTO		SANDY SHALE	25.0	380.0	
-	MODESTO	POND CREEK	COAL	1.0	405.0	
-	MODESTO		SANDY SHALE	9.0	406.0	WITH SANDSTONE BEDS
-	MODESTO		SANDSTONE	10.0	415.0	FINE
-	MODESTO		SILTY SHALE	22.0	425.0	
-	MODESTO	PIASA	LIMESTONE	4.0	447.0	TAN
-	MODESTO		GRAY SHALE	14.0	451.0	
-	CARBONDALE	DANVILLE	COAL	2.0	465.0	
-	CARBONDALE		SILTY SHALE	18.0	467.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	485.0	
-	CARBONDALE		GRAY SHALE	5.0	489.0	
-	CARBONDALE		SILTY SHALE	16.0	494.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	35.0	510.0	FINE TO MEDIUM
-	CARBONDALE		CALCAREOUS SHALE	3.0	545.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	4.5	548.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	2.0	552.5	
-	CARBONDALE	HERRIN	COAL	5.9	554.5	
-	CARBONDALE		UNDERCLAY	3.0	560.4	
-	CARBONDALE		LIMESTONE	3.0	563.4	NODULAR
-	CARBONDALE		SILTY SHALE	25.6	566.4	
-	CARBONDALE	BRIAR HILL	COAL	2.5	592.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	67.5	594.5	
-	CARBONDALE	SPRINGFIELD	COAL	6.8	662.0	
-	CARBONDALE		SILTY SHALE	1.4	668.8	WITH THIN COAL BANDS
-	CARBONDALE		SILTY SHALE	9.8	670.2	
-	CARBONDALE		SANDSTONE	8.0	680.0	FINE

MAPID: 16526147000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 150' N line, 1675' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.590568 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.862834 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 685.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-13 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	GLACIAL DRIFT
-	BOND		SANDY SHALE	22.0	25.0	SOFT, YELLOW BROWN
-	BOND	MT. CARMEL	SANDSTONE	14.0	47.0	FINE
-			SILTY SHALE	210.0	61.0	
-	MODESTO	CHAPEL	COAL	1.0	271.0	
-	MODESTO	TRIVOLI	SANDSTONE	34.0	272.0	FINE
-	MODESTO		SILTY SHALE	67.0	306.0	
-	MODESTO		SANDY SHALE	22.0	373.0	
-	MODESTO		CARBONACEOUS SHALE	4.0	395.0	DARK GRAY
-	MODESTO	POND CREEK	COAL	1.0	399.0	
-	MODESTO		SANDY SHALE	37.0	400.0	WITH THIN SANDSTONE BEDS
-	MODESTO	PIASA	LIMESTONE	4.0	437.0	TAN
-	MODESTO		GRAY SHALE	13.0	441.0	
-	CARBONDALE	DANVILLE	COAL	2.0	454.0	
-	CARBONDALE		SILTY SHALE	24.0	456.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	480.0	
-	CARBONDALE		GRAY SHALE	6.0	486.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	44.0	492.0	FINE
-	CARBONDALE		CALCAREOUS SHALE	7.0	536.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	5.3	543.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE	2.7	548.3	
-	CARBONDALE	HERRIN	COAL	6.5	551.0	
-	CARBONDALE		UNDERCLAY	2.3	557.5	
-	CARBONDALE		GRAY SHALE	2.2	559.8	WITH LIMESTONE NODULES
-	CARBONDALE		SILTY SHALE	8.0	562.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	570.0	BONE
-	CARBONDALE	DYKERSBURG	SILTY SHALE	53.0	572.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.0	625.0	
-	CARBONDALE	SPRINGFIELD	SILTY SHALE	24.4	628.0	
-	CARBONDALE	SPRINGFIELD	COAL	2.6	652.4	
-	CARBONDALE	SPRINGFIELD	SHALE	0.8	655.0	DARK GRAY
-	CARBONDALE	SPRINGFIELD	COAL	0.9	655.8	
-	CARBONDALE		SILTY SHALE	28.3	656.7	

MAPID: 16526148000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1350' N line, 2300' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.588426 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.859512 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 663.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-15 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0	GLACIAL DRIFT
-	BOND		SANDY SHALE	20.0	30.0	
-	BOND		SILTY SHALE	118.0	50.0	
-	BOND	MT. CARMEL	SANDSTONE	6.0	168.0	FINE
-	BOND		SILTY SHALE	80.0	174.0	
-	MODESTO	CHAPEL	COAL	1.0	254.0	
-	MODESTO		SILTY SHALE	8.0	255.0	
-	MODESTO		SILTY SHALE	32.0	263.0	WITH SANDSTONE BEDS
-	MODESTO	TRIVOLI	SANDSTONE	9.0	295.0	FINE
-	MODESTO		SILTY SHALE	72.0	304.0	
-	MODESTO		CARBONACEOUS SHALE	6.0	376.0	DARK GRAY
-	MODESTO	POND CREEK	COAL	1.0	382.0	
-	MODESTO		SANDY SHALE	37.0	383.0	WITH SANDSTONE BEDS
-	MODESTO	PIASA	LIMESTONE	5.0	420.0	
-	MODESTO		GRAY SHALE	12.0	425.0	
-	CARBONDALE	DANVILLE	COAL	1.0	437.0	
-	CARBONDALE		SILTY SHALE	28.0	438.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	466.0	
-	CARBONDALE		GRAY SHALE	10.0	471.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	40.0	481.0	FINE, SHALEY
-	CARBONDALE		CARBONACEOUS SHALE	6.0	521.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	3.4	527.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	2.3	530.4	
-	CARBONDALE	HERRIN	COAL	6.8	532.7	
-	CARBONDALE		CARBONACEOUS SHALE	0.5	539.5	DARK GRAY
-	CARBONDALE		SILTY SHALE	14.0	540.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	554.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	74.3	555.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.9	629.3	
-	CARBONDALE		SILTY SHALE	11.0	633.2	
-	CARBONDALE		COAL WITH SHALE	7.6	644.2	ALTERNATING THIN BEDS
-	CARBONDALE		SILTY SHALE	11.2	651.8	

MAPID: 16526149000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1150' N line, 1300' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.591901 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.860078 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 672.5 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-16 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	GLACIAL DRIFT
-	BOND		SANDSTONE	15.0	60.0	
-	BOND		SILTY SHALE	78.0	75.0	
-	BOND	MT. CARMEL	SANDSTONE	17.0	153.0	FINE
-	BOND		GRAY SHALE	6.0	170.0	
-			SILTY SHALE	106.0	176.0	
-	MODESTO	CHAPEL	COAL	1.0	282.0	
-	MODESTO	TRIVOLI	SANDSTONE	43.0	283.0	FINE
-	MODESTO		SILTY SHALE	124.0	326.0	
-	MODESTO	PIASA	LIMESTONE	4.0	450.0	TAN
-	MODESTO		GRAY SHALE	14.0	454.0	
-	CARBONDALE	DANVILLE	COAL	1.0	468.0	
-	CARBONDALE		GRAY SHALE	23.0	469.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	492.0	
-	CARBONDALE		SHALE	7.0	496.0	DARK GRAY
-	CARBONDALE	ANVIL ROCK	SANDSTONE	47.0	503.0	FINE
-	CARBONDALE		CALCAREOUS SHALE	5.0	550.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	5.0	555.0	
-	CARBONDALE	ANNA	BLACK SHALE & COAL	3.0	560.0	
-	CARBONDALE	HERRIN	COAL	6.0	563.0	
-	CARBONDALE		SHALE	1.0	569.0	DARK
-	CARBONDALE		SILTY SHALE	13.0	570.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	583.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	70.5	584.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.8	654.5	
-	CARBONDALE		SILTY SHALE	11.2	661.3	

MAPID: 16526150000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 250' N line, 1000' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.592922 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.862565 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 688.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-17 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	GLACIAL DRIFT
-	BOND		SILTY SHALE	115.0	80.0	
-	BOND	MT. CARMEL	SANDSTONE	5.0	195.0	FINE
-			SILTY SHALE	93.0	200.0	
-	MODESTO	CHAPEL	COAL	1.0	293.0	
-	MODESTO	TRIVOLI	SANDSTONE	41.0	294.0	FINE
-	MODESTO		SANDY SHALE	95.0	335.0	
-	MODESTO		SANDSTONE	15.0	430.0	FINE
-	MODESTO		SILTY SHALE	18.0	445.0	
-	MODESTO	PIASA	LIMESTONE	4.0	463.0	TAN
-	MODESTO		GRAY SHALE	15.0	467.0	
-	CARBONDALE	DANVILLE	COAL	2.0	482.0	
-	CARBONDALE		GRAY SHALE	22.0	484.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	506.0	
-	CARBONDALE		SHALE	3.0	511.0	DARK GRAY
-	CARBONDALE	ANVIL ROCK	SANDSTONE	48.0	514.0	FINE SHALEY
-	CARBONDALE		CALCAREOUS SHALE	7.0	562.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	5.0	569.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	2.0	574.0	
-	CARBONDALE	HERRIN	COAL	6.0	576.0	
-	CARBONDALE		UNDERCLAY	3.0	582.0	
-	CARBONDALE		SILTY SHALE	10.0	585.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	595.0	
-	CARBONDALE		SILTY SHALE	58.0	596.0	
-	CARBONDALE		COAL	1.0	654.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	21.9	655.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.5	676.9	
-	CARBONDALE	SPRINGFIELD	GRAY SHALE	0.3	683.4	
-	CARBONDALE	SPRINGFIELD	COAL	0.2	683.7	
-	CARBONDALE	SPRINGFIELD	GRAY SHALE	0.7	683.9	
-	CARBONDALE	SPRINGFIELD	COAL	0.8	684.6	
-	CARBONDALE		SILTY SHALE	2.6	685.4	

MAPID: 16526151000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2350' N line, 1150' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.592458 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.856767 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 678.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-19 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	GLACIAL DEPOSITS
-	BOND	MT. CARMEL	SANDSTONE	22.0	40.0	FINE TO MEDIUM
-	BOND	CARTHAGE	LIMESTONE	6.0	62.0	GRAY
-	MODESTO		SILTY SHALE	86.0	68.0	
-	MODESTO	WOMAC	COAL	1.0	154.0	
-	MODESTO		SILTY SHALE	94.0	155.0	
-	MODESTO		LIMESTONE	1.0	249.0	
-	MODESTO		GRAY SHALE	20.0	250.0	
-	MODESTO	TRIVOLI	SANDSTONE	48.0	270.0	FINE
-	MODESTO		SILTY SHALE	72.0	318.0	
-	MODESTO	POND CREEK	BLACK SHALE	4.0	390.0	WITH COAL
-	MODESTO		GRAY SHALE	8.0	394.0	
-	MODESTO		SANDSTONE	31.0	402.0	FINE
-	MODESTO	PIASA	LIMESTONE	5.0	433.0	TAN
-			SANDY SHALE	38.0	438.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	476.0	
-	CARBONDALE		GRAY SHALE	2.0	480.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	56.0	482.0	FINE
-	CARBONDALE		GRAY SHALE	5.0	538.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	543.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	1.1	547.0	
-	CARBONDALE	HERRIN	COAL	6.4	548.1	
-	CARBONDALE		UNDERCLAY	1.5	554.5	
-	CARBONDALE		SILTY SHALE	23.0	556.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	579.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	74.0	580.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	654.0	
-	CARBONDALE		SILTY SHALE	2.0	660.0	WITH THIN COAL BANDS
-	CARBONDALE		SILTY SHALE	16.0	662.0	

MAPID: 16526152000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2250' N line, 950' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.593151 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.857045 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 674.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 866-20 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	GLACIAL DEPOSITS
-	BOND		SANDSTONE	35.0	20.0	FINE, TAN
-	BOND	MT. CARMEL	SANDSTONE	15.0	55.0	FINE, BROWNISH-YELLOW
-	BOND	CARTHAGE	LIMESTONE	6.0	70.0	TAN
-	MODESTO		SHALE	83.0	76.0	DARK GRAY
-	MODESTO	WOMAC	COAL	1.0	159.0	
-	MODESTO		SILTY SHALE	93.0	160.0	
-	MODESTO		LIMESTONE	1.0	253.0	
-	MODESTO		GRAY SHALE	17.0	254.0	
-	MODESTO	CHAPEL	COAL	1.0	271.0	
-	MODESTO	TRIVOLI	SANDSTONE	46.0	272.0	FINE
-	MODESTO		SHALE	83.0	318.0	
-	MODESTO		LIMESTONE	1.0	401.0	
-	MODESTO		SANDSTONE	22.0	402.0	
-	MODESTO		GRAY SHALE	12.0	424.0	
-	MODESTO	PIASA	LIMESTONE	4.0	436.0	
-	MODESTO	FARMINGTON	GRAY SHALE	13.0	440.0	
-	CARBONDALE	DANVILLE	COAL	1.0	453.0	
-	CARBONDALE		SANDY SHALE	23.0	454.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	477.0	
-	CARBONDALE		GRAY SHALE	2.0	480.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	58.0	482.0	
-	CARBONDALE		SHALE	2.0	540.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	5.3	542.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.4	547.3	
-	CARBONDALE	HERRIN	COAL	6.1	548.7	
-	CARBONDALE		UNDERCLAY	4.6	554.8	
-	CARBONDALE		LIMESTONE	0.6	559.4	NODULAR
-	CARBONDALE		SILTY SHALE	17.0	560.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	577.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	80.0	578.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.5	658.0	
-	CARBONDALE		SILTY SHALE	8.5	665.5	

MAPID: 16502943000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.582853 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.835581 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2747.0 **LOG TYPE:**

SOURCE: WEAL DRLG CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	BRERETON	LIMESTONE	-	396.0	
-1429.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1860.0	
-1851.0			LIMESTONE	-	2282.0	
-2316.0		BASE BARLOW	LIMESTONE	-	2747.0	

MAPID: 16502943000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.582853 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835581 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 408.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
126.0	MODESTO	PIASA	LIMESTONE	6.0	305.0	
120.0	MODESTO		GRAY SHALE	14.0	311.0	
106.0	CARBONDALE	DANVILLE	COAL	1.0	325.0	
105.0	CARBONDALE		SILTY SHALE	13.0	326.0	
92.0	CARBONDALE	ALLENBY	COAL	0.5	339.0	
91.5	CARBONDALE		CLAYSTONE & SHALE	6.5	339.5	
85.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	346.0	
81.0	CARBONDALE	LAWSON	SILTY SHALE	16.0	350.0	
65.0	CARBONDALE	LAWSON	SANDSTONE	15.0	366.0	
50.0	CARBONDALE	LAWSON	SHALE	4.0	381.0	
46.0	CARBONDALE	LAWSON	SANDSTONE	10.0	385.0	
36.0	CARBONDALE	LAWSON	SHALE	2.0	395.0	
34.0	CARBONDALE	BRERETON	LIMESTONE	5.0	397.0	
29.0	CARBONDALE	ANNA	BLACK SHALE	1.0	402.0	
28.0	CARBONDALE	HERRIN	COAL	5.0	403.0	

MAPID: 16502943000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.582853 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835581 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 1705.0 **LOG TYPE:** Electric Log

SOURCE: WEAL DRLG CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-264.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	695.0	
-341.0	SPOON	DAVIS	UNCLASSIFIED	-	772.0	
-1274.0	BASE OF PENN.		UNCLASSIFIED	-	1705.0	

MAPID: 16502943000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.582853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835581 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 408.0 **LOG TYPE:** Electric Log

SOURCE: WEAL DRLG CO, DILLARD IRA 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-162.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	593.0	
-198.0	CARBONDALE	SURVANT	COAL	1.5	629.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-307.0	CARBONDALE	DEKOVEN	COAL	2.0	738.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	763.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-343.0	CARBONDALE	DAVIS	COAL	4.0	774.0	
-373.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	804.0	
-378.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	809.0	
-417.0	TRADEWATER	MT. RORAH	COAL	1.5	848.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502943000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.582853 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835581 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 776.5 **LOG TYPE:** Electric Log
SOURCE: LOBREE & LOBREE LISZ 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
28.0	CARBONDALE	HERRIN	COAL	5.0	403.0	
-111.0	CARBONDALE	SPRINGFIELD	COAL	5.0	542.0	
-162.0	CARBONDALE	HOUCHIN CREEK	COAL	-	593.0	
-269.0	CARBONDALE	COLCHESTER	COAL	-	700.0	
-342.0	SPOON	DAVIS	COAL	3.5	773.0	

MAPID: 16525147000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 675' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.594162 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.842874 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 706.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	HERRIN	COAL	4.5	433.0	
-75.0	CARBONDALE	SPRINGFIELD	COAL	7.0	519.0	
-262.0	CARBONDALE	COLCHESTER	COAL	-	706.0	

MAPID: 16525203000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 970' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593143 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.84471 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 749.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
10.0	CARBONDALE	HERRIN	COAL	5.0	440.0	
-104.0	CARBONDALE	SPRINGFIELD	COAL	4.0	554.0	
-299.0	CARBONDALE	COLCHESTER	COAL	-	749.0	

MAPID: 16525207000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595899 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.844249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 484.0 **LOGGED (FT.):** 787.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
8.0	CARBONDALE	HERRIN	COAL	6.0	476.0	
-92.0	CARBONDALE	SPRINGFIELD	COAL	4.0	576.0	
-303.0	CARBONDALE	COLCHESTER	COAL	-	787.0	

MAPID: 16525207000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595899 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 484.0 **LOGGED (FT.):** 787.0 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	637.0	
-218.0	CARBONDALE	SURVANT	COAL	1.3	702.0	
-301.0	CARBONDALE	COLCHESTER	COAL	0.5	785.0	
-339.0	CARBONDALE	DEKOVEN	COAL	2.5	823.0	
-361.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	845.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-371.0	CARBONDALE	DAVIS	COAL	4.0	855.0	
-406.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	
-412.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	896.0	
-444.0	TRADEWATER	MT. RORAH	COAL	2.0	928.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525208000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590344 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.844707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 722.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
9.0	CARBONDALE	HERRIN	COAL	5.0	410.0	
-38.0	CARBONDALE	BRIAR HILL	COAL	-	457.0	
-106.0	CARBONDALE	SPRINGFIELD	COAL	1.0	525.0	
-107.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	526.0	
-108.0	CARBONDALE	SPRINGFIELD	COAL	3.0	527.0	
-303.0	CARBONDALE	COLCHESTER	COAL	-	722.0	

MAPID: 16525208000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590344 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 722.0 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-157.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	578.0	
-239.0	CARBONDALE	SURVANT	COAL	1.5	660.0	
-299.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-337.0	CARBONDALE	DEKOVEN	COAL	2.0	758.0	
-362.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	783.0	25 PERCENT SANDSTONE IN DEKOVEN SPLIT
-371.0	CARBONDALE	DAVIS	COAL	4.0	792.0	
-405.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	826.0	
-411.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	832.0	
-447.0	TRADEWATER	MT. RORAH	COAL	2.0	868.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525213000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 970' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593148 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.84653 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 561.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
8.0	CARBONDALE	HERRIN	COAL	5.0	443.0	
-105.0	CARBONDALE	SPRINGFIELD	COAL	5.0	556.0	

MAPID: 16525247000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 1630' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590858 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 728.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
16.0	CARBONDALE	HERRIN	COAL	5.0	413.0	
-101.0	CARBONDALE	SPRINGFIELD	COAL	7.0	530.0	
-299.0	CARBONDALE	COLCHESTER	COAL	-	728.0	

MAPID: 16525255000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 970' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593156 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848363 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 824.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
5.0	CARBONDALE	HERRIN	COAL	4.0	424.0	
-96.0	CARBONDALE	SPRINGFIELD	COAL	5.0	525.0	
-310.0	CARBONDALE	COLCHESTER	COAL	-	739.0	
-391.0	SPOON	DAVIS	COAL	4.0	820.0	

MAPID: 16525298000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 976' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593109 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841055 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 744.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	HERRIN	COAL	5.5	436.0	
-93.0	CARBONDALE	SPRINGFIELD	COAL	1.5	540.0	
-94.5	CARBONDALE	SPRINGFIELD	SHALE	1.0	541.5	
-95.5	CARBONDALE	SPRINGFIELD	COAL	2.5	542.5	
-297.0	CARBONDALE	COLCHESTER	COAL	-	744.0	

MAPID: 16525378000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595349 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.839231 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 790.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	HERRIN	COAL	5.0	432.0	
-130.0	CARBONDALE	SPRINGFIELD	COAL	3.0	555.0	
-133.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	558.0	
-134.0	CARBONDALE	SPRINGFIELD	COAL	1.5	559.0	
-185.0	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	
-295.0	CARBONDALE	COLCHESTER	COAL	-	720.0	
-362.0	SPOON	DAVIS	COAL	3.0	787.0	

MAPID: 16525421000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595358 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 709.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	HERRIN	COAL	6.0	444.0	
-104.0	CARBONDALE	SPRINGFIELD	COAL	1.0	551.0	
-105.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	552.0	
-106.0	CARBONDALE	SPRINGFIELD	COAL	3.5	553.0	
-262.0	CARBONDALE	COLCHESTER	COAL	-	709.0	

MAPID: 16525447000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 870' S line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595342 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.837053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 767.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.0	CARBONDALE	HERRIN	COAL	5.0	403.0	
-111.0	CARBONDALE	SPRINGFIELD	COAL	4.0	533.0	
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	-	586.0	
-275.0	CARBONDALE	COLCHESTER	COAL	-	697.0	
-341.0	SPOON	DAVIS	COAL	4.0	763.0	

MAPID: 16525447000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 870' S line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.595342 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.837053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 767.0 **LOG TYPE:** Nuclear Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-163.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	585.0	
-200.0	CARBONDALE	SURVANT	COAL	2.0	622.0	
-276.0	CARBONDALE	COLCHESTER	COAL	0.5	698.0	
-308.0	CARBONDALE	DEKOVEN	COAL	2.0	730.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	752.0	35 PERCENT SANDSTONE IN DEKOVEN SPLIT
-341.0	CARBONDALE	DAVIS	COAL	4.0	763.0	
-378.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-384.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	806.0	
-420.0	TRADEWATER	MT. RORAH	COAL	2.0	842.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590014000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 3460' S line, 850' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.593556 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.844206 **DATE COLLECTED:** 12 / 29 / 1992
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 576.0 **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. KM-8 **WELL TYPE:** Coal Test
COMMENT: LOCATION AND DATA FROM PERMIT MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.2	CARBONDALE	HERRIN	COAL	6.3	460.8	
-93.5	CARBONDALE	SPRINGFIELD	COAL	6.5	569.5	

MAPID: 16590015000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 690' S line, 2190' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.584396 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.836574 **DATE COLLECTED:** 0 / 0 / 1986

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 559.3 **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. 86-7-3 **WELL TYPE:** Coal Test

COMMENT: THICK & DEPTH FROM X-SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	55.0	0.0	
380.0	MODESTO		SHALE	79.5	55.0	
300.5	MODESTO		LIMESTONE	0.5	134.5	
300.0	MODESTO		SHALE	28.0	135.0	
272.0	MODESTO	CHAPEL	COAL	2.5	163.0	
269.5	MODESTO		SILTY SHALE	48.0	165.5	
221.5	MODESTO	TRIVOLI	SANDSTONE	12.5	213.5	
209.0	MODESTO		SHALE	11.0	226.0	
198.0	MODESTO		SANDSTONE	6.0	237.0	
192.0	MODESTO		SHALE	14.5	243.0	
177.5	MODESTO	POND CREEK	COAL	2.0	257.5	
175.5	MODESTO		SHALE	4.5	259.5	
171.0	MODESTO		SANDSTONE	16.0	264.0	
155.0	MODESTO		SHALE	7.0	280.0	
148.0	MODESTO		SANDSTONE	2.8	287.0	
145.2	MODESTO		SHALE	0.5	289.8	
144.7	MODESTO		SANDSTONE	2.8	290.3	
142.0	MODESTO		SHALE	19.6	293.0	
122.4	MODESTO	PIASA	LIMESTONE	1.4	312.6	
121.0	MODESTO		SHALE	16.5	314.0	
104.5	CARBONDALE	DANVILLE	COAL	2.0	330.5	
102.5	CARBONDALE		SHALE	17.5	332.5	
85.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	350.0	
81.4	CARBONDALE		SHALE	20.4	353.6	
61.0	CARBONDALE		SANDSTONE	13.0	374.0	
48.0	CARBONDALE		SHALE	6.0	387.0	
42.0	CARBONDALE		SANDSTONE	4.5	393.0	
37.5	CARBONDALE		SHALE	1.5	397.5	
36.0	CARBONDALE	JAMESTOWN	COAL	1.0	399.0	
35.0	CARBONDALE		SHALE	1.5	400.0	
33.5	CARBONDALE	BRERETON	LIMESTONE	4.2	401.5	
29.3	CARBONDALE	ANNA	BLACK SHALE	1.3	405.7	
28.0	CARBONDALE	HERRIN	COAL	5.5	407.0	
22.5	CARBONDALE		SHALE	21.5	412.5	
1.0	CARBONDALE	BRIAR HILL	COAL	1.3	434.0	
-0.3	CARBONDALE	DYKERSBURG	SHALE	77.8	435.3	
-78.0	CARBONDALE	DYKERSBURG	SILTSTONE	12.0	513.0	
-90.0	CARBONDALE	DYKERSBURG	SHALE	2.0	525.0	
-92.0	CARBONDALE	DYKERSBURG	SILTSTONE	13.5	527.0	

-105.5	CARBONDALE	DYKERSBURG	BLACK SHALE	8.5	540.5
-114.0	CARBONDALE	SPRINGFIELD	COAL	4.0	549.0
-118.0	CARBONDALE		SILTSTONE	6.3	553.0

MAPID: 16590016000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 100' S line, 2190' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.5844 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.834945 **DATE COLLECTED:** 0 / 0 / 1986
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 585.8 **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. 86-7-4 **WELL TYPE:** Coal Test
COMMENT: THICKNESS & DEPTH FROM X-SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	50.0	0.0	GLACIAL DRIFT DEPOSITS
375.0	MODESTO		SHALE	72.5	50.0	
302.5	MODESTO		LIMESTONE	0.5	122.5	
302.0	MODESTO		SHALE	26.0	123.0	
276.0	MODESTO	CHAPEL	COAL	2.0	149.0	
274.0	MODESTO		SHALE	31.0	151.0	
243.0	MODESTO	TRIVOLI	SANDSTONE	20.0	182.0	
223.0	MODESTO		SHALE	26.0	202.0	
197.0	MODESTO		SANDSTONE	10.0	228.0	
187.0	MODESTO		SHALE	11.0	238.0	
176.0	MODESTO	POND CREEK	COAL	1.3	249.0	
174.7	MODESTO		SHALE	1.8	250.3	
173.0	MODESTO		SANDSTONE	13.0	252.0	
160.0	MODESTO		SHALE	7.5	265.0	
152.5	MODESTO		SANDSTONE	13.5	272.5	
139.0	MODESTO		SHALE	18.5	286.0	
120.5	MODESTO	PIASA	LIMESTONE	1.5	304.5	
119.0	MODESTO		SHALE	12.0	306.0	
107.0	CARBONDALE	DANVILLE	COAL	3.0	318.0	
104.0	CARBONDALE		SHALE	18.5	321.0	
85.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	339.5	
81.0	CARBONDALE		SHALE	26.5	344.0	
54.5	CARBONDALE	ANVIL ROCK	SANDSTONE	18.5	370.5	
36.0	CARBONDALE	BRERETON	LIMESTONE	7.5	389.0	
28.5	CARBONDALE	ANNA	BLACK SHALE	1.0	396.5	
27.5	CARBONDALE	HERRIN	COAL	6.0	397.5	
21.5	CARBONDALE		UNDERCLAY	3.5	403.5	
18.0	CARBONDALE		SANDY SHALE	15.0	407.0	
3.0	CARBONDALE	BRIAR HILL	COAL	2.0	422.0	
1.0	CARBONDALE		SHALE	129.5	424.0	
-128.5	CARBONDALE	SPRINGFIELD	COAL	2.0	553.5	
-130.5	CARBONDALE		SHALE	7.0	555.5	
-137.5	CARBONDALE		SANDY SHALE	4.5	562.5	
-142.0	CARBONDALE		SHALE	12.0	567.0	
-154.0	CARBONDALE	EXCELLO	BLACK SHALE	3.0	579.0	
-157.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	582.0	
-158.8	CARBONDALE		UNDERCLAY	2.0	583.8	

MAPID: 16590017000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2090' S line, 2130' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.58418 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.840437 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 588.5 **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. 86-7-7 **WELL TYPE:** Coal Test

COMMENT: THICKNESS EST. FROM X-SECTION MINE.PRMT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	60.0	0.0	
383.0	MODESTO		SHALE	98.0	60.0	
285.0	MODESTO	CHAPEL	COAL	2.5	158.0	
282.5	MODESTO		SHALE	3.0	160.5	
279.5	MODESTO	TRIVOLI	SANDSTONE	59.5	163.5	
220.0	MODESTO		SHALE	38.5	223.0	
181.5	MODESTO		SILTSTONE	10.0	261.5	
171.5	MODESTO		SHALE	18.3	271.5	
153.2	MODESTO	POND CREEK	COAL	0.3	289.8	
153.0	MODESTO		SHALE	11.5	290.0	
141.5	MODESTO		SANDSTONE	3.5	301.5	
138.0	MODESTO		SILTSTONE	15.5	305.0	
122.5	MODESTO		SHALE	10.5	320.5	
112.0	MODESTO	PIASA	LIMESTONE	3.5	331.0	
108.5	MODESTO		SHALE	12.5	334.5	
96.0	CARBONDALE	DANVILLE	COAL	2.0	347.0	
94.0	CARBONDALE		SHALE	16.5	349.0	
77.5	CARBONDALE	ALLENBY	COAL	0.3	365.5	
77.2	CARBONDALE		SHALE	5.0	365.8	
72.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	370.8	
65.0	CARBONDALE		SHALE	23.0	378.0	
42.0	CARBONDALE	ANVIL ROCK	SANDSTONE	27.5	401.0	
14.5	CARBONDALE		SHALE	0.5	428.5	SHALE AND COAL
14.0	CARBONDALE	BRERETON	LIMESTONE	3.3	429.0	
10.7	CARBONDALE	ANNA	BLACK SHALE	3.3	432.3	
7.5	CARBONDALE	HERRIN	COAL	6.2	435.5	
1.3	CARBONDALE		SHALE	17.8	441.7	
-16.5	CARBONDALE	BRIAR HILL	COAL	1.5	459.5	
-18.0	CARBONDALE		UNDERCLAY	5.0	461.0	
-23.0	CARBONDALE		SANDSTONE	4.5	466.0	
-27.5	CARBONDALE		SILTY SHALE	71.0	470.5	
-98.5	CARBONDALE		COAL	0.3	541.5	
-98.8	CARBONDALE		SILTY SHALE	19.3	541.8	
-118.0	CARBONDALE	SPRINGFIELD	COAL	7.8	561.0	
-125.8	CARBONDALE		UNCLASSIFIED	4.2	568.8	
-130.0	CARBONDALE		SANDSTONE	15.5	573.0	

MAPID: 16590018000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1480' S line, 2210' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.584463 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.838753 **DATE COLLECTED:** 0 / 0 / 1986

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 587.5 **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. 86-7-8 **WELL TYPE:** Coal Test

COMMENT: DEPTH & THICKNESS EST. FROM X-SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	59.0	0.0	
381.0	MODESTO		SHALE	72.8	59.0	
308.2	MODESTO		LIMESTONE	1.0	131.8	
307.2	MODESTO		SHALE	17.3	132.8	
290.0	MODESTO	CHAPEL	COAL	1.8	150.0	
288.2	MODESTO		SHALE	20.3	151.8	
268.0	MODESTO	TRIVOLI	SANDSTONE	20.0	172.0	
248.0	MODESTO	TRIVOLI	SHALE	2.0	192.0	
246.0	MODESTO	TRIVOLI	SANDSTONE	5.5	194.0	
240.5	MODESTO	TRIVOLI	SHALE	2.0	199.5	
238.5	MODESTO	TRIVOLI	SANDSTONE	6.5	201.5	
232.0	MODESTO	TRIVOLI	SHALE	4.0	208.0	
228.0	MODESTO	TRIVOLI	SANDSTONE	4.5	212.0	
223.5	MODESTO		SHALE	34.0	216.5	
189.5	MODESTO		SANDSTONE	4.8	250.5	
184.7	MODESTO		SHALE	20.3	255.3	
164.5	MODESTO		SANDSTONE	1.0	275.5	
163.5	MODESTO		SHALE	1.0	276.5	
162.5	MODESTO	POND CREEK	COAL	3.0	277.5	
159.5	MODESTO		SHALE	2.8	280.5	
156.7	MODESTO		SILTSTONE	3.2	283.3	
153.5	MODESTO		SHALE	6.0	286.5	
147.5	MODESTO		SANDSTONE	13.5	292.5	
134.0	MODESTO		SHALE	16.5	306.0	
117.5	MODESTO	PIASA	LIMESTONE	3.0	322.5	
114.5	MODESTO		SHALE	15.5	325.5	
99.0	CARBONDALE	DANVILLE	COAL	2.0	341.0	
97.0	CARBONDALE		SHALE	13.8	343.0	
83.2	CARBONDALE	ALLENBY	COAL	0.3	356.8	
83.0	CARBONDALE		SHALE	8.0	357.0	
75.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	365.0	
70.0	CARBONDALE		SHALE	11.5	370.0	
58.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.3	381.5	
56.2	CARBONDALE	ANVIL ROCK	SHALE	1.3	383.8	
55.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.8	385.0	
53.2	CARBONDALE	ANVIL ROCK	SHALE	2.8	386.8	
50.5	CARBONDALE	ANVIL ROCK	SANDSTONE	27.5	389.5	
23.0	CARBONDALE		BLACK SHALE	0.3	417.0	
22.7	CARBONDALE	JAMESTOWN	COAL	0.2	417.3	

22.5	CARBONDALE	BRERETON	LIMESTONE	1.5	417.5	
21.0	CARBONDALE	ANNA	BLACK SHALE	4.5	419.0	
16.5	CARBONDALE	HERRIN	COAL	6.3	423.5	
10.2	CARBONDALE		SHALE	13.3	429.8	
-3.0	CARBONDALE	BRIAR HILL	COAL	6.7	443.0	
-9.7	CARBONDALE		UNDERCLAY	5.3	449.7	
-15.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	455.0	
-18.0	CARBONDALE	DYKERSBURG	SILTSTONE	80.3	458.0	
-98.3	CARBONDALE	DYKERSBURG	SHALE	5.2	538.3	
-103.4	CARBONDALE	SPRINGFIELD	COAL	1.2	543.4	PARTING OF SPRINGFIELD COAL
-104.6	CARBONDALE	SPRINGFIELD	BLACK SHALE	9.9	544.6	
-114.5	CARBONDALE	SPRINGFIELD	COAL	6.0	554.5	
-120.5	CARBONDALE		UNCLASSIFIED	27.0	560.5	

MAPID: 16590019000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2700' S line, 1050' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.580416 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.842127 **DATE COLLECTED:** 4 / 9 / 1976

SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 612.5 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 86-7-1 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	92.0	0.0	GLACIAL DRIFT
360.0			GRAY SHALE	91.5	92.0	
268.5	MODESTO	CHAPEL	COAL	1.0	183.5	
267.5	MODESTO		SANDY SHALE	3.0	184.5	
264.5	MODESTO	TRIVOLI	SANDSTONE	56.5	187.5	
208.0	MODESTO		SILTY SHALE	39.5	244.0	
168.5	MODESTO		COAL	0.5	283.5	
168.0	MODESTO		SILTY SANDSTONE	25.0	284.0	
143.0	MODESTO		DARK SHALE	2.0	309.0	
141.0	MODESTO	POND CREEK	COAL	1.0	311.0	
140.0	MODESTO		GRAY SHALE	11.0	312.0	
129.0	MODESTO		SANDSTONE	7.0	323.0	
122.0	MODESTO		SANDY SHALE	23.0	330.0	
99.0	MODESTO	PIASA	LIMESTONE	4.5	353.0	
94.5	MODESTO		SILTY SHALE	14.0	357.5	
80.5	CARBONDALE	DANVILLE	COAL	1.5	371.5	
79.0	CARBONDALE		SILTY SHALE	17.5	373.0	SILTY SHALE W/ SS SEAMS
61.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	390.5	
56.5	CARBONDALE		SANDY SHALE	25.5	395.5	SANDY SHALE W/ SS SEAMS
31.0	CARBONDALE	ANVIL ROCK	SANDSTONE	24.5	421.0	
6.5	CARBONDALE		DARK SHALE	1.5	445.5	
5.0	CARBONDALE	BRERETON	LIMESTONE	5.5	447.0	
-0.5	CARBONDALE	ANNA	BLACK SHALE	1.4	452.5	
-1.9	CARBONDALE	HERRIN	COAL	5.7	453.9	
-7.6	CARBONDALE		SHALE	3.0	459.6	
-10.6	CARBONDALE		GRAY SHALE	0.9	462.6	GY SH W/ LS NODS
-11.5	CARBONDALE		SILTY SHALE	18.0	463.5	SLT SH W/ LS NODS
-29.5	CARBONDALE	BRIAR HILL	COAL	1.5	481.5	
-31.0	CARBONDALE	DYKERSBURG	SANDY SHALE	59.0	483.0	SILTY, SANDY SHALE W/ SS SEAMS
-90.0	CARBONDALE	DYKERSBURG	SILTY SHALE	35.3	542.0	SILTY SHALE W/ SS SEAMS
-125.3	CARBONDALE	DYKERSBURG	SILTY SHALE	7.2	577.3	
-132.5	CARBONDALE	SPRINGFIELD	COAL	7.0	584.5	
-139.5	CARBONDALE		CALCAREOUS SHALE	1.0	591.5	
-140.5	CARBONDALE		CLAYSTONE	0.8	592.5	
-141.3	CARBONDALE		SILTY SHALE	7.6	593.3	SILTY SHALE W/ LS NODS
-148.9	CARBONDALE		SILTY SHALE	11.6	600.9	SILTY SHALE W/ SS SEAMS

MAPID: 16500090000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.562545 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.842311 **DATE COLLECTED:** 0 / 0 / 1921

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 808.0 **LOG TYPE:** Drillers Log

SOURCE: TRI. CO. COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	50.0	0.0	
388.0	MODESTO		SHALE	84.0	50.0	
304.0	MODESTO	CHAPEL	COAL	1.0	134.0	
303.0	MODESTO		GRAY SHALE	4.0	135.0	
299.0	MODESTO		SANDSTONE	46.0	139.0	
253.0	MODESTO		SHALE	58.0	185.0	
195.0	MODESTO		LIMESTONE	4.0	243.0	
191.0	MODESTO		DARK SHALE	13.0	247.0	
178.0	MODESTO		COAL	0.7	260.0	
177.3	MODESTO		SANDSTONE	19.3	260.7	
158.0	MODESTO		GRAY SHALE	24.0	280.0	
134.0	MODESTO	PIASA	LIMESTONE	6.0	304.0	
128.0	CARBONDALE		SHALE	13.0	310.0	
115.0	CARBONDALE		COAL	2.0	323.0	
113.0	CARBONDALE		SHALE	20.0	325.0	
93.0	CARBONDALE		UNDERCLAY	4.0	345.0	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	349.0	
83.0	CARBONDALE		SHALE	30.0	355.0	
53.0	CARBONDALE		SANDSTONE	9.0	385.0	
44.0	CARBONDALE	ANNA	BLACK SHALE	2.0	394.0	
42.0	CARBONDALE		SHALE	5.0	396.0	
37.0	CARBONDALE	HERRIN	COAL	5.8	401.0	
31.2	CARBONDALE		SHALE	22.2	406.8	
9.0	CARBONDALE	BRIAR HILL	COAL	1.0	429.0	
8.0	CARBONDALE		SHALE	63.5	430.0	
-55.5	CARBONDALE	SPRINGFIELD	COAL	5.8	493.5	
-61.3	CARBONDALE		LIMESTONE	1.7	499.3	
-63.0	CARBONDALE		SHALE	42.0	501.0	
-105.0	CARBONDALE		SANDSTONE	10.0	543.0	
-115.0	CARBONDALE		SHALE	21.0	553.0	
-136.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	574.0	
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	579.0	
-143.3	CARBONDALE		UNDERCLAY	2.7	581.3	
-146.0	CARBONDALE		SANDSTONE	7.0	584.0	
-153.0	CARBONDALE		SHALE	8.0	591.0	
-161.0	CARBONDALE		SANDSTONE	9.8	599.0	
-170.8	CARBONDALE	SURVANT	COAL	0.3	608.8	
-171.0	CARBONDALE		SHALE	37.0	609.0	
-208.0	CARBONDALE		SANDSTONE	88.0	646.0	

-296.0	CARBONDALE		SHALE	4.0	734.0
-300.0	CARBONDALE	COLCHESTER	COAL	1.2	738.0
-301.2	SPOON		SHALE	11.8	739.2
-313.0	SPOON		SANDSTONE	9.0	751.0
-322.0	SPOON		SHALE	7.0	760.0
-329.0	SPOON	DEKOVEN	COAL	1.5	767.0
-330.5	SPOON		GRAY SHALE	3.5	768.5
-334.0	SPOON		BLACK SHALE	3.0	772.0
-337.0	SPOON	DAVIS	COAL	4.0	775.0
-341.0	SPOON		SHALE	22.0	779.0
-363.0	SPOON		SANDSTONE	7.0	801.0

MAPID: 16500090000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.562545 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.842311 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 406.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	MODESTO	PIASA	LIMESTONE	6.0	304.0	
128.0	MODESTO		GRAY SHALE	13.0	310.0	
115.0	CARBONDALE	DANVILLE	COAL	2.0	323.0	
113.0	CARBONDALE		GRAY SHALE	20.0	325.0	
93.0	CARBONDALE		CLAYSTONE	4.0	345.0	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	349.0	
83.0	CARBONDALE	LAWSON	GRAY SHALE	20.0	355.0	
63.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	375.0	
53.0	CARBONDALE	LAWSON	SANDSTONE	9.0	385.0	
44.0	CARBONDALE	ANNA	BLACK SHALE	2.0	394.0	
42.0	CARBONDALE	ENERGY	GRAY SHALE	5.0	396.0	
37.0	CARBONDALE	HERRIN	COAL	5.8	401.0	

MAPID: 16500090000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.562545 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.842311 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 808.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	DANVILLE	COAL	2.0	323.0	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	349.0	
53.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	9.0	385.0	
37.0	CARBONDALE	HERRIN	COAL	5.8	401.0	
9.0	CARBONDALE	BRIAR HILL	COAL	1.0	429.0	
-55.0	CARBONDALE	SPRINGFIELD	COAL	5.8	493.0	
-105.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	10.0	543.0	
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	579.0	

MAPID: 16500090000C **VERSION:** 4 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.562545 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.842311 **DATE COLLECTED:** 0 / 0 / 1921
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 808.0 **LOG TYPE:** Drillers Log
SOURCE: TRI COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	50.0	0.0	
388.0	MODESTO		SANDY SHALE	25.0	50.0	
363.0	MODESTO		SHALE	40.0	75.0	
323.0	MODESTO		SHALE	4.0	115.0	
319.0	MODESTO		SHALE	4.0	119.0	
315.0	MODESTO		SHALE	6.0	123.0	
309.0	MODESTO		SHALE	3.0	129.0	
306.0	MODESTO		SHALE	2.0	132.0	
304.0	MODESTO	CHAPEL	COAL	1.0	134.0	
303.0	MODESTO		SHALE	4.0	135.0	
299.0	MODESTO		SANDSTONE	46.0	139.0	
253.0	MODESTO		SHALE	37.0	185.0	
216.0	MODESTO		SHALE	10.0	222.0	
206.0	MODESTO		SHALE	11.0	232.0	
195.0	MODESTO		LIMESTONE	4.0	243.0	
191.0	MODESTO		SHALE	8.0	247.0	
183.0	MODESTO		SHALE	5.0	255.0	DARK
178.0	MODESTO		COAL	0.7	260.0	
177.3	MODESTO		SANDSTONE	19.3	260.7	
158.0	MODESTO		SHALE	24.0	280.0	
134.0	MODESTO	PIASA	LIMESTONE	6.0	304.0	
128.0	MODESTO		SHALE	13.0	310.0	
115.0	CARBONDALE	DANVILLE	COAL	2.0	323.0	
113.0	CARBONDALE		SHALE	10.0	325.0	
103.0	CARBONDALE		SHALE	10.0	335.0	
93.0	CARBONDALE		UNDERCLAY	4.0	345.0	
89.0	CARBONDALE		LIMESTONE	6.0	349.0	
83.0	CARBONDALE		SHALE	10.0	355.0	
73.0	CARBONDALE		SHALE	10.0	365.0	
63.0	CARBONDALE		SANDY SHALE	10.0	375.0	
53.0	CARBONDALE		SANDSTONE	9.0	385.0	
44.0	CARBONDALE		BLACK SHALE	2.0	394.0	
42.0	CARBONDALE		SHALE	5.0	396.0	
37.0	CARBONDALE	HERRIN	COAL	5.8	401.0	
31.2	CARBONDALE		ARGILACEOUS SHALE	1.2	406.8	ARG
30.0	CARBONDALE		SHALE	10.0	408.0	
20.0	CARBONDALE		SHALE	11.0	418.0	
9.0	CARBONDALE	BRIAR HILL	COAL	1.0	429.0	
8.0	CARBONDALE	DYKERSBURG	SANDY SHALE	44.0	430.0	

-36.0	CARBONDALE	DYKERSBURG	SHALE	19.5	474.0	
-55.5	CARBONDALE	SPRINGFIELD	COAL	5.8	493.5	
-61.3	CARBONDALE		LIMESTONE	1.7	499.3	
-63.0	CARBONDALE		SANDY SHALE	42.0	501.0	
-105.0	CARBONDALE		SANDSTONE	10.0	543.0	
-115.0	CARBONDALE		SHALE	21.0	553.0	
-136.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	574.0	
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	579.0	
-143.3	CARBONDALE		UNDERCLAY	2.7	581.3	
-146.0	CARBONDALE		SANDSTONE	7.0	584.0	
-153.0	CARBONDALE		SANDY SHALE	8.0	591.0	
-161.0	CARBONDALE		SANDSTONE	9.8	599.0	
-170.8	CARBONDALE	SURVANT	COAL	0.3	608.8	
-171.0	CARBONDALE		SHALE	12.0	609.0	
-183.0	CARBONDALE		SANDY SHALE	25.0	621.0	
-208.0	CARBONDALE		SANDSTONE	88.0	646.0	
-296.0	CARBONDALE		SHALE	4.0	734.0	
-300.0	CARBONDALE	COLCHESTER	COAL	1.2	738.0	
-301.2	SPOON		SHALE	11.8	739.2	
-313.0	SPOON		SANDSTONE	9.0	751.0	
-322.0	SPOON		SANDY SHALE	3.0	760.0	
-325.0	SPOON		SHALE	4.0	763.0	
-329.0	SPOON	DEKOVEN	COAL	1.5	767.0	
-330.5	SPOON		SHALE	3.5	768.5	
-334.0	SPOON		BLACK SHALE	3.0	772.0	
-337.0	SPOON	DAVIS	COAL	4.0	775.0	
-341.0	SPOON		SHALE	3.0	779.0	
-344.0	SPOON		CALCAREOUS SHALE	6.0	782.0	CALC
-350.0	SPOON		SHALE	10.0	788.0	
-360.0	SPOON		SHALE	3.0	798.0	
-363.0	SPOON		SANDSTONE	7.0	801.0	

MAPID: 16502677000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.559117 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.835502 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2661.0 **LOG TYPE:**

SOURCE: ORGAN DWIGHT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	BRERETON	LIMESTONE	-	392.0	
-1433.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1868.0	
-1807.0			LIMESTONE	-	2242.0	
-2226.0		BASE BARLOW	LIMESTONE	-	2661.0	

MAPID: 16503025000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568494 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846663 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2704.0 **LOG TYPE:**
SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	438.0	
-1446.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1910.0	
-1809.0			LIMESTONE	-	2273.0	
-2240.0		BASE BARLOW	LIMESTONE	-	2704.0	

MAPID: 16503025000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568494 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.846663 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 3218.0 **LOG TYPE:** Electric Log
SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.0	CARBONDALE	HERRIN	COAL	5.0	445.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	-	473.0	
-101.0	CARBONDALE	SPRINGFIELD	COAL	8.0	565.0	
-146.0	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	

MAPID: 16503025000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568494 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.846663 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 1760.0 **LOG TYPE:** Electric Log
SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-274.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	738.0	
-346.0	SPOON	DAVIS	UNCLASSIFIED	-	810.0	
-1296.0	BASE OF PENN.		UNCLASSIFIED	-	1760.0	

MAPID: 16503025000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568494 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846663 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 2704.0 **LOG TYPE:** Electric Log
SOURCE: MCINTYRE, PAUL J., BRADDY JOHN COM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-151.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-181.0	CARBONDALE	SURVANT	COAL	0.5	645.0	
-275.0	CARBONDALE	COLCHESTER	COAL	0.5	739.0	
-316.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-336.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	800.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-344.0	CARBONDALE	DAVIS	COAL	3.0	808.0	
-374.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	838.0	
-378.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	842.0	
-435.0	TRADEWATER	MT. RORAH	COAL	0.5	899.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503025000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568494 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846663 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 730.0 **LOG TYPE:** Electric Log
SOURCE: MCINTYRE, PAUL J. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.0	CARBONDALE	HERRIN	COAL	-	445.0	
-101.0	CARBONDALE	SPRINGFIELD	COAL	8.0	565.0	
-150.0	CARBONDALE	HOUCHIN CREEK	COAL	-	614.0	
-266.0	CARBONDALE	COLCHESTER	COAL	-	730.0	

MAPID: 16525276000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 392' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56621 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840988 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 782.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
46.0	CARBONDALE	HERRIN	COAL	4.0	410.0	
-48.0	CARBONDALE	SPRINGFIELD	COAL	5.5	504.0	
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	-	586.0	
-322.0	SPOON	DAVIS	COAL	4.0	778.0	

MAPID: 16525387000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566218 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.837437 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 796.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
29.0	CARBONDALE	HERRIN	COAL	5.0	426.0	
-69.0	CARBONDALE	SPRINGFIELD	COAL	6.5	524.0	
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	-	603.0	
-269.0	CARBONDALE	COLCHESTER	COAL	-	724.0	
-337.0	SPOON	DAVIS	COAL	4.0	792.0	

MAPID: 16525397000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 350' E line of SE SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.563869 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.843001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 793.5 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
25.0	CARBONDALE	HERRIN	COAL	4.5	424.0	
-12.0	CARBONDALE	BRIAR HILL	COAL	1.5	461.0	
-61.0	CARBONDALE	SPRINGFIELD		6.0	510.0	
-341.0	SPOON	DAVIS	COAL	3.5	790.0	

MAPID: 16525438000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 350' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568502 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.843013 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 788.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
36.0	CARBONDALE	HERRIN	COAL	5.0	422.0	
-62.0	CARBONDALE	SPRINGFIELD	COAL	6.0	520.0	
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	-	596.0	
-327.0	SPOON	DAVIS	COAL	3.0	785.0	

MAPID: 16590001000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1220' N line, 1420' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.56288 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846222 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 528.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 868-28 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	85.0	0.0	GLACIAL DRIFT DEPOSITS
291.0	MODESTO	CHAPEL	COAL	2.0	159.0	
159.0	MODESTO		COAL	0.5	291.0	
102.0	CARBONDALE	DANVILLE	COAL	1.5	348.0	
23.0	CARBONDALE	HERRIN	COAL	5.0	427.0	
-13.0	CARBONDALE	BRIAR HILL	COAL	2.5	463.0	
-71.0	CARBONDALE	SPRINGFIELD	COAL	7.0	521.0	

MAPID: 16503138000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549888 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846676 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC., KARNES R J 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-188.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	664.0	
-294.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-337.0	CARBONDALE	DEKOVEN	COAL	3.0	813.0	
-368.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	844.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-374.0	CARBONDALE	DAVIS	COAL	3.5	850.0	
-396.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	872.0	
-402.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	878.0	
-464.0	TRADEWATER	MT. RORAH	COAL	0.5	940.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503138000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549888 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846676 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:**
SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
0.0	CARBONDALE	BRERETON	LIMESTONE	-	476.0	
-1445.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1921.0	
-1717.0			LIMESTONE	-	2193.0	
-2224.0		BASE BARLOW	LIMESTONE	-	2700.0	

MAPID: 16503138000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549888 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846676 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 743.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	HERRIN	COAL	4.5	484.0	
-37.0	CARBONDALE	BRIAR HILL	COAL	-	513.0	
-119.0	CARBONDALE	SPRINGFIELD	COAL	8.0	595.0	
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	-	663.0	
-267.0	CARBONDALE	COLCHESTER	COAL	-	743.0	

MAPID: 16503257000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.54063 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 590.0 **LOG TYPE:** Electric Log
SOURCE: KEWANEE OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	HERRIN	COAL	-	401.0	
14.0	CARBONDALE	BRIAR HILL	COAL	-	426.0	
-102.0	CARBONDALE	SPRINGFIELD	COAL	3.0	542.0	
-150.0	CARBONDALE	HOUCHIN CREEK	COAL	-	590.0	

MAPID: 16503257000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.54063 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2627.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
45.0	CARBONDALE	BRERETON	LIMESTONE	-	395.0	
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2627.0	

MAPID: 16503274000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.549879 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.839216 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2672.0 **LOG TYPE:**

SOURCE: VAN ROSSAN M L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	425.0	
-1422.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1878.0	
-1798.0			LIMESTONE	-	2254.0	
-2216.0		BASE BARLOW	LIMESTONE	-	2672.0	

MAPID: 16503274000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.549879 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.839216 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 438.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	MODESTO	PIASA	LIMESTONE	7.0	337.0	
112.0	MODESTO		GRAY SHALE	16.0	344.0	
96.0	CARBONDALE	DANVILLE	COAL	2.0	360.0	
94.0	CARBONDALE		GRAY SHALE	15.5	362.0	
78.5	CARBONDALE	ALLENBY	COAL	0.5	377.5	
78.0	CARBONDALE		CLAYSTONE & SHALE	14.0	378.0	
64.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	8.0	392.0	
56.0	CARBONDALE	LAWSON	SILTY SHALE	11.0	400.0	
45.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	8.0	411.0	
37.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	7.0	419.0	
30.0	CARBONDALE	BRERETON	LIMESTONE	5.0	426.0	
25.0	CARBONDALE	ANNA	BLACK SHALE	2.0	431.0	
23.0	CARBONDALE	HERRIN	COAL	5.0	433.0	

MAPID: 16503274000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549879 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.839216 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 1845.0 **LOG TYPE:** Electric Log
SOURCE: VAN ROSSAN M L **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-359.0	SPOON	DAVIS	UNCLASSIFIED	-	815.0	
-1389.0	BASE OF PENN.		UNCLASSIFIED	-	1845.0	

MAPID: 16503274000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549879 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.839216 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 438.0 **LOG TYPE:** Electric Log
SOURCE: VAN ROSSAN M L, DOOLEY A 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-149.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	605.0	
-176.0	CARBONDALE	SURVANT	COAL	0.5	632.0	
-324.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-348.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	804.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-357.0	CARBONDALE	DAVIS	COAL	5.0	813.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	832.0	
-382.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	838.0	
-434.0	TRADEWATER	MT. RORAH	COAL	1.3	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503274000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.549879 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.839216 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 818.0 **LOG TYPE:** Electric Log
SOURCE: VAN ROSSAN M L 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
23.0	CARBONDALE	HERRIN	COAL	4.5	433.0	
-7.0	CARBONDALE	BRIAR HILL	COAL	-	463.0	
-76.0	CARBONDALE	SPRINGFIELD	COAL	8.0	532.0	
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	-	604.0	
-357.0	SPOON	DAVIS	COAL	5.0	813.0	

MAPID: 16524925000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542969 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.839167 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 491.0 **LOGGED (FT.):** 846.0 **LOG TYPE:** Electric Log
SOURCE: ERNEST EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	HERRIN	COAL	4.5	480.0	
-50.0	CARBONDALE	BRIAR HILL	COAL	-	541.0	
-119.0	CARBONDALE	SPRINGFIELD	COAL	1.5	610.0	
-120.5	CARBONDALE	SPRINGFIELD	SHALE	4.0	611.5	
-124.5	CARBONDALE	SPRINGFIELD	COAL	3.5	615.5	
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	-	658.0	
-351.0	SPOON	DAVIS	COAL	4.0	842.0	

MAPID: 16525204000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.545273 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.841061 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 478.0 **LOGGED (FT.):** 651.0 **LOG TYPE:** Electric Log

SOURCE: ERNEST EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
6.0	CARBONDALE	HERRIN	COAL	5.0	472.0	
-23.0	CARBONDALE	BRIAR HILL	COAL	-	501.0	
-95.0	CARBONDALE	SPRINGFIELD	COAL	2.5	573.0	
-97.5	CARBONDALE	SPRINGFIELD	SHALE	1.0	575.5	
-98.5	CARBONDALE	SPRINGFIELD	COAL	3.0	576.5	
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	-	651.0	

MAPID: 16526153000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.541254 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.845384 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 428.8 **LOGGED (FT.):** 540.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 869-30 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.8	PLEISTOCENE		UNCONSOLIDATED	52.7	0.0	
376.1	MODESTO		SILTY SHALE	112.7	52.7	
263.4	MODESTO	CHAPEL	COAL	2.5	165.4	
261.0	MODESTO	TRIVOLI	SANDSTONE	36.8	167.8	
224.2	MODESTO		SILTY SHALE	36.8	204.6	
187.5	MODESTO		LIMESTONE	1.2	241.3	
186.2	MODESTO		SILTY SHALE	83.3	242.6	
102.9	MODESTO	PIASA	LIMESTONE	6.1	325.9	
96.8	MODESTO		SHALE	17.2	332.0	DARK GRAY
79.7	CARBONDALE	DANVILLE	COAL	2.5	349.1	
77.2	CARBONDALE		SILTY SHALE	28.2	351.6	
49.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.6	379.8	
40.4	CARBONDALE	ANVIL ROCK	SANDSTONE	22.1	388.4	FINE
18.4	CARBONDALE		CALCAREOUS SHALE	7.4	410.4	DARK GRAY
11.0	CARBONDALE	BRERETON	LIMESTONE	7.4	417.8	
3.7	CARBONDALE	HERRIN	COAL	6.1	425.1	
-2.4	CARBONDALE		UNDERCLAY	3.7	431.2	
-6.1	CARBONDALE		SILTY SHALE	18.4	434.9	
-24.5	CARBONDALE	BRIAR HILL	COAL	2.5	453.3	
-26.9	CARBONDALE	DYKERSBURG	SILTY SHALE	71.1	455.7	
-98.0	CARBONDALE	SPRINGFIELD	COAL	7.2	526.8	
-105.1	CARBONDALE		SILTY SHALE	6.1	533.9	

MAPID: 16590011000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2650' S line, 1410' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.553043 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.841896 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 510.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 869-11 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
38.0	CARBONDALE	HERRIN	COAL & ROCK	10.0	400.0	70% COAL BALLS
4.5	CARBONDALE	BRIAR HILL	COAL	1.5	433.5	
-63.0	CARBONDALE	SPRINGFIELD	COAL	1.3	501.0	
-64.3	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.7	502.3	
-65.0	CARBONDALE	SPRINGFIELD	COAL	4.0	503.0	

MAPID: 16590026000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1450' S line, 1160' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.543538 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.838573 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 604.1 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 869-19 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	107.0	0.0	GLACIAL DRIFT
290.5	MODESTO	MOUND CITY	BLACK SHALE	1.5	184.5	
289.0	MODESTO		GRAY SHALE	11.0	186.0	
278.0	MODESTO	CHAPEL	COAL	2.0	197.0	
115.0	MODESTO	PIASA	LIMESTONE	5.0	360.0	
94.5	CARBONDALE	DANVILLE	COAL	2.0	380.5	
22.5	CARBONDALE	BRERETON	LIMESTONE	5.5	452.5	
15.0	CARBONDALE	HERRIN	COAL	4.3	460.0	
-13.0	CARBONDALE	BRIAR HILL	COAL	1.5	488.0	
-17.0	CARBONDALE	DYKERSBURG	SHALE	107.4	492.0	
-124.6	CARBONDALE	SPRINGFIELD	COAL	4.0	599.6	
-128.6	CARBONDALE		DARK GRAY SHALE	0.4	603.6	
-129.0	CARBONDALE		COAL	0.1	604.0	

MAPID: 16590029000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2100' S line, 1360' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.544245 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.840368 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 488.0 **LOGGED (FT.):** 620.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 869-15 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
488.0			UNCONSOLIDATED	123.0	0.0	
279.5	MODESTO	MOUND CITY	BLACK SHALE	1.5	208.5	
278.0	MODESTO		GRAY SHALE	10.0	210.0	
268.0	MODESTO	CHAPEL	COAL	2.0	220.0	
99.0	MODESTO	PIASA	LIMESTONE	5.0	389.0	
78.0	CARBONDALE	DANVILLE	COAL	2.0	410.0	
5.5	CARBONDALE	BRERETON	LIMESTONE	6.0	482.5	
-2.0	CARBONDALE	HERRIN	COAL	6.0	490.0	
-34.0	CARBONDALE	BRIAR HILL	COAL	2.0	522.0	
-132.0	CARBONDALE	SPRINGFIELD	COAL	-	620.0	

MAPID: 16590030000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2760' S line, 1100' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.54335 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.842188 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO I-25-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.0	PLEISTOCENE		CLAY	4.0	0.0	BROWN
486.0	CARBONDALE		SANDSTONE	3.0	4.0	BROWN
483.0	CARBONDALE		SANDSTONE	5.0	7.0	RED
478.0	CARBONDALE		SANDY SHALE	27.0	12.0	
451.0	CARBONDALE		DARK GRAY SHALE	8.0	39.0	
443.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	47.0	
439.0	CARBONDALE	COLCHESTER	COAL	0.5	51.0	APPROXIMATE THICKNESS
438.5	CARBONDALE		UNDERCLAY	7.5	51.5	
431.0	CARBONDALE		SANDSTONE	8.0	59.0	
423.0	CARBONDALE		SANDY SHALE	13.0	67.0	
410.0	CARBONDALE		DARK GRAY SHALE	16.0	80.0	
394.0	CARBONDALE		BLACK SHALE	4.0	96.0	
390.0	CARBONDALE	DEKOVEN	COAL	1.8	100.0	
388.2	CARBONDALE		SANDY SHALE	23.2	101.8	
365.0	CARBONDALE		BLACK SHALE	0.5	125.0	
364.5	CARBONDALE	DAVIS	COAL	3.3	125.5	
361.2	TRADEWATER		SHALE	6.3	128.8	

MAPID: 16590030000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2760' S line, 1100' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.54335 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.842188 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 562.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 869-14 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	86.0	0.0	GLACIAL DRIFT
273.0	MODESTO	MOUND CITY	BLACK SHALE	2.0	177.0	
271.0	MODESTO		GRAY SHALE	7.0	179.0	
264.0	MODESTO	CHAPEL	COAL	1.5	186.0	
97.5	MODESTO	PIASA	LIMESTONE	5.0	352.5	
76.0	CARBONDALE	DANVILLE	COAL	2.0	374.0	
5.0	CARBONDALE	BRERETON	LIMESTONE	4.0	445.0	
0.0	CARBONDALE	HERRIN	COAL	5.0	450.0	
-29.0	CARBONDALE	BRIAR HILL	COAL	1.0	479.0	
-30.0	CARBONDALE	DYKERSBURG	SHALE	70.0	480.0	
-100.0	CARBONDALE	SPRINGFIELD	COAL	6.0	550.0	
-106.0	CARBONDALE		MUDSTONE	0.7	556.0	
-106.7	CARBONDALE		SILTSTONE	5.3	556.7	

MAPID: 16590031000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2800' S line, 2650' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.548745 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.842304 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 561.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 869-9 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
473.0			UNCONSOLIDATED	113.0	0.0	GLACIAL DEPOSITS
291.0	MODESTO	MOUND CITY	BLACK SHALE	1.5	182.0	
289.5	MODESTO		GRAY SHALE	11.5	183.5	
278.0	MODESTO	CHAPEL	COAL	1.5	195.0	
111.5	MODESTO	PIASA	LIMESTONE	4.5	361.5	
93.0	CARBONDALE	DANVILLE	COAL	2.0	380.0	
20.5	CARBONDALE	BRERETON	LIMESTONE	6.0	452.5	
14.5	CARBONDALE	HERRIN	COAL	6.0	458.5	
-15.0	CARBONDALE	BRIAR HILL	COAL	2.0	488.0	
-17.0	CARBONDALE	DYKERSBURG	SHALE	63.0	490.0	
-80.0	CARBONDALE	SPRINGFIELD	COAL	6.5	553.0	

MAPID: 16590032000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 780' S line, 3220' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.550698 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.83673 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 544.2 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 869-17 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	127.0	0.0	GLACIAL DRIFT
306.5	MODESTO	MOUND CITY	BLACK SHALE	1.5	143.5	
305.0	MODESTO		GRAY SHALE	11.5	145.0	
293.5	MODESTO	CHAPEL	COAL	1.5	156.5	
128.0	MODESTO	PIASA	LIMESTONE	5.0	322.0	
107.5	CARBONDALE	DANVILLE	COAL	1.5	342.5	
32.0	CARBONDALE	BRERETON	LIMESTONE	5.0	418.0	
27.0	CARBONDALE	HERRIN	COAL	6.0	423.0	
-4.5	CARBONDALE	BRIAR HILL	COAL	1.5	454.5	
-6.0	CARBONDALE	DYKERSBURG	SHALE	74.7	456.0	
-80.7	CARBONDALE	SPRINGFIELD	COAL	3.0	530.7	
-83.7	CARBONDALE	SPRINGFIELD	SHALE	1.0	533.7	SHALE PARTING IN COAL
-84.7	CARBONDALE	SPRINGFIELD	COAL	3.5	534.7	
-88.2	CARBONDALE		SHALE	0.6	538.2	
-88.8	CARBONDALE		SILTY SHALE	1.4	538.8	
-90.2	CARBONDALE		SILTSTONE	4.0	540.2	

MAPID: 16500091000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2240' N line, 2610' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.53044 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.84286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 578.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	DANVILLE	COAL	2.3	359.0	
71.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	394.0	
42.0	CARBONDALE	ANVIL ROCK	SHALE & SANDSTONE	12.0	423.0	
24.0	CARBONDALE	HERRIN	COAL	5.7	441.0	
-7.0	CARBONDALE	BRIAR HILL	COAL	1.4	472.0	
-104.0	CARBONDALE	SPRINGFIELD	COAL	6.7	569.0	

MAPID: 16500091000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2240' N line, 2610' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.53044 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.84286 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 446.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.7	MODESTO		DARK GRAY SHALE	20.2	342.3	
102.5	CARBONDALE	DANVILLE	COAL	2.3	362.5	
100.2	CARBONDALE		SILTY SHALE	29.6	364.8	
70.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	394.3	
66.7	CARBONDALE	LAWSON	SILTY SHALE	25.0	398.3	
41.7	CARBONDALE	LAWSON	SANDSTONE	12.0	423.3	
29.7	CARBONDALE	BRERETON	NODULAR LIMESTONE	4.0	435.3	
25.7	CARBONDALE	ANNA	BLACK SHALE	1.7	439.3	
24.0	CARBONDALE	HERRIN	COAL	5.7	441.0	

MAPID: 16500091000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2240' N line, 2610' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.53044 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.84286 **DATE COLLECTED:** 0 / 0 / 1918

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 578.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
465.0			UNCONSOLIDATED	79.0	0.0	
386.0	MODESTO		SHALE	19.0	79.0	
367.0	MODESTO		SANDY SHALE	66.0	98.0	
301.0	MODESTO	CHAPEL	COAL	0.8	164.0	
300.2	MODESTO		SANDY SHALE	12.0	164.8	
288.2	MODESTO		SANDSTONE	34.2	176.8	
254.0	MODESTO		SANDY SHALE	49.0	211.0	
205.0	MODESTO		SHALE	4.7	260.0	DARK
200.3	MODESTO		COAL	0.3	264.7	
200.0	MODESTO		SANDY SHALE	18.0	265.0	
182.0	MODESTO		SHALE	7.3	283.0	DARK
174.7	MODESTO		COAL	0.7	290.3	
174.0	MODESTO		UNDERCLAY	2.0	291.0	
172.0	MODESTO		SHALE	10.0	293.0	
162.0	MODESTO		SANDY SHALE	8.0	303.0	
154.0	MODESTO		LIMESTONE	6.0	311.0	
148.0	MODESTO		SANDY SHALE	4.0	317.0	
144.0	MODESTO		SANDSTONE	7.0	321.0	
137.0	MODESTO		SANDY SHALE	5.0	328.0	
132.0	MODESTO		SANDSTONE	4.0	333.0	
128.0	MODESTO		SANDY SHALE	2.0	337.0	
126.0	MODESTO		SHALE	20.2	339.0	DARK
105.8	CARBONDALE	DANVILLE	COAL	2.3	359.2	
103.6	CARBONDALE		SANDY SHALE	29.6	361.4	LOG REPORTS 29.58' FOR 361.42 TO 394'
71.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	394.0	
67.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.0	398.0	
42.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	423.0	
30.0	CARBONDALE	BRERETON	LIMESTONE	4.0	435.0	
26.0	CARBONDALE	ANNA	BLACK SHALE	1.7	439.0	
24.3	CARBONDALE	HERRIN	COAL	5.7	440.7	
18.7	CARBONDALE		SHALE	1.7	446.3	
17.0	CARBONDALE		SANDY SHALE	23.0	448.0	
-6.0	CARBONDALE		SHALE	1.2	471.0	DARK
-7.2	CARBONDALE	BRIAR HILL	COAL	1.4	472.2	
-8.6	CARBONDALE	DYKERSBURG	SANDY SHALE	95.4	473.6	
-104.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	569.0	
-104.5	CARBONDALE	SPRINGFIELD	COAL	6.7	569.5	
-111.2	CARBONDALE		UNDERCLAY	1.8	576.2	

MAPID: 16500960000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.524592 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.840701 **DATE COLLECTED:** 7 / 12 / 1946

SURFACE ELEVATION (FT.): 502.3 **LOGGED (FT.):** 613.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 24 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
502.3			CLAY	38.0	0.0	CLAY, SAND, AND GRAVEL
464.3	MODESTO		GRAY SHALE	66.0	38.0	
398.3	MODESTO		DARK GRAY SHALE	25.0	104.0	DARK GREEN SHALE AND GRAVEL (TILL)
373.3	MODESTO		DARK GRAY SHALE	9.3	129.0	
364.0	MODESTO		GRAY SANDSTONE	20.8	138.3	
343.3	MODESTO		DARK GRAY SHALE	29.0	159.0	
314.3	MODESTO		GRAY SHALE	16.0	188.0	
298.3	MODESTO		DARK GRAY SHALE	13.6	204.0	
284.7	MODESTO	MOUND CITY	BLACK SHALE	4.7	217.6	
280.0	MODESTO	CHAPEL	COAL	1.2	222.3	
278.9	MODESTO		UNDERCLAY	0.2	223.4	
278.7	MODESTO		GRAY SANDSTONE	35.3	223.6	
243.4	MODESTO		SANDY SHALE	4.0	258.9	
239.4	MODESTO		SHALE	1.1	262.9	CONGLOMERATE SHALE
238.3	MODESTO		SANDY SHALE	5.3	264.0	
233.0	MODESTO		GRAY SHALE	33.1	269.3	
199.9	MODESTO		FOSSILIFEROUS LIMESTONE	1.6	302.4	
198.3	MODESTO		DARK GRAY SHALE	20.0	304.0	
178.3	MODESTO		SHALE	2.3	324.0	CONGLOMERATE SHALE
176.0	MODESTO		GRAY SANDSTONE	6.3	326.3	
169.7	MODESTO		DARK GRAY SHALE	6.0	332.6	
163.7	MODESTO		DARK GRAY SHALE	3.2	338.6	WITH IRON BANDS
160.5	MODESTO		BLACK SHALE	0.8	341.8	
159.7	MODESTO		COAL	0.3	342.6	
159.4	MODESTO		GRAY SHALE	1.1	342.9	
158.3	MODESTO		DARK GRAY SHALE	0.3	344.0	
158.0	MODESTO		BLACK SHALE	0.7	344.3	
157.4	MODESTO		DARK GRAY SHALE	3.3	344.9	WITH IRON BANDS
154.1	MODESTO		BLACK SHALE	3.1	348.2	WITH SULPHUR BANDS
151.0	MODESTO		COAL	0.8	351.3	
150.3	MODESTO		UNDERCLAY	0.2	352.0	
150.1	MODESTO		BLACK SHALE	0.3	352.2	
149.9	MODESTO		SHALE	11.6	352.4	CONGLOMERATE SH
138.3	MODESTO		SANDY SHALE	18.0	364.0	WITH LIMESTONE NODULES
120.3	MODESTO		SANDY SHALE	1.0	382.0	
119.3	MODESTO		GRAY SHALE	0.3	383.0	
119.0	MODESTO		GRAY SANDSTONE	1.2	383.3	
117.8	MODESTO		GRAY SHALE	0.3	384.5	

117.5	MODESTO		SANDY SHALE	4.8	384.8	
112.6	MODESTO		BONE COAL	0.3	389.7	
112.3	MODESTO		UNDERCLAY	0.3	390.0	
112.0	MODESTO		GRAY SHALE	2.1	390.3	
110.0	MODESTO	PIASA	LIMESTONE	4.8	392.3	
105.2	MODESTO		CALCAREOUS SHALE	1.6	397.1	
103.6	MODESTO		DARK GRAY SHALE	1.6	398.7	WITH IRON BANDS
102.0	MODESTO		BLACK SHALE	1.8	400.3	
100.3	MODESTO		GRAY SHALE	1.3	402.0	
99.0	MODESTO		GRAY SHALE	4.2	403.3	
94.9	MODESTO		DARK GRAY SHALE	6.7	407.4	
88.2	MODESTO		BLACK SHALE	1.2	414.1	
87.0	MODESTO		FOSSILIFEROUS LIMESTONE	0.4	415.3	-1" TO MATCH LOG ENTRY
86.6	CARBONDALE	DANVILLE	COAL	2.3	415.7	
84.4	CARBONDALE		UNDERCLAY	0.4	417.9	
84.0	CARBONDALE		SANDY SHALE	1.6	418.3	
82.4	CARBONDALE		DARK GRAY SHALE	0.8	419.9	
81.6	CARBONDALE		GRAY SANDSTONE	1.3	420.7	
80.3	CARBONDALE		GRAY SHALE	0.3	422.0	
80.0	CARBONDALE		GRAY SANDSTONE	0.7	422.3	
79.3	CARBONDALE		DARK GRAY SHALE	8.7	423.0	WITH IRON BANDS
70.6	CARBONDALE		GRAY SHALE	3.3	431.7	
67.4	CARBONDALE		DARK GRAY SHALE	7.1	434.9	
60.3	CARBONDALE		GRAY SHALE	1.3	442.0	
59.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	443.3	
52.2	CARBONDALE		SHALE	0.4	450.1	CONGLOMERATE SHALE
51.8	CARBONDALE		DARK GRAY SHALE	2.3	450.5	
49.5	CARBONDALE		DARK SHALE	7.3	452.8	
42.3	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	460.0	
40.3	CARBONDALE	ANVIL ROCK	SANDSTONE	5.3	462.0	
35.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	1.8	467.3	
33.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.4	469.1	
25.8	CARBONDALE		DARK GRAY SHALE	5.7	476.5	
20.1	CARBONDALE		COAL	0.1	482.2	
20.0	CARBONDALE	CONANT	FOSSILIFEROUS LIMESTONE	0.6	482.3	
19.4	CARBONDALE	CONANT	FOSSILIFEROUS LIMESTONE	0.6	482.9	
18.8	CARBONDALE	JAMESTOWN	COAL	0.1	483.5	
18.7	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.3	483.6	
18.5	CARBONDALE		BLACK SHALE	1.6	483.8	
16.9	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	4.4	485.4	
12.5	CARBONDALE	ANNA	BLACK SHALE	1.0	489.8	
11.5	CARBONDALE	HERRIN	COAL	5.8	490.8	
5.6	CARBONDALE		UNDERCLAY	0.6	496.7	
5.0	CARBONDALE		GRAY SHALE	2.8	497.3	CONGLOMERATE GRAY SHALE

2.3	CARBONDALE		GRAY SHALE	6.0	500.0	
-3.7	CARBONDALE		DARK GRAY SHALE	14.0	506.0	WITH IRON BANDS
-17.7	CARBONDALE		DARK GRAY SHALE	2.3	520.0	
-20.0	CARBONDALE	BRIAR HILL	COAL	1.7	522.3	
-21.6	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	70.1	523.9	+3'8" TO MATCH NEXT ENTRY DEPTH
-91.7	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	594.0	
-101.7	CARBONDALE	SPRINGFIELD	COAL	7.7	604.0	
-109.5	CARBONDALE		UNDERCLAY	1.3	611.8	

MAPID: 16502433000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53148 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840832 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 494.0 **LOGGED (FT.):** 2706.0 **LOG TYPE:** Electric Log

SOURCE: UPCHURCH JOHN D, BISHOP BERTHA B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	665.0	
-206.0	CARBONDALE	SURVANT	COAL	0.5	700.0	
-296.0	CARBONDALE	COLCHESTER	COAL	0.5	790.0	
-318.0	CARBONDALE	DEKOVEN	COAL	0.0	812.0	
-348.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	842.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-359.0	CARBONDALE	DAVIS	COAL	5.0	853.0	
-380.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	874.0	
-414.0	TRADEWATER	MT. RORAH	COAL	1.3	908.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502433000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53148 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.840832 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 494.0 **LOGGED (FT.):** 2706.0 **LOG TYPE:**

SOURCE: UPCHURCH JOHN D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
14.0	CARBONDALE	BRERETON	LIMESTONE	-	480.0	
-1434.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1928.0	
-1813.0			LIMESTONE	-	2307.0	
-2212.0		BASE BARLOW	LIMESTONE	-	2706.0	

MAPID: 16502433000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53148 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840832 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 494.0 **LOGGED (FT.):** 856.5 **LOG TYPE:** Electric Log
SOURCE: UPCHURCH JOHN D 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
6.0	CARBONDALE	HERRIN	COAL	5.0	488.0	
-26.0	CARBONDALE	BRIAR HILL	COAL	-	520.0	
-123.0	CARBONDALE	SPRINGFIELD	COAL	9.0	617.0	
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	-	664.0	
-298.0	CARBONDALE	COLCHESTER	COAL	-	792.0	
-358.0	SPOON	DAVIS	COAL	4.5	852.0	

MAPID: 16502987000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538364 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.840962 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 1740.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-365.0	SPOON	DAVIS	UNCLASSIFIED	-	820.0	
-1285.0	BASE OF PENN.		UNCLASSIFIED	-	1740.0	

MAPID: 16502987000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538364 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840962 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2662.0 **LOG TYPE:**
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	BRERETON	LIMESTONE	-	452.0	
-1435.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1890.0	
-1807.0			LIMESTONE	-	2262.0	
-2207.0		BASE BARLOW	LIMESTONE	-	2662.0	

MAPID: 16502987000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538364 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840962 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2662.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S., GUEST LLOYD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-250.0	CARBONDALE	SURVANT	COAL	0.5	705.0	
-317.0	CARBONDALE	DEKOVEN	COAL	3.0	772.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	810.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-364.0	CARBONDALE	DAVIS	COAL	3.8	819.0	
-385.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	840.0	
-445.0	TRADEWATER	MT. RORAH	COAL	0.5	900.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502987000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538364 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840962 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 633.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	HERRIN	COAL	4.5	462.0	
-34.0	CARBONDALE	BRIAR HILL	COAL	-	489.0	
-128.0	CARBONDALE	SPRINGFIELD	COAL	9.0	583.0	
-178.0	CARBONDALE	HOUCHIN CREEK	COAL	-	633.0	

MAPID: 16503029000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531497 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846315 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2661.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., ENDICOTT PAUL T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	619.0	
-224.0	CARBONDALE	SURVANT	COAL	0.5	660.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	721.0	
-321.0	CARBONDALE	DEKOVEN	COAL	3.0	757.0	
-349.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	785.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-357.0	CARBONDALE	DAVIS	COAL	4.0	793.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	820.0	
-434.0	TRADEWATER	MT. RORAH	COAL	0.5	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503029000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531497 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846315 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2661.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.0	CARBONDALE	BRERETON	LIMESTONE	-	433.0	
-1441.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1877.0	
-1818.0			LIMESTONE	-	2254.0	
-2225.0		BASE BARLOW	LIMESTONE	-	2661.0	

MAPID: 16503029000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531497 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846315 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 797.5 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-4.0	CARBONDALE	HERRIN	COAL	4.5	440.0	
-34.0	CARBONDALE	BRIAR HILL	COAL	-	470.0	
-119.0	CARBONDALE	SPRINGFIELD	COAL	8.0	555.0	
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	-	619.0	
-286.0	CARBONDALE	COLCHESTER	COAL	-	722.0	
-357.0	SPOON	DAVIS	COAL	4.5	793.0	

MAPID: 16503083000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524605 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.848018 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2617.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, JONES ROY ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-176.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	593.0	
-218.0	CARBONDALE	SURVANT	COAL	0.5	635.0	
-293.0	CARBONDALE	COLCHESTER	COAL	3.0	710.0	
-311.0	CARBONDALE	DEKOVEN	COAL	3.0	728.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	750.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-343.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	789.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503083000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524605 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848018 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2617.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	BRERETON	LIMESTONE	-	406.0	
-1424.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1841.0	
-1797.0			LIMESTONE	-	2214.0	
-2200.0		BASE BARLOW	LIMESTONE	-	2617.0	

MAPID: 16503083000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524605 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848018 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 763.5 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
4.0	CARBONDALE	HERRIN	COAL	5.0	413.0	
-28.0	CARBONDALE	BRIAR HILL	COAL	-	445.0	
-128.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	545.0	PARTING IN MIDDLE OF SEAM
-175.0	CARBONDALE	HOUCHIN CREEK	COAL	-	592.0	
-293.0	CARBONDALE	COLCHESTER	COAL	-	710.0	
-342.0	SPOON	DAVIS	COAL	4.5	759.0	

MAPID: 16503093000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.526902 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.848065 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2628.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., BISHOP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	593.0	
-212.0	CARBONDALE	SURVANT	COAL	0.5	632.0	
-279.0	CARBONDALE	COLCHESTER	COAL	0.6	699.0	
-309.0	CARBONDALE	DEKOVEN	COAL	3.0	729.0	
-336.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	756.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-344.0	CARBONDALE	DAVIS	COAL	4.0	764.0	
-370.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	790.0	
-432.0	TRADEWATER	MT. RORAH	COAL	0.5	852.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503093000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.526902 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848065 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2628.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
7.0	CARBONDALE	BRERETON	LIMESTONE	-	413.0	
-1425.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1845.0	
-2208.0		BASE BARLOW	LIMESTONE	-	2628.0	

MAPID: 16503093000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.526902 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.848065 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 700.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.0	MODESTO	CHAPEL	COAL	-	141.0	
78.0	CARBONDALE	DANVILLE	COAL	-	342.0	
2.0	CARBONDALE	HERRIN	COAL	5.5	418.0	
-28.0	CARBONDALE	BRIAR HILL	COAL	-	448.0	
-118.0	CARBONDALE	SPRINGFIELD	COAL	7.0	538.0	
-174.0	CARBONDALE	HOUCHIN CREEK	COAL	-	594.0	
-280.0	CARBONDALE	COLCHESTER	COAL	-	700.0	

MAPID: 16503106000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 325' N line, 327' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524603 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840718 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 478.0 **LOGGED (FT.):** 2694.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
8.0	CARBONDALE	BRERETON	LIMESTONE	-	470.0	
-1435.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1913.0	
-1802.0			LIMESTONE	-	2280.0	
-2216.0		BASE BARLOW	LIMESTONE	-	2694.0	

MAPID: 16503106000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 325' N line, 327' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524603 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.840718 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 478.0 **LOGGED (FT.):** 3195.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
4.0	CARBONDALE	HERRIN	COAL	6.0	474.0	
-32.0	CARBONDALE	BRIAR HILL	COAL	-	510.0	
-116.0	CARBONDALE	SPRINGFIELD	COAL	7.0	594.0	
-174.0	CARBONDALE	HOUCHIN CREEK	COAL	-	652.0	

MAPID: 16503106000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 325' N line, 327' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524603 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840718 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 478.0 **LOGGED (FT.):** 780.0 **LOG TYPE:** Electric Log
SOURCE: 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
4.0	CARBONDALE	HERRIN	COAL	5.5	474.0	
-27.0	CARBONDALE	BRIAR HILL	COAL	-	505.0	
-117.0	CARBONDALE	SPRINGFIELD	COAL	9.0	595.0	
-177.0	CARBONDALE	HOUCHIN CREEK	COAL	-	655.0	
-302.0	CARBONDALE	COLCHESTER	COAL	-	780.0	

MAPID: 16503172000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.538333 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 600.0 **LOG TYPE:** Electric Log
SOURCE: KEWANEE OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
24.0	CARBONDALE	HERRIN	COAL	4.5	423.0	
-95.0	CARBONDALE	SPRINGFIELD	COAL	7.0	542.0	
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	

MAPID: 16503172000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.538333 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2635.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	416.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1856.0	
-1789.0			LIMESTONE	-	2236.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2635.0	

MAPID: 16503252000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533756 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.837215 **DATE COLLECTED:** 11 / 0 / 1958
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2680.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., MICK R R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-159.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-228.0	CARBONDALE	SURVANT	COAL	0.5	703.0	
-300.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-320.0	CARBONDALE	DEKOVEN	COAL	0.0	795.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	820.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-354.0	CARBONDALE	DAVIS	COAL	4.0	829.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	859.0	
-430.0	TRADEWATER	MT. RORAH	COAL	1.5	905.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503252000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533756 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837215 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2680.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
22.0	CARBONDALE	BRERETON	LIMESTONE	-	453.0	
-1425.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1900.0	
-1782.0			LIMESTONE	-	2257.0	
-2205.0		BASE BARLOW	LIMESTONE	-	2680.0	

MAPID: 16503252000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533756 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.837215 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 633.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
7.0	CARBONDALE	HERRIN	COAL	4.5	468.0	
-15.0	CARBONDALE	BRIAR HILL	COAL	-	490.0	
-87.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.0	562.0	SPLIT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	-	633.0	

MAPID: 16503291000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52919 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842626 **DATE COLLECTED:** 4 / 0 / 1959
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2662.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., BISHOP BERTHA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	620.0	
-207.0	CARBONDALE	SURVANT	COAL	0.5	655.0	
-292.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-302.0	CARBONDALE	DEKOVEN	COAL	0.0	750.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-349.0	CARBONDALE	DAVIS	COAL	4.0	797.0	
-375.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	823.0	
-412.0	TRADEWATER	MT. RORAH	COAL	1.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503291000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.52919 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.842626 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2662.0 **LOG TYPE:**

SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
10.0	CARBONDALE	BRERETON	LIMESTONE	-	438.0	
-1432.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1880.0	
-1813.0			LIMESTONE	-	2261.0	
-2214.0		BASE BARLOW	LIMESTONE	-	2662.0	

MAPID: 16503291000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.52919 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.842626 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 742.0 **LOG TYPE:** Electric Log

SOURCE: KAPP, LOUIS H., JR. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.0	MODESTO	CHAPEL	COAL	-	169.0	
3.0	CARBONDALE	HERRIN	COAL	4.5	445.0	
-30.0	CARBONDALE	BRIAR HILL	COAL	-	478.0	
-132.0	CARBONDALE	SPRINGFIELD	COAL	8.0	580.0	
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	-	620.0	
-294.0	CARBONDALE	COLCHESTER	COAL	-	742.0	

MAPID: 16503343000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533782 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842836 **DATE COLLECTED:** 11 / 0 / 1960
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2667.0 **LOG TYPE:** Electric Log
SOURCE: POWERS ROY H, BISHOP 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-174.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	622.0	
-206.0	CARBONDALE	SURVANT	COAL	0.5	654.0	
-302.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-330.0	CARBONDALE	DEKOVEN	COAL	0.0	778.0	
-349.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	797.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-358.0	CARBONDALE	DAVIS	COAL	4.0	806.0	
-380.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	828.0	
-391.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	839.0	
-424.0	TRADEWATER	MT. RORAH	COAL	1.5	872.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503343000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533782 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2667.0 **LOG TYPE:**
SOURCE: POWERS ROY H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
6.0	CARBONDALE	BRERETON	LIMESTONE	-	442.0	
-1442.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1890.0	
-2219.0		BASE BARLOW	LIMESTONE	-	2667.0	

MAPID: 16523916000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522301 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846151 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 707.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.0	CARBONDALE	HERRIN	COAL	5.0	425.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	-	453.0	
-106.0	CARBONDALE	SPRINGFIELD	COAL	7.0	550.0	
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	
-263.0	CARBONDALE	COLCHESTER	COAL	-	707.0	

MAPID: 16525380000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524602 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.846195 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 592.0 **LOG TYPE:** Electric Log
SOURCE: DOUBLE RIVER O&G 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
11.0	CARBONDALE	HERRIN	COAL	4.5	417.0	
-115.0	CARBONDALE	SPRINGFIELD	COAL	1.5	543.0	
-116.5	CARBONDALE	SPRINGFIELD	SHALE	1.5	544.5	
-118.0	CARBONDALE	SPRINGFIELD	COAL	2.5	546.0	
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	-	592.0	

MAPID: 16526154000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.530333 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.841722 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 632.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8610-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	115.0	0.0	GLACIAL DRIFT
-	MODESTO		SANDY SHALE	40.0	115.0	WITH SANDSTONE BEDS
-	MODESTO		SILTY SHALE	53.0	155.0	
-	MODESTO	TRIVOLI	SANDSTONE	16.0	208.0	
-	MODESTO		SILTY SHALE	47.5	224.0	
-	MODESTO		LIMESTONE	0.5	271.5	DARK GRAY
-	MODESTO		SILTY SHALE	17.5	272.0	
-	MODESTO	POND CREEK	COAL	0.5	289.5	
-	MODESTO		SILTY SHALE	68.0	290.0	
-	MODESTO	PIASA	LIMESTONE	5.0	358.0	
-	MODESTO		SILTY SHALE	18.0	363.0	
-	CARBONDALE	DANVILLE	COAL	1.0	381.0	
-	CARBONDALE		SILTY SHALE	19.0	382.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	401.0	
-	CARBONDALE		SANDY SHALE	13.0	407.0	WITH SANDSTONE
-	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	420.0	
-	CARBONDALE		CALCAREOUS SHALE	6.0	450.0	
-	CARBONDALE	BRERETON	LIMESTONE	6.0	456.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.0	462.0	
-	CARBONDALE	HERRIN	COAL	5.0	463.0	
-	CARBONDALE		UNDERCLAY	4.0	468.0	
-	CARBONDALE		SILTY SHALE	18.0	472.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	490.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	491.0	
-	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	25.0	505.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	56.0	530.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.9	586.0	
-	CARBONDALE		SHALE	2.1	592.9	DARK GRAY
-	CARBONDALE		SANDSTONE	37.0	595.0	

MAPID: 16526155000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 50' N line, 2200' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.5319 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.848935 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 533.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8610-2 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	GLACIAL DRIFT
-	MODESTO		SILTY SHALE	89.0	60.0	
-	MODESTO	CHAPEL	COAL	1.0	149.0	
-	MODESTO	TRIVOLI	SANDY SHALE	10.0	150.0	
-	MODESTO	TRIVOLI	SANDSTONE	15.0	160.0	MEDIUM GRAINED
-	MODESTO		SILTY SHALE	24.0	175.0	
-	MODESTO		SANDSTONE	9.0	199.0	FINE TO MEDIUM
-	MODESTO		SHALE	42.0	208.0	
-	MODESTO		SILTY SHALE	20.0	250.0	
-	MODESTO		SHALY SANDSTONE	45.0	270.0	
-	MODESTO		GRAY SHALE	15.0	315.0	
-	MODESTO	PIASA	LIMESTONE	4.0	330.0	
-	MODESTO		SILTY SHALE	19.0	334.0	
-	CARBONDALE	DANVILLE	COAL	1.0	353.0	
-	CARBONDALE		SILTY SHALE	26.0	354.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	380.0	
-	CARBONDALE		COAL	2.0	390.0	
-	CARBONDALE		SILTY SHALE	9.0	392.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	401.0	
-	CARBONDALE		CALCAREOUS SHALE	3.0	417.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	2.0	420.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	422.0	
-	CARBONDALE	HERRIN	COAL	5.0	424.0	
-	CARBONDALE		UNDERCLAY	2.0	429.0	
-	CARBONDALE	BRIAR HILL	COAL	18.0	431.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	71.0	449.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	520.0	
-	CARBONDALE		SILTY SHALE	6.0	527.0	

MAPID: 16526156000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2400' S line, 2400' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.53116 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.841044 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 586.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8610-3 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0	GLACIAL DRIFT
-	BOND		GRAY SHALE	23.0	37.0	SOFT
-	BOND	MT. CARMEL	SANDSTONE	25.0	60.0	FINE. SHALY
-	MODESTO		SILTY SHALE	100.0	85.0	
-	MODESTO	TRIVOLI	SANDSTONE	25.0	185.0	FINE, SHALY
-	MODESTO		SILTY SHALE	115.0	210.0	
-	MODESTO		SANDSTONE	17.0	325.0	FINE, SHALY
-	MODESTO		SHALE	3.0	342.0	DARK GRAY
-	MODESTO	PIASA	LIMESTONE	3.0	345.0	TAN
-	MODESTO		GRAY SHALE	17.0	348.0	
-	CARBONDALE	DANVILLE	COAL	2.0	365.0	
-	CARBONDALE		SILTY SHALE	22.0	367.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	389.0	
-	CARBONDALE		SILTY SHALE	17.0	393.0	
-	CARBONDALE		SANDSTONE	26.0	410.0	FINE TO MEDIUM
-	CARBONDALE		CALCAREOUS SHALE	3.0	436.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	4.0	439.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE	1.0	443.0	
-	CARBONDALE	HERRIN	COAL	5.0	444.0	
-	CARBONDALE		UNDERCLAY	4.0	449.0	
-	CARBONDALE		ARGILLACEOUS LIMESTONE	3.0	453.0	NODULAR
-	CARBONDALE		SILTY SHALE	22.0	456.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	478.0	
-	CARBONDALE		SILTY SHALE	95.0	479.0	
-	CARBONDALE	SPRINGFIELD	COAL	8.0	574.0	
-	CARBONDALE		SILTY SHALE	4.0	582.0	

MAPID: 16526157000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1900' S line, 500' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.522885 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.839519 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 611.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8610-6 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	GLACIAL DRIFT
-			GRAY SHALE	70.0	60.0	SOFT
-			SANDSTONE	25.0	130.0	FINE, SHALY
-			SILTY SHALE	69.0	155.0	
-	MODESTO	CHAPEL	COAL	1.0	224.0	
-	MODESTO	TRIVOLI	SANDSTONE	43.0	225.0	FINE SHALY
-	MODESTO		SILTY SHALE	36.0	268.0	
-	MODESTO		LIMESTONE	2.0	304.0	
-	MODESTO		SILTY SHALE	59.0	306.0	
-	MODESTO		SANDSTONE	8.0	365.0	FINE TO MEDIUM
-	MODESTO		SILTY SHALE	20.0	373.0	
-	MODESTO	PIASA	LIMESTONE	4.0	393.0	TAN
-	MODESTO		GRAY SHALE	18.0	397.0	
-	CARBONDALE	DANVILLE	COAL	2.0	415.0	
-	CARBONDALE		SILTY SHALE	28.0	417.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	445.0	
-	CARBONDALE		SANDY SHALE	9.0	451.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	460.0	FINE
-	CARBONDALE		SANDY SHALE	16.0	467.0	
-	CARBONDALE	BRERETON	LIMESTONE	5.0	483.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE	1.0	488.0	
-	CARBONDALE	HERRIN	COAL	5.5	489.0	
-	CARBONDALE		UNDERCLAY	1.5	494.5	
-	CARBONDALE		LIMESTONE	2.0	496.0	NODULAR
-	CARBONDALE		SILTY SHALE	23.0	498.0	
-	CARBONDALE	BRIAR HILL	COAL	1.0	521.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	26.0	522.0	WITH SANDSTONE
-	CARBONDALE	DYKERSBURG	SILTY SHALE	51.0	548.0	
-	CARBONDALE	SPRINGFIELD	COAL	7.0	599.0	
-	CARBONDALE		SILTY SHALE	5.0	606.0	

MAPID: 16590028000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2740' S line, 570' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.537538 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.842095 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 585.3 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 8610-4 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
446.0			UNCONSOLIDATED	86.0	0.0	GLACIAL DRIFT
274.0	MODESTO	MOUND CITY	BLACK SHALE	1.5	172.0	
272.5			GRAY SHALE	11.5	173.5	
261.0	MODESTO	CHAPEL	COAL	2.5	185.0	
104.0	MODESTO	PIASA	LIMESTONE	4.5	342.0	
81.5	CARBONDALE	DANVILLE	COAL	2.5	364.5	
5.0	CARBONDALE	BRERETON	LIMESTONE	5.5	441.0	
-2.0	CARBONDALE	HERRIN	COAL	6.5	448.0	
-29.0	CARBONDALE	BRIAR HILL	COAL	1.5	475.0	
-30.5	CARBONDALE	DYKERSBURG	SHALE	94.3	476.5	
-124.8	CARBONDALE	SPRINGFIELD	COAL	4.5	570.8	
-129.3	CARBONDALE	SPRINGFIELD	SHALE	1.5	575.3	
-130.8	CARBONDALE	SPRINGFIELD	COAL	2.5	576.8	
-133.3	CARBONDALE		SHALE	5.0	579.3	
-138.3	CARBONDALE		SILTSTONE	1.0	584.3	

MAPID: 16500650000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512441 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.845683 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 489.8 **LOGGED (FT.):** 584.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 13 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
489.8			UNCLASSIFIED	55.0	0.0	
434.8			CLAY	48.0	55.0	BLUE GRAVELY CLAY
386.8	MODESTO		BLUE SHALE	14.0	103.0	
372.8	MODESTO		BLUE SHALE	72.0	117.0	
300.8	MODESTO		DARK SHALE	1.0	189.0	
299.8	MODESTO	MOUND CITY	BLACK SHALE	6.2	190.0	
293.6	MODESTO	CHAPEL	COAL	1.1	196.2	
292.5	MODESTO		UNDERCLAY	2.0	197.3	
290.5	MODESTO		SANDSTONE	19.0	199.3	
271.5	MODESTO		SANDSTONE	41.8	218.3	WITH SHALE STREAKS
229.8	MODESTO		BLUE SHALE	19.7	260.0	
210.1	MODESTO		LIMESTONE	1.5	279.7	
208.6	MODESTO		BLUE SHALE	12.8	281.2	
195.8	MODESTO		BLUE SHALE	7.0	294.0	
188.8	MODESTO		COAL	0.3	301.0	
188.5	MODESTO		UNDERCLAY	0.7	301.3	
187.8	MODESTO		GRAY SHALE	7.7	302.0	
180.1	MODESTO		BLUE SHALE	13.3	309.7	
166.8	MODESTO		BLACK SHALE	2.0	323.0	
164.8	MODESTO	POND CREEK	COAL	0.8	325.0	
164.0	MODESTO		UNDERCLAY	6.2	325.8	
157.8	MODESTO		BLUE SHALE	9.0	332.0	
148.8	MODESTO		SANDY SHALE	9.0	341.0	
139.8	MODESTO		BLUE SHALE	16.5	350.0	
123.3	MODESTO	PIASA	SHALY LIMESTONE	3.5	366.5	
119.8	MODESTO		BLUE SHALE	22.0	370.0	
97.8	CARBONDALE	DANVILLE	COAL	2.3	392.0	
95.5	CARBONDALE		SANDY CLAYSTONE	0.5	394.3	SANDY FIRE CLAY
95.0	CARBONDALE		SANDY SHALE	6.5	394.8	
88.5	CARBONDALE		BLUE SHALE	22.7	401.3	
65.8	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	5.0	424.0	
60.8	CARBONDALE		BLUE SHALE	17.0	429.0	
43.8	CARBONDALE		BLUE SHALE	9.8	446.0	
34.0	CARBONDALE	JAMESTOWN	COAL	0.1	455.8	
34.0	CARBONDALE		BLUE SHALE	2.3	455.8	
31.6	CARBONDALE	BRERETON	BLUE LIMESTONE	4.8	458.2	
26.9	CARBONDALE	ANNA	BLACK SHALE	1.6	462.9	
25.3	CARBONDALE	HERRIN	COAL	5.7	464.5	
19.6	CARBONDALE		SANDY CLAYSTONE	2.8	470.2	SANDY FIRE CLAY

16.8	CARBONDALE		BLUE SHALE	28.2	473.0	
-11.4	CARBONDALE	BRIAR HILL	COAL	1.8	501.2	
-13.1	CARBONDALE		BLUE SHALE	3.6	502.9	
-16.7	CARBONDALE		FOSSILIFEROUS SHALE	1.0	506.5	
-17.7	CARBONDALE	DYKERSBURG	SANDY SHALE	42.5	507.5	
-60.2	CARBONDALE	DYKERSBURG	SANDSTONE	24.0	550.0	WITH SHALE STREAKS
-84.2	CARBONDALE	DYKERSBURG	BLACK SHALE	1.2	574.0	WITH COAL PARTINGS
-85.4	CARBONDALE	SPRINGFIELD	COAL	0.8	575.2	
-86.2	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	576.0	
-86.5	CARBONDALE	SPRINGFIELD	COAL	3.5	576.3	
-90.0	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	579.8	
-90.2	CARBONDALE	SPRINGFIELD	COAL	3.3	580.0	
-93.5	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	583.3	
-93.7	CARBONDALE	SPRINGFIELD	COAL	0.4	583.5	
-94.1	CARBONDALE		SANDY CLAYSTONE	0.1	583.9	SANDY FIRE CLAY

MAPID: 16500650000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512441 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845683 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 470.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.9	MODESTO	PIASA	LIMESTONE/UNDERCLAY	3.5	367.1	
119.4	MODESTO		GRAY SHALE	22.0	370.6	
97.4	CARBONDALE	DANVILLE	COAL	2.3	392.6	
95.1	CARBONDALE		SHALE	29.7	394.9	
65.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	424.6	
60.4	CARBONDALE	LAWSON	GRAY SHALE	26.8	429.6	
33.7	CARBONDALE		GRAY SHALE	2.3	456.3	
31.3	CARBONDALE	BRERETON	LIMESTONE	4.8	458.7	
26.6	CARBONDALE	ANNA	BLACK SHALE	1.6	463.4	
25.0	CARBONDALE	HERRIN	COAL	5.7	465.0	

MAPID: 16500961000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.515321 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.835175 **DATE COLLECTED:** 6 / 14 / 1946

SURFACE ELEVATION (FT.): 443.9 **LOGGED (FT.):** 504.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 22 **WELL TYPE:** Coal Test

COMMENT: CORE#: C 3100, C 3410

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.9			CLAY	35.0	0.0	SURFACE CLAY, SAND, AND GRAVEL
408.9	MODESTO		GRAY SHALE	7.0	35.0	
401.9	MODESTO		DARK GRAY SHALE	41.0	42.0	
360.9	MODESTO		GRAY SHALE	35.0	83.0	
325.9	MODESTO		DARK GRAY SHALE	22.5	118.0	
303.4	MODESTO	CHAPEL	COAL	1.1	140.5	
302.3	MODESTO		UNDERCLAY	0.4	141.6	
301.9	MODESTO		GRAY SANDSTONE	29.0	142.0	
272.9	MODESTO		GRAY SHALE	6.8	171.0	
266.1	MODESTO		GRAY SANDSTONE	3.3	177.8	
262.9	MODESTO		GRAY SHALE	7.0	181.0	
255.9	MODESTO		DARK GRAY SHALE	51.7	188.0	
204.2	MODESTO		COAL	0.4	239.7	
203.9	MODESTO		DARK GRAY SHALE	3.0	240.0	
200.9	MODESTO		GRAY SHALE	5.0	243.0	
195.9	MODESTO		DARK GRAY SHALE	6.0	248.0	WITH IRON BANDS
189.9	MODESTO		DARK GRAY SHALE	2.3	254.0	
187.6	MODESTO		BLACK SHALE	8.5	256.3	BLACK SLATE AND SULPHUR
179.1	MODESTO		COAL	0.6	264.8	
178.5	MODESTO		SHALE	10.7	265.4	CONGLOMERATE SHALE
167.9	MODESTO		DARK GRAY SHALE	1.5	276.0	
166.3	MODESTO		SANDY SHALE	10.4	277.6	
155.9	MODESTO		GRAY SHALE	9.0	288.0	
146.9	MODESTO		DARK GRAY SHALE	4.0	297.0	WITH IRON BANDS
142.9	MODESTO		GRAY SHALE	2.7	301.0	
140.2	MODESTO	PIASA	LIMESTONE	5.3	303.7	
135.0	MODESTO		SHALE	1.0	308.9	CONGLOMERATE SHALE
134.0	MODESTO		DARK GRAY SHALE	3.4	309.9	
130.6	MODESTO		GRAY SHALE	4.7	313.3	
125.9	MODESTO		DARK GRAY SHALE	7.0	318.0	WITH IRON BANDS
118.9	MODESTO		DARK GRAY SHALE	1.8	325.0	
117.1	CARBONDALE	DANVILLE	COAL	2.2	326.8	
115.0	CARBONDALE		UNDERCLAY	0.4	328.9	
114.6	CARBONDALE		DARK GRAY SHALE	7.8	329.3	
106.8	CARBONDALE	ALLENBY	COAL	0.2	337.1	CONGLOMERATE COAL AND SHALE
106.6	CARBONDALE		GRAY SHALE	0.8	337.3	
105.8	CARBONDALE		GRAY SANDSTONE	2.0	338.1	
103.8	CARBONDALE		DARK GRAY SHALE	3.4	340.1	

100.4	CARBONDALE		CALCAREOUS SHALE	3.4	343.5	
97.0	CARBONDALE		FOSSILIFEROUS LIMESTONE	6.1	346.9	
90.9	CARBONDALE		DARK GRAY SHALE	3.3	353.0	
87.6	CARBONDALE		DARK GRAY SHALE	0.4	356.3	WITH COAL PARTINGS
87.1	CARBONDALE		COAL	0.6	356.8	
86.6	CARBONDALE		DARK GRAY SHALE	0.2	357.3	WITH COAL PARTINGS
86.4	CARBONDALE		DARK GRAY SHALE	2.5	357.5	
83.9	CARBONDALE		DARK GRAY SHALE	6.5	360.0	
77.4	CARBONDALE	ANVIL ROCK	SANDSTONE	7.9	366.5	
69.5	CARBONDALE		DARK GRAY SHALE	12.3	374.4	
57.1	CARBONDALE	CONANT	FOSSILIFEROUS LIMESTONE	0.6	386.8	
56.6	CARBONDALE		BLACK SHALE	1.4	387.3	WITH FOSSILS
55.1	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	5.0	388.8	
50.1	CARBONDALE	ANNA	BLACK SHALE	0.8	393.8	
49.3	CARBONDALE	HERRIN	COAL	0.7	394.6	
48.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	395.3	SULPHUR BAND
48.6	CARBONDALE	HERRIN	COAL	1.9	395.3	
46.7	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	397.2	SULPHUR BAND
46.7	CARBONDALE	HERRIN	COAL	0.1	397.2	
46.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	397.3	SULPHUR BAND
46.6	CARBONDALE	HERRIN	COAL	0.8	397.3	
45.9	CARBONDALE	HERRIN	BONE COAL	0.1	398.0	
45.7	CARBONDALE	HERRIN	COAL	0.7	398.2	
45.0	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	398.9	SULPHUR BAND
45.0	CARBONDALE	HERRIN	COAL	0.9	398.9	
44.1	CARBONDALE		UNDERCLAY	1.8	399.8	
42.3	CARBONDALE		SHALE	1.4	401.6	CONGLOMERATE SHALE
40.9	CARBONDALE		DARK GRAY SHALE	10.0	403.0	WITH LS NODULES
30.9	CARBONDALE		DARK GRAY SHALE	10.0	413.0	
20.9	CARBONDALE		DARK GRAY SHALE	4.6	423.0	WITH IRON BAND
16.3	CARBONDALE	BRIAR HILL	COAL	1.6	427.6	
14.7	CARBONDALE		DARK GRAY SHALE	3.1	429.2	
11.6	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.1	432.3	
11.6	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	65.5	432.3	
-53.9	CARBONDALE	SPRINGFIELD	COAL	5.7	497.8	
-59.6	CARBONDALE		UNDERCLAY	0.5	503.5	

MAPID: 16500962000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.512995 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.83701 **DATE COLLECTED:** 7 / 2 / 1946

SURFACE ELEVATION (FT.): 456.2 **LOGGED (FT.):** 534.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 23 **WELL TYPE:** Coal Test

COMMENT: 'ISGS CORE# C-3031 & C-9962'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.2			CLAY	34.0	0.0	CLAY, SAND, AND GRAVEL
422.2	MODESTO		GRAY SHALE	89.0	34.0	
333.2	MODESTO		DARK GRAY SHALE	25.5	123.0	
307.7	MODESTO		DARK GRAY SHALE	1.5	148.5	DARK GRAY SHALE WITH FOSSILS
306.2	MODESTO		BLACK SHALE	4.7	150.0	
301.5	MODESTO		FOSSILIFEROUS LIMESTONE	1.6	154.7	
299.9	MODESTO	MOUND CITY	BLACK SHALE	0.8	156.3	
299.2	MODESTO	CHAPEL	COAL	1.3	157.0	COAL - RIDER #1 (log)
297.9	MODESTO		UNDERCLAY	0.3	158.3	
297.7	MODESTO		GRAY SANDSTONE	52.5	158.5	
245.2	MODESTO		GRAY SHALE	27.0	211.0	
218.2	MODESTO		FOSSILIFEROUS LIMESTONE	2.0	238.0	
216.2	MODESTO		DARK GRAY SHALE	13.0	240.0	
203.2	MODESTO		DARK GRAY SHALE	9.7	253.0	WITH IRON BANDS
193.5	MODESTO		COAL	0.3	262.7	
193.2	MODESTO		UNDERCLAY	0.4	263.0	
192.8	MODESTO		GRAY SHALE	2.8	263.4	
190.0	MODESTO		GRAY SHALE	6.8	266.2	WITH SS LENSES
183.2	MODESTO		DARK GRAY SHALE	12.3	273.0	
170.9	MODESTO		COAL	0.7	285.3	
170.3	MODESTO		UNDERCLAY	0.4	285.9	
169.9	MODESTO		GRAY SHALE	6.7	286.3	
163.2	MODESTO		GREEN SHALE	6.3	293.0	GREEN SLIPPY SHALE
156.9	MODESTO		SHALE	5.2	299.3	CONGLOMERATE SHALE
151.8	MODESTO		DARK GRAY SHALE	22.6	304.4	
129.2	MODESTO	PIASA	LIMESTONE	3.5	327.0	
125.7	MODESTO		GRAY SHALE	1.5	330.5	
124.2	MODESTO		DARK GRAY SHALE	17.8	332.0	WITH IRON BANDS
106.4	MODESTO		BLACK SHALE	0.3	349.8	
106.0	MODESTO		FOSSILIFEROUS LIMESTONE	0.6	350.2	
105.4	CARBONDALE	DANVILLE	COAL	2.0	350.8	
103.4	CARBONDALE		UNDERCLAY	0.4	352.8	
103.0	CARBONDALE		GRAY SANDSTONE	1.6	353.2	
101.4	CARBONDALE		DARK GRAY SHALE	8.2	354.8	
93.3	CARBONDALE		CALCAREOUS SHALE	0.8	362.9	
92.5	CARBONDALE		LIMESTONE	0.8	363.7	

91.8	CARBONDALE		DARK GRAY SHALE	2.8	364.4	
88.9	CARBONDALE		GRAY SHALE	9.2	367.3	
79.8	CARBONDALE		DARK GRAY SHALE	5.1	376.4	
74.7	CARBONDALE		DARK GRAY SHALE	1.3	381.5	WITH COAL PARTINGS
73.4	CARBONDALE	ALLENBY	COAL	0.8	382.8	
72.6	CARBONDALE		GRAY SANDSTONE	0.1	383.6	
72.5	CARBONDALE		DARK GRAY SHALE	5.3	383.7	
67.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.1	388.9	
53.2	CARBONDALE		DARK GRAY SHALE	7.0	403.0	WITH IRON BANDS
46.2	CARBONDALE	CONANT	FOSSILIFEROUS LIMESTONE	0.5	410.0	
45.7	CARBONDALE		BLACK SHALE	0.3	410.5	
45.4	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.2	410.8	
45.3	CARBONDALE		BLACK SHALE	2.3	410.9	
42.9	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	8.1	413.3	
34.8	CARBONDALE	ANNA	BLACK SHALE	0.7	421.4	
34.1	CARBONDALE	HERRIN	COAL	3.3	422.1	
30.8	CARBONDALE	HERRIN	BONE COAL	0.3	425.4	
30.5	CARBONDALE	HERRIN	COAL	0.2	425.7	
30.3	CARBONDALE	HERRIN	BONE COAL	0.1	425.9	
30.2	CARBONDALE	HERRIN	COAL	0.4	426.0	
29.8	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	426.4	SULPHUR BAND
29.8	CARBONDALE	HERRIN	COAL	0.6	426.4	
29.2	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	427.0	SULPHUR BAND
29.2	CARBONDALE	HERRIN	COAL	0.9	427.0	
28.3	CARBONDALE		UNDERCLAY	1.1	427.9	
27.2	CARBONDALE		SANDY SHALE	8.2	429.0	
19.0	CARBONDALE		DARK GRAY SHALE	6.8	437.2	
12.2	CARBONDALE		DARK GRAY SHALE	6.7	444.0	WITH IRON BANDS
5.5	CARBONDALE	BRIAR HILL	COAL	1.7	450.7	
3.9	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	3.3	452.3	
0.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	17.6	455.7	
-17.1	CARBONDALE	DYKERSBURG	GRAY SHALE	10.8	473.3	
-27.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	20.0	484.0	
-47.8	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	22.0	504.0	
-69.8	CARBONDALE	SPRINGFIELD	COAL	6.5	526.0	
-76.3	CARBONDALE		UNDERCLAY	1.5	532.5	

MAPID: 16501523000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515362 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847961 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:**
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
24.0	CARBONDALE	BRERETON	LIMESTONE	-	424.0	
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1859.0	
-1776.0			LIMESTONE	-	2224.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2612.0	

MAPID: 16501523000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515362 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.847961 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 3102.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	DANVILLE	COAL	-	360.0	
58.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	390.0	
18.0	CARBONDALE	HERRIN	COAL	4.0	430.0	
-17.0	CARBONDALE	BRIAR HILL	COAL	-	465.0	
-69.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	17.0	517.0	
-87.0	CARBONDALE	SPRINGFIELD	COAL	7.0	535.0	
-132.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	20.0	580.0	
-160.0	CARBONDALE	HOUCHIN CREEK	COAL	-	608.0	

MAPID: 16501523000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515362 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.847961 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 1720.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-284.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	732.0	
-342.0	SPOON	DAVIS	UNCLASSIFIED	-	790.0	
-1272.0	BASE OF PENN.		UNCLASSIFIED	-	1720.0	

MAPID: 16501523000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515362 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.847961 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO., STAFFORD JAMES ET **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-207.0	CARBONDALE	SURVANT	COAL	0.5	655.0	
-282.0	CARBONDALE	COLCHESTER	COAL	0.5	730.0	
-312.0	CARBONDALE	DEKOVEN	COAL	2.0	760.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	780.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-340.0	CARBONDALE	DAVIS	COAL	4.0	788.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	813.0	
-402.0	TRADEWATER	MT. RORAH	COAL	3.0	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501523000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515362 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.847961 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 732.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
295.0	MODESTO	CHAPEL	COAL	-	153.0	
88.0	CARBONDALE	DANVILLE	COAL	-	360.0	
17.0	CARBONDALE	HERRIN	COAL	4.5	431.0	
-19.0	CARBONDALE	BRIAR HILL	COAL	-	467.0	
-88.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.5	536.0	
-166.0	CARBONDALE	HOUCHIN CREEK	COAL	-	614.0	
-284.0	CARBONDALE	COLCHESTER	COAL	-	732.0	

MAPID: 16502214000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512996 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842485 **DATE COLLECTED:** 7 / 0 / 1951
SURFACE ELEVATION (FT.): 512.0 **LOGGED (FT.):** 2701.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-154.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	666.0	
-190.0	CARBONDALE	SURVANT	COAL	0.5	702.0	
-267.0	CARBONDALE	COLCHESTER	COAL	0.5	779.0	
-283.0	CARBONDALE	DEKOVEN	COAL	0.0	795.0	
-318.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	830.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-326.0	CARBONDALE	DAVIS	COAL	3.7	838.0	
-358.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502214000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512996 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 512.0 **LOGGED (FT.):** 2701.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
36.0	CARBONDALE	BRERETON	LIMESTONE	-	476.0	
-1431.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1943.0	
-1812.0			LIMESTONE	-	2324.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2701.0	

MAPID: 16502214000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512996 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.842485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 515.0 **LOGGED (FT.):** 778.0 **LOG TYPE:** Electric Log
SOURCE: HALBERT RALPH C 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	HERRIN	COAL	-	485.0	
-5.0	CARBONDALE	BRIAR HILL	COAL	1.5	520.0	
-75.0	CARBONDALE	SPRINGFIELD	COAL	4.0	590.0	
-150.0	CARBONDALE	HOUCHIN CREEK	COAL	-	665.0	
-263.0	CARBONDALE	COLCHESTER	COAL	-	778.0	

MAPID: 16503403000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510696 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 2293.0 **LOG TYPE:**
SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	BRERETON	LIMESTONE	-	430.0	
-1444.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1917.0	
-1820.0			LIMESTONE	-	2293.0	

MAPID: 16503403000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510696 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.840668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 2364.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	4.0	438.0	
1.0	CARBONDALE	BRIAR HILL	COAL	-	472.0	
-71.0	CARBONDALE	SPRINGFIELD	COAL	6.0	544.0	
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	-	618.0	

MAPID: 16503403000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510696 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840668 **DATE COLLECTED:** 4 / 0 / 1962
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 2293.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., PARKER COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-151.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	624.0	
-182.0	CARBONDALE	SURVANT	COAL	0.5	655.0	
-255.0	CARBONDALE	COLCHESTER	COAL	0.5	728.0	
-277.0	CARBONDALE	DEKOVEN	COAL	0.5	750.0	
-322.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	795.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	4.0	803.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	830.0	
-414.0	TRADEWATER	MT. RORAH	COAL	1.5	887.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503403000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510696 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 473.0 **LOGGED (FT.):** 727.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	4.5	438.0	
1.0	CARBONDALE	BRIAR HILL	COAL	-	472.0	
-71.0	CARBONDALE	SPRINGFIELD	COAL	6.0	544.0	
-149.0	CARBONDALE	HOUCHIN CREEK	COAL	-	622.0	
-254.0	CARBONDALE	COLCHESTER	COAL	-	727.0	

MAPID: 16503415000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515344 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.838825 **DATE COLLECTED:** 7 / 0 / 1962
SURFACE ELEVATION (FT.): 479.0 **LOGGED (FT.):** 2294.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., SPEER-ABNEY COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	618.0	
-171.0	CARBONDALE	SURVANT	COAL	0.5	650.0	
-248.0	CARBONDALE	COLCHESTER	COAL	0.5	727.0	
-271.0	CARBONDALE	DEKOVEN	COAL	2.0	750.0	
-311.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-317.0	CARBONDALE	DAVIS	COAL	3.0	796.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	818.0	
-395.0	TRADEWATER	MT. RORAH	COAL	0.5	874.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503415000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515344 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838825 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 2294.0 **LOG TYPE:**
SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	432.0	
-1440.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1920.0	
-1814.0			LIMESTONE	-	2294.0	

MAPID: 16503415000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515344 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.838825 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 482.0 **LOGGED (FT.):** 728.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	HERRIN	COAL	5.0	442.0	
14.0	CARBONDALE	BRIAR HILL	COAL	-	468.0	
-57.0	CARBONDALE	SPRINGFIELD	COAL	5.0	539.0	
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	-	618.0	
-246.0	CARBONDALE	COLCHESTER	COAL	-	728.0	

MAPID: 16503417000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508355 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844322 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 2330.0 **LOG TYPE:**
SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
41.0	CARBONDALE	BRERETON	LIMESTONE	-	473.0	
-1435.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1949.0	
-1816.0			LIMESTONE	-	2330.0	

MAPID: 16503417000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.508355 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.844322 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 2352.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
34.0	CARBONDALE	HERRIN	COAL	5.0	480.0	
-2.0	CARBONDALE	BRIAR HILL	COAL	-	516.0	
-86.0	CARBONDALE	SPRINGFIELD	COAL	6.0	600.0	
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	-	662.0	

MAPID: 16503417000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.508355 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844322 **DATE COLLECTED:** 7 / 0 / 1962

SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 2330.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R., VINYARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	667.0	
-190.0	CARBONDALE	SURVANT	COAL	0.5	704.0	
-261.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-286.0	CARBONDALE	DEKOVEN	COAL	0.0	800.0	
-326.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	840.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-334.0	CARBONDALE	DAVIS	COAL	4.0	848.0	
-359.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	873.0	
-411.0	TRADEWATER	MT. RORAH	COAL	1.5	925.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503417000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508355 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.844322 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 775.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
33.0	CARBONDALE	HERRIN	COAL	4.5	481.0	
0.0	CARBONDALE	BRIAR HILL	COAL	-	514.0	
-70.0	CARBONDALE	SPRINGFIELD	COAL	2.0	584.0	
-72.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	586.0	
-73.0	CARBONDALE	SPRINGFIELD	COAL	2.5	587.0	
-75.5	CARBONDALE	SPRINGFIELD	SHALE	11.0	589.5	
-86.5	CARBONDALE	SPRINGFIELD	COAL	5.5	600.5	
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	-	667.0	
-261.0	CARBONDALE	COLCHESTER	COAL	-	775.0	

MAPID: 16524426000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.519992 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.835157 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 500.0 **LOG TYPE:** Electric Log
SOURCE: TURNER J O 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	HERRIN	COAL	-	396.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	6.0	494.0	

MAPID: 16524963000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.508317 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.8352 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 703.0 **LOG TYPE:** Electric Log

SOURCE: EMERALD OIL 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
22.0	CARBONDALE	HERRIN	COAL	5.0	421.0	
-77.0	CARBONDALE	SPRINGFIELD	COAL	4.0	520.0	
-81.0	CARBONDALE	SPRINGFIELD	SHALE	2.0	524.0	
-83.0	CARBONDALE	SPRINGFIELD	COAL	3.0	526.0	
-157.0	CARBONDALE	HOUCHIN CREEK	COAL	-	600.0	
-260.0	CARBONDALE	COLCHESTER	COAL	-	703.0	

MAPID: 16590906000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.521164 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.843472 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.8 **LOGGED (FT.):** 566.2 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8611-18 **WELL TYPE:** Coal Test

COMMENT: PERMIT 292 GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.8	PLEISTOCENE		UNCONSOLIDATED	45.0	0.0	
396.8	MODESTO		GRAY SHALE	13.0	45.0	
383.8	MODESTO	WOMAC	COAL	2.0	58.0	
381.8	MODESTO		GRAY SHALE	102.0	60.0	
279.8	MODESTO	CHAPEL	COAL	1.0	162.0	
278.8	MODESTO	TRIVOLI	SANDSTONE	34.0	163.0	
244.8	MODESTO		GRAY SHALE	45.0	197.0	
199.8	MODESTO		LIMESTONE	2.0	242.0	
197.8	MODESTO		SANDY SHALE	60.0	244.0	
137.8	MODESTO		SANDSTONE	7.0	304.0	
130.8	MODESTO		GRAY SHALE	23.0	311.0	
107.8	MODESTO	PIASA	LIMESTONE	6.0	334.0	
101.8	MODESTO		GRAY SHALE	17.0	340.0	
84.8	CARBONDALE	DANVILLE	COAL	2.0	357.0	
82.8	CARBONDALE		GRAY SHALE	37.0	359.0	
45.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	396.0	
39.8	CARBONDALE		GRAY SHALE	29.0	402.0	
10.8	CARBONDALE	BRERETON	LIMESTONE	4.0	431.0	
6.8	CARBONDALE	HERRIN	COAL	6.0	435.0	
0.8	CARBONDALE		GRAY SHALE	27.0	441.0	
-26.2	CARBONDALE	BRIAR HILL	COAL	1.0	468.0	
-27.2	CARBONDALE		GRAY SHALE	81.0	469.0	
-108.2	CARBONDALE	SPRINGFIELD	COAL	8.2	550.0	
-116.4	CARBONDALE		SANDY SHALE	8.0	558.2	

MAPID: 16590908000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333595 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.839484 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 451.1 **LOGGED (FT.):** 531.3 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8611-12 **WELL TYPE:** Coal Test

COMMENT: PERMIT #2 GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.1	PLEISTOCENE		UNCONSOLIDATED	88.0	0.0	
363.1	MODESTO		GRAY SHALE	63.0	88.0	
300.1	MODESTO	CHAPEL	COAL	1.0	151.0	
299.1	MODESTO	TRIVOLI	SANDSTONE	68.0	152.0	
231.1	MODESTO		SANDY SHALE	95.0	220.0	
136.1	MODESTO	PIASA	LIMESTONE	4.0	315.0	
132.1	MODESTO		GRAY SHALE	19.0	319.0	
113.1	MODESTO		CALCAREOUS SANDSTONE	8.0	338.0	
105.1	CARBONDALE		GRAY SHALE	18.0	346.0	
87.1	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	364.0	
83.1	CARBONDALE	ANVIL ROCK	SANDSTONE	31.0	368.0	
52.1	CARBONDALE		GRAY SHALE	10.0	399.0	
42.1	CARBONDALE	BRERETON	LIMESTONE	7.0	409.0	
35.1	CARBONDALE	HERRIN	COAL	5.1	416.0	
30.0	CARBONDALE		UNDERCLAY	5.0	421.1	
25.0	CARBONDALE		GRAY SHALE	21.0	426.1	
4.0	CARBONDALE	BRIAR HILL	COAL	2.0	447.1	
2.0	CARBONDALE		SANDSTONE	26.0	449.1	
-24.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	475.1	
-25.0	CARBONDALE	DYKERSBURG	SILTY SHALE	45.0	476.1	
-70.0	CARBONDALE	SPRINGFIELD	COAL	6.2	521.1	
-76.2	CARBONDALE		GRAY SHALE	4.0	527.3	

MAPID: 16500651000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.501994 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.842047 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 501.6 **LOGGED (FT.):** 574.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
501.6			CLAY	56.0	0.0	
445.6			CLAY	24.0	56.0	
421.6			CLAY	21.0	80.0	BLUE GRAVELY CLAY
400.6			CLAY	46.0	101.0	BLUE SANDY CLAY
354.6	MODESTO		SHALE	5.5	147.0	ROTTEN SHALE
349.1	MODESTO		BLUE SHALE	21.5	152.5	
327.6	MODESTO		GRAY SHALE	14.0	174.0	ROTTEN GREY SHALE
313.6	MODESTO	MOUND CITY	BLACK SHALE	3.0	188.0	
310.6	MODESTO		BLUE SHALE	2.8	191.0	
307.8	MODESTO	CHAPEL	COAL	1.3	193.8	
306.4	MODESTO		UNDERCLAY	2.0	195.2	
304.4	MODESTO		SANDSTONE	71.8	197.2	
232.6	MODESTO		BLUE SHALE	10.2	269.0	WITH BROWN BANDS
222.4	MODESTO		BLUE LIMESTONE	1.8	279.2	
220.6	MODESTO		BLUE SHALE	20.0	281.0	
200.6	MODESTO		BLACK SHALE	1.2	301.0	
199.4	MODESTO		COAL	0.4	302.2	
199.0	MODESTO		UNDERCLAY	1.3	302.6	
197.7	MODESTO		GRAY SHALE	18.3	303.9	
179.4	MODESTO		COAL	0.8	322.2	
178.6	MODESTO		UNDERCLAY	2.0	323.0	
176.6	MODESTO		SANDSTONE	6.0	325.0	
170.6	MODESTO		SANDSTONE	11.7	331.0	
158.9	MODESTO		SANDY SHALE	5.3	342.7	
153.6	MODESTO		BLUE SHALE	18.3	348.0	
135.3	MODESTO	POND CREEK	COAL	0.2	366.3	
135.1	MODESTO		SHALE	2.5	366.5	
132.6	MODESTO		LIMESTONE	3.5	369.0	
129.1	MODESTO		BLUE SHALE	5.5	372.5	
123.6	MODESTO		BLACK SHALE	2.5	378.0	
121.1	MODESTO		BLUE SHALE	12.5	380.5	WITH BROWN BANDS
108.6	MODESTO		BLUE SHALE	4.0	393.0	
104.6	MODESTO	PIASA	BLUE LIMESTONE	5.0	397.0	
99.6	MODESTO		BLACK SHALE	4.0	402.0	
95.6	MODESTO		BLUE SHALE	5.0	406.0	WITH BROWN BANDS
90.6	MODESTO		BLUE SHALE	1.9	411.0	
88.7	MODESTO		SHALE	2.7	412.9	
86.0	CARBONDALE	DANVILLE	COAL	2.4	415.6	
83.6	MODESTO		DARK CLAYSTONE	1.0	418.0	

82.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	419.0	
79.6	CARBONDALE	ANVIL ROCK	BLUE SHALE	3.5	422.0	
76.1	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	425.5	
71.8	CARBONDALE	ANVIL ROCK	SANDSTONE	7.2	429.8	WITH SHALE STREAKS
64.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	437.0	
61.6	MODESTO		BLUE SHALE	9.5	440.0	
52.1	CARBONDALE	BRERETON	BLUE LIMESTONE	6.0	449.5	
46.1	CARBONDALE	ANNA	BLACK SHALE	2.4	455.5	
43.7	CARBONDALE	HERRIN	COAL	4.5	457.9	
39.2	CARBONDALE		UNDERCLAY	1.6	462.4	
37.6	CARBONDALE		SHALE	11.5	464.0	SHALE LIME SPOTS
26.1	CARBONDALE		BLUE SHALE	17.5	475.5	WITH BROWN BANDS
8.6	CARBONDALE		BLUE SHALE	2.0	493.0	
6.6	CARBONDALE	BRIAR HILL	COAL	1.3	495.0	
5.3	CARBONDALE		BLUE SHALE	3.8	496.3	
1.6	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	500.0	
-10.4	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	512.0	WITH SHALE STREAKS
-20.4	CARBONDALE	DYKERSBURG	SANDY SHALE	43.5	522.0	
-63.9	CARBONDALE	DYKERSBURG	BLUE SHALE	0.8	565.5	
-64.7	CARBONDALE	SPRINGFIELD	COAL	6.7	566.3	
-71.3	CARBONDALE		UNDERCLAY	1.1	572.9	

MAPID: 16500651000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.501994 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.842047 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 502.0 **LOGGED (FT.):** 462.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	MODESTO	PIASA	LIMESTONE	5.0	397.0	
100.0	MODESTO		DARK GRAY SHALE	13.6	402.0	
86.4	CARBONDALE	DANVILLE	COAL	2.4	415.6	
84.0	CARBONDALE		CLAYSTONE & SHALE	7.5	418.0	
76.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	24.0	425.5	
52.5	CARBONDALE	BRERETON	LIMESTONE	6.0	449.5	
46.5	CARBONDALE	ANNA	BLACK SHALE	2.4	455.5	
44.0	CARBONDALE	HERRIN	COAL	4.5	458.0	

MAPID: 16500964000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.493721 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.841456 **DATE COLLECTED:** 1 / 27 / 1944

SURFACE ELEVATION (FT.): 467.8 **LOGGED (FT.):** 662.2 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 17 **WELL TYPE:** Coal Test

COMMENT: NEAR CENTER OF SECTION 12 (8S-6E)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.8			UNCONSOLIDATED	35.0	0.0	SURFACE LAYER (LOG SAYS 'OVERBURDEN')
432.8	MODESTO		SHALE	25.0	35.0	
407.8	MODESTO		SANDSTONE	70.0	60.0	SOFT SHALE
337.8	MODESTO		SHALE	36.0	130.0	STICKY SHALE
301.8	MODESTO		BLACK SHALE	60.0	166.0	WITH SS
241.8	MODESTO		DARK SHALE	40.0	226.0	
201.8	MODESTO		SHALE	12.5	266.0	
189.3	MODESTO		COAL	0.3	278.5	
189.0	MODESTO		SHALE	21.2	278.8	STICKY SHALE
167.8	MODESTO		SHALE	1.3	300.0	
166.5	MODESTO		COAL	0.3	301.3	
166.1	MODESTO		UNDERCLAY	5.3	301.7	
160.8	MODESTO		SANDSTONE	39.0	307.0	AND SHALE
121.8	MODESTO		SANDY SHALE	22.8	346.0	
99.0	CARBONDALE	DANVILLE	COAL	2.4	368.8	
96.5	CARBONDALE		DARK GRAY SHALE	4.8	371.3	
91.8	CARBONDALE		SHALE	12.5	376.0	STICKY SHALE
79.3	CARBONDALE	ALLENBY	COAL	2.0	388.5	
77.3	CARBONDALE		SHALE	5.5	390.5	
71.8	CARBONDALE	ANVIL ROCK	SANDSTONE	31.0	396.0	AND LS
40.8	CARBONDALE		GRAY SHALE	3.0	427.0	
37.8	CARBONDALE	HERRIN	COAL	5.1	430.0	
32.7	CARBONDALE		UNDERCLAY	0.9	435.1	
31.8	CARBONDALE		SHALE	42.8	436.0	
-11.0	CARBONDALE	BRIAR HILL	COAL	1.6	478.8	
-12.5	CARBONDALE	DYKERSBURG	SHALE	60.8	480.3	
-73.4	CARBONDALE	SPRINGFIELD	COAL	5.6	541.2	
-79.0	CARBONDALE	SPRINGFIELD	SANDSTONE	0.6	546.8	
-79.5	CARBONDALE	SPRINGFIELD	COAL	0.5	547.3	
-80.0	CARBONDALE	SPRINGFIELD	SHALE	3.1	547.8	
-83.1	CARBONDALE	SPRINGFIELD	COAL	1.8	550.9	WITH SHALE PARTINGS
-85.0	CARBONDALE		SHALE	4.3	552.8	AND SS
-89.2	CARBONDALE		LIMESTONE	38.0	557.0	AND SDY SH
-127.2	CARBONDALE		SANDSTONE	11.0	595.0	
-138.2	CARBONDALE		SHALE	4.5	606.0	
-142.7	CARBONDALE	HOUCHIN CREEK	COAL	1.7	610.5	
-144.4	CARBONDALE		GRAY SHALE	11.8	612.2	
-156.2	CARBONDALE		SHALE	20.3	624.0	
-176.5	CARBONDALE	SURVANT - UPPER	COAL	1.3	644.3	

-177.7	CARBONDALE		SHALE	13.8	645.5	
-191.5	CARBONDALE	SURVANT - LOWER	COAL	0.4	659.3	
-191.9	CARBONDALE		SHALE	2.5	659.7	+2" ADJUSTMENT TO MATCH DEPTH

MAPID: 16502733000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490455 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.840491 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 497.0 **LOGGED (FT.):** 1780.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-253.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	750.0	
-318.0	SPOON	DAVIS	UNCLASSIFIED	-	815.0	
-1283.0	BASE OF PENN.		UNCLASSIFIED	-	1780.0	

MAPID: 16502733000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490455 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 492.0 **LOGGED (FT.):** 2685.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	BRERETON	LIMESTONE	-	453.0	
-1437.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1929.0	
-1841.0			LIMESTONE	-	2333.0	
-2193.0		BASE BARLOW	LIMESTONE	-	2685.0	

MAPID: 16502733000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490455 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840491 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 492.0 **LOGGED (FT.):** 2685.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., STEVENS W W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	635.0	
-178.0	CARBONDALE	SURVANT	COAL	0.5	670.0	
-253.0	CARBONDALE	COLCHESTER	COAL	2.0	745.0	
-280.0	CARBONDALE	DEKOVEN	COAL	0.0	772.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	802.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-322.0	CARBONDALE	DAVIS	COAL	4.0	814.0	
-347.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	839.0	
-352.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	844.0	
-406.0	TRADEWATER	MT. RORAH	COAL	1.5	898.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502733000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490455 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.840491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 492.0 **LOGGED (FT.):** 816.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
32.0	CARBONDALE	HERRIN	COAL	4.0	460.0	
-24.0	CARBONDALE	BRIAR HILL	COAL	-	516.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	2.5	536.0	
-46.5	CARBONDALE	SPRINGFIELD	SHALE	2.0	538.5	
-48.5	CARBONDALE	SPRINGFIELD	COAL	4.0	540.5	
-52.5	CARBONDALE	SPRINGFIELD	SHALE	8.0	544.5	
-60.5	CARBONDALE	SPRINGFIELD	COAL	3.5	552.5	
-64.0	CARBONDALE	SPRINGFIELD	SHALE	15.0	556.0	
-79.0	CARBONDALE	SPRINGFIELD	COAL	1.0	571.0	
-80.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	18.0	572.0	
-98.0	CARBONDALE	SPRINGFIELD	COAL	2.5	590.0	
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	-	635.0	
-253.0	CARBONDALE	COLCHESTER	COAL	-	745.0	
-320.0	SPOON	DAVIS	COAL	4.0	812.0	

MAPID: 16500653000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE SE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.494204 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.8273 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 416.5 **LOGGED (FT.):** 492.2 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.5			CLAY	20.0	0.0	
396.5			CLAY	36.0	20.0	
360.5	MODESTO		BLUE SHALE	41.0	56.0	
319.5	MODESTO	MOUND CITY	BLACK SHALE	3.0	97.0	
316.5	MODESTO	CHAPEL	COAL	0.3	100.0	
316.2	MODESTO		UNDERCLAY	0.7	100.3	
315.5	MODESTO		SHALE	14.0	101.0	
301.5	MODESTO		BLUE SHALE	7.5	115.0	WITH SANDSTONE PARTING
294.0	MODESTO		COAL	0.5	122.5	
293.5	MODESTO		DARK SHALE	1.0	123.0	
292.5	MODESTO		SANDSTONE	21.0	124.0	
271.5	MODESTO		BLUE SHALE	4.0	145.0	
267.5	MODESTO		BLUE SHALE	21.0	149.0	WITH SANDSTONE PARTING
246.5	MODESTO		BLUE SHALE	17.0	170.0	
229.5	MODESTO		LIMESTONE	2.0	187.0	BASTARD
227.5	MODESTO		BLUE SHALE	23.5	189.0	
204.0	MODESTO		COAL	0.5	212.5	
203.5	MODESTO		DARK SHALE	1.0	213.0	
202.5	MODESTO		UNDERCLAY	2.0	214.0	
200.5	MODESTO		SHALE	4.0	216.0	WITH HARD BANDS
196.5	MODESTO		DARK SHALE	9.0	220.0	
187.5	MODESTO		SHALE	4.3	229.0	DARK CLAY SHALE
183.2	MODESTO		COAL	0.7	233.3	
182.5	MODESTO		UNDERCLAY	2.0	234.0	
180.5	MODESTO		SHALE	4.0	236.0	LIGHT CLAY SHALE
176.5	MODESTO		SHALE	6.0	240.0	WITH LIME BOULDERS
170.5	MODESTO		BLUE SHALE	15.0	246.0	
155.5	MODESTO		SANDSTONE/SHALE	4.0	261.0	
151.5	MODESTO		BLACK SHALE	4.0	265.0	
147.5	MODESTO		CALCAREOUS SHALE	6.0	269.0	
141.5	MODESTO		DARK SHALE	11.0	275.0	
130.5	MODESTO		BLUE SHALE	4.0	286.0	
126.5	MODESTO		DARK SHALE	6.6	290.0	
119.9	CARBONDALE	DANVILLE	COAL	1.9	296.6	
118.0	CARBONDALE		UNDERCLAY	2.5	298.5	
115.5	CARBONDALE		CALCAREOUS SHALE	4.0	301.0	
111.5	CARBONDALE		DARK SHALE	7.3	305.0	
104.2	CARBONDALE	ALLENBY	COAL	0.3	312.3	
103.8	CARBONDALE		UNDERCLAY	1.3	312.7	

102.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	314.0	
96.5	CARBONDALE		GRAY SHALE	5.0	320.0	
91.5	CARBONDALE		BLUE SHALE	4.0	325.0	WITH HARD BANDS
87.5	CARBONDALE		BLUE SHALE	1.0	329.0	WITH HARD BANDS
86.5	CARBONDALE	ANVIL ROCK	SANDSTONE	29.0	330.0	
57.5	CARBONDALE	ANVIL ROCK	BLUE SHALE	2.0	359.0	
55.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	361.0	
53.5	CARBONDALE		SHALE	1.0	363.0	DARK CLAY SHALE
52.5	CARBONDALE		BLACK SHALE	2.0	364.0	
50.5	CARBONDALE		SANDSTONE	1.0	366.0	DARK, HARD SS
49.5	CARBONDALE	ANNA	BLACK SHALE	1.0	367.0	
48.5	CARBONDALE	ANNA	DARK SHALE	0.8	368.0	
47.7	CARBONDALE	HERRIN	COAL	4.6	368.8	
43.1	CARBONDALE		CALCAREOUS SHALE	9.6	373.4	
33.5	CARBONDALE		BLUE SHALE	22.0	383.0	WITH VERY HARD LIMESTONE BANDS
11.5	CARBONDALE		BLUE SHALE	6.2	405.0	
5.3	CARBONDALE	BRIAR HILL	COAL	0.3	411.2	
5.0	CARBONDALE	BRIAR HILL	SANDSTONE	0.3	411.5	
4.7	CARBONDALE	BRIAR HILL	COAL	1.7	411.8	
3.0	CARBONDALE	DYKERSBURG	SHALE	21.5	413.5	MIXED WITH LIGHT BLUE SANDSTONE
-18.5	CARBONDALE	DYKERSBURG	SHALE	8.0	435.0	
-26.5	CARBONDALE	DYKERSBURG	BLUE SHALE	10.0	443.0	WITH SANDSTONE PARTINGS
-36.5	CARBONDALE	DYKERSBURG	BLUE SHALE	31.0	453.0	
-67.5	CARBONDALE	DYKERSBURG	BLUE SHALE	1.8	484.0	
-69.3	CARBONDALE	SPRINGFIELD	COAL	5.7	485.8	
-75.0	CARBONDALE		UNDERCLAY	0.7	491.5	

MAPID: 16500653000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE SE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.494204 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.8273 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 373.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
147.8	MODESTO	PIASA	LIMESTONE/UNDERCLAY	6.0	269.2	
141.8	MODESTO		DARK GRAY SHALE	21.6	275.2	
120.2	CARBONDALE	DANVILLE	COAL	1.9	296.8	
118.3	CARBONDALE		CLAYSTONE	2.5	298.7	
115.8	CARBONDALE	GALUM	CALCAREOUS SHALE	4.0	301.2	
111.8	CARBONDALE		DARK GRAY SHALE	7.3	305.2	
104.5	CARBONDALE	ALLENBY	COAL	0.3	312.5	
104.2	CARBONDALE		CLAYSTONE	1.3	312.8	
102.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	314.2	
96.8	CARBONDALE	LAWSON	CLAYSTONE & SHALE	10.0	320.2	
86.8	CARBONDALE	LAWSON	SANDSTONE	33.0	330.2	
53.8	CARBONDALE	LAWSON	DARK GRAY SHALE	3.0	363.2	
50.8	CARBONDALE	LAWSON	SANDSTONE	1.0	366.2	
49.8	CARBONDALE	ANNA	BLACK SHALE	1.8	367.2	
48.0	CARBONDALE	HERRIN	COAL	4.6	369.0	

MAPID: 16500965000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.487051 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.828562 **DATE COLLECTED:** 2 / 10 / 1944

SURFACE ELEVATION (FT.): 433.9 **LOGGED (FT.):** 507.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 18 **WELL TYPE:** Coal Test

COMMENT: NEAR THE CENTER OF SE NE (8S-6E-13)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.9			UNCONSOLIDATED	65.0	0.0	SURFACE LAYER (LOG SAYS 'OVERBURDEN')
368.9	MODESTO		SANDSTONE	25.0	65.0	SOFT SHALE
343.9	MODESTO		SHALE	159.5	90.0	
184.4	MODESTO		COAL	0.5	249.5	
183.9	MODESTO		SHALE	70.0	250.0	
113.9	CARBONDALE	DANVILLE	COAL	2.4	320.0	
111.5	CARBONDALE		SHALE	19.6	322.4	
91.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	342.0	
85.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	348.0	
74.9	CARBONDALE	ANVIL ROCK	SHALE	2.0	359.0	
72.9	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	361.0	AND SHALE
53.9	CARBONDALE		SHALE	2.3	380.0	
51.6	CARBONDALE	HERRIN	COAL	5.3	382.3	
46.3	CARBONDALE		SHALE	37.6	387.6	
8.7	CARBONDALE	BRIAR HILL	COAL	1.5	425.2	
7.2	CARBONDALE	DYKERSBURG	SHALE	33.3	426.7	
-26.1	CARBONDALE	DYKERSBURG	SANDSTONE	11.6	460.0	
-37.7	CARBONDALE	SPRINGFIELD	COAL	1.9	471.6	
-39.6	CARBONDALE	SPRINGFIELD	SANDSTONE	15.5	473.5	
-55.1	CARBONDALE	SPRINGFIELD	SHALE	1.6	489.0	
-56.7	CARBONDALE	SPRINGFIELD	COAL	2.9	490.6	
-59.6	CARBONDALE	SPRINGFIELD	SHALE	8.3	493.5	
-67.9	CARBONDALE	SPRINGFIELD	COAL	0.7	501.8	
-68.6	CARBONDALE		SHALE	3.5	502.5	
-72.1	CARBONDALE		SANDSTONE	1.0	506.0	

MAPID: 16503356000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.486018 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.833169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 793.5 **LOG TYPE:** Electric Log
SOURCE: MUTUAL OIL & GAS CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
47.0	CARBONDALE	HERRIN	COAL	5.0	420.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	6.0	514.0	
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	-	612.0	
-249.0	CARBONDALE	COLCHESTER	COAL	-	716.0	
-323.0	SPOON	DAVIS	COAL	3.5	790.0	

MAPID: 16503356000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.486018 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 2628.0 **LOG TYPE:**
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	414.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1886.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2628.0	

MAPID: 16503361000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490415 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 694.0 **LOG TYPE:** Electric Log
SOURCE: MUTUAL OIL & GAS CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	HERRIN	COAL	5.5	401.0	
-74.0	CARBONDALE	SPRINGFIELD	COAL	2.5	515.0	
-76.5	CARBONDALE	SPRINGFIELD	SHALE	1.0	517.5	
-77.5	CARBONDALE	SPRINGFIELD	COAL	1.5	518.5	
-146.0	CARBONDALE	HOUCHIN CREEK	COAL	-	587.0	
-253.0	CARBONDALE	COLCHESTER	COAL	-	694.0	

MAPID: 16503361000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490415 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	BRERETON	LIMESTONE	-	400.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1847.0	
-1806.0			LIMESTONE	-	2246.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16503376000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488109 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	BRERETON	LIMESTONE	-	394.0	
-1413.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503376000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488109 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.82951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 3055.0 **LOG TYPE:** Electric Log
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.0	CARBONDALE	HERRIN	COAL	5.0	394.0	
5.0	CARBONDALE	BRIAR HILL	COAL	-	432.0	
-67.0	CARBONDALE	SPRINGFIELD	COAL	7.0	504.0	
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	-	576.0	

MAPID: 16503376000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488109 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.82951 **DATE COLLECTED:** 8 / 0 / 1961
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 1665.0 **LOG TYPE:** Electric Log
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-253.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	690.0	
-323.0	SPOON	DAVIS	UNCLASSIFIED	-	760.0	
-1228.0	BASE OF PENN.		UNCLASSIFIED	-	1665.0	

MAPID: 16503376000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.488109 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82951 **DATE COLLECTED:** 8 / 0 / 1961
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:** Electric Log
SOURCE: MUTUAL OIL & GAS CO., CLARK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-183.0	CARBONDALE	SURVANT	COAL	0.5	620.0	
-246.0	CARBONDALE	COLCHESTER	COAL	0.5	683.0	
-283.0	CARBONDALE	DEKOVEN	COAL	1.0	720.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	750.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	3.0	757.0	
-354.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	791.0	
-363.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	800.0	
-403.0	TRADEWATER	MT. RORAH	COAL	1.3	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503376000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.488109 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.82951 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 760.5 **LOG TYPE:** Electric Log

SOURCE: MUTUAL OIL & GAS CO. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
43.5	CARBONDALE	HERRIN	COAL	5.0	393.5	
4.5	CARBONDALE	BRIAR HILL	COAL	-	432.5	
-67.0	CARBONDALE	SPRINGFIELD	COAL	4.0	504.0	
-71.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	508.0	
-72.0	CARBONDALE	SPRINGFIELD	COAL	2.0	509.0	
-144.0	CARBONDALE	HOUCHIN CREEK	COAL	-	581.0	
-246.0	CARBONDALE	COLCHESTER	COAL	-	683.0	
-320.0	SPOON	DAVIS	COAL	3.5	757.0	

MAPID: 16500966000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.515326 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.829692 **DATE COLLECTED:** 7 / 23 / 1946

SURFACE ELEVATION (FT.): 450.8 **LOGGED (FT.):** 500.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.8			CLAY	38.0	0.0	CLAY, SAND, AND GRAVEL
412.8	MODESTO		SANDSTONE	56.0	38.0	SOFT GRAY SHALE
356.8	MODESTO		GRAY SHALE	21.6	94.0	
335.2	MODESTO		FOSSILIFEROUS LIMESTONE	1.2	115.6	
334.0	MODESTO		DARK GRAY SHALE	1.5	116.8	
332.5	MODESTO		FOSSILIFEROUS LIMESTONE	0.3	118.3	
332.2	MODESTO		DARK GRAY SHALE	2.6	118.6	
329.6	MODESTO		LIMESTONE	0.4	121.2	
329.2	MODESTO		DARK GRAY SHALE	3.6	121.6	
325.6	MODESTO		FOSSILIFEROUS LIMESTONE	0.1	125.2	
325.5	MODESTO	CHAPEL	COAL	1.2	125.3	
324.4	MODESTO		GRAY SANDSTONE	39.1	126.4	
285.3	MODESTO		SANDY SHALE	7.5	165.5	
277.8	MODESTO		DARK GRAY SHALE	20.0	173.0	WITH SANDSTONE BANDS
257.8	MODESTO		DARK GRAY SHALE	9.2	193.0	
248.6	MODESTO		FOSSILIFEROUS LIMESTONE	1.8	202.2	
246.8	MODESTO		DARK GRAY SHALE	9.0	204.0	
237.8	MODESTO		DARK GRAY SHALE	11.3	213.0	WITH IRON BAND
226.5	MODESTO		COAL	0.4	224.3	
226.1	MODESTO		UNDERCLAY	0.4	224.7	
225.7	MODESTO		DARK GRAY SHALE	1.5	225.1	
224.2	MODESTO		DARK GRAY SHALE	1.3	226.6	CONGLOMERATE
223.0	MODESTO		SANDSTONE	5.2	227.8	
217.8	MODESTO		DARK GRAY SHALE	13.0	233.0	
204.8	MODESTO		GRAY SHALE	12.4	246.0	
192.4	MODESTO		SANDY SHALE	5.6	258.4	
186.8	MODESTO		GRAY SHALE	1.2	264.0	
185.6	MODESTO		SANDSTONE	5.3	265.2	(OILY GRAY SS)
180.4	MODESTO		GRAY SHALE	13.6	270.4	WITH IRON BANDS
166.8	MODESTO		GRAY SHALE	0.8	284.0	
166.0	MODESTO	PIASA	LIMESTONE	3.1	284.8	
163.0	MODESTO		SHALE	1.7	287.8	CONGLOMERATE SHALE
161.3	MODESTO		GRAY SHALE	4.5	289.5	
156.8	MODESTO		DARK GRAY SHALE	13.1	294.0	WITH IRON BANDS
143.7	CARBONDALE	DANVILLE	COAL	2.2	307.1	
141.5	CARBONDALE		UNDERCLAY	0.4	309.3	

141.1	CARBONDALE		DARK GRAY SHALE	6.5	309.7	
134.6	CARBONDALE		GRAY SANDSTONE	5.4	316.2	
129.2	CARBONDALE		GRAY SHALE	2.4	321.6	
126.8	CARBONDALE		SHALE	1.3	324.0	SOFT BLOCKY SHALE
125.5	CARBONDALE		GRAY SHALE	1.7	325.3	
123.8	CARBONDALE		SHALE	1.0	327.0	SOFT BLOCKY SHALE
122.8	CARBONDALE		SANDY SHALE	16.0	328.0	
106.8	CARBONDALE		GRAY SHALE	2.7	344.0	WITH SANDSTONE LENSE
104.1	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	346.7	
101.6	CARBONDALE	ANVIL ROCK	GRAY SHALE	3.3	349.2	SANDSTONE LENSE
98.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	19.5	352.5	
78.8	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.6	372.0	WITH COAL PARTING
75.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.7	375.5	GRAY COARSE SANDSTONE (OILY)
71.6	CARBONDALE	ANNA	BLACK SHALE	0.1	379.2	
71.5	CARBONDALE	ANNA	BLACK SHALE	4.0	379.3	
67.5	CARBONDALE	HERRIN	COAL	5.4	383.3	
62.0	CARBONDALE		UNDERCLAY	0.3	388.8	
61.8	CARBONDALE		UNDERCLAY	2.2	389.0	
59.6	CARBONDALE		SANDY SHALE	2.8	391.2	
56.8	CARBONDALE		GRAY SHALE	20.0	394.0	
36.8	CARBONDALE		SANDSTONE	3.3	414.0	SOFT GRAY BLOCKY SHALE
33.5	CARBONDALE	BRIAR HILL	COAL	1.8	417.3	
31.7	CARBONDALE		DARK GRAY SHALE	3.3	419.1	
28.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	4.3	422.3	
24.1	CARBONDALE	DYKERSBURG	SHALE	1.6	426.7	AND SANDSTONE SPLIT
22.5	CARBONDALE	DYKERSBURG	SANDSTONE	2.8	428.3	
19.8	CARBONDALE	DYKERSBURG	SHALE	3.0	431.0	AND SANDSTONE SPLIT
16.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	50.0	434.0	
-33.2	CARBONDALE	DYKERSBURG	SANDY SHALE	8.6	484.0	
-41.8	CARBONDALE	SPRINGFIELD	COAL	6.2	492.6	
-48.0	CARBONDALE		UNDERCLAY	1.2	498.8	

MAPID: 16500967000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.51533 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.827865 **DATE COLLECTED:** 6 / 4 / 1946

SURFACE ELEVATION (FT.): 432.5 **LOGGED (FT.):** 570.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 21 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-3099 & C-3410

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.5			CLAY	27.0	0.0	CLAY, SAND, AND GRAVEL
405.5	MODESTO		GRAY SHALE	47.0	27.0	
358.5	MODESTO		DARK GRAY SHALE	36.5	74.0	
322.0	MODESTO	CHAPEL	COAL	1.1	110.5	
320.9	MODESTO		UNDERCLAY	0.4	111.6	
320.5	MODESTO		SANDY SHALE	21.0	112.0	
299.5	MODESTO		SANDSTONE	1.0	133.0	AND SHALE
298.5	MODESTO		GRAY SANDSTONE	17.0	134.0	WITH BROWN BANDS
281.5	MODESTO		SHALE	2.0	151.0	AND SS
279.5	MODESTO		DARK GRAY SHALE	35.0	153.0	WITH IRON BANDS
244.5	MODESTO		FOSSILIFEROUS LIMESTONE	2.0	188.0	
242.5	MODESTO		DARK GRAY SHALE	20.3	190.0	WITH IRON BANDS
222.2	MODESTO		COAL	0.4	210.3	
221.9	MODESTO		UNDERCLAY	0.4	210.6	
221.5	MODESTO		GRAY SHALE	9.0	211.0	
212.5	MODESTO		DARK GRAY SHALE	8.5	220.0	
204.0	MODESTO		BLACK SHALE	4.6	228.5	
199.4	MODESTO		COAL	0.6	233.1	
198.7	MODESTO		GRAY SHALE	14.3	233.8	
184.5	MODESTO		SANDSTONE	4.0	248.0	
180.5	MODESTO		SANDY SHALE	0.6	252.0	
179.9	MODESTO		SANDSTONE	2.5	252.6	
177.4	MODESTO		GRAY SHALE	12.9	255.1	
164.5	MODESTO		DARK GRAY SHALE	3.0	268.0	
161.5	MODESTO		LIMESTONE	4.0	271.0	
157.5	MODESTO		FOSSILIFEROUS LIMESTONE	1.5	275.0	
156.0	MODESTO		DARK GRAY SHALE	17.8	276.5	WITH IRON BANDS
138.2	CARBONDALE	DANVILLE	COAL	2.0	294.3	
136.2	CARBONDALE		SANDY SHALE	1.9	296.3	
134.3	CARBONDALE		GRAY SHALE	7.4	298.2	
127.0	CARBONDALE		SANDSTONE	4.0	305.5	
123.0	CARBONDALE		DARK GRAY SHALE	1.7	309.5	WITH IRON BANDS
121.3	CARBONDALE		GRAY SHALE	8.6	311.2	
112.7	CARBONDALE		SANDY SHALE	4.5	319.8	
108.2	CARBONDALE		DARK GRAY SHALE	18.8	324.3	WITH IRON BANDS
89.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	15.4	343.0	
74.1	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.9	358.4	WITH COAL PARTINGS

68.2	CARBONDALE		BLACK SHALE	0.4	364.3	WITH LIME AND COAL PARTINGS
67.7	CARBONDALE		LIMESTONE	0.4	364.8	
67.4	CARBONDALE		BLACK SHALE	1.0	365.1	
66.4	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	4.2	366.1	
62.2	CARBONDALE	ANNA	BLACK SHALE	1.1	370.3	
61.1	CARBONDALE	HERRIN	COAL	0.6	371.4	
60.5	CARBONDALE	HERRIN	ROCK	0.1	372.0	IRON BAND
60.3	CARBONDALE	HERRIN	COAL	0.6	372.2	
59.7	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	372.8	SULPHUR BAND
59.7	CARBONDALE	HERRIN	COAL	1.3	372.8	
58.5	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	374.0	SULPHUR BAND
58.4	CARBONDALE	HERRIN	COAL	0.7	374.1	
57.7	CARBONDALE	HERRIN	BONE COAL	0.1	374.8	
57.6	CARBONDALE	HERRIN	COAL	0.2	374.9	
57.5	CARBONDALE	HERRIN	ROCK	0.1	375.0	IRON BAND
57.4	CARBONDALE	HERRIN	COAL	0.5	375.1	
56.9	CARBONDALE	HERRIN	BONE COAL	0.0	375.6	
56.8	CARBONDALE	HERRIN	COAL	0.3	375.7	
56.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.1	375.9	SULPHUR BAND
56.5	CARBONDALE	HERRIN	COAL	0.5	376.0	
56.0	CARBONDALE		UNDERCLAY	1.0	376.5	
55.0	CARBONDALE		GRAY SHALE	20.5	377.5	
34.5	CARBONDALE		DARK GRAY SHALE	8.0	398.0	WITH IRON BANDS
26.5	CARBONDALE		FOSSILIFEROUS LIMESTONE	1.3	406.0	
25.2	CARBONDALE	BRIAR HILL	COAL	2.1	407.3	
23.1	CARBONDALE		GRAY SHALE	3.6	409.4	
19.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	40.0	413.0	
-20.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	2.3	453.0	WITH COAL PARTINGS
-22.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	16.4	455.3	
-39.3	CARBONDALE	DYKERSBURG	COAL	0.2	471.8	
-39.4	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	21.1	471.9	
-60.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	4.3	493.0	AND GRAY SHALE
-64.8	CARBONDALE	SPRINGFIELD	COAL	0.7	497.3	
-65.5	CARBONDALE		SHALE	4.3	498.0	CONGLOMERATE SHALE
-69.8	CARBONDALE		LIMESTONE	0.8	502.3	
-70.5	CARBONDALE		SHALE	5.9	503.0	CONGLOMERATE SHALE
-76.4	CARBONDALE		SANDY SHALE	4.1	508.9	
-80.5	CARBONDALE		LIMESTONE	5.0	513.0	
-85.5	CARBONDALE		GRAY SANDSTONE	33.2	518.0	
-118.7	CARBONDALE		DARK GRAY SHALE	1.8	551.2	WITH IRON BANDS
-120.5	CARBONDALE		SANDY SHALE	6.2	553.0	
-126.7	CARBONDALE	EXCELLO	BLACK SHALE	4.7	559.2	
-131.3	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.8	
-133.3	CARBONDALE		UNDERCLAY	0.8	565.8	
-134.1	CARBONDALE		SANDY SHALE	3.4	566.6	

MAPID: 16500968000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.520034 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.82237 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 360.1 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 26 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-2550 & C-3101

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCLASSIFIED	93.0	0.0	NO LOG FOR THIS UNIT (ASSUME SURF)
329.0	MODESTO		GRAY SILTSTONE	8.9	93.0	+1" TO MATCH LOG DEPTH
320.1	MODESTO		SANDSTONE	1.0	101.9	
319.1	MODESTO		GRAY SILTSTONE	3.0	102.9	
316.1	MODESTO		SANDSTONE	24.8	105.9	
291.2	MODESTO		GRAY SHALE	37.7	130.8	
253.6	MODESTO		LIMESTONE	2.8	168.4	
250.7	MODESTO		GRAY SHALE	17.4	171.3	
233.3	MODESTO		DARK GRAY SHALE	3.6	188.7	
229.7	MODESTO		COAL	0.3	192.3	
229.5	MODESTO		GRAY SHALE	3.0	192.5	
226.5	MODESTO		GRAY SHALE	3.7	195.5	
222.8	MODESTO		DARK GRAY SHALE	2.0	199.2	
220.8	MODESTO		SHALE	6.7	201.2	
214.2	MODESTO		BLACK SHALE	1.2	207.8	
213.0	MODESTO		GRAY SHALE	4.2	209.0	
208.8	MODESTO		BLACK SHALE	1.3	213.2	
207.5	MODESTO		COAL	0.1	214.5	
207.4	MODESTO		DARK GRAY SHALE	0.3	214.6	
207.2	MODESTO		COAL	0.2	214.8	
207.0	MODESTO		UNDERCLAY	2.3	215.0	
204.6	MODESTO		SANDSTONE	0.9	217.4	
203.7	MODESTO		SHALE	2.9	218.3	
200.8	MODESTO		GRAY SHALE	8.2	221.2	
192.6	MODESTO		UNCLASSIFIED	1.0	229.4	NO CORE
191.6	MODESTO		GRAY SILTSTONE	2.4	230.4	
189.2	MODESTO		GRAY SHALE	17.5	232.8	
171.7	MODESTO		COAL	0.1	250.3	
171.6	MODESTO		GRAY SHALE	2.3	250.4	
169.3	MODESTO		UNCLASSIFIED	5.2	252.7	NO CORE
164.2	MODESTO	PIASA	LIMESTONE	4.6	257.8	
159.5	MODESTO		GRAY SHALE	4.8	262.5	
154.7	CARBONDALE	DANVILLE	COAL	2.3	267.3	
152.5	CARBONDALE		SILTSTONE	1.1	269.5	
151.3	CARBONDALE		GRAY SHALE	1.7	270.7	
149.6	CARBONDALE		GRAY SHALE	2.3	272.4	
147.4	CARBONDALE		GRAY SANDSTONE	20.0	274.6	
127.4	CARBONDALE		GRAY SHALE	0.3	294.6	
127.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.6	294.9	

125.5	CARBONDALE		GRAY SHALE	8.3	296.5	+1" TO MATCH LOG DEPTH
117.2	CARBONDALE		DARK GRAY SHALE	6.7	304.8	
110.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.8	311.5	
95.7	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	0.8	326.3	
94.9	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	327.1	
74.9	CARBONDALE		BLACK SHALE	0.9	347.1	
74.0	CARBONDALE	CONANT	LIMESTONE	0.7	348.0	
73.3	CARBONDALE		BLACK SHALE	1.3	348.7	
72.0	CARBONDALE		BLACK SHALE	1.2	350.0	
70.8	CARBONDALE	BRERETON	LIMESTONE	2.5	351.2	
68.3	CARBONDALE		GRAY SHALE	0.2	353.7	
68.1	CARBONDALE	HERRIN	COAL	5.4	353.9	
62.7	CARBONDALE		UNDERCLAY	0.8	359.3	

MAPID: 16502657000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.508277 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.822398 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:** Electric Log

SOURCE: SHURE OIL CORP., BAKER JOHN C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	537.0	
-153.0	CARBONDALE	SURVANT	COAL	0.5	570.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-283.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	727.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-318.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-363.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-366.0	TRADEWATER	STONEFORT	LIMESTONE	3.4	783.0	
-403.0	TRADEWATER	MT. RORAH	COAL	0.5	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502657000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508277 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822398 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:**
SOURCE: SHURE OIL CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	344.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1826.0	
-1779.0			LIMESTONE	-	2196.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2584.0	

MAPID: 16502657000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508277 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822398 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 739.0 **LOG TYPE:** Electric Log
SOURCE: SHURE OIL CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	HERRIN	COAL	-	344.0	
32.0	CARBONDALE	BRIAR HILL	COAL	-	385.0	
-36.0	CARBONDALE	SPRINGFIELD	COAL	5.0	453.0	
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	-	536.0	
-233.0	CARBONDALE	COLCHESTER	COAL	-	650.0	
-318.5	SPOON	DAVIS	COAL	3.5	735.5	

MAPID: 16502685000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512971 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826044 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2609.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD, HEDGER-FARRELL-CAIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	553.0	
-156.0	CARBONDALE	SURVANT	COAL	0.5	584.0	
-232.0	CARBONDALE	COLCHESTER	COAL	0.0	660.0	
-306.0	CARBONDALE	DEKOVEN	COAL	3.0	734.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	748.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-326.0	CARBONDALE	DAVIS	COAL	4.0	754.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-381.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	809.0	
-437.0	TRADEWATER	MT. RORAH	COAL	0.5	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502685000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512971 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2609.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	BRERETON	LIMESTONE	-	365.0	
-1420.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1848.0	
-1791.0			LIMESTONE	-	2219.0	
-2181.0		BASE BARLOW	LIMESTONE	-	2609.0	

MAPID: 16502685000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.512971 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.826044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 552.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
332.0	MODESTO	CHAPEL	COAL	2.5	96.0	
61.5	CARBONDALE	HERRIN	COAL	-	366.5	
22.0	CARBONDALE	BRIAR HILL	COAL	-	406.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	5.0	472.0	
-49.0	CARBONDALE	SPRINGFIELD	SHALE	1.5	477.0	
-50.5	CARBONDALE	SPRINGFIELD	COAL	1.5	478.5	
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	-	552.0	

MAPID: 16503085000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 230' N line, 340' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505948 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822679 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, ELDER GLEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-165.0	CARBONDALE	SURVANT	COAL	0.5	583.0	
-307.0	CARBONDALE	DEKOVEN	COAL	0.0	725.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	750.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-336.0	CARBONDALE	DAVIS	COAL	4.0	754.0	
-382.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-391.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	809.0	
-425.0	TRADEWATER	MT. RORAH	COAL	0.5	843.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503085000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 230' N line, 340' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505948 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822679 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-1778.0			LIMESTONE	-	2196.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16503085000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 230' N line, 340' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505948 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822679 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 550.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	HERRIN	COAL	4.0	355.0	
23.0	CARBONDALE	BRIAR HILL	COAL	-	395.0	
-45.5	CARBONDALE	SPRINGFIELD	COAL	3.5	463.5	
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	550.0	

MAPID: 16503237000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505902 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.826063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 3080.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
47.0	CARBONDALE	HERRIN	COAL	4.0	380.0	
7.0	CARBONDALE	BRIAR HILL	COAL	-	420.0	
-63.0	CARBONDALE	SPRINGFIELD	COAL	3.0	490.0	
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	-	567.0	

MAPID: 16503237000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505902 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.826063 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 385.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	277.0	
145.0	MODESTO		DARK GRAY SHALE	17.5	282.0	
127.5	CARBONDALE	DANVILLE	COAL	2.5	299.5	
125.0	CARBONDALE		ARGILLACEOUS SANDSTONE	11.0	302.0	
114.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SANDSTONE	10.0	313.0	
104.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	15.0	323.0	
89.0	CARBONDALE	LAWSON	SANDSTONE	34.0	338.0	
55.0	CARBONDALE	ANNA	DARK GRAY SHALE	8.0	372.0	
47.0	CARBONDALE	HERRIN	COAL	5.0	380.0	

MAPID: 16503237000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505902 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.826063 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**

SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
47.0	CARBONDALE	BRERETON	LIMESTONE	-	380.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1842.0	
-1782.0			LIMESTONE	-	2209.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16503237000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505902 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826063 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 385.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., ELDER GLEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	572.0	
-178.0	CARBONDALE	SURVANT	COAL	0.5	605.0	
-301.0	CARBONDALE	DEKOVEN	COAL	3.0	728.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	760.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-343.0	CARBONDALE	DAVIS	COAL	3.0	770.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	818.0	
-438.0	TRADEWATER	MT. RORAH	COAL	0.5	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503237000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.505902 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.826063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 571.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.5	CARBONDALE	DANVILLE	COAL	2.5	286.5	
47.0	CARBONDALE	HERRIN	COAL	4.0	380.0	
7.0	CARBONDALE	BRIAR HILL	COAL	-	420.0	
-63.0	CARBONDALE	SPRINGFIELD	COAL	4.0	490.0	
-144.0	CARBONDALE	HOUCHIN CREEK	COAL	-	571.0	

MAPID: 16503268000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.503627 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.829713 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 1762.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-233.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	682.0	
-311.0	SPOON	DAVIS	UNCLASSIFIED	-	760.0	
-1313.0	BASE OF PENN.		UNCLASSIFIED	-	1762.0	

MAPID: 16503268000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.503627 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829713 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2624.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1875.0	
-1796.0			LIMESTONE	-	2245.0	
-2175.0		BASE BARLOW	LIMESTONE	-	2624.0	

MAPID: 16503268000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.503627 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829713 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2624.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., ELDER ORE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	592.0	
-180.0	CARBONDALE	SURVANT	COAL	0.5	629.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.5	691.0	
-276.0	CARBONDALE	DEKOVEN	COAL	1.5	725.0	
-306.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	755.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-321.0	CARBONDALE	DAVIS	COAL	3.0	770.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-411.0	TRADEWATER	MT. RORAH	COAL	0.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16524459000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 365' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.519926 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.824194 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 551.0 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	HERRIN	COAL	4.0	356.0	
-53.5	CARBONDALE	SPRINGFIELD	COAL	5.0	472.5	
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	551.0	

MAPID: 16524466000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.520058 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822373 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.5 **LOGGED (FT.):** 546.0 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.5	CARBONDALE	HERRIN	COAL	4.5	346.0	
-53.5	CARBONDALE	SPRINGFIELD	COAL	2.0	460.0	
-55.5	CARBONDALE	SPRINGFIELD	SHALE	1.0	462.0	
-56.5	CARBONDALE	SPRINGFIELD	COAL	2.0	463.0	
-139.5	CARBONDALE	HOUCHIN CREEK	COAL	-	546.0	

MAPID: 16524471000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.517668 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820544 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.5 **LOGGED (FT.):** 542.0 **LOG TYPE:** Electric Log
SOURCE: BEESON, RICHARD W. 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.5	CARBONDALE	HERRIN	COAL	4.5	344.0	
-42.5	CARBONDALE	SPRINGFIELD	COAL	4.5	453.0	
-131.5	CARBONDALE	HOUCHIN CREEK	COAL	-	542.0	

MAPID: 16590907000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.518472 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.828684 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 511.3 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8614-10 **WELL TYPE:** Coal Test

COMMENT: PERMIT #2 GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0	
399.0	MODESTO		GRAY SHALE	82.0	42.0	
317.0	MODESTO	CHAPEL	COAL	2.0	124.0	
315.0	MODESTO		SANDY SHALE	16.0	126.0	
299.0	MODESTO	TRIVOLI	SANDSTONE	21.0	142.0	
278.0	MODESTO		GRAY SHALE	35.0	163.0	
243.0	MODESTO		LIMESTONE	2.0	198.0	
241.0	MODESTO		SANDY SHALE	62.0	200.0	
179.0	MODESTO		SANDSTONE	9.0	262.0	
170.0	MODESTO		GRAY SHALE	17.0	271.0	
153.0	MODESTO	PIASA	LIMESTONE	3.5	288.0	
149.5	MODESTO		GRAY SHALE	17.0	291.5	
132.5	CARBONDALE	DANVILLE	COAL	2.0	308.5	
130.5	CARBONDALE		GRAY SHALE	32.0	310.5	
98.5	CARBONDALE	ANVIL ROCK	SANDSTONE	33.0	342.5	
65.5	CARBONDALE		BLACK SHALE	4.0	375.5	
61.5	CARBONDALE	BRERETON	LIMESTONE	6.0	379.5	
55.5	CARBONDALE	HERRIN	COAL	4.9	385.5	
50.6	CARBONDALE		GRAY SHALE	30.0	390.4	
20.6	CARBONDALE	BRIAR HILL	COAL	2.0	420.4	
18.6	CARBONDALE		GRAY SHALE	74.0	422.4	
-55.4	CARBONDALE	SPRINGFIELD	COAL	5.9	496.4	
-61.3	CARBONDALE		GRAY SHALE	9.0	502.3	

MAPID: 16500094000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' N line, 660' W line of SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.537171 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.827104 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 351.3 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	30.0	0.0	
385.0	MODESTO		SHALE	36.0	30.0	
349.0	MODESTO		ARGILACEOUS SHALE	7.0	66.0	ARG
342.0	MODESTO		BLACK SHALE	19.0	73.0	
323.0	MODESTO	CHAPEL	COAL	2.5	92.0	
320.5	MODESTO		BLACK SHALE	18.0	94.5	
302.5	MODESTO		ARGILACEOUS SHALE	4.0	112.5	ARG
298.5	MODESTO		SANDSTONE	25.0	116.5	
273.5	MODESTO		BLACK SHALE	6.0	141.5	
267.5	MODESTO		LIMESTONE	2.0	147.5	
265.5	MODESTO		ARGILACEOUS SHALE	19.0	149.5	ARG
246.5	MODESTO		SHALE	10.0	168.5	
236.5	MODESTO		ARGILACEOUS SHALE	8.0	178.5	ARG
228.5	MODESTO		COAL	0.5	186.5	
228.0	MODESTO		ARGILACEOUS SHALE	2.0	187.0	ARG
226.0	MODESTO		BLACK SHALE	3.0	189.0	
223.0	MODESTO		ARGILACEOUS SHALE	8.5	192.0	ARG
214.5	MODESTO		LIMESTONE	1.0	200.5	
213.5	MODESTO		SANDSTONE	19.5	201.5	
194.0	MODESTO		ARGILACEOUS SHALE	5.0	221.0	ARG
189.0	MODESTO		SANDSTONE	2.0	226.0	
187.0	MODESTO		ARGILACEOUS SHALE	2.0	228.0	ARG
185.0	MODESTO		SANDSTONE	6.0	230.0	
179.0	MODESTO		ARGILACEOUS SHALE	17.0	236.0	ARG
162.0	CARBONDALE	DANVILLE	COAL	1.0	253.0	
161.0	CARBONDALE		ARGILACEOUS SHALE	10.0	254.0	ARG
151.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	264.0	
138.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	277.0	
120.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	295.0	
117.0	CARBONDALE		SHALE	26.0	298.0	
91.0	CARBONDALE		ARGILACEOUS SHALE	13.0	324.0	ARG
78.0	CARBONDALE	BRERETON	LIMESTONE	8.0	337.0	
70.0	CARBONDALE	HERRIN	COAL	6.3	345.0	

MAPID: 16500095000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.523477 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.825127 **DATE COLLECTED:** 1 / 29 / 1906

SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 503.7 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	25.0	0.0	
393.0	MODESTO		SANDSTONE	10.0	25.0	
383.0	MODESTO		SHALE	11.0	35.0	
372.0	MODESTO		SANDY SHALE	33.0	46.0	
339.0	MODESTO		SHALE	29.0	79.0	
310.0	MODESTO		LIMESTONE	1.0	108.0	
309.0	MODESTO		SHALE	19.0	109.0	
290.0	MODESTO		SANDSTONE	53.0	128.0	
237.0	MODESTO		SANDY SHALE	6.0	181.0	
231.0	MODESTO		LIMESTONE	3.0	187.0	
228.0	MODESTO		SHALE	22.0	190.0	
206.0	MODESTO		SANDSTONE	17.0	212.0	
189.0	MODESTO		SHALE	4.0	229.0	
185.0	MODESTO		BLACK SHALE	2.0	233.0	
183.0	CARBONDALE	DANVILLE	COAL	2.0	235.0	
181.0	CARBONDALE		UNDERCLAY	1.0	237.0	
180.0	CARBONDALE		SHALE	4.0	238.0	
176.0	CARBONDALE		SANDSTONE	6.0	242.0	GRAY
170.0	CARBONDALE		SANDY SHALE	10.0	248.0	
160.0	CARBONDALE		SHALE	18.0	258.0	DARK
142.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	276.0	
136.0	CARBONDALE	ANVIL ROCK	SHALE	27.0	282.0	
109.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	309.0	
100.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	15.0	318.0	CALC
85.0	CARBONDALE	ANVIL ROCK	SANDSTONE	39.0	333.0	
46.0	CARBONDALE	ANVIL ROCK	SHALE	2.0	372.0	
44.0	CARBONDALE	BRERETON	LIMESTONE	8.0	374.0	
36.0	CARBONDALE		SHALE	2.0	382.0	
34.0	CARBONDALE	HERRIN	COAL	5.0	384.0	
29.0	CARBONDALE		UNDERCLAY	3.0	389.0	
26.0	CARBONDALE		SHALE	4.0	392.0	
22.0	CARBONDALE		SHALE	28.0	396.0	
-6.0	CARBONDALE	BRIAR HILL	COAL	0.5	424.0	
-6.5	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	424.5	
-26.5	CARBONDALE	DYKERSBURG	SANDY SHALE	36.0	444.5	GRAY
-62.5	CARBONDALE	DYKERSBURG	SHALE	19.0	480.5	
-81.5	CARBONDALE	SPRINGFIELD	COAL	3.2	499.5	
-84.7	CARBONDALE		UNDERCLAY	1.0	502.7	

MAPID: 16500095000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.523477 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.825127 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 504.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
34.0	CARBONDALE	HERRIN	COAL	5.0	384.0	
-6.0	CARBONDALE	BRIAR HILL	COAL	0.5	424.0	
-81.0	CARBONDALE	SPRINGFIELD	COAL	3.2	499.0	

MAPID: 16500096000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1320' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.528092 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.823297 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 434.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	DANVILLE	COAL	2.0	233.0	
147.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	251.0	
119.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	25.0	279.0	
81.0	CARBONDALE	HERRIN	COAL	5.3	317.0	
42.0	CARBONDALE	BRIAR HILL	COAL	1.0	356.0	
31.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	45.0	367.0	
-31.0	CARBONDALE	SPRINGFIELD	COAL	4.7	429.0	

MAPID: 16500096000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1320' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.528092 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.823297 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 322.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	MODESTO	PIASA	LIMESTONE	6.0	207.0	
185.0	MODESTO		GRAY SHALE	20.0	213.0	
165.0	CARBONDALE	DANVILLE	COAL	2.0	233.0	
163.0	CARBONDALE		GRAY SHALE	16.0	235.0	
147.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	251.0	
145.0	CARBONDALE	LAWSON	SHALE	26.0	253.0	
119.0	CARBONDALE	LAWSON	SANDSTONE	25.0	279.0	
94.0	CARBONDALE	LAWSON	GRAY SHALE	4.0	304.0	
90.0	CARBONDALE	BRERETON	LIMESTONE	8.0	308.0	
82.0	CARBONDALE	ANNA	GRAY SHALE	1.0	316.0	
81.0	CARBONDALE	HERRIN	COAL	5.3	317.0	

MAPID: 16500096000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1320' S line, 1980' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.528092 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.823297 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 433.9 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL CO. **WELL TYPE:** Coal Test

COMMENT: THICKNESS OF UNIT 33 WRONG IN LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	22.0	0.0	
376.0	MODESTO		SANDSTONE	4.0	22.0	
372.0	MODESTO		SHALE	30.0	26.0	
342.0	MODESTO		SHALE	10.0	56.0	
332.0	MODESTO		BLACK SHALE	2.0	66.0	
330.0	MODESTO	CHAPEL	COAL	1.0	68.0	
329.0	MODESTO		UNDERCLAY	2.0	69.0	
327.0	MODESTO		SANDSTONE	41.0	71.0	
286.0	MODESTO		SHALE	10.0	112.0	
276.0	MODESTO		SANDSTONE	33.0	122.0	
243.0	MODESTO		SHALE	7.0	155.0	
236.0	MODESTO		BLACK SHALE	3.0	162.0	
233.0	MODESTO		COAL	0.5	165.0	
232.5	MODESTO		UNDERCLAY	12.0	165.5	
220.5	MODESTO		BLACK SHALE	2.0	177.5	
218.5	MODESTO		COAL	0.5	179.5	
218.0	MODESTO		UNDERCLAY	2.0	180.0	
216.0	MODESTO		SHALE	12.0	182.0	
204.0	MODESTO		CALCAREOUS SHALE	13.0	194.0	CALC
191.0	MODESTO	PIASA	LIMESTONE	6.0	207.0	
185.0	MODESTO		SHALE	17.0	213.0	
168.0	MODESTO		BLACK SHALE	3.0	230.0	
165.0	CARBONDALE	DANVILLE	COAL	2.0	233.0	
163.0	CARBONDALE		SHALE	16.0	235.0	
147.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	251.0	
145.0	CARBONDALE	ANVIL ROCK	SHALE	17.0	253.0	
128.0	CARBONDALE	ANVIL ROCK	SHALE	9.0	270.0	
119.0	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	279.0	
94.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	304.0	
90.0	CARBONDALE	BRERETON	LIMESTONE	8.0	308.0	
82.0	CARBONDALE		SHALE	1.0	316.0	
81.0	CARBONDALE	HERRIN	COAL	5.3	317.0	
75.7	CARBONDALE		UNDERCLAY	1.7	322.3	THICKNESS CHANGED TO MATCH DEPTH
74.0	CARBONDALE		SHALE	14.0	324.0	
60.0	CARBONDALE		SHALE	16.0	338.0	
44.0	CARBONDALE		BLACK SHALE	2.0	354.0	
42.0	CARBONDALE	BRIAR HILL	COAL	1.0	356.0	
41.0	CARBONDALE		SHALE	10.0	357.0	
31.0	CARBONDALE	DYKERSBURG	SANDSTONE	45.0	367.0	

-14.0	CARBONDALE	DYKERSBURG	SHALE	17.0	412.0
-31.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.3	429.0
-31.3	CARBONDALE	SPRINGFIELD	COAL	4.7	429.3

MAPID: 16501524000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 340' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533748 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829827 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	368.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1772.0			LIMESTONE	-	2188.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2596.0	

MAPID: 16501524000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 340' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533748 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.829827 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 3098.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
126.0	CARBONDALE	DANVILLE	COAL	-	290.0	
120.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	3.0	296.0	
100.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	316.0	
80.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	34.0	336.0	
42.0	CARBONDALE	HERRIN	COAL	5.0	374.0	
12.0	CARBONDALE	BRIAR HILL	COAL	-	404.0	
4.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	18.0	412.0	
-58.0	CARBONDALE	SPRINGFIELD	COAL	6.0	474.0	
-110.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	24.0	526.0	
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	-	507.0	

MAPID: 16501524000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 340' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533748 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.829827 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 1715.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-264.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	680.0	
-328.0	SPOON	DAVIS	UNCLASSIFIED	-	744.0	
-1299.0	BASE OF PENN.		UNCLASSIFIED	-	1715.0	

MAPID: 16501524000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 340' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.533748 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829827 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2596.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, SRONCE MABEL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-144.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	560.0	
-186.0	CARBONDALE	SURVANT	COAL	0.5	602.0	
-264.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-299.0	CARBONDALE	DEKOVEN	COAL	0.0	715.0	
-319.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	735.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-326.0	CARBONDALE	DAVIS	COAL	4.0	742.0	
-359.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-364.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	780.0	
-404.0	TRADEWATER	MT. RORAH	COAL	0.5	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503196000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531484 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820576 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., MATHIS COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-98.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	492.0	
-131.0	CARBONDALE	SURVANT	COAL	0.5	525.0	
-210.0	CARBONDALE	COLCHESTER	COAL	0.5	604.0	
-261.0	CARBONDALE	DEKOVEN	COAL	0.0	655.0	
-276.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	670.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-284.0	CARBONDALE	DAVIS	COAL	4.0	678.0	
-323.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	717.0	
-336.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	730.0	
-363.0	TRADEWATER	MT. RORAH	COAL	1.5	757.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503196000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531484 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1751.0			LIMESTONE	-	2145.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16503254000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.53833 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833634 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 2620.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	BRERETON	LIMESTONE	-	399.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1840.0	
-1762.0			LIMESTONE	-	2196.0	
-2186.0		BASE BARLOW	LIMESTONE	-	2620.0	

MAPID: 16503267000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 340' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538292 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 557.0 **LOG TYPE:** Electric Log
SOURCE: KEWANEE OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	HERRIN	COAL	-	372.0	
-66.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	9.0	487.0	
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	-	557.0	

MAPID: 16503267000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 340' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538292 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2595.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	372.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-2174.0		BASE BARLOW	LIMESTONE	-	2595.0	

MAPID: 16503275000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.538341 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829921 **DATE COLLECTED:** 2 / 0 / 1959

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1688.0 **LOG TYPE:** Electric Log

SOURCE: VAN FOSSAN, M. L. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-249.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	664.0	
-319.0	SPOON	DAVIS	UNCLASSIFIED	-	734.0	
-1273.0	BASE OF PENN.		UNCLASSIFIED	-	1688.0	

MAPID: 16503275000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.538341 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.829921 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**

SOURCE: VAN FOSSAN, M. L. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	BRERETON	LIMESTONE	-	365.0	
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1764.0			LIMESTONE	-	2179.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503275000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538341 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829921 **DATE COLLECTED:** 2 / 0 / 1959
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:** Electric Log
SOURCE: VAN FOSSAN, M. L., GUEST LLOYD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	549.0	
-168.0	CARBONDALE	SURVANT	COAL	0.5	583.0	
-248.0	CARBONDALE	COLCHESTER	COAL	0.5	663.0	
-290.0	CARBONDALE	DEKOVEN	COAL	0.0	705.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	725.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-319.0	CARBONDALE	DAVIS	COAL	3.7	734.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	763.0	
-403.0	TRADEWATER	MT. RORAH	COAL	1.3	818.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503314000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538311 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.822494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 497.0 **LOG TYPE:** Electric Log
SOURCE: OWENS, C L & RIGNEY, F L 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-12.0	CARBONDALE	SPRINGFIELD	COAL	7.0	412.0	
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	-	497.0	

MAPID: 16503314000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538311 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: OWENS, C L & RIGNEY, F L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1745.0			LIMESTONE	-	2140.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16523872000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.526918 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820565 **DATE COLLECTED:** 11 / 0 / 1974
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 25.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, HALE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	522.0	
-163.0	CARBONDALE	SURVANT	COAL	0.5	563.0	
-248.0	CARBONDALE	COLCHESTER	COAL	2.0	648.0	
-279.0	CARBONDALE	DEKOVEN	COAL	0.0	679.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	704.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-310.0	CARBONDALE	DAVIS	COAL	3.0	710.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	753.0	
-369.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	769.0	
-410.0	TRADEWATER	MT. RORAH	COAL	0.5	810.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16525148000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.526884 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831608 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 550.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR OIL CO., INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
61.0	CARBONDALE	HERRIN	COAL	-	366.0	
29.0	CARBONDALE	BRIAR HILL	COAL	-	398.0	
-42.0	CARBONDALE	SPRINGFIELD	COAL	-	469.0	
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	-	550.0	

MAPID: 16525758000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 550' N line, 2600' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.530198 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.832884 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 571.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8615-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	GLACIAL DRIFT
-	MODESTO		SANDY SHALE	69.0	65.0	
-	MODESTO	CHAPEL	COAL	2.0	134.0	
-	MODESTO		SANDY SHALE	8.0	136.0	
-	MODESTO	TRIVOLI	SANDSTONE	4.0	144.0	
-	MODESTO		SILTY SHALE	139.0	148.0	
-	MODESTO		GRAY SHALE	21.0	287.0	
-	CARBONDALE	DANVILLE	COAL	2.0	308.0	
-	CARBONDALE		SILTY SHALE	20.0	310.0	
-	CARBONDALE		SANDSTONE	6.0	330.0	FINE
-	CARBONDALE		SILTY SHALE	15.0	336.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	27.0	351.0	FINE TO MEDIUM
-	CARBONDALE		CALCAREOUS SHALE	4.0	378.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	4.0	382.0	
-	CARBONDALE	ANNA	BLACK SHALE & COAL	1.0	386.0	
-	CARBONDALE	HERRIN	COAL	5.0	387.0	
-	CARBONDALE		UNDERCLAY	3.0	392.0	
-	CARBONDALE		SILTY SHALE	23.0	395.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	418.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	16.0	420.0	WITH SANDSTONE BEDS
-	CARBONDALE	DYKERSBURG	SILTY SHALE	50.0	436.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	486.0	
-	CARBONDALE		SILTY SHALE	79.0	492.0	

MAPID: 16526159000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1050' N line, 2750' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.530728 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.831511 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 493.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8615-4 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	GLACIAL DRIFT
-			SANDSTONE	9.0	33.0	
-			SILTY SHALE	92.0	42.0	
-	MODESTO	CHAPEL	COAL	3.0	134.0	
-	MODESTO		SILTY SHALE	107.0	137.0	
-	MODESTO		SANDSTONE	6.0	244.0	FINE
-	MODESTO		SILTY SHALE	25.0	250.0	
-	MODESTO		SANDSTONE	7.0	275.0	FINE TO MEDIUM
-	MODESTO		CALCAREOUS SHALE	1.0	282.0	
-	MODESTO	PIASA	LIMESTONE	3.0	283.0	TAN
-	MODESTO		GRAY SHALE	19.0	286.0	
-	CARBONDALE	DANVILLE	COAL	2.0	305.0	
-	CARBONDALE		SANDY SHALE	22.0	307.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	329.0	
-	CARBONDALE		SILTY SHALE	20.0	333.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	353.0	
-	CARBONDALE		CALCAREOUS SHALE	4.0	372.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	5.0	376.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	2.0	381.0	
-	CARBONDALE	HERRIN	COAL	5.0	383.0	
-	CARBONDALE		UNDERCLAY	4.0	388.0	
-	CARBONDALE		LIMESTONE	2.0	392.0	NODULAR, DARK GRAY
-	CARBONDALE		SILTY SHALE	20.0	394.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	414.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	67.0	416.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	483.0	
-	CARBONDALE		SILTY SHALE	4.0	489.0	

MAPID: 16526160000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2050' N line, 700' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.523607 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.828623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 506.0 **LOG TYPE:** Drillers Log

SOURCE: KERR-MCGEE COAL CO. 8615-5 **WELL TYPE:** Coal Test

COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0	GLACIAL DRIFT
-			SANDSTONE	20.0	29.0	
-			SILTY SHALE	84.0	49.0	
-	MODESTO	CHAPEL	COAL	3.0	133.0	
-	MODESTO		SILTY SHALE	22.0	136.0	
-	MODESTO	TRIVOLI	SANDSTONE	24.0	158.0	FINE TO MEDIUM
-	MODESTO		GRAY SHALE	10.0	182.0	
-	MODESTO		LIMESTONE	1.0	192.0	
-	MODESTO		GRAY SHALE	22.0	193.0	
-	MODESTO		SILTY SHALE	63.0	215.0	
-	MODESTO	PIASA	LIMESTONE	4.0	278.0	TAN
-	MODESTO		GRAY SHALE	19.0	282.0	
-	CARBONDALE	DANVILLE	COAL	2.0	301.0	
-	CARBONDALE		SANDY SHALE	32.0	303.0	
-	CARBONDALE		SANDSTONE	23.0	335.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	358.0	FINE TO MEDIUM
-	CARBONDALE		CALCAREOUS SHALE	2.0	372.0	DARK GRAY
-	CARBONDALE	BRERETON	LIMESTONE	6.0	374.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE & COAL	2.0	380.0	
-	CARBONDALE	HERRIN	COAL	5.0	382.0	
-	CARBONDALE		UNDERCLAY	3.0	387.0	
-	CARBONDALE		LIMESTONE	4.0	390.0	NODULAR
-	CARBONDALE		SILTY SHALE	22.0	394.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	416.0	
-	CARBONDALE	DYKERSBURG	SILTY SHALE	76.0	418.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	494.0	
-	CARBONDALE		SILTY SHALE	6.0	500.0	

MAPID: 16500097000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.548654 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.827288 **DATE COLLECTED:** 0 / 0 / 1921
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 486.0 **LOG TYPE:** Drillers Log
SOURCE: TRI COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	79.0	0.0	
326.0	MODESTO		SHALE	8.0	79.0	
318.0	MODESTO		BONE COAL	2.0	87.0	
316.0	MODESTO		SANDSTONE	30.0	89.0	W/SH
286.0	MODESTO		SANDSTONE	30.0	119.0	
256.0	MODESTO		SANDY SHALE	28.0	149.0	
228.0	MODESTO		COAL	0.3	177.0	
227.7	MODESTO		SHALE	0.7	177.3	
227.0	MODESTO		SANDY SHALE	28.0	178.0	
199.0	MODESTO		BLACK SHALE	1.0	206.0	
198.0	MODESTO		COAL	0.3	207.0	
197.7	MODESTO		SHALE	2.8	207.3	
195.0	MODESTO		UNDERCLAY	2.0	210.0	
193.0	MODESTO		LIMESTONE	5.0	212.0	
188.0	MODESTO		SANDY SHALE	10.0	217.0	
178.0	MODESTO		SHALE	23.0	227.0	
155.0	MODESTO	PIASA	LIMESTONE	3.0	250.0	
152.0	MODESTO		SHALE	4.0	253.0	
148.0	MODESTO		SHALE	2.0	257.0	DARK
146.0	MODESTO		CALCAREOUS SHALE	4.0	259.0	CALC
142.0	MODESTO		SHALE	2.0	263.0	
140.0	CARBONDALE	DANVILLE	COAL	1.5	265.0	
138.5	CARBONDALE		SANDSTONE	6.5	266.5	
132.0	CARBONDALE		LIMESTONE	3.0	273.0	
129.0	CARBONDALE		SANDSTONE	10.0	276.0	
119.0	CARBONDALE		SHALE	5.0	286.0	
114.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	291.0	
111.0	CARBONDALE		SHALE	6.0	294.0	
105.0	CARBONDALE	ANVIL ROCK	SANDSTONE	36.0	300.0	
69.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	336.0	W/COAL
68.0	CARBONDALE	ANVIL ROCK	BLACK SHALE	1.0	337.0	
67.0	CARBONDALE	BRERETON	LIMESTONE	5.1	338.0	
61.9	CARBONDALE	HERRIN	COAL	5.3	343.1	
56.6	CARBONDALE		UNCLASSIFIED	23.6	348.4	
33.0	CARBONDALE	BRIAR HILL	COAL	1.8	372.0	
31.2	CARBONDALE	DYKERSBURG	SANDY SHALE	44.2	373.8	
-13.0	CARBONDALE	DYKERSBURG	SHALE	63.7	418.0	
-76.7	CARBONDALE	SPRINGFIELD	COAL	0.7	481.7	
-77.3	CARBONDALE		SANDY SHALE	3.7	482.3	

MAPID: 16500097000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.548654 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.827288 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 348.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.1	MODESTO	PIASA	LIMESTONE	3.0	249.9	
152.1	MODESTO		SHALE	12.0	252.9	
140.1	CARBONDALE	DANVILLE	COAL	1.5	264.9	
138.6	CARBONDALE		SANDSTONE	6.5	266.4	
132.1	CARBONDALE	GALUM	LIMESTONE	3.0	272.9	
129.1	CARBONDALE		SHALE & SANDSTONE	15.0	275.9	
114.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	290.9	
111.1	CARBONDALE	LAWSON	SHALE	6.0	293.9	
105.1	CARBONDALE	LAWSON	SANDSTONE	36.0	299.9	
69.1	CARBONDALE	JAMESTOWN	CARBONACEOUS SANDSTONE	1.0	335.9	
68.1	CARBONDALE		BLACK SHALE	1.0	336.9	
67.1	CARBONDALE	BRERETON	LIMESTONE	5.1	337.9	
62.0	CARBONDALE	HERRIN	COAL	5.3	343.0	

MAPID: 16501525000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.552254 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.824532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**

SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1768.0			LIMESTONE	-	2184.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16501525000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.552254 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.824532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 3103.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	DANVILLE	COAL	-	262.0	
140.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	276.0	
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	290.0	
104.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	24.0	312.0	
74.0	CARBONDALE	HERRIN	COAL	4.0	342.0	
46.0	CARBONDALE	BRIAR HILL	COAL	-	370.0	
36.0	CARBONDALE	CANTON	SILTSTONE	10.0	380.0	
-48.0	CARBONDALE	SPRINGFIELD	COAL	3.0	464.0	
-96.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	22.0	512.0	
-118.0	CARBONDALE	HOUCHIN CREEK	COAL	-	534.0	

MAPID: 16501525000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.552254 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824532 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H, THORNBERRY-BURNS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-163.0	CARBONDALE	SURVANT	COAL	0.5	579.0	
-226.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-259.0	CARBONDALE	DEKOVEN	COAL	2.5	675.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	705.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	4.0	712.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	747.0	
-379.0	TRADEWATER	MT. RORAH	COAL	1.8	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502915000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552271 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.82088 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 1655.0 **LOG TYPE:** Electric Log
SOURCE: HORTON, LEO V., ETAL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-231.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	640.0	
-275.0	SPOON	DAVIS	UNCLASSIFIED	-	684.0	
-1246.0	BASE OF PENN.		UNCLASSIFIED	-	1655.0	

MAPID: 16502915000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552271 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82088 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: HORTON, LEO V., ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	BRERETON	LIMESTONE	-	317.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1757.0			LIMESTONE	-	2166.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16502915000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552271 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82088 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:** Electric Log
SOURCE: HORTON, LEO V., ETAL, JONES L E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	525.0	
-154.0	CARBONDALE	SURVANT	COAL	0.5	563.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-253.0	CARBONDALE	DEKOVEN	COAL	3.0	662.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	678.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-275.0	CARBONDALE	DAVIS	COAL	3.5	684.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	
-307.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	716.0	
-359.0	TRADEWATER	MT. RORAH	COAL	1.3	768.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503061000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.54296 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82808 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2602.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE & LOBREE LISZ, ENDICOTT PEARCE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-160.0	CARBONDALE	SURVANT	COAL	0.5	580.0	
-238.0	CARBONDALE	COLCHESTER	COAL	0.6	658.0	
-263.0	CARBONDALE	DEKOVEN	COAL	2.0	683.0	
-288.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	708.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	3.0	724.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	749.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503061000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.54296 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2602.0 **LOG TYPE:**
SOURCE: LOBREE & LOBREE LISZ **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	BRERETON	LIMESTONE	-	343.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1768.0			LIMESTONE	-	2188.0	
-2182.0		BASE BARLOW	LIMESTONE	-	2602.0	

MAPID: 16503113000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 315' S line, 970' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55212 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	BRERETON	LIMESTONE	-	365.0	
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1829.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2608.0	

MAPID: 16503113000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 315' S line, 970' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55212 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.828142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 3146.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	HERRIN	COAL	4.0	372.0	
23.0	CARBONDALE	BRIAR HILL	COAL	-	398.0	
-64.0	CARBONDALE	SPRINGFIELD	COAL	3.0	485.0	
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	-	555.0	

MAPID: 16503113000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 315' S line, 970' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55212 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.828142 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2608.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ERWIN R C ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	560.0	
-174.0	CARBONDALE	SURVANT	COAL	0.5	595.0	
-258.0	CARBONDALE	COLCHESTER	COAL	0.5	679.0	
-279.0	CARBONDALE	DEKOVEN	COAL	1.3	700.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	720.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-308.0	CARBONDALE	DAVIS	COAL	3.0	729.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-394.0	TRADEWATER	MT. RORAH	COAL	1.5	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503113000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 315' S line, 970' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55212 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.828142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 679.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	HERRIN	COAL	5.0	371.0	
21.0	CARBONDALE	BRIAR HILL	COAL	-	400.0	
-56.0	CARBONDALE	SPRINGFIELD	COAL	4.0	477.0	
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	-	560.0	
-258.0	CARBONDALE	COLCHESTER	COAL	-	679.0	

MAPID: 16503260000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545253 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831796 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2622.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1776.0			LIMESTONE	-	2202.0	
-2196.0		BASE BARLOW	LIMESTONE	-	2622.0	

MAPID: 16503262000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542956 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1766.0			LIMESTONE	-	2185.0	
-2181.0		BASE BARLOW	LIMESTONE	-	2600.0	

MAPID: 16503265000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.540627 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833656 **DATE COLLECTED:** 11 / 0 / 1958
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2619.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., TATE CHAS COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-149.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-183.0	CARBONDALE	SURVANT	COAL	0.5	614.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	705.0	
-297.0	CARBONDALE	DEKOVEN	COAL	2.0	728.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	760.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-379.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	810.0	
-419.0	TRADEWATER	MT. RORAH	COAL	1.3	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503265000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.540627 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833656 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2619.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	BRERETON	LIMESTONE	-	381.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1847.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2619.0	

MAPID: 16503266000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542956 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831779 **DATE COLLECTED:** 12 / 0 / 1958
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., TATE COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	564.0	
-174.0	CARBONDALE	SURVANT	COAL	2.0	599.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-280.0	CARBONDALE	DEKOVEN	COAL	1.5	705.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	745.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-325.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	773.0	
-355.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	780.0	
-413.0	TRADEWATER	MT. RORAH	COAL	1.5	838.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503266000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542956 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831779 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
61.0	CARBONDALE	BRERETON	LIMESTONE	-	364.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1831.0	
-1775.0			LIMESTONE	-	2200.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2612.0	

MAPID: 16503266000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542956 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831779 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 754.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	HERRIN	COAL	4.5	372.0	
25.0	CARBONDALE	BRIAR HILL	COAL	-	400.0	
-98.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	4.0	523.0	
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	-	564.0	
-258.0	CARBONDALE	COLCHESTER	COAL	-	683.0	
-325.0	SPOON	DAVIS	COAL	4.0	750.0	

MAPID: 16503270000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545249 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833662 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2622.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	BRERETON	LIMESTONE	-	382.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-1782.0			LIMESTONE	-	2208.0	
-2196.0		BASE BARLOW	LIMESTONE	-	2622.0	

MAPID: 16503273000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545253 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829973 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2623.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1767.0			LIMESTONE	-	2195.0	
-2195.0		BASE BARLOW	LIMESTONE	-	2623.0	

MAPID: 16503276000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.540624 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831765 **DATE COLLECTED:** 3 / 0 / 1959
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., TATE COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-273.0	CARBONDALE	SURVANT	COAL	1.3	693.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	679.0	
-282.0	CARBONDALE	DEKOVEN	COAL	0.5	702.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	740.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-358.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	778.0	
-360.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	780.0	
-410.0	TRADEWATER	MT. RORAH	COAL	1.5	830.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503276000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.540624 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831765 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1821.0	
-1764.0			LIMESTONE	-	2184.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2600.0	

MAPID: 16503280000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.54062 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: KEWANEE OIL & GAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	BRERETON	LIMESTONE	-	346.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16503484000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.54526 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822597 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: N V DUNCAN DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	BRERETON	LIMESTONE	-	323.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16590007000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.557669 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.829952 **DATE COLLECTED:** 11 / 22 / 1986
SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 386.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8616-3 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3			UNCONSOLIDATED	86.0	0.0	GLACIAL DEPOSITS
304.3	MODESTO	CHAPEL	COAL	3.0	107.0	
123.3	CARBONDALE	DANVILLE	COAL	2.0	288.0	
44.3	CARBONDALE	BRERETON	LIMESTONE	5.0	367.0	
39.3	CARBONDALE	ANNA	BLACK SHALE	2.0	372.0	
37.3	CARBONDALE	HERRIN	COAL	5.5	374.0	

MAPID: 16590008000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.556282 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.824458 **DATE COLLECTED:** 11 / 23 / 1986
SURFACE ELEVATION (FT.): 401.3 **LOGGED (FT.):** 465.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8616-2 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.3			UNCONSOLIDATED	85.0	0.0	GLACIAL DEPOSITS
212.3			COAL	1.0	189.0	TRACE OF COAL
152.7	CARBONDALE	DANVILLE	COAL	1.4	248.6	
76.5	CARBONDALE	BRERETON	LIMESTONE	5.2	324.8	
71.3	CARBONDALE	HERRIN	COAL	5.8	330.0	
46.3	CARBONDALE	BRIAR HILL	COAL	1.3	355.0	
45.0	CARBONDALE	DYKERSBURG	SHALE	96.7	356.3	
-51.7	CARBONDALE	SPRINGFIELD	COAL	2.3	453.0	

MAPID: 16590009000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.552059 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.82881 **DATE COLLECTED:** 2 / 2 / 1979
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 529.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8616-1 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	91.5	0.0	GLACIAL DEPOSITS
306.8	MODESTO	CHAPEL	COAL	2.8	112.2	
190.4	MODESTO		COAL	1.0	228.6	
130.0	CARBONDALE	DANVILLE	COAL	2.8	289.0	
53.5	CARBONDALE	BRERETON	LIMESTONE	6.6	365.5	
44.6	CARBONDALE	HERRIN	COAL	6.5	374.4	
16.0	CARBONDALE	BRIAR HILL	COAL	1.0	403.0	

MAPID: 16590025000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1420' N line, 420' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.540935 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.830647 **DATE COLLECTED:** 11 / 24 / 1992

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 511.5 **LOG TYPE:** Other Core Study

SOURCE: KERR-MCGEE COAL CO. 8616-4 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	85.0	0.0	GLACIAL DRIFT
-	MODESTO	MOUND CITY	BLACK SHALE	1.5	85.0	
-	MODESTO		GRAY SHALE	15.5	86.5	
-	MODESTO	CHAPEL	COAL	3.0	102.0	
-	MODESTO	PIASA	LIMESTONE	4.0	260.0	
-	CARBONDALE	DANVILLE	COAL	2.0	281.0	
-	CARBONDALE	BRERETON	LIMESTONE	5.0	354.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.9	359.0	
-	CARBONDALE	HERRIN	COAL	5.9	360.9	
-	CARBONDALE	BRIAR HILL	COAL	2.0	384.0	
-	CARBONDALE	DYKERSBURG	SHALE	122.0	386.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.5	508.0	

MAPID: 16590027000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1210' N line, 1620' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.552358 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 507.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8616-6 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.0			UNCONSOLIDATED	83.0	0.0	GLACIAL DRIFT
311.5	MODESTO	MOUND CITY	BLACK SHALE	1.5	111.5	
310.0	MODESTO		GRAY SHALE	19.0	113.0	
291.0	MODESTO	CHAPEL	COAL	3.0	132.0	
135.5	MODESTO	PIASA	LIMESTONE	4.0	287.5	
116.0	CARBONDALE	DANVILLE	COAL	2.0	307.0	
39.5	CARBONDALE	BRERETON	LIMESTONE	5.5	383.5	
33.0	CARBONDALE	HERRIN	COAL	6.0	390.0	
3.0	CARBONDALE	BRIAR HILL	COAL	1.5	420.0	
1.5	CARBONDALE	DYKERSBURG	SHALE	72.5	421.5	
-71.0	CARBONDALE	SPRINGFIELD	COAL	3.0	494.0	
-74.0	CARBONDALE	SPRINGFIELD	SHALE	1.0	497.0	
-75.0	CARBONDALE	SPRINGFIELD	COAL	3.0	498.0	
-78.0	CARBONDALE		MUDSTONE	1.6	501.0	
-79.6	CARBONDALE		GRAY SHALE	4.4	502.6	

MAPID: 16502656000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3092.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	HERRIN	COAL	5.0	305.0	
63.0	CARBONDALE	BRIAR HILL	COAL	-	334.0	
-69.0	CARBONDALE	SPRINGFIELD	COAL	3.0	466.0	
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	-	490.0	

MAPID: 16502656000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 310.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	MODESTO	PIASA	LIMESTONE	5.0	206.0	
186.0	MODESTO		SHALE	12.5	211.0	
173.5	CARBONDALE	DANVILLE	COAL	1.5	223.5	
172.0	CARBONDALE		SILTY SHALE	14.0	225.0	
158.0	CARBONDALE	GALUM	LIMESTONE AND SANDSTONE	4.0	239.0	
154.0	CARBONDALE		CLAYSTONE & SHALE	6.0	243.0	
148.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	249.0	
144.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	5.0	253.0	
139.0	CARBONDALE	LAWSON	SANDSTONE	38.0	258.0	
101.0	CARBONDALE	LAWSON	SHALE	2.0	296.0	
99.0	CARBONDALE	BRERETON	LIMESTONE	5.0	298.0	
94.0	CARBONDALE	ANNA	BLACK SHALE	2.0	303.0	
92.0	CARBONDALE	HERRIN	COAL	5.0	305.0	

MAPID: 16502656000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**

SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	BRERETON	LIMESTONE	-	297.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1765.0			LIMESTONE	-	2162.0	
-2173.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502656000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1760.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	598.0	
-271.0	SPOON	DAVIS	UNCLASSIFIED	-	668.0	
-1363.0	BASE OF PENN.		UNCLASSIFIED	-	1760.0	

MAPID: 16502656000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 310.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, THORNBERRY GEO A 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-102.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	499.0	
-135.0	CARBONDALE	SURVANT	COAL	0.5	532.0	
-202.0	CARBONDALE	COLCHESTER	COAL	0.6	599.0	
-242.0	CARBONDALE	DEKOVEN	COAL	3.0	639.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	660.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-273.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-298.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	695.0	
-363.0	TRADEWATER	MT. RORAH	COAL	1.3	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502656000C **VERSION:** 6 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561577 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 598.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	HERRIN	COAL	5.0	305.0	
62.0	CARBONDALE	BRIAR HILL	COAL	-	335.0	
-66.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	-	463.0	CONTAINS ONE OR MORE SHALE PARTINGS
-101.0	CARBONDALE	HOUCHIN CREEK	COAL	-	498.0	
-201.0	CARBONDALE	COLCHESTER	COAL	-	598.0	

MAPID: 16503049000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568525 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822681 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: LINDSAY F E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1799.0	
-1794.0			LIMESTONE	-	2184.0	
-2199.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16503049000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568525 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.822681 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2910.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY F E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	HERRIN	COAL	5.0	313.0	
50.0	CARBONDALE	BRIAR HILL	COAL	-	340.0	
-65.0	CARBONDALE	SPRINGFIELD	COAL	3.0	455.0	
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	-	507.0	

MAPID: 16503049000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.568525 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.822681 **DATE COLLECTED:** 8 / 0 / 1956

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:** Electric Log

SOURCE: LINDSAY F E, LEITCH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-160.0	CARBONDALE	SURVANT	COAL	2.0	550.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-270.0	CARBONDALE	DEKOVEN	COAL	1.5	660.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	680.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-295.0	CARBONDALE	DAVIS	COAL	3.0	685.0	
-372.0	TRADEWATER	MT. RORAH	COAL	3.0	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523942000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.558135 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.834224 **DATE COLLECTED:** 3 / 27 / 1976

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 519.0 **LOG TYPE:** Multiple log types

SOURCE: KERR-MCGEE COAL CO. 86-17-1 **WELL TYPE:** Coal Test

COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	76.0	0.0	GLACIAL DEPOSITS
341.0	MODESTO		SHALE	2.5	76.0	
338.5	MODESTO		SANDY SHALE	4.5	78.5	
334.0	MODESTO		SILTY SHALE	11.0	83.0	
323.0	MODESTO		BONE COAL	1.0	94.0	
322.0	MODESTO		SILTY SHALE	14.0	95.0	
308.0	MODESTO	CHAPEL	BONE COAL	1.0	109.0	
307.0	MODESTO		SANDY SHALE	3.5	110.0	
303.5	MODESTO		SANDY SHALE	58.0	113.5	
245.5	MODESTO		SILTY SHALE	2.5	171.5	
243.0	MODESTO		SANDY SHALE	6.5	174.0	SDY SH W/ SS
236.5	MODESTO		SANDSTONE	11.5	180.5	
225.0	MODESTO		SILTY SHALE	22.0	192.0	
203.0	MODESTO		SANDSTONE	7.0	214.0	
196.0	MODESTO		SILTY SHALE	11.0	221.0	
185.0	MODESTO		SHALE	1.5	232.0	SH W/ COAL PARTINGS
183.5	MODESTO	POND CREEK	COAL	1.5	233.5	
182.0	MODESTO		UNDERCLAY	0.5	235.0	
181.5	MODESTO		SILTSTONE	17.5	235.5	
164.0	MODESTO		SANDSTONE	7.5	253.0	
156.5	MODESTO		SILTY SHALE	20.5	260.5	
136.0	MODESTO	PIASA	LIMESTONE	4.0	281.0	
132.0	MODESTO		DARK GRAY SHALE	3.0	285.0	
129.0	MODESTO		SILTY SHALE	12.0	288.0	
117.0	CARBONDALE	DANVILLE	COAL	1.5	300.0	
115.5	CARBONDALE		SILTY SHALE	8.0	301.5	
107.5	CARBONDALE		SANDSTONE	6.5	309.5	
101.0	CARBONDALE		SILTY SHALE	5.5	316.0	
95.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	321.5	
91.0	CARBONDALE		SANDY SHALE	17.5	326.0	
73.5	CARBONDALE	ANVIL ROCK	SANDSTONE	27.5	343.5	
46.0	CARBONDALE	JAMESTOWN	COAL	0.5	371.0	
45.5	CARBONDALE		CALCAREOUS SHALE	2.5	371.5	
43.0	CARBONDALE	BRERETON	LIMESTONE	5.5	374.0	
37.5	CARBONDALE	HERRIN	COAL	4.8	379.5	
32.7	CARBONDALE		GRAY SHALE	0.4	384.3	
32.4	CARBONDALE		GRAY SHALE	0.1	384.6	GY SH W/ BK SH TRACES
32.3	CARBONDALE		GRAY SHALE	0.9	384.7	
31.4	CARBONDALE		UNCLASSIFIED	1.4	385.6	CORE LOSS

30.0	CARBONDALE		GRAY SHALE	2.0	387.0	
28.0	CARBONDALE		LIMESTONE	1.0	389.0	
27.0	CARBONDALE		SILTSTONE	2.5	390.0	
24.5	CARBONDALE		SANDY SHALE	12.5	392.5	SILTY, SANDY SHALE
12.0	CARBONDALE		DARK GRAY SHALE	4.5	405.0	
7.5	CARBONDALE	BRIAR HILL	COAL	1.0	409.5	
6.5	CARBONDALE	DYKERSBURG	SANDY SHALE	13.5	410.5	SDY SH W/ SS
-7.0	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	424.0	
-14.0	CARBONDALE	DYKERSBURG	SANDY SHALE	50.0	431.0	SDY SH W/ SS
-64.0	CARBONDALE	SPRINGFIELD	COAL	6.0	481.0	
-70.0	CARBONDALE		GRAY SHALE	0.5	487.0	
-70.5	CARBONDALE		SHALE	2.8	487.5	SHALE W/ LS NODULES
-73.3	CARBONDALE		SILTSTONE	1.4	490.3	ST W/ LS NODULES
-74.7	CARBONDALE		UNCLASSIFIED	0.5	491.7	CORE LEFT IN HOLE
-75.2	CARBONDALE		SANDSTONE	26.8	492.2	

MAPID: 16524418000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.559188 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828239 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 24.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	543.0	
-156.0	CARBONDALE	SURVANT	COAL	0.5	570.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-266.0	CARBONDALE	DEKOVEN	COAL	0.5	680.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	705.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590005000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568293 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.829316 **DATE COLLECTED:** 11 / 18 / 1986
SURFACE ELEVATION (FT.): 426.7 **LOGGED (FT.):** 396.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8617-4 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.7	MODESTO	CHAPEL	COAL	1.5	110.0	
117.7	CARBONDALE	DANVILLE	COAL	2.0	309.0	
41.7	CARBONDALE	HERRIN	COAL	6.0	385.0	

MAPID: 16590006000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.825338 **DATE COLLECTED:** 11 / 20 / 1986
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 366.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8617-3 **WELL TYPE:** Coal Test
COMMENT: NO ELEV, GALATIA MINE PERMIT, GAMMA DEN.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	84.0	0.0	GLACIAL DEPOSITS
-	MODESTO	CHAPEL	COAL	3.0	97.0	
-	MODESTO		COAL	1.0	208.0	
-	MODESTO	PIASA	LIMESTONE	3.0	250.0	
-	CARBONDALE	DANVILLE	COAL	2.0	267.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	343.0	
-	CARBONDALE	ANNA	BLACK SHALE	3.0	347.0	
-	CARBONDALE	HERRIN	COAL	5.5	350.0	

MAPID: 16502426000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595325 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: ROWE J W ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1767.0			LIMESTONE	-	2154.0	
-2165.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502426000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595325 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.820646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 327.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	MODESTO	PIASA	LIMESTONE	4.0	216.0	
167.0	MODESTO		SHALE	15.0	220.0	
152.0	CARBONDALE	DANVILLE	COAL	2.0	235.0	
150.0	CARBONDALE		SILTY SHALE	11.0	237.0	
139.0	CARBONDALE	GALUM	LIMESTONE & SHALE	3.0	248.0	
136.0	CARBONDALE		CLAYSTONE & SHALE	10.0	251.0	
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	261.0	
122.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	8.0	265.0	
114.0	CARBONDALE	LAWSON	SANDSTONE	40.0	273.0	
74.0	CARBONDALE	LAWSON	SHALE	2.0	313.0	
72.0	CARBONDALE	BRERETON	LIMESTONE	5.0	315.0	
67.0	CARBONDALE	ANNA	BLACK SHALE	2.0	320.0	
65.0	CARBONDALE	HERRIN	COAL	5.0	322.0	

MAPID: 16502426000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595325 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820646 **DATE COLLECTED:** 8 / 0 / 1940
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 327.0 **LOG TYPE:** Electric Log
SOURCE: ROWE J W ETAL, SOMMERS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-169.0	CARBONDALE	SURVANT	COAL	0.5	556.0	
-251.0	CARBONDALE	COLCHESTER	COAL	0.6	638.0	
-287.0	CARBONDALE	DEKOVEN	COAL	3.0	674.0	
-308.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	695.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-315.0	CARBONDALE	DAVIS	COAL	4.0	702.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	743.0	
-408.0	TRADEWATER	MT. RORAH	COAL	3.0	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502426000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595325 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.820646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 706.0 **LOG TYPE:** Electric Log
SOURCE: ROWE J W ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	HERRIN	COAL	6.0	320.0	
40.0	CARBONDALE	BRIAR HILL	COAL	-	347.0	
-70.0	CARBONDALE	SPRINGFIELD	COAL	5.0	457.0	
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	-	512.0	
-245.0	CARBONDALE	COLCHESTER	COAL	-	632.0	
-314.0	SPOON	DAVIS	COAL	5.0	701.0	

MAPID: 16525248000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.592699 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.831839 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 707.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND EXPLORATION, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	HERRIN	COAL	6.0	341.0	
17.0	CARBONDALE	BRIAR HILL	COAL	-	377.0	
-103.0	CARBONDALE	SPRINGFIELD	COAL	3.5	497.0	
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	-	530.0	
-240.0	CARBONDALE	COLCHESTER	COAL	-	634.0	
-309.0	SPOON	DAVIS	COAL	4.0	703.0	

MAPID: 16525248000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.592699 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.831839 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1625.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1231.0	BASE OF PENN.		UNCLASSIFIED	-	1625.0	

MAPID: 16526161000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.580334 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.824303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.7 **LOGGED (FT.):** 374.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8618-12 **WELL TYPE:** Coal Test
COMMENT: PERMIT 2; GALATIA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.7	PLEISTOCENE		UNCONSOLIDATED	51.9	0.0	
369.8	MODESTO		SILTY SHALE	30.0	51.9	
339.8	MODESTO		LIMESTONE	2.4	81.9	
337.4	MODESTO		SHALE	16.8	84.3	DARK GRAY
320.6	MODESTO	CHAPEL	COAL	2.4	101.1	
318.2	MODESTO	TRIVOLI	SANDSTONE	24.0	103.5	
294.2	MODESTO		SHALE	46.8	127.5	DARK GRAY
247.4	MODESTO		LIMESTONE	2.4	174.3	
245.0	MODESTO		SILTY SHALE	87.6	176.7	
157.4	MODESTO	PIASA	LIMESTONE	4.8	264.3	
152.6	MODESTO		SHALE	9.6	269.1	DARK GRAY
143.0	CARBONDALE	DANVILLE	COAL	2.4	278.7	
140.6	CARBONDALE		SILTY SHALE	13.2	281.1	
127.4	CARBONDALE		SILTSTONE	10.8	294.3	
116.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	305.1	BROWN-GRAY
110.6	CARBONDALE		SILTY SHALE	18.0	311.1	
92.6	CARBONDALE	ANVIL ROCK	SANDSTONE	25.2	329.1	FINE SHALY
67.4	CARBONDALE		CALCAREOUS SHALE	3.6	354.3	DARK GRAY
63.8	CARBONDALE	BRERETON	LIMESTONE	8.4	357.9	
55.4	CARBONDALE	HERRIN	COAL	5.3	366.3	
50.1	CARBONDALE		UNDERCLAY	2.4	371.6	

MAPID: 16590003000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.583636 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.827112 **DATE COLLECTED:** 6 / 17 / 1984
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 520.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8618-3 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMIT, GAMMA DENSITY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.0	MODESTO	CHAPEL	COAL	2.0	112.0	
188.0	MODESTO		COAL	0.8	232.0	
129.0	CARBONDALE	DANVILLE	COAL	1.5	291.0	
50.0	CARBONDALE	HERRIN	COAL	6.5	370.0	
22.0	CARBONDALE	BRIAR HILL	COAL	1.0	398.0	

MAPID: 16590004000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.57694 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.825454 **DATE COLLECTED:** 4 / 5 / 1978
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 497.0 **LOG TYPE:** Multiple log types
SOURCE: KERR-MCGEE COAL CO. 8618-1 **WELL TYPE:** Coal Test
COMMENT: GALATIA MINE PERMITS, GAMMA DENSTIY LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
317.5	MODESTO	CHAPEL	COAL	2.0	82.5	
192.0	MODESTO		COAL	0.8	208.0	
131.0	CARBONDALE	DANVILLE	COAL	2.0	269.0	
47.0	CARBONDALE	HERRIN	COAL	6.0	353.0	

MAPID: 16502401000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.580493 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2561.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1747.0			LIMESTONE	-	2146.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2561.0	

MAPID: 16502401000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.580493 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.817063 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.0	MODESTO	PIASA	LIMESTONE	5.0	200.0	
194.0	MODESTO		SHALE	8.0	205.0	
186.0	CARBONDALE	DANVILLE	COAL	2.0	213.0	
184.0	CARBONDALE		SILTY SHALE	15.0	215.0	
169.0	CARBONDALE	GALUM	LIMESTONE AND SANDSTONE	5.0	230.0	
164.0	CARBONDALE		CLAYSTONE & SHALE	5.0	235.0	
159.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	240.0	
154.0	CARBONDALE	LAWSON	SILTY SHALE	18.0	245.0	
136.0	CARBONDALE	LAWSON	SANDSTONE	30.0	263.0	
106.0	CARBONDALE	BRERETON	LIMESTONE	7.0	293.0	
99.0	CARBONDALE	ANNA	BLACK SHALE	1.0	300.0	
98.0	CARBONDALE	HERRIN	COAL	5.0	301.0	

MAPID: 16502401000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.580493 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.817063 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	600.0	
-276.0	SPOON	DAVIS	UNCLASSIFIED	-	675.0	
-1311.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 16502401000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.580493 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817063 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, RAPP AMOS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-146.0	CARBONDALE	SURVANT	COAL	4.0	545.0	
-201.0	CARBONDALE	COLCHESTER	COAL	0.6	600.0	
-251.0	CARBONDALE	DEKOVEN	COAL	0.5	650.0	
-268.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	667.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-275.0	CARBONDALE	DAVIS	COAL	4.0	674.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	
-321.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	720.0	
-353.0	TRADEWATER	MT. RORAH	COAL	1.5	752.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502401000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.580493 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.817063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 678.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	HERRIN	COAL	5.0	300.0	
72.0	CARBONDALE	BRIAR HILL	COAL	3.5	327.0	
-15.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	-	414.0	
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	-	496.0	
-201.0	CARBONDALE	COLCHESTER	COAL	-	600.0	
-275.0	SPOON	DAVIS	COAL	4.0	674.0	

MAPID: 16502737000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.577874 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809836 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG., THOMPSON N R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	477.0	
-120.0	CARBONDALE	SURVANT	COAL	0.5	518.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-237.0	CARBONDALE	DEKOVEN	COAL	2.5	635.0	
-252.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	650.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-259.0	CARBONDALE	DAVIS	COAL	4.0	657.0	
-286.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	684.0	
-292.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	690.0	
-347.0	TRADEWATER	MT. RORAH	COAL	1.5	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502737000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.577874 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	279.0	
-1782.0			LIMESTONE	-	2180.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502737000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.577874 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.809836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 580.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.5	CARBONDALE	HERRIN	COAL	4.5	287.5	
78.0	CARBONDALE	BRIAR HILL	COAL	4.0	320.0	
-24.0	CARBONDALE	SPRINGFIELD	COAL	4.5	422.0	
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	-	477.0	
-182.0	CARBONDALE	COLCHESTER	COAL	-	580.0	

MAPID: 16503108000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.577883 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808045 **DATE COLLECTED:** 4 / 0 / 1957
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, THOMPSON N A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	469.0	
-116.0	CARBONDALE	SURVANT	COAL	0.5	510.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-218.0	CARBONDALE	DEKOVEN	COAL	3.0	612.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	643.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-256.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	673.0	
-285.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	679.0	
-336.0	TRADEWATER	MT. RORAH	COAL	1.5	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503108000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.577883 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
128.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1781.0			LIMESTONE	-	2175.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16503108000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.577883 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.808045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 654.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
117.0	CARBONDALE	HERRIN	COAL	5.0	277.0	
84.0	CARBONDALE	BRIAR HILL	COAL	-	310.0	
-3.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.0	397.0	
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	-	469.0	
-175.0	CARBONDALE	COLCHESTER	COAL	-	569.0	
-256.0	SPOON	DAVIS	COAL	4.0	650.0	

MAPID: 16503207000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587751 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815246 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., JOHNSON P N **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	503.0	
-137.0	CARBONDALE	SURVANT	COAL	0.5	540.0	
-205.0	CARBONDALE	COLCHESTER	COAL	0.5	608.0	
-259.0	CARBONDALE	DEKOVEN	COAL	2.5	662.0	
-277.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	680.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-286.0	CARBONDALE	DAVIS	COAL	4.0	689.0	
-317.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	
-325.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	728.0	
-379.0	TRADEWATER	MT. RORAH	COAL	1.5	782.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503207000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587751 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815246 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1719.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16503207000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587751 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.815246 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 692.5 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	HERRIN	COAL	-	306.0	
66.0	CARBONDALE	BRIAR HILL	COAL	-	337.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	2.0	421.0	
-20.0	CARBONDALE	SPRINGFIELD	SHALE	7.0	423.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	2.5	430.0	
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	-	502.0	
-199.0	CARBONDALE	COLCHESTER	COAL	-	602.0	
-285.0	SPOON	DAVIS	COAL	4.5	688.0	

MAPID: 16524098000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590352 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809889 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 16.2 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	465.0	
-123.0	CARBONDALE	SURVANT	COAL	0.5	503.0	
-190.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-233.0	CARBONDALE	DEKOVEN	COAL	2.0	613.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	634.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-260.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	674.0	
-348.0	TRADEWATER	MT. RORAH	COAL	1.5	728.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16524116000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587895 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.806286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 16.2 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	459.0	
-116.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-225.0	CARBONDALE	DEKOVEN	COAL	2.0	609.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	629.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-251.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-276.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-326.0	TRADEWATER	MT. RORAH	COAL	2.0	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500102000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.567269 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.819932 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 459.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
186.0	CARBONDALE	DANVILLE	COAL	1.8	204.0	
176.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	14.0	214.0	
162.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	228.0	
152.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	40.0	238.0	
103.0	CARBONDALE	HERRIN	COAL	5.5	287.0	
74.0	CARBONDALE	BRIAR HILL	COAL	1.5	316.0	
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	450.0	

MAPID: 16500102000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.567269 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.819932 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 293.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
200.5	MODESTO	PIASA	LIMESTONE	3.5	189.5	
197.0	MODESTO		DARK GRAY SHALE	11.0	193.0	
186.0	CARBONDALE	DANVILLE	COAL	1.8	204.0	
184.2	CARBONDALE		SHALE & SANDSTONE	22.7	205.8	
161.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	228.5	
157.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	1.0	233.0	
156.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	4.5	234.0	
151.5	CARBONDALE	LAWSON	SANDSTONE	40.5	238.5	
111.0	CARBONDALE		BLACK SHALE	2.5	279.0	
108.5	CARBONDALE	BRERETON	LIMESTONE	6.5	281.5	
102.0	CARBONDALE	HERRIN	COAL	5.5	288.0	

MAPID: 16500102000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.567269 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.819932 **DATE COLLECTED:** 8 / 19 / 1918

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 459.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	35.0	0.0	
355.0	MODESTO		SHALE	5.0	35.0	
350.0	MODESTO		SHALE	14.0	40.0	
336.0	MODESTO		SHALE	16.0	54.0	
320.0	MODESTO		SANDY SHALE	8.0	70.0	
312.0	MODESTO		SHALE	40.0	78.0	DARK
272.0	MODESTO		COAL	0.4	118.0	
271.6	MODESTO		CALCAREOUS SHALE	2.6	118.4	CALC
269.0	MODESTO		SANDY SHALE	8.0	121.0	
261.0	MODESTO		SHALE	11.0	129.0	DARK
250.0	MODESTO		COAL	0.8	140.0	
249.2	MODESTO		SHALE	1.7	140.8	DARK
247.5	MODESTO		COAL	0.5	142.5	
247.0	MODESTO		SHALE	15.0	143.0	
232.0	MODESTO		LIMESTONE	4.0	158.0	
228.0	MODESTO		CALCAREOUS SHALE	2.0	162.0	CALC
226.0	MODESTO		SHALY SANDSTONE	3.0	164.0	
223.0	MODESTO		SHALE	22.0	167.0	DARK
201.0	MODESTO	PIASA	LIMESTONE	3.5	189.0	
197.5	MODESTO		SHALE	11.0	192.5	DARK
186.5	CARBONDALE	DANVILLE	COAL	1.8	203.5	
184.7	CARBONDALE		UNDERCLAY	0.7	205.3	
184.0	CARBONDALE		SHALE	8.0	206.0	DARK
176.0	CARBONDALE		SHALY SANDSTONE	14.0	214.0	
162.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	228.0	
157.5	CARBONDALE		CALCAREOUS SHALE	1.0	232.5	CALC
156.5	CARBONDALE	ANVIL ROCK	SHALE	4.5	233.5	
152.0	CARBONDALE	ANVIL ROCK	SANDSTONE	40.5	238.0	
111.5	CARBONDALE	ANVIL ROCK	BLACK SHALE	1.5	278.5	
110.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	1.0	280.0	CALC
109.0	CARBONDALE	BRERETON	LIMESTONE	6.5	281.0	
102.5	CARBONDALE	HERRIN	COAL	5.5	287.5	
97.0	CARBONDALE		SHALE	6.0	293.0	
91.0	CARBONDALE		SHALE	16.5	299.0	DARK
74.5	CARBONDALE	BRIAR HILL	COAL	1.5	315.5	
73.0	CARBONDALE	DYKERSBURG	SANDY SHALE	125.0	317.0	
-52.0	CARBONDALE	DYKERSBURG	SHALE	8.3	442.0	DARK
-60.3	CARBONDALE	SPRINGFIELD	BONE COAL	1.0	450.3	
-61.3	CARBONDALE		UNDERCLAY	1.0	451.3	

-62.3	CARBONDALE		SANDY SHALE	6.8	452.3

MAPID: 16502549000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.566271 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.813488 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:**

SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1769.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2542.0	

MAPID: 16502604000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.563931 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.811675 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**

SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	BRERETON	LIMESTONE	-	258.0	
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	
-1752.0			LIMESTONE	-	2134.0	
-2142.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16502620000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56628 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811666 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., GALBRAITH E ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-133.0	CARBONDALE	SURVANT	COAL	0.5	520.0	
-212.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-248.0	CARBONDALE	DEKOVEN	COAL	4.0	635.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	640.0	
-261.0	CARBONDALE	DAVIS	COAL	4.0	648.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	682.0	
-333.0	TRADEWATER	MT. RORAH	COAL	0.5	720.0	

MAPID: 16502620000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56628 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811666 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRERETON	LIMESTONE	-	267.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1761.0	
-1753.0			LIMESTONE	-	2140.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16502626000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.563908 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815377 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1756.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502635000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561601 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.817224 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 1665.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	584.0	
-268.0	SPOON	DAVIS	UNCLASSIFIED	-	656.0	
-1277.0	BASE OF PENN.		UNCLASSIFIED	-	1665.0	

MAPID: 16502635000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561601 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817224 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1767.0	
-1766.0			LIMESTONE	-	2154.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502655000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.563898 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817199 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	BRERETON	LIMESTONE	-	274.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2547.0	

MAPID: 16502665000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566257 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2549.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1785.0			LIMESTONE	-	2176.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2549.0	

MAPID: 16502667000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568577 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811658 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: FIRST NAT'L. PETRO., THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
125.0	CARBONDALE	BRERETON	LIMESTONE	-	267.0	
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1767.0	
-1782.0			LIMESTONE	-	2174.0	
-2153.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502678000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568567 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81348 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1747.0			LIMESTONE	-	2138.0	
-2165.0		BASE BARLOW	LIMESTONE	-	2556.0	

MAPID: 16502705000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568554 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815326 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, RAYBOURN J S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-74.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	469.0	
-105.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	568.0	
-233.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	638.0	
-250.0	CARBONDALE	DAVIS	COAL	5.0	645.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	673.0	
-335.0	TRADEWATER	MT. RORAH	COAL	1.5	730.0	

MAPID: 16502705000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568554 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
126.0	CARBONDALE	BRERETON	LIMESTONE	-	269.0	
-1759.0			LIMESTONE	-	2154.0	
-2176.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16502719000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559251 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1760.0			LIMESTONE	-	2150.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2542.0	

MAPID: 16502756000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56161 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815402 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., GANN DICK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-92.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	477.0	
-127.0	CARBONDALE	SURVANT	COAL	0.5	512.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-244.0	CARBONDALE	DEKOVEN	COAL	3.0	629.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	644.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	3.0	650.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	678.0	
-309.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	694.0	
-355.0	TRADEWATER	MT. RORAH	COAL	1.5	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502756000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56161 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815402 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	277.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1759.0			LIMESTONE	-	2144.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2542.0	

MAPID: 16502756000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.56161 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.815402 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 579.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	-	432.0	
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	-	476.0	
-194.0	CARBONDALE	COLCHESTER	COAL	-	579.0	

MAPID: 16502799000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559261 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815427 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2549.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2549.0	

MAPID: 16502805000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.563921 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502979000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561586 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819121 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., GARRISON ARTHUR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-134.0	CARBONDALE	SURVANT	COAL	0.5	530.0	
-200.0	CARBONDALE	COLCHESTER	COAL	0.6	596.0	
-269.0	CARBONDALE	DEKOVEN	COAL	4.0	665.0	
-282.0	CARBONDALE	DAVIS	COAL	5.0	678.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-357.0	TRADEWATER	MT. RORAH	COAL	1.3	753.0	

MAPID: 16502979000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561586 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819121 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	BRERETON	LIMESTONE	-	291.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1779.0	
-1764.0			LIMESTONE	-	2160.0	
-2168.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502991000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570945 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807991 **DATE COLLECTED:** 4 / 0 / 1957
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., GALBRAITH EZRA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-68.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	455.0	
-108.0	CARBONDALE	SURVANT	COAL	0.5	495.0	
-172.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-223.0	CARBONDALE	DEKOVEN	COAL	4.0	610.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	630.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	4.0	637.0	
-285.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	672.0	
-334.0	TRADEWATER	MT. RORAH	COAL	1.3	721.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502991000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570945 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1737.0			LIMESTONE	-	2124.0	
-2151.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16502991000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570945 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.807991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 559.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
130.0	CARBONDALE	HERRIN	COAL	5.0	257.0	
100.0	CARBONDALE	BRIAR HILL	COAL	-	287.0	
12.0	CARBONDALE	SPRINGFIELD	COAL	4.5	375.0	
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	-	456.0	
-172.0	CARBONDALE	COLCHESTER	COAL	-	559.0	

MAPID: 16503104000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570923 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	
-1742.0			LIMESTONE	-	2140.0	
-2173.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16503105000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.573242 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807999 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
132.0	CARBONDALE	BRERETON	LIMESTONE	-	256.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1743.0			LIMESTONE	-	2131.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16503109000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.573219 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811637 **DATE COLLECTED:** 4 / 0 / 1957
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, DEGIACINTO BRUNO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-74.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	463.0	
-111.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-223.0	CARBONDALE	DEKOVEN	COAL	2.0	612.0	
-146.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	535.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	5.0	644.0	
-295.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	684.0	
-341.0	TRADEWATER	MT. RORAH	COAL	1.3	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503109000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.573219 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811637 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1749.0			LIMESTONE	-	2138.0	
-2174.0		BASE BARLOW	LIMESTONE	-	2563.0	

MAPID: 16503109000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.573219 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.811637 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 612.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	HERRIN	COAL	4.5	274.0	
84.0	CARBONDALE	BRIAR HILL	COAL	-	305.0	
-23.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	6.0	412.0	PARTING IN SEAM
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	-	462.0	
-223.0	CARBONDALE	COLCHESTER	COAL	-	612.0	

MAPID: 16503115000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.573229 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809821 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1771.0	
-1742.0			LIMESTONE	-	2140.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16503121000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570936 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809813 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2561.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
125.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1738.0			LIMESTONE	-	2136.0	
-2163.0		BASE BARLOW	LIMESTONE	-	2561.0	

MAPID: 16503123000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.5732 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815276 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, DEGIACINTO BRUNO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-116.0	CARBONDALE	SURVANT	COAL	0.5	512.0	
-189.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-241.0	CARBONDALE	DEKOVEN	COAL	4.0	637.0	
-250.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	646.0	
-258.0	CARBONDALE	DAVIS	COAL	4.0	654.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	689.0	
-339.0	TRADEWATER	MT. RORAH	COAL	1.3	735.0	

MAPID: 16503123000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.5732 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815276 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
121.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1756.0			LIMESTONE	-	2152.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2566.0	

MAPID: 16503124000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.570913 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1354.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1761.0			LIMESTONE	-	2159.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16503125000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.5732 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815279 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, RAYBOURN J S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-113.0	CARBONDALE	SURVANT	COAL	0.5	514.0	
-184.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-238.0	CARBONDALE	DEKOVEN	COAL	2.0	639.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	655.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-261.0	CARBONDALE	DAVIS	COAL	4.0	662.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	
-298.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	699.0	
-343.0	TRADEWATER	MT. RORAH	COAL	2.5	744.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503125000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.5732 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815279 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	282.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1760.0			LIMESTONE	-	2161.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16503167000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.559328 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.806049 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 546.0 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	HERRIN	COAL	-	226.0	
116.0	CARBONDALE	BRIAR HILL	COAL	-	259.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	7.0	405.0	
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	-	428.0	
-171.0	CARBONDALE	COLCHESTER	COAL	-	546.0	

MAPID: 16503167000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.559328 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806049 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2507.0 **LOG TYPE:**
SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
157.0	CARBONDALE	BRERETON	LIMESTONE	-	218.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1733.0	
-1731.0			LIMESTONE	-	2106.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2507.0	

MAPID: 16503192000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.561673 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	BRERETON	LIMESTONE	-	224.0	
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1735.0			LIMESTONE	-	2110.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2506.0	

MAPID: 16503230000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.559313 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80796 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
153.0	CARBONDALE	BRERETON	LIMESTONE	-	223.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1737.0	
-1730.0			LIMESTONE	-	2106.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2510.0	

MAPID: 16500106000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1650' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.552412 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.80962 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 412.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
215.0	CARBONDALE	DANVILLE	COAL	2.0	169.0	
209.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	1.0	175.0	
203.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	58.0	181.0	
137.0	CARBONDALE	HERRIN	COAL	4.4	247.0	
106.0	CARBONDALE	BRIAR HILL	COAL	0.8	278.0	
-25.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	409.0	

MAPID: 16500106000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1650' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.552412 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.80962 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 251.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.0	MODESTO	PIASA	LIMESTONE	4.0	153.0	
227.0	MODESTO		CLAYSTONE & SHALE	12.0	157.0	
215.0	CARBONDALE	DANVILLE	COAL	2.0	169.0	
213.0	CARBONDALE		SHALE & SANDSTONE	24.0	171.0	
189.0	CARBONDALE	LAWSON	SANDSTONE	44.0	195.0	
145.0	CARBONDALE		CALCAREOUS SHALE	1.0	239.0	
144.0	CARBONDALE	BRERETON	LIMESTONE	6.0	240.0	
138.0	CARBONDALE	ANNA	DARK GRAY SHALE	0.8	246.0	
137.0	CARBONDALE	HERRIN	COAL	4.4	247.0	

MAPID: 16500106000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1650' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.552412 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.80962 **DATE COLLECTED:** 9 / 8 / 1918

SURFACE ELEVATION (FT.): 383.7 **LOGGED (FT.):** 412.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.7			UNCONSOLIDATED	38.0	0.0	
345.7			CLAY	43.0	38.0	
302.7	MODESTO		SHALE	26.3	81.0	
276.4	MODESTO		COAL	1.0	107.3	
275.4	MODESTO		SHALE	2.7	108.3	
272.7	MODESTO		SHALY SANDSTONE	3.0	111.0	
269.7	MODESTO		SHALE	5.0	114.0	
264.7	MODESTO		LIMESTONE	1.0	119.0	
263.7	MODESTO		SHALE	6.0	120.0	
257.7	MODESTO		SANDSTONE	5.0	126.0	
252.7	MODESTO		SHALE	22.0	131.0	
230.7	MODESTO	PIASA	LIMESTONE	4.0	153.0	
226.7	MODESTO		SHALE	12.0	157.0	
214.7	CARBONDALE	DANVILLE	COAL	2.0	169.0	
212.7	CARBONDALE		SHALE	4.0	171.0	
208.7	CARBONDALE		SANDSTONE	1.0	175.0	
207.7	CARBONDALE		SHALE	3.0	176.0	DARK
204.7	CARBONDALE		SHALE	2.0	179.0	
202.7	CARBONDALE		SHALY SANDSTONE	4.0	181.0	
198.7	CARBONDALE		SHALE	3.0	185.0	
195.7	CARBONDALE		SHALE	7.0	188.0	
188.7	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	2.0	195.0	
186.7	CARBONDALE	ANVIL ROCK	SANDSTONE	42.0	197.0	
144.7	CARBONDALE		CALCAREOUS SHALE	1.0	239.0	CALC
143.7	CARBONDALE	BRERETON	LIMESTONE	6.0	240.0	
137.7	CARBONDALE	ANNA	SHALE	0.8	246.0	DARK
136.9	CARBONDALE	HERRIN	COAL	4.4	246.8	
132.4	CARBONDALE		UNDERCLAY	2.0	251.3	
130.4	CARBONDALE		SHALE	24.8	253.3	DARK
105.7	CARBONDALE		COAL	0.8	278.0	
104.9	CARBONDALE		UNDERCLAY	0.2	278.8	
104.7	CARBONDALE	DYKERSBURG	SANDY SHALE	104.0	279.0	
0.7	CARBONDALE	DYKERSBURG	SHALE	25.8	383.0	DARK
-25.1	CARBONDALE	SPRINGFIELD	COAL	0.0	408.8	CHANNEL-NO COAL
-25.1	CARBONDALE		BLACK SHALE	1.0	408.8	
-26.1	CARBONDALE		UNDERCLAY	0.5	409.8	
-26.6	CARBONDALE		SANDY SHALE	1.7	410.3	

MAPID: 16500107000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.555874 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.806971 **DATE COLLECTED:** 8 / 11 / 1905

SURFACE ELEVATION (FT.): 382.9 **LOGGED (FT.):** 390.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.9			UNCONSOLIDATED	80.0	0.0	
302.9	CARBONDALE		SHALE	20.0	80.0	
282.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	100.0	
275.9	CARBONDALE		SHALE	23.0	107.0	
252.9	CARBONDALE		ARGILACEOUS SHALE	45.0	130.0	ARG
207.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	175.0	
197.9	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	10.0	185.0	ARG
187.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	32.0	195.0	
155.9	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	227.0	
149.9	CARBONDALE		SHALE	1.0	233.0	
148.9	CARBONDALE	HERRIN	COAL	4.0	234.0	
144.9	CARBONDALE		UNDERCLAY	1.0	238.0	
143.9	CARBONDALE		ARGILACEOUS SHALE	27.0	239.0	ARG
116.9	CARBONDALE	BRIAR HILL	COAL	0.5	266.0	
116.4	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	13.5	266.5	ARG
102.9	CARBONDALE	DYKERSBURG	SANDSTONE	25.0	280.0	
77.9	CARBONDALE	DYKERSBURG	SHALE	25.0	305.0	
52.9	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	45.0	330.0	ARG
7.9	CARBONDALE	DYKERSBURG	SHALE	7.0	375.0	DARK
0.9	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	382.0	
-1.1	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	384.0	
-7.1	CARBONDALE	SPRINGFIELD	COAL	0.0	390.0	CHANNEL-NO COAL

MAPID: 16501526000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.547668 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.817065 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2140.0 **LOG TYPE:**

SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1745.0			LIMESTONE	-	2140.0	

MAPID: 16501526000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.547668 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.817065 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3004.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	DANVILLE	COAL	-	227.0	
152.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	243.0	
141.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	254.0	
132.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	40.0	263.0	
83.0	CARBONDALE	HERRIN	COAL	5.0	312.0	
42.0	CARBONDALE	BRIAR HILL	COAL	-	353.0	
-73.0	CARBONDALE	SPRINGFIELD	COAL	3.0	468.0	
-92.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	9.0	487.0	
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	-	503.0	

MAPID: 16501526000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.547668 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.817065 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2140.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H, GUEST LLOYD 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	507.0	
-155.0	CARBONDALE	SURVANT	COAL	0.5	550.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.6	620.0	
-258.0	CARBONDALE	DEKOVEN	COAL	3.0	653.0	
-270.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	665.0	
-275.0	CARBONDALE	DAVIS	COAL	2.0	670.0	
-305.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-360.0	TRADEWATER	MT. RORAH	COAL	1.5	755.0	

MAPID: 16501526000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.547668 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.817065 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 620.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS E H 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	HERRIN	COAL	-	312.0	
41.0	CARBONDALE	BRIAR HILL	COAL	-	354.0	
-74.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	3.0	469.0	
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	-	506.0	
-225.0	CARBONDALE	COLCHESTER	COAL	-	620.0	

MAPID: 16502762000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55231 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817153 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., JONES LAWRENCE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-102.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	504.0	
-143.0	CARBONDALE	SURVANT	COAL	0.5	545.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-242.0	CARBONDALE	DEKOVEN	COAL	4.0	644.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	655.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-259.0	CARBONDALE	DAVIS	COAL	4.0	661.0	
-288.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	
-348.0	TRADEWATER	MT. RORAH	COAL	0.5	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502762000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55231 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817153 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	BRERETON	LIMESTONE	-	298.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1751.0			LIMESTONE	-	2153.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16503074000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 390' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552234 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.805972 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 430.0 **LOG TYPE:** Electric Log
SOURCE: MCINTYRE, PAUL J. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HERRIN	COAL	-	230.0	
116.0	CARBONDALE	BRIAR HILL	COAL	-	264.0	
-20.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	400.0	CHANNEL - COAL MISSING
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	-	430.0	

MAPID: 16503074000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 390' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552234 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805972 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:**
SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	BRERETON	LIMESTONE	-	224.0	
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2506.0	

MAPID: 16503110000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.547854 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:**
SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
147.0	CARBONDALE	BRERETON	LIMESTONE	-	235.0	
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2511.0	

MAPID: 16503156000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.557032 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806025 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	223.0	
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1738.0	
-1731.0			LIMESTONE	-	2112.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2500.0	

MAPID: 16503201000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.557017 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807941 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	BRERETON	LIMESTONE	-	237.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1730.0			LIMESTONE	-	2115.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2510.0	

MAPID: 16503210000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 296' S line, 795' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.556312 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80966 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., GANN-AIRPORT ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	458.0	
-108.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-184.0	CARBONDALE	COLCHESTER	COAL	2.0	576.0	
-227.0	CARBONDALE	DEKOVEN	COAL	3.0	619.0	
-233.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	625.0	
-240.0	CARBONDALE	DAVIS	COAL	3.0	632.0	
-253.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	645.0	
-262.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	654.0	
-317.0	TRADEWATER	MT. RORAH	COAL	1.3	709.0	

MAPID: 16503210000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 296' S line, 795' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.556312 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80966 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.0	CARBONDALE	BRERETON	LIMESTONE	-	254.0	
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1745.0			LIMESTONE	-	2137.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2529.0	

MAPID: 16503212000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552397 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.8097 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-168.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	565.0	
-233.0	SPOON	DAVIS	UNCLASSIFIED	-	630.0	
-1193.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	

MAPID: 16503212000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552397 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8097 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	BRERETON	LIMESTONE	-	246.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1748.0	
-1715.0			LIMESTONE	-	2112.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2504.0	

MAPID: 16503212000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552397 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8097 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, HARRISBG-RALEIGH 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-98.0	CARBONDALE	SURVANT	COAL	0.5	495.0	
-168.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-213.0	CARBONDALE	DEKOVEN	COAL	0.0	610.0	
-223.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-231.0	CARBONDALE	DAVIS	COAL	3.0	628.0	
-263.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-313.0	TRADEWATER	MT. RORAH	COAL	0.5	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503319000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.54092 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807721 **DATE COLLECTED:** 4 / 0 / 1960
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, BURNS-BISHOP COMM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.0	CARBONDALE	HERRIN	COAL	4.0	244.0	
103.0	CARBONDALE	BRIAR HILL	COAL	-	277.0	
10.0	CARBONDALE	SPRINGFIELD	COAL	2.0	370.0	
-65.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-100.0	CARBONDALE	SURVANT	COAL	0.5	480.0	
-179.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-215.0	CARBONDALE	DEKOVEN	COAL	0.5	595.0	
-240.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-245.0	CARBONDALE	DAVIS	COAL	3.7	625.0	
-277.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	657.0	
-284.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	664.0	
-322.0	TRADEWATER	MT. RORAH	COAL	0.5	702.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503319000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.54092 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.807721 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:**

SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	BRERETON	LIMESTONE	-	237.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2511.0	

MAPID: 16503474000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 630' S line, 920' W line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.550379 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.806779 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2508.0 **LOG TYPE:**

SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Water Injection

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
146.0	CARBONDALE	BRERETON	LIMESTONE	-	233.0	
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1737.0			LIMESTONE	-	2116.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2508.0	

MAPID: 16500108000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.534862 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.819677 **DATE COLLECTED:** 2 / 7 / 1906

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 414.6 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	56.0	0.0	
344.0	MODESTO		ARGILACEOUS SHALE	6.0	56.0	ARG
338.0	MODESTO		SANDSTONE	8.0	62.0	
330.0	MODESTO		LIMESTONE	2.0	70.0	
328.0	MODESTO		SANDY SHALE	10.0	72.0	
318.0	MODESTO		SANDSTONE	22.0	82.0	
296.0	MODESTO		ARGILACEOUS SHALE	12.0	104.0	ARG
284.0	MODESTO		LIMESTONE	2.0	116.0	
282.0	MODESTO		ARGILACEOUS SHALE	36.0	118.0	ARG
246.0	MODESTO		BLACK SHALE	2.0	154.0	
244.0	MODESTO		SHALE	6.0	156.0	
238.0	MODESTO		COAL	2.0	162.0	
236.0	MODESTO		UNDERCLAY	7.0	164.0	
229.0	MODESTO		ARGILACEOUS SHALE	7.0	171.0	ARG
222.0	MODESTO		SANDSTONE	16.0	178.0	
206.0	MODESTO		ARGILACEOUS SHALE	4.0	194.0	ARG
202.0	MODESTO		SANDSTONE	4.0	198.0	
198.0	MODESTO	PIASA	LIMESTONE	5.0	202.0	
193.0	MODESTO		SHALE	16.0	207.0	
177.0	CARBONDALE	DANVILLE	COAL	1.0	223.0	
176.0	CARBONDALE		UNDERCLAY	12.0	224.0	
164.0	CARBONDALE		ARGILACEOUS SHALE	4.0	236.0	ARG
160.0	CARBONDALE		SANDSTONE	14.0	240.0	
146.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	254.0	
141.0	CARBONDALE		CLAYSTONE	4.0	259.0	
137.0	CARBONDALE	ANVIL ROCK	SANDSTONE	36.0	263.0	
101.0	CARBONDALE	BRERETON	LIMESTONE	8.0	299.0	
93.0	CARBONDALE	HERRIN	COAL	5.2	307.0	
87.8	CARBONDALE		UNDERCLAY	3.8	312.2	
84.0	CARBONDALE		SANDY SHALE	12.0	316.0	
72.0	CARBONDALE		SHALE	15.0	328.0	
57.0	CARBONDALE	BRIAR HILL	COAL	1.0	343.0	
56.0	CARBONDALE		UNDERCLAY	2.0	344.0	
54.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	346.0	
42.0	CARBONDALE	DYKERSBURG	SHALE	40.0	358.0	
2.0	CARBONDALE	DYKERSBURG	SHALE	10.0	398.0	
-8.0	CARBONDALE	SPRINGFIELD	COAL	5.6	408.0	
-13.6	CARBONDALE		UNDERCLAY	1.0	413.6	

MAPID: 16500108000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.534862 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.819677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 312.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	MODESTO	PIASA	LIMESTONE	5.0	202.0	
193.0	MODESTO		GRAY SHALE	16.0	207.0	
177.0	CARBONDALE	DANVILLE	COAL	1.0	223.0	
176.0	CARBONDALE		SHALE & SANDSTONE	30.0	224.0	
146.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	254.0	
141.0	CARBONDALE	LAWSON	CLAYSTONE	4.0	259.0	
137.0	CARBONDALE	LAWSON	SANDSTONE	36.0	263.0	
101.0	CARBONDALE	BRERETON	LIMESTONE	8.0	299.0	
93.0	CARBONDALE	HERRIN	COAL	5.2	307.0	

MAPID: 16500109000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.528305 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.806723 **DATE COLLECTED:** 10 / 26 / 1904

SURFACE ELEVATION (FT.): 373.5 **LOGGED (FT.):** 353.7 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.5			UNCONSOLIDATED	30.0	0.0	
343.5	MODESTO		ARGILACEOUS SHALE	33.0	30.0	ARG
310.5	MODESTO		SHALE	10.0	63.0	DARK
300.5	MODESTO		ARGILACEOUS SHALE	22.0	73.0	ARG
278.5	MODESTO		SHALE	33.0	95.0	
245.5	MODESTO		SHALE	0.5	128.0	
245.0	MODESTO	PIASA	LIMESTONE	3.5	128.5	
241.5	MODESTO		SHALE	8.0	132.0	DARK
233.5	MODESTO		ARGILACEOUS SHALE	8.0	140.0	ARG
225.5	CARBONDALE	DANVILLE	COAL	1.0	148.0	
224.5	CARBONDALE		SHALE	17.0	149.0	
207.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	166.0	
203.5	CARBONDALE	ANVIL ROCK	SHALE	25.0	170.0	
178.5	CARBONDALE	ANVIL ROCK	SANDSTONE	34.0	195.0	
144.5	CARBONDALE	ANVIL ROCK	BLACK SHALE	1.0	229.0	
143.5	CARBONDALE	BRERETON	LIMESTONE	6.0	230.0	
137.5	CARBONDALE	ANNA	BLACK SHALE	3.0	236.0	
134.5	CARBONDALE	HERRIN	COAL	4.0	239.0	
130.5	CARBONDALE		UNDERCLAY	4.0	243.0	
126.5	CARBONDALE		SANDY SHALE	15.0	247.0	
111.5	CARBONDALE		ARGILACEOUS SHALE	20.0	262.0	ARG
91.5	CARBONDALE	BRIAR HILL	COAL	1.0	282.0	
90.5	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	5.0	283.0	ARG
85.5	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	288.0	
72.5	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	301.0	
62.5	CARBONDALE	DYKERSBURG	SHALE	37.3	311.0	
25.2	CARBONDALE	SPRINGFIELD	COAL	5.3	348.3	

MAPID: 16500109000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.528305 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.806723 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 354.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
225.0	CARBONDALE	DANVILLE	COAL	1.0	148.0	
207.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	166.0	
178.0	CARBONDALE	ANVIL ROCK		34.0	195.0	
134.0	CARBONDALE	HERRIN	COAL	4.0	239.0	
91.0	CARBONDALE	BRIAR HILL	COAL	1.0	282.0	
72.0	CARBONDALE	CANTON		10.0	301.0	
25.0	CARBONDALE	SPRINGFIELD	COAL	5.3	348.0	

MAPID: 16501397000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529208 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.818746 **DATE COLLECTED:** 6 / 0 / 1951
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 1640.0 **LOG TYPE:** Electric Log
SOURCE: TEXAS COMPANY, THE **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	615.0	
-287.0	SPOON	DAVIS	UNCLASSIFIED	-	675.0	
-1252.0	BASE OF PENN.		UNCLASSIFIED	-	1640.0	

MAPID: 16501397000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529208 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: TEXAS COMPANY, THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1771.0	
-1757.0			LIMESTONE	-	2145.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16501540000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53611 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.816899 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**

SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	BRERETON	LIMESTONE	-	282.0	
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1747.0			LIMESTONE	-	2134.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16501540000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53611 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.816899 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 3031.0 **LOG TYPE:** Electric Log

SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
184.0	CARBONDALE	DANVILLE	COAL	-	203.0	
170.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE/SANDSTONE	7.0	217.0	
160.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	227.0	
153.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	46.0	234.0	
97.0	CARBONDALE	HERRIN	COAL	4.0	290.0	
67.0	CARBONDALE	BRIAR HILL	COAL	-	320.0	
52.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	7.0	335.0	
-6.0	CARBONDALE	SPRINGFIELD	COAL	7.0	393.0	
-36.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	35.0	423.0	
-78.0	CARBONDALE	HOUCHIN CREEK	COAL	-	465.0	

MAPID: 16501540000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53611 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.816899 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., WESLEY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	470.0	
-118.0	CARBONDALE	SURVANT	COAL	0.5	505.0	
-201.0	CARBONDALE	COLCHESTER	COAL	0.5	588.0	
-233.0	CARBONDALE	DEKOVEN	COAL	0.0	620.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-259.0	CARBONDALE	DAVIS	COAL	3.8	646.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	
-338.0	TRADEWATER	MT. RORAH	COAL	1.8	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502215000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52701 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1758.0			LIMESTONE	-	2140.0	
-2142.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16502828000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531583 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815061 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:** Electric Log
SOURCE: WOODWAY STORES, HALE LAWRENCE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	473.0	
-120.0	CARBONDALE	SURVANT	COAL	0.5	508.0	
-205.0	CARBONDALE	COLCHESTER	COAL	3.0	593.0	
-238.0	CARBONDALE	DEKOVEN	COAL	0.0	626.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	642.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-261.0	CARBONDALE	DAVIS	COAL	4.0	649.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502828000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531583 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815061 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: WOODWAY STORES **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1767.0	
-1761.0			LIMESTONE	-	2149.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16502828000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531583 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.815061 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 597.0 **LOG TYPE:** Electric Log
SOURCE: WOODWAY STORES 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	HERRIN	COAL	3.5	284.0	
71.0	CARBONDALE	BRIAR HILL	COAL	-	317.0	
-1.0	CARBONDALE	SPRINGFIELD	COAL	6.0	389.0	
-84.0	CARBONDALE	HOUCHIN CREEK	COAL	-	472.0	
-205.0	CARBONDALE	COLCHESTER	COAL	4.0	593.0	

MAPID: 16503050000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524649 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818729 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, SISNEY-KENNADY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-110.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-150.0	CARBONDALE	SURVANT	COAL	0.5	545.0	
-235.0	CARBONDALE	COLCHESTER	COAL	3.5	630.0	
-256.0	CARBONDALE	DEKOVEN	COAL	0.5	651.0	
-282.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	677.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	724.0	
-335.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	730.0	
-360.0	TRADEWATER	MT. RORAH	COAL	1.5	755.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503050000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524649 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818729 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1783.0	
-1762.0			LIMESTONE	-	2157.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2547.0	

MAPID: 16503050000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524649 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.818729 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 634.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	HERRIN	COAL	6.0	312.0	
48.0	CARBONDALE	BRIAR HILL	COAL	-	347.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL	6.5	425.0	
-109.0	CARBONDALE	HOUCHIN CREEK	COAL	-	504.0	
-235.0	CARBONDALE	COLCHESTER	COAL	4.0	630.0	

MAPID: 16503315000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536327 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807691 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1741.0	
-1739.0			LIMESTONE	-	2117.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2512.0	

MAPID: 16503441000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53403 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807683 **DATE COLLECTED:** 11 / 0 / 1962
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, STRICKLIN LEE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	HERRIN	COAL	5.0	260.0	
80.0	CARBONDALE	BRIAR HILL	COAL	-	298.0	
-3.0	CARBONDALE	SPRINGFIELD	COAL	7.0	381.0	
-72.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-112.0	CARBONDALE	SURVANT	COAL	0.5	490.0	
-197.0	CARBONDALE	COLCHESTER	COAL	3.0	575.0	
-224.0	CARBONDALE	DEKOVEN	COAL	0.5	602.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-247.0	CARBONDALE	DAVIS	COAL	3.0	625.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	662.0	
-291.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	669.0	
-324.0	TRADEWATER	MT. RORAH	COAL	1.0	702.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503441000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53403 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807683 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
125.0	CARBONDALE	BRERETON	LIMESTONE	-	253.0	
-1350.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1728.0	
-1730.0			LIMESTONE	-	2108.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2500.0	

MAPID: 16503459000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53173 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.807674 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:**

SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1346.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1724.0	
-1726.0			LIMESTONE	-	2104.0	
-2123.0		BASE BARLOW	LIMESTONE	-	2501.0	

MAPID: 16500111000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.51427 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.810419 **DATE COLLECTED:** 2 / 27 / 1906

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 417.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	10.0	0.0	
390.0	MODESTO		SANDSTONE	4.0	10.0	
386.0	MODESTO		ARGILACEOUS SHALE	72.0	14.0	ARG
314.0	MODESTO		LIMESTONE	2.0	86.0	
312.0	MODESTO		ARGILACEOUS SHALE	64.0	88.0	ARG
248.0	MODESTO		SANDSTONE	24.0	152.0	
224.0	MODESTO		SANDY SHALE	50.0	176.0	
174.0	MODESTO		SANDSTONE	16.0	226.0	
158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	12.0	242.0	
146.0	CARBONDALE		COAL	1.0	254.0	
145.0	CARBONDALE	ANVIL ROCK	SHALE	19.0	255.0	
126.0	CARBONDALE	BRERETON	LIMESTONE	6.0	274.0	
120.0	CARBONDALE	ANNA	BLACK SHALE	2.0	280.0	
118.0	CARBONDALE	HERRIN	COAL	4.2	282.0	
113.8	CARBONDALE		UNDERCLAY	4.8	286.2	
109.0	CARBONDALE		SHALE	37.0	291.0	
72.0	CARBONDALE		ARGILACEOUS SHALE	8.0	328.0	ARG
64.0	CARBONDALE		SHALE	10.0	336.0	
54.0	CARBONDALE	BRIAR HILL	COAL	1.0	346.0	
53.0	CARBONDALE	DYKERSBURG	SANDY SHALE	21.0	347.0	
32.0	CARBONDALE	DYKERSBURG	SHALE	12.0	368.0	
20.0	CARBONDALE	DYKERSBURG	SHALE	31.2	380.0	
-11.2	CARBONDALE	SPRINGFIELD	COAL	4.8	411.2	
-16.0	CARBONDALE		UNDERCLAY	1.0	416.0	

MAPID: 16500655000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE NE NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.503016 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.818278 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 399.8 **LOGGED (FT.):** 444.4 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 1-A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.8			UNCONSOLIDATED	31.0	0.0	
368.8	MODESTO		SHALE	45.0	31.0	
323.8	MODESTO	CHAPEL	COAL	1.0	76.0	
322.8	MODESTO		SANDSTONE/SHALE	10.0	77.0	
312.8	MODESTO		SANDSTONE	0.4	87.0	LOG SAYS 'QUICKSAND'
312.4	MODESTO		SANDSTONE/SHALE	8.8	87.4	
303.6	MODESTO		BLUE SHALE	39.8	96.2	
263.8	MODESTO		IGNEOUS INTRUSION	5.0	136.0	POSSIBLY A GRAY GRANET DIKE
258.8	MODESTO		BLUE SHALE	18.0	141.0	
240.8	MODESTO		COAL	1.0	159.0	
239.8	MODESTO		CALCAREOUS SHALE	16.0	160.0	
223.8	MODESTO		COAL	2.0	176.0	
221.8	MODESTO		BLUE SHALE	5.0	178.0	
216.8	MODESTO		COAL	4.0	183.0	
212.8	MODESTO		SHALE	6.0	187.0	
206.8	MODESTO		SANDSTONE	3.0	193.0	
203.8	MODESTO		SANDSTONE/SHALE	49.0	196.0	
154.8			SANDSTONE	8.0	245.0	
146.8			SANDSTONE/SHALE	19.0	253.0	
127.8			SANDSTONE	5.0	272.0	
122.8			SHALE	8.0	277.0	
114.8	CARBONDALE	ANVIL ROCK	SANDSTONE	22.0	285.0	
92.8	CARBONDALE		SHALE	4.0	307.0	
88.8	CARBONDALE	BRERETON	LIMESTONE	2.0	311.0	
86.8	CARBONDALE	HERRIN	COAL	3.0	313.0	
83.8	CARBONDALE		BLUE SHALE	5.0	316.0	
78.8	CARBONDALE		UNDERCLAY	4.0	321.0	
74.8	CARBONDALE		SANDSTONE	2.0	325.0	
72.8	CARBONDALE		CALCAREOUS SHALE	26.0	327.0	
46.8	CARBONDALE		BLUE SHALE	17.0	353.0	
29.8	CARBONDALE	BRIAR HILL	COAL	2.0	370.0	
27.8	CARBONDALE		BLUE SHALE	22.0	372.0	
5.8	CARBONDALE		BLACK SHALE	7.0	394.0	LOG SAYS 'SLATE SAND-COAL'
-1.2	CARBONDALE	DYKERSBURG	GRAY SHALE	38.0	401.0	
-39.2	CARBONDALE	SPRINGFIELD	COAL	5.4	439.0	

MAPID: 16500969000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.50595 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.818731 **DATE COLLECTED:** 8 / 6 / 1946

SURFACE ELEVATION (FT.): 409.7 **LOGGED (FT.):** 453.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 27 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.7			CLAY	44.0	0.0	CLAY, SAND, AND GRAVEL
365.7	MODESTO		GRAY SHALE	40.0	44.0	
325.7	MODESTO		GRAY SANDSTONE	5.3	84.0	
320.4	MODESTO		GRAY SHALE	14.8	89.3	WITH SS LENSE
305.7	MODESTO		GRAY SHALE	40.0	104.0	
265.7	MODESTO		FOSSILIFEROUS LIMESTONE	1.3	144.0	
264.4	MODESTO		DARK GRAY SHALE	0.8	145.3	WITH IRON BANDS
263.7	MODESTO		DARK GRAY SHALE	20.0	146.0	WITH IRON BANDS
243.7	MODESTO		COAL	0.2	166.0	
243.5	MODESTO		GRAY SHALE	8.8	166.2	
234.7	MODESTO		GRAY SHALE	9.0	175.0	AND SS LENSE
225.7	MODESTO		BLACK SHALE	4.0	184.0	
221.7	MODESTO		GRAY SHALE	0.7	188.0	
221.0	MODESTO		COAL	0.3	188.7	
220.7	MODESTO		GRAY SHALE	1.5	189.0	
219.2	MODESTO		GRAY SANDSTONE	4.0	190.5	
215.2	MODESTO		SANDY SHALE	3.0	194.5	GRAY
212.2	MODESTO		GRAY SHALE	6.5	197.5	
205.7	MODESTO		GRAY SANDSTONE	6.3	204.0	
199.4	MODESTO		SANDY SHALE	12.8	210.3	
186.7	MODESTO		DARK GRAY SHALE	4.0	223.0	WITH IRON BANDS
182.7	MODESTO		BLACK SHALE	0.6	227.0	
182.1	MODESTO		COAL	0.1	227.6	
182.1	MODESTO		GRAY SHALE	1.5	227.6	
180.5	MODESTO		FOSSILIFEROUS LIMESTONE	0.8	229.2	
179.7	MODESTO		LIMESTONE	4.3	230.0	
175.4	MODESTO		SHALE	1.3	234.3	CONGLOMERATE SHALE
174.1	MODESTO		DARK GRAY SHALE	7.4	235.6	+1' TO MATCH LOG DEPTH
166.7	MODESTO		DARK GRAY SHALE	8.8	243.0	WITH IRON BANDS
157.9	CARBONDALE	DANVILLE	COAL	2.3	251.8	
155.7	CARBONDALE		DARK GRAY SHALE	5.3	254.0	
150.4	CARBONDALE		SANDY SHALE	2.7	259.3	
147.7	CARBONDALE		GRAY SANDSTONE	2.0	262.0	
145.7	CARBONDALE		SANDSTONE	3.3	264.0	
142.4	CARBONDALE		GRAY SHALE	5.3	267.3	
137.2	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	272.5	
135.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.3	274.0	

120.4	CARBONDALE	ANVIL ROCK	SANDSTONE	25.8	289.3	
94.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.6	315.0	WITH COAL PARTINGS
80.1	CARBONDALE	CONANT	FOSSILIFEROUS LIMESTONE	0.4	329.6	
79.7	CARBONDALE		BLACK SHALE	1.8	330.0	
77.9	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	1.2	331.8	
76.7	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	4.8	333.0	
71.9	CARBONDALE	HERRIN	COAL	4.9	337.8	
66.9	CARBONDALE		UNDERCLAY	1.3	342.8	
65.7	CARBONDALE		DARK GRAY SHALE	2.7	344.0	
63.0	CARBONDALE		SANDY SHALE	16.3	346.7	
46.7	CARBONDALE		DARK GRAY SHALE	15.8	363.0	WITH IRON BANDS
30.9	CARBONDALE	BRIAR HILL	COAL	1.6	378.8	
29.4	CARBONDALE		UNDERCLAY	0.3	380.3	
29.0	CARBONDALE		SANDY SHALE	2.0	380.7	
27.0	CARBONDALE		DARK GRAY SHALE	2.3	382.7	
24.7	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.8	385.0	
23.9	CARBONDALE	DYKERSBURG	SANDY SHALE	1.5	385.8	
22.4	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	42.7	387.3	
-20.3	CARBONDALE	DYKERSBURG	SANDY SHALE	14.4	430.0	
-34.7	CARBONDALE	DYKERSBURG	GRAY SHALE	2.4	444.4	
-37.1	CARBONDALE	SPRINGFIELD	COAL	5.3	446.8	
-42.4	CARBONDALE		UNDERCLAY	0.9	452.1	

MAPID: 16502755000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.508275 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818738 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:** Electric Log

SOURCE: SHURE OIL CORP., MILLER ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	508.0	
-171.0	CARBONDALE	SURVANT	COAL	0.5	570.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	629.0	
-261.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	690.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	
-331.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	730.0	
-344.0	TRADEWATER	MT. RORAH	COAL	1.8	743.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502755000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508275 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818738 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: SHURE OIL CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
94.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1773.0			LIMESTONE	-	2172.0	
-2183.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16502758000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.503582 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.816888 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ELDER-WHITLOCK 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	515.0	
-144.0	CARBONDALE	SURVANT	COAL	0.5	550.0	
-249.0	CARBONDALE	COLCHESTER	COAL	0.5	655.0	
-262.0	CARBONDALE	DEKOVEN	COAL	3.0	668.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	695.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	750.0	
-359.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	765.0	
-424.0	TRADEWATER	MT. RORAH	COAL	0.5	830.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502758000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.503582 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816888 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	313.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1758.0			LIMESTONE	-	2164.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2547.0	

MAPID: 16502814000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508301 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815055 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, STRICKLIN 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	500.0	
-192.0	CARBONDALE	SURVANT	COAL	5.0	583.0	
-214.0	CARBONDALE	COLCHESTER	COAL	0.5	605.0	
-249.0	CARBONDALE	DEKOVEN	COAL	2.5	640.0	
-275.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	666.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	4.0	674.0	
-314.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	705.0	
-334.0	TRADEWATER	MT. RORAH	COAL	1.8	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502814000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508301 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815055 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	BRERETON	LIMESTONE	-	294.0	
-1331.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1722.0	
-1747.0			LIMESTONE	-	2138.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16502815000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506027 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81138 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2124.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, NEWCOMB **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	489.0	
-171.0	CARBONDALE	SURVANT	COAL	0.5	560.0	
-219.0	CARBONDALE	COLCHESTER	COAL	3.8	608.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	618.0	
-256.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	645.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	652.0	
-281.0	TRADEWATER	SEAHORNE LS	LIMESTONE	4.0	670.0	
-311.0	TRADEWATER	MT. RORAH	COAL	1.8	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502815000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506027 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81138 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2124.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1753.0	
-1735.0			LIMESTONE	-	2124.0	

MAPID: 16502897000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513029 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.813177 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1640.0 **LOG TYPE:** Electric Log
SOURCE: TEXAS COMPANY, THE **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-226.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	610.0	
-266.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1256.0	BASE OF PENN.		UNCLASSIFIED	-	1640.0	

MAPID: 16502897000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513029 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813177 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2518.0 **LOG TYPE:**
SOURCE: TEXAS COMPANY, THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1738.0			LIMESTONE	-	2122.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2518.0	

MAPID: 16502897000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513029 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813177 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2518.0 **LOG TYPE:** Electric Log
SOURCE: TEXAS COMPANY, THE, BUTLER JEANNETTIE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	483.0	
-139.0	CARBONDALE	SURVANT	COAL	1.3	523.0	
-224.0	CARBONDALE	COLCHESTER	COAL	3.0	608.0	
-238.0	CARBONDALE	DEKOVEN	COAL	2.5	622.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	645.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	2.5	653.0	
-316.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503003000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506005 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81506 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 1779.0 **LOG TYPE:**
SOURCE: CARTER JAMES E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1779.0	

MAPID: 16503003000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.506005 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.81506 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 317.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	MODESTO	PIASA	LIMESTONE	5.0	235.0	
159.0	MODESTO		GRAY SHALE	17.0	240.0	
142.0	CARBONDALE	DANVILLE	COAL	4.0	257.0	
138.0	CARBONDALE		SHALE	7.0	261.0	
131.0	CARBONDALE	GALUM	LIMESTONE AND SANDSTONE	8.0	268.0	
123.0	CARBONDALE		SHALE	0.5	276.0	
122.5	CARBONDALE	ALLENBY	COAL	0.5	276.5	
122.0	CARBONDALE		CLAYSTONE	3.0	277.0	
119.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	280.0	
114.0	CARBONDALE	LAWSON	SANDSTONE	20.0	285.0	
94.0	CARBONDALE	LAWSON	SHALE	1.0	305.0	
93.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	306.0	
91.0	CARBONDALE	ANNA	SHALE	4.0	308.0	
87.0	CARBONDALE	HERRIN	COAL	5.0	312.0	

MAPID: 16503003000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.506005 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81506 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 317.0 **LOG TYPE:** Electric Log

SOURCE: CARTER JAMES E, WHITLOCK HAL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	510.0	
-196.0	CARBONDALE	SURVANT	COAL	5.0	595.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-246.0	CARBONDALE	DEKOVEN	COAL	3.0	645.0	
-276.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	675.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-281.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-300.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	699.0	
-306.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	705.0	
-331.0	TRADEWATER	MT. RORAH	COAL	1.8	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503158000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508324 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811372 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2117.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, ECKLUND ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-98.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	485.0	
-153.0	CARBONDALE	SURVANT	COAL	1.5	540.0	
-216.0	CARBONDALE	COLCHESTER	COAL	4.0	603.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	616.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	642.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	4.0	649.0	
-313.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	
-332.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	719.0	
-391.0	TRADEWATER	MT. RORAH	COAL	1.3	778.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503158000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508324 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811372 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2117.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1754.0	
-1730.0			LIMESTONE	-	2117.0	

MAPID: 16503813000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513098 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805804 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 1755.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	

MAPID: 16500113000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.49583 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.814007 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 442.3 **LOG TYPE:** Drillers Log

SOURCE: PAUL HUDGINS **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	35.0	0.0	
369.0	MODESTO		SHALE	30.0	35.0	
339.0	MODESTO		SANDY SHALE	40.0	65.0	
299.0	MODESTO		SHALE	28.0	105.0	
271.0	MODESTO		LIMESTONE	2.0	133.0	
269.0	MODESTO		SHALE	45.0	135.0	
224.0	MODESTO		SANDY SHALE	20.0	180.0	
204.0			SHALE	20.0	200.0	
184.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	220.0	
183.0	CARBONDALE		CLAYSTONE	2.0	221.0	
181.0	CARBONDALE	ANVIL ROCK	SHALE	27.0	223.0	DARK
154.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	60.0	250.0	
94.0	CARBONDALE	BRERETON	LIMESTONE	5.0	310.0	
89.0	CARBONDALE	HERRIN	COAL	4.3	315.0	
84.7	CARBONDALE		SHALE	50.8	319.3	
34.0	CARBONDALE	BRIAR HILL	COAL	2.0	370.0	
32.0	CARBONDALE		UNDERCLAY	1.0	372.0	
31.0	CARBONDALE		LIMESTONE	3.0	373.0	
28.0	CARBONDALE	DYKERSBURG	SHALE	20.0	376.0	
8.0	CARBONDALE	DYKERSBURG	SANDY SHALE	30.0	396.0	
-22.0	CARBONDALE	DYKERSBURG	SHALE	12.0	426.0	
-34.0	CARBONDALE	SPRINGFIELD	COAL	4.3	438.0	

MAPID: 16500114000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.495839 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.810333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Drillers Log
SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	25.0	0.0	
380.0	MODESTO		SHALE	72.0	25.0	
308.0	MODESTO		LIMESTONE	3.0	97.0	
305.0	MODESTO		SHALE	60.0	100.0	
245.0	MODESTO		SANDSTONE	20.0	160.0	
225.0	MODESTO		SHALE	5.0	180.0	
220.0	MODESTO		CALCAREOUS SHALE	10.0	185.0	CALC
210.0	MODESTO		SHALE	19.0	195.0	
191.0	MODESTO		SANDSTONE	11.0	214.0	
180.0	CARBONDALE		SHALE	5.0	225.0	
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	230.0	
172.0	CARBONDALE	ANVIL ROCK	SANDSTONE	35.0	233.0	
137.0	CARBONDALE		SHALE	5.0	268.0	
132.0	CARBONDALE	BRERETON	LIMESTONE	5.0	273.0	
127.0	CARBONDALE	ANNA	BLACK SHALE	3.0	278.0	
124.0	CARBONDALE	HERRIN	COAL	4.0	281.0	
120.0	CARBONDALE		UNDERCLAY	3.5	285.0	
116.5	CARBONDALE		SANDSTONE	20.0	288.5	
96.5	CARBONDALE		SHALE	20.0	308.5	
76.5	CARBONDALE	BRIAR HILL	COAL	2.0	328.5	
74.5	CARBONDALE	DYKERSBURG	SANDY SHALE	68.0	330.5	
6.5	CARBONDALE	SPRINGFIELD	COAL	4.5	398.5	
2.0	CARBONDALE		UNDERCLAY	1.0	403.0	

MAPID: 16500114000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.495839 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.810333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Drillers Log
SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	HERRIN	COAL	4.0	281.0	
77.0	CARBONDALE	BRIAR HILL	COAL	2.0	328.0	
7.0	CARBONDALE	SPRINGFIELD	COAL	4.5	398.0	

MAPID: 16500665000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 1800' S line, 1060' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.489927 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.817026 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 486.6 **LOGGED (FT.):** 485.5 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
486.6			CLAY	24.0	0.0	
462.6			CLAY	45.0	24.0	BLUE,FIRM WITH PEBBLES
417.6	MODESTO		GRAY SHALE	2.3	69.0	
415.3	MODESTO		SHALE	1.8	71.3	STICKEY
413.6	MODESTO		DARK SHALE	3.3	73.0	
410.3	MODESTO	CHAPEL	COAL	1.3	76.3	(10" CORE)
408.9	MODESTO		GRAY SHALE	6.3	77.7	SOFT STICKEY
402.6	MODESTO		SANDSTONE/SHALE	1.0	84.0	
401.6	MODESTO		SHALE	9.0	85.0	WITH STICKEY BLUE CLAY
392.6	MODESTO		COAL	0.3	94.0	
392.3	MODESTO		SHALE	0.8	94.3	LIGHT CLAY SHALE
391.5	MODESTO		SANDSTONE	20.9	95.1	SD ROCKS, SD SH, AND CLY. SH MIXED
370.6	MODESTO		SANDSTONE	6.0	116.0	HARD, BROKEN UP
364.6	MODESTO		BLUE SHALE	24.0	122.0	
340.6	MODESTO		BLUE SHALE	16.0	146.0	
324.6	MODESTO		LIMESTONE	1.3	162.0	BASTARD
323.3	MODESTO		BLUE SHALE	12.7	163.3	
310.6	MODESTO		BLUE SHALE	18.0	176.0	
292.6	MODESTO		DARK SHALE	1.0	194.0	
291.6	MODESTO		COAL	0.2	195.0	
291.4	MODESTO		DARK SHALE	0.2	195.2	
291.3	MODESTO		COAL	0.2	195.3	
291.1	MODESTO		GRAY SHALE	0.5	195.5	
290.6	MODESTO		BLUE SHALE	8.0	196.0	
282.6	MODESTO		DARK SHALE	2.0	204.0	
280.6	MODESTO		COAL	1.0	206.0	
279.6	MODESTO		CALCAREOUS SHALE	5.0	207.0	
274.6	MODESTO		CALCAREOUS SHALE	3.5	212.0	
271.1	MODESTO		SANDSTONE	4.0	215.5	
267.1	MODESTO		SHALE	7.8	219.5	
259.3	MODESTO		SANDSTONE	0.7	227.3	
258.6	MODESTO		SHALE	12.0	228.0	SANDY
246.6	MODESTO		LIMESTONE	0.5	240.0	
246.1	MODESTO		DARK SHALE	1.0	240.5	
245.1	MODESTO		SHALE	4.5	241.5	
240.6	MODESTO		GRAY SHALE	6.0	246.0	
234.6	MODESTO		BLUE SHALE	3.0	252.0	
231.6	MODESTO		BLUE SHALE	14.0	255.0	
217.6	MODESTO		DARK SHALE	2.3	269.0	

215.3	CARBONDALE	DANVILLE	COAL	1.8	271.3	
213.4	CARBONDALE		BLUE SHALE	11.8	273.2	
201.6	CARBONDALE		BLUE SHALE	4.0	285.0	WITH HARD SANDSTONE
197.6	CARBONDALE		SHALE	0.3	289.0	
197.3	CARBONDALE	ALLENBY	COAL	0.4	289.3	
196.9	CARBONDALE		SHALE	3.5	289.7	LIGHT CLAY SHALE
193.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	293.2	
187.4	CARBONDALE		SHALE	3.0	299.2	LIGHT CLAY SHALE
184.4	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	20.8	302.2	
163.6	CARBONDALE	ANVIL ROCK	BLUE SHALE	2.0	323.0	
161.6	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	325.0	
149.6	CARBONDALE		DARK SHALE	3.7	337.0	
145.9	CARBONDALE	HERRIN	COAL	4.6	340.7	
141.3	CARBONDALE		UNDERCLAY	2.0	345.3	
139.3	CARBONDALE		SANDSTONE/SHALE	15.8	347.3	WITH HARD LIME NUGGETS
123.6	CARBONDALE		BLUE SHALE	2.0	363.0	
121.6	CARBONDALE		BLUE SHALE	21.6	365.0	
100.0	CARBONDALE	BRIAR HILL	COAL	1.6	386.6	
98.4	CARBONDALE		UNDERCLAY	1.2	388.2	
97.3	CARBONDALE		BLUE SHALE	24.7	389.3	
72.6	CARBONDALE	DYKERSBURG	SHALE	2.0	414.0	WITH SAND SHALE MIXED
70.6	CARBONDALE	DYKERSBURG	SHALE	20.0	416.0	WITH SANDSTONE PARTING
50.6	CARBONDALE	DYKERSBURG	SHALE	20.0	436.0	
30.6	CARBONDALE	DYKERSBURG	BLUE SHALE	10.0	456.0	
20.6	CARBONDALE	DYKERSBURG	DARK SHALE	2.6	466.0	DARK CLAY SHALE
18.0	CARBONDALE	SPRINGFIELD	COAL	5.9	468.6	
12.1	CARBONDALE		UNDERCLAY	1.0	474.5	
11.1	CARBONDALE		SHALE & CONGLOMERATE	10.0	475.5	SHALE CONGLOMERATE

MAPID: 16500666000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 350' S line, 900' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.490495 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.813033 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 404.8 **LOGGED (FT.):** 450.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.8			CLAY	20.0	0.0	
384.8			CLAY	18.0	20.0	
366.8	MODESTO		SHALE	1.0	38.0	
365.8	MODESTO		DARK SHALE	2.6	39.0	
363.2	MODESTO	CHAPEL	COAL	1.4	41.6	
361.8	MODESTO		GRAY SHALE	19.0	43.0	
342.8	MODESTO		SANDSTONE	23.0	62.0	WITH STREAKS OF CLAY SHALE
319.8	MODESTO		SANDSTONE	5.0	85.0	WITH GRAY SHALE PARTINGS
314.8	MODESTO		BLUE SHALE	30.0	90.0	
284.8	MODESTO		LIMESTONE	2.0	120.0	BASTARD
282.8	MODESTO		BLUE SHALE	10.0	122.0	
272.8	MODESTO		BLUE SHALE	17.0	132.0	
255.8	MODESTO		COAL	0.3	149.0	
255.5	MODESTO		GRAY SHALE	18.8	149.3	
236.8	MODESTO		COAL	1.0	168.0	
235.8	MODESTO		UNDERCLAY	1.0	169.0	
234.8	MODESTO		BLUE SHALE	3.0	170.0	
231.8	MODESTO		BLUE SHALE	5.0	173.0	WITH SANDSTONE PARTINGS
226.8	MODESTO		BLUE SHALE	20.0	178.0	
206.8	MODESTO		DARK SHALE	4.0	198.0	
202.8	MODESTO		COAL	0.3	202.0	
202.5	MODESTO		GRAY SHALE	12.7	202.3	
189.8	MODESTO		BLUE SHALE	1.0	215.0	WITH LIMESTONE PEBBLES
188.8	MODESTO		BLACK SHALE	4.0	216.0	
184.8	MODESTO		GRAY SHALE	5.0	220.0	
179.8	MODESTO		BLUE SHALE	3.0	225.0	MIXED WITH SAND SHALE
176.8	MODESTO		BLUE SHALE	4.5	228.0	
172.3	CARBONDALE	DANVILLE	COAL	1.8	232.5	
170.5	CARBONDALE		GRAY SHALE	2.7	234.3	
167.8	CARBONDALE		SANDSTONE	2.0	237.0	
165.8	CARBONDALE		GRAY SHALE	3.0	239.0	
162.8	CARBONDALE		SANDSTONE	6.5	242.0	WITH SHALE PARTINGS
156.3	CARBONDALE	ALLENBY	COAL	0.5	248.5	
155.8	CARBONDALE		UNDERCLAY	2.0	249.0	
153.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	251.0	
149.8	CARBONDALE	ANVIL ROCK	SANDSTONE	28.0	255.0	
121.8	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	283.0	
109.8	CARBONDALE		BLUE SHALE	2.0	295.0	
107.8	CARBONDALE		UNCERTAIN	2.0	297.0	MILLSTONE GRIT

105.8	CARBONDALE	BRERETON	LIMESTONE	3.0	299.0	
102.8	CARBONDALE	ANNA	DARK SHALE	3.3	302.0	
99.5	CARBONDALE	HERRIN	COAL	4.2	305.3	
95.3	CARBONDALE		UNDERCLAY	2.5	309.5	
92.8	CARBONDALE		GRAY SHALE	20.0	312.0	
72.8	CARBONDALE		BLUE SHALE	21.0	332.0	WITH HARD BANDS
51.8	CARBONDALE	BRIAR HILL	COAL	1.8	353.0	
50.0	CARBONDALE	DYKERSBURG	BLUE SHALE	2.3	354.8	WITH SANSTONE PARTING
47.8	CARBONDALE	DYKERSBURG	BLUE SHALE	6.0	357.0	WITH HARD BANDS
41.8	CARBONDALE	DYKERSBURG	SHALE & CONGLOMERATE	2.0	363.0	
39.8	CARBONDALE	DYKERSBURG	BLUE SHALE	19.0	365.0	WITH HARD BANDS
20.8	CARBONDALE	DYKERSBURG	BLUE SHALE	4.0	384.0	WITH HARD BANDS
16.8	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	5.0	388.0	
11.8	CARBONDALE	DYKERSBURG	SHALE	11.0	393.0	LIGHT CLAY SHALE
0.8	CARBONDALE	DYKERSBURG	SANDSTONE	0.7	404.0	
0.1	CARBONDALE	DYKERSBURG	BLUE SHALE	13.3	404.7	
-13.2	CARBONDALE	DYKERSBURG	BLUE SHALE	10.5	418.0	
-23.7	CARBONDALE	SPRINGFIELD	COAL	5.6	428.5	
-29.3	CARBONDALE		UNDERCLAY	0.9	434.1	
-30.2	CARBONDALE		CALCAREOUS SHALE	8.0	435.0	WITH HARD PEBBLES
-38.2	CARBONDALE		SHALE	7.0	443.0	LIGHT CLAY SHALE

MAPID: 16500666000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 350' S line, 900' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.490495 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813033 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 309.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.3	MODESTO		SILTY SHALE	7.5	224.7	
172.8	CARBONDALE	DANVILLE	COAL	1.8	232.2	
171.0	CARBONDALE		SHALE & SANDSTONE	14.2	234.0	
156.8	CARBONDALE	ALLENBY	COAL	0.5	248.2	
156.3	CARBONDALE		CLAYSTONE	2.0	248.7	
154.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	250.7	
150.3	CARBONDALE	LAWSON	SANDSTONE	40.0	254.7	
110.3	CARBONDALE	LAWSON	GRAY SHALE	2.0	294.7	
108.3	CARBONDALE	LAWSON	SANDSTONE	2.0	296.7	
106.3	CARBONDALE	BRERETON	LIMESTONE	3.0	298.7	
103.3	CARBONDALE	ANNA	DARK GRAY SHALE	3.3	301.7	
100.0	CARBONDALE	HERRIN	COAL	4.2	305.0	

MAPID: 16500667000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 660' S line, 1980' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.486736 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.813814 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 441.5 **LOGGED (FT.):** 447.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.5			CLAY	20.0	0.0	
421.5			CLAY	22.0	20.0	
399.5	MODESTO		SHALE	6.0	42.0	
393.5	MODESTO		SHALE	4.0	48.0	WITH SANDSTONE MIXED
389.5	MODESTO		BLUE SHALE	8.0	52.0	
381.5	MODESTO		BLUE SHALE	10.0	60.0	
371.5	MODESTO		SHALE	5.0	70.0	
366.5	MODESTO		SANDSTONE	16.0	75.0	BROKEN UP
350.5	MODESTO		SANDSTONE	7.0	91.0	BROKEN
343.5	MODESTO		BLUE SHALE	15.0	98.0	
328.5	MODESTO		BLUE SHALE	21.0	113.0	
307.5	MODESTO		LIMESTONE	2.0	134.0	
305.5	MODESTO		BLUE SHALE	4.0	136.0	WITH SANDSTONE PARTINGS
301.5	MODESTO		BLUE SHALE	15.0	140.0	
286.5	MODESTO		BLUE SHALE	10.0	155.0	
276.5	MODESTO		COAL	0.7	165.0	
275.8	MODESTO		SHALE	7.7	165.7	LIGHT CLY SH
268.2	MODESTO		BLACK SHALE	3.3	173.3	
264.8	MODESTO		COAL	0.5	176.7	
264.3	MODESTO		GRAY SHALE	5.8	177.2	
258.5	MODESTO		SHALE	1.0	183.0	DK CLY SH
257.5	MODESTO		CALCAREOUS SHALE	9.0	184.0	
248.5	MODESTO		GRAY SHALE	5.0	193.0	
243.5	MODESTO		GRAY SHALE	2.0	198.0	WITH WIDE SANDSTONE PARTINGS
241.5	MODESTO		GRAY SHALE	10.0	200.0	
231.5	MODESTO		DARK SHALE	5.3	210.0	
226.2	MODESTO		COAL	0.5	215.3	
225.7	MODESTO		SHALE	1.3	215.8	
224.5	MODESTO	PIASA	LIMESTONE	6.0	217.0	WITH PEBBLES
218.5	MODESTO		DARK SHALE	3.0	223.0	
215.5	MODESTO		BLACK SHALE	1.0	226.0	
214.5	MODESTO		BLUE SHALE	15.0	227.0	
199.5	CARBONDALE	DANVILLE	COAL	1.8	242.0	CORE SAVED
197.7	CARBONDALE		BLUE SHALE	4.2	243.8	
193.5	CARBONDALE		GRAY SHALE	2.0	248.0	SANDY
191.5	CARBONDALE		LIMESTONE	0.7	250.0	
190.8	CARBONDALE		SHALE	5.3	250.7	WITH LIME BOULDERS
185.5	CARBONDALE		BLUE SHALE	1.0	256.0	WITH SANDSTONE PARTINGS
184.5	CARBONDALE		DARK SHALE	1.2	257.0	

183.3	CARBONDALE	ALLENBY	COAL	0.4	258.2	
182.9	CARBONDALE		UNDERCLAY	3.4	258.6	
179.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	262.0	
173.5	CARBONDALE		CALCAREOUS SHALE	6.0	268.0	
167.5	CARBONDALE	ANVIL ROCK	BLUE SHALE	12.0	274.0	WITH SANDSTONE PARTINGS
155.5	CARBONDALE	ANVIL ROCK	SANDSTONE	23.8	286.0	
131.7	CARBONDALE	ANNA	BLACK SHALE	2.6	309.8	
129.2	CARBONDALE	HERRIN	COAL	4.8	312.3	
124.3	CARBONDALE		UNDERCLAY	2.8	317.2	
121.5	CARBONDALE		SHALE	1.0	320.0	
120.5	CARBONDALE		LIMESTONE	3.0	321.0	
117.5	CARBONDALE		SHALE	6.0	324.0	LIGHT CLY SH
111.5	CARBONDALE		GRAY SHALE	10.0	330.0	
101.5	CARBONDALE		BLUE SHALE	20.0	340.0	
81.5	CARBONDALE	BRIAR HILL	COAL	1.8	360.0	
79.7	CARBONDALE		UNDERCLAY	1.2	361.8	
78.5	CARBONDALE		BLUE SHALE	2.0	363.0	WITH SANDSTONE PARTINGS
76.5	CARBONDALE		BLUE SHALE	6.0	365.0	
70.5	CARBONDALE		BLACK SHALE	2.0	371.0	
68.5	CARBONDALE	ST. DAVID	LIMESTONE	1.7	373.0	BASTARD
66.8	CARBONDALE	DYKERSBURG	BLUE SHALE	65.8	374.7	WITH HARD BANDS
1.0	CARBONDALE	SPRINGFIELD	COAL	5.8	440.5	
-4.8	CARBONDALE		UNDERCLAY	0.7	446.3	

MAPID: 16500970000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of SW NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.498045 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.810377 **DATE COLLECTED:** 2 / 22 / 1944

SURFACE ELEVATION (FT.): 392.5 **LOGGED (FT.):** 493.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 19 **WELL TYPE:** Coal Test

COMMENT: NW CORNER OF THE SW 1/4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.5			UNCONSOLIDATED	35.0	0.0	SURFACE OVERBURDEN
357.5	MODESTO		SHALE	100.1	35.0	
257.4	MODESTO		COAL	0.8	135.1	
256.6	MODESTO		UNDERCLAY	3.1	135.9	
253.5	MODESTO		LIMESTONE	3.0	139.0	
250.5	MODESTO		SHALE	15.0	142.0	
235.5	MODESTO		SHALE	21.0	157.0	AND SANDY SHALE
214.5	MODESTO		SHALE	22.5	178.0	
192.0	CARBONDALE	DANVILLE	COAL	2.0	200.5	
190.0	CARBONDALE		SHALE	3.5	202.5	
186.5	CARBONDALE		SANDSTONE	16.4	206.0	
170.1	CARBONDALE	ALLENBY	COAL	0.3	222.4	
169.7	CARBONDALE		SHALE	2.3	222.8	
167.5	CARBONDALE		CALCAREOUS SHALE	10.0	225.0	
157.5	CARBONDALE	ANVIL ROCK	SANDSTONE	40.0	235.0	
117.5	CARBONDALE		SHALE	4.6	275.0	
112.9	CARBONDALE	HERRIN	COAL	4.8	279.6	
108.2	CARBONDALE		SHALE	3.0	284.3	
105.2	CARBONDALE		CALCAREOUS SHALE	17.7	287.3	
87.5	CARBONDALE		SHALE	24.5	305.0	
63.0	CARBONDALE	BRIAR HILL	COAL	1.7	329.5	
61.3	CARBONDALE		UNDERCLAY	0.8	331.2	
60.5	CARBONDALE	DYKERSBURG	SHALE	10.0	332.0	
50.5	CARBONDALE	DYKERSBURG	SANDY SHALE	47.5	342.0	
3.0	CARBONDALE	DYKERSBURG	SHALE	3.0	389.5	SOFT SHALE WITH GRAVEL
0.0	CARBONDALE	SPRINGFIELD	COAL	0.0	392.5	CHANNEL - COAL MISSING
0.0	CARBONDALE	DYKERSBURG	SANDSTONE	7.5	392.5	
-7.5	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	7.0	400.0	
-14.5	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	407.0	
-22.5	CARBONDALE	DYKERSBURG	SHALE	3.0	415.0	
-25.5	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	418.0	AND SHALE
-35.5	CARBONDALE	DYKERSBURG	SANDSTONE	46.0	428.0	
-81.5	CARBONDALE		SHALE	4.5	474.0	
-86.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.5	
-88.0	CARBONDALE		SANDY SHALE	12.5	480.5	

MAPID: 16500971000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 0' N line, 140' E line of SE NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.498532 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.810387 **DATE COLLECTED:** 3 / 9 / 1944

SURFACE ELEVATION (FT.): 390.4 **LOGGED (FT.):** 395.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 20 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.4			UNCONSOLIDATED	25.0	0.0	LOG SAYS 'SURFACE'
365.4	MODESTO		SHALE	88.5	25.0	
276.9	MODESTO		COAL	0.5	113.5	
276.4	MODESTO		SHALE	19.0	114.0	
257.4	MODESTO		COAL	0.7	133.0	
256.7	MODESTO		UNDERCLAY	2.3	133.7	
254.4	MODESTO		LIMESTONE	10.0	136.0	LIMESTONE AND UCLY
244.4	MODESTO		LIMESTONE	6.5	146.0	
237.9	MODESTO		SANDSTONE	5.0	152.5	
232.9	MODESTO		CALCAREOUS SHALE	14.5	157.5	
218.4	MODESTO		SHALE	5.0	172.0	
213.4	MODESTO		UNDERCLAY	1.0	177.0	
212.4	MODESTO	PIASA	LIMESTONE	2.0	178.0	
210.4	MODESTO		CALCAREOUS SHALE	1.5	180.0	
208.9	MODESTO		BLACK SHALE	16.0	181.5	
192.9	CARBONDALE	DANVILLE	COAL	2.0	197.5	
190.9	CARBONDALE		UNDERCLAY	2.5	199.5	
188.4	CARBONDALE		SANDSTONE	16.8	202.0	
171.6	CARBONDALE		SHALE	0.3	218.8	
171.2	CARBONDALE	ALLENBY	COAL	0.3	219.2	
170.9	CARBONDALE		UNDERCLAY	0.5	219.5	
170.4	CARBONDALE		UNDERCLAY	3.0	220.0	UCLY WITH LS
167.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	223.0	
163.4	CARBONDALE		CALCAREOUS SHALE	8.0	227.0	
155.4	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	235.0	
154.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.5	236.0	
152.9	CARBONDALE	ANVIL ROCK	SANDSTONE	28.5	237.5	
124.4	CARBONDALE		SHALE	2.0	266.0	
122.4	CARBONDALE	BRERETON	LIMESTONE	6.0	268.0	
116.4	CARBONDALE	ANNA	BLACK SHALE	2.9	274.0	
113.5	CARBONDALE	HERRIN	COAL	4.7	276.9	
108.8	CARBONDALE		UNDERCLAY	3.0	281.6	
105.8	CARBONDALE		SANDY CLAYSTONE	16.4	284.6	SANDY FIRE CLAY AND SHALE
89.4	CARBONDALE		SHALE	24.0	301.0	
65.4	CARBONDALE	BRIAR HILL	COAL	1.7	325.0	
63.7	CARBONDALE	DYKERSBURG	SHALE	23.3	326.7	
40.4	CARBONDALE	DYKERSBURG	SHALE	31.0	350.0	SHALE MIXED WITH SS STREAKS
9.4	CARBONDALE	DYKERSBURG	GRAY SHALE	7.2	381.0	
2.2	CARBONDALE	SPRINGFIELD	COAL	4.6	388.2	

-2.4	CARBONDALE		UNDERCLAY	2.2	392.8

MAPID: 16502476000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.496912 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.805751 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-201.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	610.0	
-261.0	SPOON	DAVIS	UNCLASSIFIED	-	670.0	
-1181.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	

MAPID: 16502476000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.496912 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.805751 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2487.0 **LOG TYPE:**

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1341.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1701.0			LIMESTONE	-	2110.0	
-2078.0		BASE BARLOW	LIMESTONE	-	2487.0	

MAPID: 16502476000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.496912 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805751 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2487.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, UNION CHEMICAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	490.0	
-124.0	CARBONDALE	SURVANT	COAL	0.5	533.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	608.0	
-229.0	CARBONDALE	DEKOVEN	COAL	2.5	638.0	
-256.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	665.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	3.5	671.0	
-311.0	TRADEWATER	MT. RORAH	COAL	1.3	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502535000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 450' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.486373 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.812894 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2527.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, CONSUMERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	499.0	
-123.0	CARBONDALE	SURVANT	COAL	0.5	535.0	
-228.0	CARBONDALE	COLCHESTER	COAL	1.5	640.0	
-248.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	690.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-286.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-328.0	TRADEWATER	MT. RORAH	COAL	2.5	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502535000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 450' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.486373 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.812894 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2527.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	BRERETON	LIMESTONE	-	297.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1739.0			LIMESTONE	-	2151.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2527.0	

MAPID: 16502687000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490376 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805628 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, BRAMLET H G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	488.0	
-154.0	CARBONDALE	SURVANT	COAL	0.5	560.0	
-204.0	CARBONDALE	COLCHESTER	COAL	1.5	610.0	
-232.0	CARBONDALE	DEKOVEN	COAL	2.0	638.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	661.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	4.0	689.0	
-319.0	TRADEWATER	MT. RORAH	COAL	1.3	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502687000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490376 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805628 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1347.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1753.0	
-1728.0			LIMESTONE	-	2134.0	

MAPID: 16503816000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.488074 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.809257 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2128.0 **LOG TYPE:**

SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1753.0	
-1726.0			LIMESTONE	-	2128.0	

MAPID: 16500115000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.495869 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.802957 **DATE COLLECTED:** 3 / 9 / 1906

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	20.0	0.0	
380.0	MODESTO		ARGILACEOUS SHALE	20.0	20.0	ARG
360.0	MODESTO		SHALE	5.0	40.0	
355.0	MODESTO		ARGILACEOUS SHALE	15.0	45.0	ARG
340.0	MODESTO		SANDY SHALE	4.0	60.0	
336.0	MODESTO		ARGILACEOUS SHALE	20.0	64.0	ARG
316.0	MODESTO		SANDSTONE	10.0	84.0	
306.0	MODESTO		ARGILACEOUS SHALE	8.0	94.0	ARG
298.0	MODESTO		LIMESTONE	2.0	102.0	
296.0	MODESTO		ARGILACEOUS SHALE	40.0	104.0	ARG
256.0	MODESTO		BLACK SHALE	4.0	144.0	
252.0	MODESTO		SANDSTONE	8.0	148.0	
244.0	MODESTO		ARGILACEOUS SHALE	4.0	156.0	ARG
240.0	MODESTO		SANDY SHALE	10.0	160.0	
230.0	MODESTO		ARGILACEOUS SHALE	14.0	170.0	ARG
216.0	MODESTO		SANDY SHALE	8.0	184.0	
208.0	MODESTO		SHALE	10.0	192.0	
198.0	MODESTO		LIMESTONE	7.0	202.0	
191.0	MODESTO		UNDERCLAY	5.0	209.0	
186.0	MODESTO		SHALE	6.0	214.0	
180.0	MODESTO	PIASA	LIMESTONE	4.0	220.0	
176.0	MODESTO		SANDSTONE	2.0	224.0	
174.0	CARBONDALE	DANVILLE	COAL	2.0	226.0	
172.0	CARBONDALE		UNDERCLAY	2.0	228.0	
170.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	230.0	
165.0	CARBONDALE		CLAYSTONE	8.0	235.0	
157.0	CARBONDALE		SHALE	21.0	243.0	
136.0	CARBONDALE	BRERETON	LIMESTONE	7.0	264.0	
129.0	CARBONDALE	ANNA	BLACK SHALE	2.0	271.0	
127.0	CARBONDALE	HERRIN	COAL	5.0	273.0	
122.0	CARBONDALE		UNDERCLAY	6.0	278.0	
116.0	CARBONDALE		ARGILACEOUS SHALE	8.0	284.0	ARG
108.0	CARBONDALE		SANDSTONE	10.0	292.0	
98.0	CARBONDALE		ARGILACEOUS SHALE	18.0	302.0	ARG
80.0	CARBONDALE	BRIAR HILL	COAL	2.0	320.0	
78.0	CARBONDALE	DYKERSBURG	SHALE	50.0	322.0	
28.0	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	372.0	GRAY
10.0	CARBONDALE	DYKERSBURG	SHALE	8.0	390.0	
2.0	CARBONDALE	SPRINGFIELD	COAL	5.4	398.0	

-3.4	CARBONDALE	UNDERCLAY	0.6	403.4

MAPID: 16500115000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.495869 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.802957 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 404.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
174.0	CARBONDALE	DANVILLE	COAL	-	226.0	
170.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	230.0	
127.0	CARBONDALE	HERRIN	COAL	5.0	273.0	
108.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	10.0	292.0	
80.0	CARBONDALE	BRIAR HILL	COAL	2.0	320.0	
2.0	CARBONDALE	SPRINGFIELD	COAL	5.4	398.0	

MAPID: 16500116000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.50248 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.804947 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 385.5 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO DATA GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	31.0	0.0	
371.0	MODESTO		ARGILACEOUS SHALE	50.0	31.0	ARG
321.0	MODESTO		LIMESTONE	2.0	81.0	
319.0	MODESTO		ARGILACEOUS SHALE	36.0	83.0	ARG
283.0	MODESTO		BLACK SHALE	1.0	119.0	
282.0	MODESTO		ARGILACEOUS SHALE	8.0	120.0	ARG
274.0	MODESTO		BLACK SHALE	0.5	128.0	
273.5	MODESTO		COAL	2.5	128.5	
271.0	MODESTO		UNDERCLAY	4.5	131.0	
266.5	MODESTO		SHALE	39.5	135.5	
227.0	MODESTO	PIASA	LIMESTONE	2.5	175.0	
224.5	MODESTO		ARGILACEOUS SHALE	16.5	177.5	ARG
208.0	CARBONDALE	DANVILLE	COAL	1.0	194.0	
207.0	CARBONDALE		UNDERCLAY	0.5	195.0	
206.5	CARBONDALE		ARGILACEOUS SHALE	2.0	195.5	ARG
204.5	CARBONDALE	ANVIL ROCK	SANDSTONE	17.5	197.5	
187.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	215.0	
182.0	CARBONDALE	ANVIL ROCK	SANDSTONE	26.0	220.0	
156.0	CARBONDALE		ARGILACEOUS SHALE	11.0	246.0	ARG
145.0	CARBONDALE	BRERETON	LIMESTONE	7.0	257.0	
138.0	CARBONDALE	ANNA	BLACK SHALE	1.5	264.0	
136.5	CARBONDALE	HERRIN	COAL	4.5	265.5	
132.0	CARBONDALE		UNDERCLAY	3.0	270.0	
129.0	CARBONDALE		SANDY SHALE	17.0	273.0	
112.0	CARBONDALE		ARGILACEOUS SHALE	19.0	290.0	ARG
93.0	CARBONDALE	BRIAR HILL	COAL	0.5	309.0	
92.5	CARBONDALE		UNDERCLAY	0.5	309.5	
92.0	CARBONDALE		ARGILACEOUS SHALE	15.0	310.0	ARG
77.0	CARBONDALE		SANDSTONE	30.0	325.0	
47.0	CARBONDALE		SHALE	25.0	355.0	
22.0	CARBONDALE	SPRINGFIELD	COAL	4.8	380.0	
17.2	CARBONDALE		UNDERCLAY	0.7	384.8	

MAPID: 16500116000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 0' N line, 0' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.50248 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.804947 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 270.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
226.5	MODESTO	PIASA	LIMESTONE	2.5	175.5	
224.0	MODESTO		CLAYSTONE & SHALE	16.5	178.0	
207.5	CARBONDALE	DANVILLE	COAL	1.0	194.5	
206.5	CARBONDALE		SHALE & SANDSTONE	20.0	195.5	
186.5	CARBONDALE	LAWSON	SILTY SHALE	5.0	215.5	
181.5	CARBONDALE	LAWSON	SANDSTONE	26.0	220.5	
155.5	CARBONDALE	LAWSON	CLAYSTONE & SHALE	11.0	246.5	
144.5	CARBONDALE	BRERETON	LIMESTONE	7.0	257.5	
137.5	CARBONDALE	ANNA	BLACK SHALE	1.5	264.5	
136.0	CARBONDALE	HERRIN	COAL	4.5	266.0	

MAPID: 16502216000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' S line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492292 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.799002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2463.0 **LOG TYPE:**
SOURCE: SUPERIOR OIL COMPANY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	BRERETON	LIMESTONE	-	254.0	
-1329.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1734.0	
-1688.0			LIMESTONE	-	2093.0	
-2058.0		BASE BARLOW	LIMESTONE	-	2463.0	

MAPID: 16502216000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' S line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492292 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.799002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 29.0 **LOG TYPE:** Drillers Log
SOURCE: SUPERIOR OIL COMPANY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
209.0	CARBONDALE	DANVILLE	COAL	-	196.0	
182.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	223.0	
142.0	CARBONDALE	HERRIN	COAL	6.0	263.0	
130.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	10.0	275.0	
87.0	CARBONDALE	BRIAR HILL	COAL	-	318.0	
5.0	CARBONDALE	SPRINGFIELD	COAL	6.0	400.0	
-10.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	18.0	415.0	
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	-	440.0	

MAPID: 16502216000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' S line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492292 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.799002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2460.0 **LOG TYPE:**
SOURCE: SUPERIOR OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1340.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1745.0	
-2055.0		BASE BARLOW	LIMESTONE	-	2460.0	

MAPID: 16502216000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' S line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492292 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.799002 **DATE COLLECTED:** 10 / 0 / 1953
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 1570.0 **LOG TYPE:** Electric Log
SOURCE: SUPERIOR OIL COMPANY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-160.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	565.0	
-235.0	SPOON	DAVIS	UNCLASSIFIED	-	640.0	
-1165.0	BASE OF PENN.		UNCLASSIFIED	-	1570.0	

MAPID: 16502216000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' S line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492292 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.799002 **DATE COLLECTED:** 10 / 0 / 1953
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2463.0 **LOG TYPE:** Electric Log
SOURCE: SUPERIOR OIL COMPANY, THOMAS R GLEN **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	442.0	
-80.0	CARBONDALE	SURVANT	COAL	0.5	485.0	
-157.0	CARBONDALE	COLCHESTER	COAL	0.5	562.0	
-195.0	CARBONDALE	DEKOVEN	COAL	0.5	600.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	625.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-229.0	CARBONDALE	DAVIS	COAL	4.0	634.0	
-245.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	650.0	
-248.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	653.0	
-285.0	TRADEWATER	MT. RORAH	COAL	1.3	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502649000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490422 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.790866 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2430.0 **LOG TYPE:** Electric Log
SOURCE: KEYSTONE OIL CO, BRAMLET F E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-31.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	420.0	
-76.0	CARBONDALE	SURVANT	COAL	1.3	465.0	
-151.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-186.0	CARBONDALE	DEKOVEN	COAL	3.0	575.0	
-211.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	600.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-223.0	CARBONDALE	DAVIS	COAL	4.0	612.0	
-241.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-276.0	TRADEWATER	MT. RORAH	COAL	1.3	665.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502649000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490422 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790866 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2430.0 **LOG TYPE:**
SOURCE: KEYSTONE OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1698.0	
-1679.0			LIMESTONE	-	2068.0	
-2041.0		BASE BARLOW	LIMESTONE	-	2430.0	

MAPID: 16502969000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 350' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494908 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798269 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2461.0 **LOG TYPE:** Electric Log
SOURCE: SUPERIOR OIL COMPANY, BERTINO JOSEPHINE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-107.0	CARBONDALE	SURVANT	COAL	1.5	515.0	
-187.0	CARBONDALE	COLCHESTER	COAL	1.3	595.0	
-223.0	CARBONDALE	DEKOVEN	COAL	2.5	631.0	
-232.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-245.0	CARBONDALE	DAVIS	COAL	4.0	653.0	
-262.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	
-300.0	TRADEWATER	MT. RORAH	COAL	1.3	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502969000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 350' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494908 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798269 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2461.0 **LOG TYPE:**
SOURCE: SUPERIOR OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1332.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-2053.0		BASE BARLOW	LIMESTONE	-	2461.0	

MAPID: 16502993000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 265' S line, 350' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494883 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80181 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2114.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, BRAMLET ROSE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	485.0	
-131.0	CARBONDALE	SURVANT	COAL	1.3	529.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	607.0	
-242.0	CARBONDALE	DEKOVEN	COAL	1.8	640.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	669.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-277.0	CARBONDALE	DAVIS	COAL	4.0	675.0	
-297.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	695.0	
-330.0	TRADEWATER	MT. RORAH	COAL	0.5	728.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502993000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 265' S line, 350' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494883 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80181 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2114.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1733.0	
-1716.0			LIMESTONE	-	2114.0	

MAPID: 16503062000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.49259 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.790847 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2414.0 **LOG TYPE:** Electric Log
SOURCE: DERICKSON T BLAKE, THOMAS A D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-155.0	CARBONDALE	COLCHESTER	COAL	0.5	530.0	
-193.0	CARBONDALE	DEKOVEN	COAL	3.0	568.0	
-210.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	585.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-228.0	CARBONDALE	DAVIS	COAL	4.0	603.0	
-235.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	610.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-280.0	TRADEWATER	MT. RORAH	COAL	1.3	655.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503062000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.49259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790847 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2414.0 **LOG TYPE:**
SOURCE: DERICKSON T BLAKE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1317.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1692.0	
-1670.0			LIMESTONE	-	2045.0	
-2039.0		BASE BARLOW	LIMESTONE	-	2414.0	

MAPID: 16503135000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 410' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490393 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.799894 **DATE COLLECTED:** 8 / 0 / 1957
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1743.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, THOMAS R G 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-102.0	CARBONDALE	SURVANT	COAL	0.5	510.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	588.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.5	624.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	649.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	3.8	658.0	
-267.0	TRADEWATER	SEAHORNE LS	LIMESTONE	4.0	675.0	
-307.0	TRADEWATER	MT. RORAH	COAL	1.3	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503135000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 410' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.490393 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.799894 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1743.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1743.0	

MAPID: 16503377000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 420' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.486272 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2465.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1332.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1725.0	
-2072.0		BASE BARLOW	LIMESTONE	-	2465.0	

MAPID: 16503385000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 350' N line, 335' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499348 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.792662 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2431.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1709.0	
-2045.0		BASE BARLOW	LIMESTONE	-	2431.0	

MAPID: 16503386000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 405' S line, 430' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499699 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790992 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2442.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1318.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	
-2042.0		BASE BARLOW	LIMESTONE	-	2442.0	

MAPID: 16503394000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 350' N line, 355' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.496948 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.792668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2437.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1713.0	
-2040.0		BASE BARLOW	LIMESTONE	-	2437.0	

MAPID: 16503395000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 365' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.496932 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.79081 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2424.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1703.0	
-1669.0			LIMESTONE	-	2058.0	
-2035.0		BASE BARLOW	LIMESTONE	-	2424.0	

MAPID: 16503398000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 370' S line, 335' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494878 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794657 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2441.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1330.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-2051.0		BASE BARLOW	LIMESTONE	-	2441.0	

MAPID: 16503399000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 350' S line, 340' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.49492 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790881 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2419.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1696.0	
-2039.0		BASE BARLOW	LIMESTONE	-	2419.0	

MAPID: 16503400000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 360' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494875 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.792645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2426.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	CARBONDALE	BRERETON	LIMESTONE	-	212.0	
-1320.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1703.0	
-2043.0		BASE BARLOW	LIMESTONE	-	2426.0	

MAPID: 16503404000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492542 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798259 **DATE COLLECTED:** 11 / 0 / 1961
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 1735.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., THOMAS GLEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	462.0	
-100.0	CARBONDALE	SURVANT	COAL	2.0	510.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-212.0	CARBONDALE	DEKOVEN	COAL	2.5	622.0	
-240.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	650.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	3.0	660.0	
-268.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	678.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-272.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	682.0	
-300.0	TRADEWATER	MT. RORAH	COAL	1.5	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503404000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.492542 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798259 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 1735.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1325.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1735.0	

MAPID: 16503406000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497017 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794682 **DATE COLLECTED:** 11 / 0 / 1961
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2464.0 **LOG TYPE:** Electric Log
SOURCE: POC OIL CORP, MCCONNELL LUCY V 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-38.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-81.0	CARBONDALE	SURVANT	COAL	0.5	488.0	
-153.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-189.0	CARBONDALE	DEKOVEN	COAL	1.3	596.0	
-213.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	620.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-228.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-245.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	652.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-248.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	655.0	
-281.0	TRADEWATER	MT. RORAH	COAL	2.0	688.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503406000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497017 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794682 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2464.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	BRERETON	LIMESTONE	-	232.0	
-1333.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-2057.0		BASE BARLOW	LIMESTONE	-	2464.0	

MAPID: 16503408000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 430' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.501517 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2062.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
183.0	CARBONDALE	BRERETON	LIMESTONE	-	214.0	
-1317.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1714.0	
-1665.0			LIMESTONE	-	2062.0	

MAPID: 16503412000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 530' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.501514 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791322 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2436.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1328.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1670.0			LIMESTONE	-	2062.0	
-2044.0		BASE BARLOW	LIMESTONE	-	2436.0	

MAPID: 16500117000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.514541 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.803064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 390.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	HERRIN	COAL	5.3	259.0	
94.0	CARBONDALE	BRIAR HILL	COAL	1.2	306.0	
16.0	CARBONDALE	SPRINGFIELD	COAL	5.3	384.0	

MAPID: 16500117000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.514541 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.803064 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 265.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
230.8	MODESTO	PIASA	LIMESTONE	4.0	169.2	
226.8	MODESTO		DARK GRAY SHALE	17.0	173.2	
209.8	CARBONDALE	DANVILLE	COAL	2.3	190.2	
207.5	CARBONDALE		SHALE & SANDSTONE	20.0	192.5	
187.5	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	212.5	
179.5	CARBONDALE	LAWSON	BONE COAL	1.0	220.5	
178.5	CARBONDALE	LAWSON	SANDSTONE	11.0	221.5	
167.5	CARBONDALE	LAWSON	GRAY SHALE	20.0	232.5	
147.5	CARBONDALE	BRERETON	LIMESTONE	7.5	252.5	
140.0	CARBONDALE	HERRIN	COAL	5.3	260.0	

MAPID: 16500117000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.514541 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.803064 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 389.6 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	20.0	0.0	
380.0	MODESTO		SANDY SHALE	5.0	20.0	
375.0	MODESTO		SHALE	11.0	25.0	
364.0	MODESTO		SANDSTONE	6.0	36.0	
358.0	MODESTO		SHALE	18.0	42.0	
340.0	MODESTO		SHALE	25.0	60.0	
315.0	MODESTO		LIMESTONE	3.0	85.0	
312.0	MODESTO		SHALE	5.0	88.0	
307.0	MODESTO		SHALE	6.0	93.0	
301.0	MODESTO		COAL	2.0	99.0	
299.0	MODESTO		UNDERCLAY	4.0	101.0	
295.0	MODESTO		ARGILACEOUS SHALE	6.0	105.0	ARG
289.0	MODESTO		SHALE	10.0	111.0	DARK
279.0	MODESTO		UNDERCLAY	4.0	121.0	
275.0	MODESTO		COAL	1.0	125.0	
274.0	MODESTO		SANDSTONE	5.0	126.0	
269.0	MODESTO		SHALE	16.0	131.0	DARK
253.0	MODESTO		LIMESTONE	4.0	147.0	
249.0	MODESTO		UNDERCLAY	3.0	151.0	
246.0	MODESTO		SANDSTONE	5.0	154.0	
241.0	MODESTO		SHALE	4.0	159.0	
237.0	MODESTO		SHALE	4.0	163.0	
233.0	MODESTO		BLACK SHALE	2.0	167.0	
231.0	MODESTO	PIASA	LIMESTONE	4.0	169.0	
227.0	MODESTO		CLAYSTONE	5.0	173.0	LOG REPORTED DEPTH AT 172'
222.0	MODESTO		BLACK SHALE	6.0	178.0	
216.0	MODESTO		SHALE	6.0	184.0	
210.0	CARBONDALE	DANVILLE	COAL	2.3	190.0	
207.7	CARBONDALE		UNDERCLAY	6.0	192.3	
201.7	CARBONDALE		ARGILACEOUS SHALE	5.0	198.3	ARG
196.7	CARBONDALE		SANDSTONE	9.0	203.3	
187.7	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	212.3	
179.7	CARBONDALE	ANVIL ROCK	SHALE	1.0	220.3	W/COAL
178.7	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	221.3	
167.7	CARBONDALE	ANVIL ROCK	SHALE	20.0	232.3	
147.7	CARBONDALE	BRERETON	LIMESTONE	7.5	252.3	
140.2	CARBONDALE	HERRIN	COAL	5.3	259.8	
134.8	CARBONDALE		UNDERCLAY	3.0	265.2	
131.8	CARBONDALE		ARGILACEOUS SHALE	5.0	268.2	ARG

126.8	CARBONDALE		SANDSTONE	10.0	273.2
116.8	CARBONDALE		SANDY SHALE	15.0	283.2
101.8	CARBONDALE		SHALE	8.0	298.2
93.8	CARBONDALE	BRIAR HILL	COAL	1.2	306.2
92.7	CARBONDALE		UNDERCLAY	1.0	307.3
91.7	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	308.3
78.7	CARBONDALE	DYKERSBURG	SANDSTONE	16.0	321.3
62.7	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	337.3
42.7	CARBONDALE	DYKERSBURG	SHALE	27.0	357.3
15.7	CARBONDALE	SPRINGFIELD	COAL	5.3	384.3

MAPID: 16500118000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.511992 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.797429 **DATE COLLECTED:** 0 / 0 / 1906

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 388.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	20.0	0.0	
382.0	MODESTO		ARGILACEOUS SHALE	10.0	20.0	ARG
372.0	MODESTO		LIMESTONE	2.0	30.0	
370.0	MODESTO		ARGILACEOUS SHALE	15.0	32.0	ARG
355.0	MODESTO		SHALE	13.0	47.0	DARK
342.0	MODESTO		SHALE	20.0	60.0	
322.0	MODESTO		LIMESTONE	3.0	80.0	
319.0	MODESTO		UNDERCLAY	6.0	83.0	
313.0	MODESTO		ARGILACEOUS SHALE	35.0	89.0	ARG
278.0	MODESTO		BLACK SHALE	4.0	124.0	
274.0	MODESTO		ARGILACEOUS SHALE	8.0	128.0	ARG
266.0	MODESTO		BLACK SHALE	3.0	136.0	
263.0	MODESTO		COAL	2.0	139.0	
261.0	MODESTO		UNDERCLAY	5.0	141.0	
256.0	MODESTO		ARGILACEOUS SHALE	20.0	146.0	ARG
236.0	MODESTO	PIASA	LIMESTONE	2.0	166.0	
234.0	MODESTO		ARGILACEOUS SHALE	30.0	168.0	ARG
204.0	CARBONDALE	DANVILLE	COAL	3.0	198.0	
201.0	CARBONDALE		UNDERCLAY	5.0	201.0	
196.0	CARBONDALE		SANDSTONE	12.0	206.0	
184.0	CARBONDALE		SHALE	3.0	218.0	
181.0	CARBONDALE	ALLENBY	COAL	1.0	221.0	
180.0	CARBONDALE		UNDERCLAY	3.0	222.0	
177.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	225.0	
169.0	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	2.0	233.0	ARG
167.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	235.0	
155.0	CARBONDALE	ANVIL ROCK	SHALE	10.0	247.0	
145.0	CARBONDALE	ANVIL ROCK	BLACK SHALE	3.0	257.0	
142.0	CARBONDALE	BRERETON	LIMESTONE	8.0	260.0	
134.0	CARBONDALE	ANNA	BLACK SHALE	1.0	268.0	
133.0	CARBONDALE	HERRIN	COAL	5.0	269.0	
128.0	CARBONDALE		UNDERCLAY	3.0	274.0	
125.0	CARBONDALE		SANDSTONE	10.0	277.0	
115.0	CARBONDALE		SHALE	25.0	287.0	
90.0	CARBONDALE	BRIAR HILL	COAL	2.0	312.0	
88.0	CARBONDALE		UNDERCLAY	3.0	314.0	
85.0	CARBONDALE		SANDSTONE	5.0	317.0	
80.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	322.0	
78.0	CARBONDALE	DYKERSBURG	SANDY SHALE	35.0	324.0	GRAY

43.0	CARBONDALE	DYKERSBURG	SHALE	23.0	359.0
20.0	CARBONDALE	SPRINGFIELD	COAL	5.2	382.0
14.8	CARBONDALE		UNDERCLAY	0.8	387.2

MAPID: 16500118000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.511992 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.797429 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 388.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	DANVILLE	COAL	3.0	198.0	
196.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	12.0	206.0	
177.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	225.0	
167.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	12.0	235.0	
133.0	CARBONDALE	HERRIN	COAL	5.0	269.0	
125.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	10.0	277.0	
90.0	CARBONDALE	BRIAR HILL	COAL	2.0	312.0	
85.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	5.0	317.0	
20.0	CARBONDALE	SPRINGFIELD	COAL	5.2	382.0	

MAPID: 16500119000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.514357 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.791851 **DATE COLLECTED:** 1 / 0 / 1906
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 331.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	22.0	0.0	
350.0			ARGILACEOUS SHALE	50.0	22.0	ARG
300.0			SANDSTONE	8.0	72.0	
292.0			SHALE	76.0	80.0	
216.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	156.0	
210.5	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	161.5	
194.0	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	19.0	178.0	ARG
175.0	CARBONDALE		SHALE	33.0	197.0	DARK
142.0	CARBONDALE		ARGILACEOUS SHALE	26.0	230.0	ARG
116.0	CARBONDALE		SANDY SHALE	9.0	256.0	
107.0	CARBONDALE		ARGILACEOUS SHALE	22.0	265.0	ARG
85.0	CARBONDALE		LIMESTONE	1.0	287.0	
84.0	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	288.0	
76.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	31.0	296.0	ARG
45.0	CARBONDALE	SPRINGFIELD	COAL	4.0	327.0	
41.0	CARBONDALE		UNDERCLAY	0.5	331.0	

MAPID: 16502575000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 315' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506166 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.794518 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1560.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-155.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	542.0	
-229.0	SPOON	DAVIS	UNCLASSIFIED	-	616.0	
-1173.0	BASE OF PENN.		UNCLASSIFIED	-	1560.0	

MAPID: 16502575000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 315' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506166 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794518 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2434.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
172.0	CARBONDALE	BRERETON	LIMESTONE	-	215.0	
-1325.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1712.0	
-1678.0			LIMESTONE	-	2065.0	
-2047.0		BASE BARLOW	LIMESTONE	-	2434.0	

MAPID: 16502575000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 315' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506166 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794518 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2434.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, SAHARA-BRAMLET 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	424.0	
-82.0	CARBONDALE	SURVANT	COAL	1.3	469.0	
-153.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-192.0	CARBONDALE	DEKOVEN	COAL	2.5	579.0	
-213.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	600.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-227.0	CARBONDALE	DAVIS	COAL	5.0	614.0	
-244.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	631.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-256.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	643.0	
-283.0	TRADEWATER	MT. RORAH	COAL	1.5	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502575000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 315' S line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506166 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.794518 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 541.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.0	CARBONDALE	HERRIN	COAL	-	224.0	
113.0	CARBONDALE	BRIAR HILL	COAL	-	274.0	
41.0	CARBONDALE	SPRINGFIELD	COAL	4.0	346.0	
-36.0	CARBONDALE	HOUCHIN CREEK	COAL	-	423.0	
-154.0	CARBONDALE	COLCHESTER	COAL	-	541.0	

MAPID: 16503026000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 260' S line, 400' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513397 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794424 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2450.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., BRAMLET W E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	429.0	
-102.0	CARBONDALE	SURVANT	COAL	1.5	478.0	
-174.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-212.0	CARBONDALE	DEKOVEN	COAL	2.0	588.0	
-234.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	610.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-248.0	CARBONDALE	DAVIS	COAL	4.0	624.0	
-264.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	640.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-297.0	TRADEWATER	MT. RORAH	COAL	3.0	673.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503026000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 260' S line, 400' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513397 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794424 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2450.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1325.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1701.0	
-1681.0			LIMESTONE	-	2057.0	
-2074.0		BASE BARLOW	LIMESTONE	-	2450.0	

MAPID: 16503392000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 360' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506195 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2424.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1321.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1705.0	
-1668.0			LIMESTONE	-	2052.0	
-2040.0		BASE BARLOW	LIMESTONE	-	2424.0	

MAPID: 16503420000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 100' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506109 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800893 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2488.0 **LOG TYPE:**
SOURCE: COBB RUSSELL JR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
-1343.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1699.0			LIMESTONE	-	2113.0	
-2074.0		BASE BARLOW	LIMESTONE	-	2488.0	

MAPID: 16503428000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510875 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.790857 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2052.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1321.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1697.0	
-1676.0			LIMESTONE	-	2052.0	

MAPID: 16500125000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2400' S line, 2500' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.530096 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.796742 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 331.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
216.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	149.0	
197.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	15.0	168.0	
165.0	CARBONDALE	HERRIN	COAL	1.0	200.0	
113.0	CARBONDALE	CANTON		21.0	252.0	
39.0	CARBONDALE	SPRINGFIELD	COAL	4.8	326.0	

MAPID: 16500125000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2400' S line, 2500' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.530096 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.796742 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
255.2	MODESTO	PIASA	LIMESTONE	4.0	109.8	
251.2	CARBONDALE		DARK GRAY SHALE	35.0	113.8	
216.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	148.8	
209.5	CARBONDALE	LAWSON	GRAY SHALE	4.5	155.5	
205.0	CARBONDALE	LAWSON	DARK GRAY SHALE	8.0	160.0	
197.0	CARBONDALE	LAWSON	SANDSTONE	15.0	168.0	
182.0	CARBONDALE	LAWSON	GRAY SHALE	5.0	183.0	
177.0	CARBONDALE	BRERETON	LIMESTONE	8.0	188.0	
169.0	CARBONDALE	ANNA	BLACK SHALE	4.0	196.0	
165.0	CARBONDALE	HERRIN	COAL	1.0	200.0	

MAPID: 16500125000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2400' S line, 2500' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.530096 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.796742 **DATE COLLECTED:** 11 / 21 / 1905

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 331.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: THICKNESS CHANGED BY 2" IN UNIT 9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	23.0	0.0	
342.0	MODESTO		ARGILACEOUS SHALE	22.0	23.0	ARG
320.0	MODESTO		LIMESTONE	1.0	45.0	
319.0	MODESTO		SHALE	10.0	46.0	DARK
309.0	MODESTO		LIMESTONE	6.0	56.0	
303.0	MODESTO		ARGILACEOUS SHALE	48.0	62.0	ARG
255.0	MODESTO	PIASA	LIMESTONE	4.0	110.0	
251.0			SHALE	35.0	114.0	DARK
216.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	149.0	THICKNESS CHANGED TO MATCH DEPTH
209.5	CARBONDALE		SHALE	4.5	155.5	
205.0	CARBONDALE		SHALE	8.0	160.0	DARK
197.0	CARBONDALE		SANDSTONE	15.0	168.0	
182.0	CARBONDALE		SHALE	5.0	183.0	BLUE
177.0	CARBONDALE	BRERETON	LIMESTONE	8.0	188.0	
169.0	CARBONDALE	ANNA	SHALE	4.0	196.0	
165.0	CARBONDALE	HERRIN	COAL	1.0	200.0	
164.0	CARBONDALE		UNDERCLAY	1.0	201.0	
163.0	CARBONDALE		SANDY SHALE	16.0	202.0	
147.0	CARBONDALE		SHALE	34.0	218.0	
113.0	CARBONDALE	DYKERSBURG	SANDSTONE	21.0	252.0	
92.0	CARBONDALE	DYKERSBURG	SHALE	19.0	273.0	DARK
73.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	34.5	292.0	ARG
38.5	CARBONDALE	SPRINGFIELD	COAL	4.8	326.5	

MAPID: 16500126000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.537646 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.795688 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 314.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	39.0	0.0	
330.0	MODESTO		ARGILACEOUS SHALE	5.0	39.0	ARG
325.0	MODESTO		SANDY SHALE	4.0	44.0	
321.0	MODESTO		LIMESTONE	7.0	48.0	
314.0	MODESTO		ARGILACEOUS SHALE	26.0	55.0	ARG
288.0	MODESTO	PIASA	LIMESTONE	4.0	81.0	
284.0			CLAYSTONE	1.0	85.0	
283.0			ARGILACEOUS SHALE	24.0	86.0	ARG
259.0	CARBONDALE		SANDY SHALE	7.0	110.0	
252.0	CARBONDALE	ANVIL ROCK	SANDSTONE	61.0	117.0	
191.0	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	6.0	178.0	ARG
185.0	CARBONDALE	BRERETON	LIMESTONE	8.0	184.0	
177.0	CARBONDALE	HERRIN	COAL	2.0	192.0	
175.0	CARBONDALE		UNDERCLAY	1.0	194.0	
174.0	CARBONDALE		SHALE	20.0	195.0	
154.0	CARBONDALE		ARGILACEOUS SHALE	35.0	215.0	ARG
119.0	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	250.0	
109.0	CARBONDALE	DYKERSBURG	SHALE	11.0	260.0	
98.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	39.7	271.0	ARG
58.3	CARBONDALE	SPRINGFIELD	COAL	3.0	310.7	
55.3	CARBONDALE		COAL	0.3	313.7	

MAPID: 16501152000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2210' S line, 2805' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.531157 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796221 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2797.0 **LOG TYPE:**
SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-233.0	CARBONDALE	BRERETON	LIMESTONE	-	658.0	
-1586.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2011.0	
-1983.0			LIMESTONE	-	2408.0	
-2372.0		BASE BARLOW	LIMESTONE	-	2797.0	

MAPID: 16502581000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531794 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.803981 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1570.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	570.0	
-246.0	SPOON	DAVIS	UNCLASSIFIED	-	620.0	
-1196.0	BASE OF PENN.		UNCLASSIFIED	-	1570.0	

MAPID: 16502581000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531794 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.803981 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:**
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	CARBONDALE	BRERETON	LIMESTONE	-	240.0	
-1348.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1722.0	
-1717.0			LIMESTONE	-	2091.0	
-2123.0		BASE BARLOW	LIMESTONE	-	2497.0	

MAPID: 16502581000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531794 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.803981 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC., WOOLARD-JAMES UNIT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-72.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	446.0	
-116.0	CARBONDALE	SURVANT	COAL	0.8	490.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	569.0	
-215.0	CARBONDALE	DEKOVEN	COAL	1.8	589.0	
-236.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	610.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-242.0	CARBONDALE	DAVIS	COAL	3.0	616.0	
-276.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	650.0	
-315.0	TRADEWATER	MT. RORAH	COAL	0.5	689.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502618000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 350' S line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522523 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791043 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2036.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, DAMOSSO 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-97.0	CARBONDALE	SURVANT	COAL	1.3	465.0	
-182.0	CARBONDALE	COLCHESTER	COAL	3.5	550.0	
-206.0	CARBONDALE	DEKOVEN	COAL	3.0	574.0	
-227.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	595.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-242.0	CARBONDALE	DAVIS	COAL	5.0	610.0	
-254.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	622.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-287.0	TRADEWATER	MT. RORAH	COAL	3.0	655.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502618000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 350' S line, 330' E line of SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.522523 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.791043 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2036.0 **LOG TYPE:**

SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	BRERETON	LIMESTONE	-	204.0	
-1318.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1686.0	
-1668.0			LIMESTONE	-	2036.0	

MAPID: 16502753000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.522539 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.794682 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2436.0 **LOG TYPE:** Electric Log

SOURCE: PITTS & BASSFORD, PODORISCKI STEVE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	412.0	
-87.0	CARBONDALE	SURVANT	COAL	1.8	455.0	
-166.0	CARBONDALE	COLCHESTER	COAL	0.5	534.0	
-197.0	CARBONDALE	DEKOVEN	COAL	3.0	565.0	
-217.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	585.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-226.0	CARBONDALE	DAVIS	COAL	4.0	594.0	
-242.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	610.0	
-247.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	615.0	
-277.0	TRADEWATER	MT. RORAH	COAL	3.0	645.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502753000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522539 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794682 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2436.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	BRERETON	LIMESTONE	-	200.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1680.0	
-1678.0			LIMESTONE	-	2046.0	
-2068.0		BASE BARLOW	LIMESTONE	-	2436.0	

MAPID: 16503298000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538756 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800318 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, OGLESBY GEORGE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	425.0	
-90.0	CARBONDALE	SURVANT	COAL	2.0	465.0	
-170.0	CARBONDALE	COLCHESTER	COAL	2.0	545.0	
-207.0	CARBONDALE	DEKOVEN	COAL	1.8	582.0	
-223.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	598.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-230.0	CARBONDALE	DAVIS	COAL	5.0	605.0	
-255.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	
-260.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	635.0	
-305.0	TRADEWATER	MT. RORAH	COAL	1.3	680.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503298000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538756 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800318 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	217.0	
-1340.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1715.0	
-1717.0			LIMESTONE	-	2092.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16503301000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536415 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802129 **DATE COLLECTED:** 8 / 0 / 1959
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1718.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, JAMES HEIRS 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-64.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	437.0	
-105.0	CARBONDALE	SURVANT	COAL	1.3	478.0	
-185.0	CARBONDALE	COLCHESTER	COAL	0.5	558.0	
-212.0	CARBONDALE	DEKOVEN	COAL	2.5	585.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	603.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-238.0	CARBONDALE	DAVIS	COAL	3.8	611.0	
-262.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	635.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503301000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536415 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1718.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	BRERETON	LIMESTONE	-	230.0	
-1345.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	

MAPID: 16503303000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538806 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796628 **DATE COLLECTED:** 10 / 0 / 1959
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, DAUGHERTY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	408.0	
-73.0	CARBONDALE	SURVANT	COAL	1.8	446.0	
-157.0	CARBONDALE	COLCHESTER	COAL	2.0	530.0	
-177.0	CARBONDALE	DEKOVEN	COAL	2.0	550.0	
-199.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	572.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-209.0	CARBONDALE	DAVIS	COAL	5.0	582.0	
-236.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	609.0	
-285.0	TRADEWATER	MT. RORAH	COAL	0.5	658.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503303000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.538806 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796628 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
170.0	CARBONDALE	BRERETON	LIMESTONE	-	204.0	
-1326.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1700.0	
-1701.0			LIMESTONE	-	2075.0	

MAPID: 16503309000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.529513 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.800279 **DATE COLLECTED:** 12 / 0 / 1959

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1708.0 **LOG TYPE:** Electric Log

SOURCE: PORTIS, R. W. DRLG., MCCONNELL K **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	421.0	
-87.0	CARBONDALE	SURVANT	COAL	1.3	460.0	
-157.0	CARBONDALE	COLCHESTER	COAL	0.5	530.0	
-197.0	CARBONDALE	DEKOVEN	COAL	2.5	570.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	595.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-227.0	CARBONDALE	DAVIS	COAL	5.0	600.0	
-239.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	612.0	
-247.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	620.0	
-269.0	TRADEWATER	MT. RORAH	COAL	0.5	642.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503309000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.529513 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.800279 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1708.0 **LOG TYPE:**

SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	215.0	
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1708.0	

MAPID: 16503309000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529513 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800279 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 530.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	HERRIN	COAL	4.0	222.0	
110.0	CARBONDALE	BRIAR HILL	COAL	-	263.0	
36.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	5.5	337.0	INCLUDES A ONE FOOT SHALE PARTING
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	-	422.0	
-157.0	CARBONDALE	COLCHESTER	COAL	-	530.0	

MAPID: 16503323000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.527186 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80305 **DATE COLLECTED:** 6 / 0 / 1960
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., WESLEY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	430.0	
-97.0	CARBONDALE	SURVANT	COAL	0.8	470.0	
-166.0	CARBONDALE	COLCHESTER	COAL	0.5	539.0	
-202.0	CARBONDALE	DEKOVEN	COAL	1.5	575.0	
-227.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	600.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-232.0	CARBONDALE	DAVIS	COAL	3.0	605.0	
-265.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	638.0	
-269.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	642.0	
-287.0	TRADEWATER	MT. RORAH	COAL	1.5	660.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503323000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 660' N line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.527186 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80305 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	BRERETON	LIMESTONE	-	221.0	
-1337.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	

MAPID: 16503365000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534136 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800299 **DATE COLLECTED:** 8 / 0 / 1961
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2084.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO., JAMES **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
-103.0	CARBONDALE	SURVANT	COAL	0.5	479.0	
-184.0	CARBONDALE	COLCHESTER	COAL	3.0	560.0	
-204.0	CARBONDALE	DEKOVEN	COAL	1.3	580.0	
-224.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	600.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-232.0	CARBONDALE	DAVIS	COAL	3.0	608.0	
-244.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	620.0	
-269.0	TRADEWATER	MT. RORAH	COAL	2.5	645.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503365000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534136 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800299 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2084.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1344.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1708.0			LIMESTONE	-	2084.0	

MAPID: 16503365000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534136 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.800299 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 563.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
32.0	CARBONDALE	SPRINGFIELD	COAL	6.0	344.0	
-58.0	CARBONDALE	HOUCHIN CREEK	COAL	-	434.0	
-184.0	CARBONDALE	COLCHESTER	COAL	3.0	560.0	

MAPID: 16503387000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536432 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800307 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1712.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, OGLESBY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	425.0	
-96.0	CARBONDALE	SURVANT	COAL	1.3	468.0	
-171.0	CARBONDALE	COLCHESTER	COAL	0.5	543.0	
-201.0	CARBONDALE	DEKOVEN	COAL	3.0	573.0	
-221.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	593.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-228.0	CARBONDALE	DAVIS	COAL	4.0	600.0	
-258.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503387000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536432 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800307 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1712.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	BRERETON	LIMESTONE	-	220.0	
-1340.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1712.0	

MAPID: 16503430000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531802 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802109 **DATE COLLECTED:** 11 / 0 / 1961
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2104.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO., WOOLARD COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	458.0	
-102.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	578.0	
-202.0	CARBONDALE	DEKOVEN	COAL	3.0	600.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	620.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-232.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-262.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-267.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	665.0	
-303.0	TRADEWATER	MT. RORAH	COAL	1.3	701.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503430000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531802 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802109 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2104.0 **LOG TYPE:**
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1346.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1706.0			LIMESTONE	-	2104.0	

MAPID: 16500128000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545589 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.804064 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 378.5 **LOGGED (FT.):** 411.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.5			UNCONSOLIDATED	72.0	0.0	
306.5			SHALE	28.0	72.0	
278.5			SANDSTONE	35.0	100.0	
243.5			ARGILACEOUS SHALE	25.0	135.0	ARG
218.5	CARBONDALE	ANVIL ROCK	SANDSTONE	80.0	160.0	
138.5	CARBONDALE	BRERETON	LIMESTONE	4.0	240.0	
134.5	CARBONDALE	HERRIN	COAL	3.0	244.0	W/SH
131.5	CARBONDALE		ARGILACEOUS SHALE	43.0	247.0	ARG
88.5	CARBONDALE		SANDSTONE	18.0	290.0	
70.5	CARBONDALE		ARGILACEOUS SHALE	102.0	308.0	ARG
-31.5	CARBONDALE	SPRINGFIELD	COAL	0.0	410.0	CHANNEL-NO COAL
-31.5	CARBONDALE		BLACK SHALE	1.0	410.0	
-32.5	CARBONDALE		SANDSTONE	0.5	411.0	

MAPID: 16500130000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1320' S line, 2640' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.549174 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.793923 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 361.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.0	CARBONDALE	DANVILLE	COAL	2.3	103.0	
208.0	CARBONDALE	HERRIN	COAL	5.5	162.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	2.2	300.0	
47.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	28.0	323.0	
11.0	CARBONDALE	HOUCHIN CREEK	COAL	1.7	359.0	

MAPID: 16500130000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1320' S line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.549174 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.793923 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 167.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.0	MODESTO	PIASA	LIMESTONE	3.0	85.0	
282.0	MODESTO		SHALE	15.0	88.0	
267.0	CARBONDALE	DANVILLE	COAL	2.3	103.0	
264.7	CARBONDALE		SILTY SHALE	24.8	105.3	
240.0	CARBONDALE	LAWSON	DARK GRAY SHALE	0.3	130.0	
239.7	CARBONDALE	LAWSON	COAL	1.7	130.3	
238.0	CARBONDALE	LAWSON	DARK GRAY SHALE	7.0	132.0	
231.0	CARBONDALE	LAWSON	SILTY SHALE	11.0	139.0	
220.0	CARBONDALE	LAWSON	DARK GRAY SHALE	5.5	150.0	
214.5	CARBONDALE	BRERETON	LIMESTONE	6.0	155.5	
208.5	CARBONDALE	ANNA	CALCAREOUS SHALE	0.5	161.5	
208.0	CARBONDALE	HERRIN	COAL	5.5	162.0	

MAPID: 16500130000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1320' S line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.549174 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.793923 **DATE COLLECTED:** 0 / 0 / 1918

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 361.3 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	35.0	0.0	
335.0	MODESTO		SANDY SHALE	11.0	35.0	
324.0	MODESTO		CLAYSTONE	12.0	46.0	
312.0	MODESTO		SHALE	4.0	58.0	
308.0	MODESTO		SANDSTONE	12.0	62.0	
296.0	MODESTO		SHALE	11.0	74.0	DARK
285.0	MODESTO	PIASA	LIMESTONE	3.0	85.0	
282.0	MODESTO		SHALE	1.0	88.0	
281.0	MODESTO		BLACK SHALE	1.0	89.0	
280.0	MODESTO		SHALE	13.0	90.0	
267.0	CARBONDALE	DANVILLE	COAL	2.3	103.0	
264.7	CARBONDALE		UNDERCLAY	0.8	105.3	
264.0	CARBONDALE		SANDY SHALE	24.0	106.0	
240.0	CARBONDALE		SHALE	0.3	130.0	DARK
239.7	CARBONDALE	ALLENBY	COAL	1.7	130.3	
238.0	CARBONDALE	ANVIL ROCK	SHALE	7.0	132.0	DARK
231.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	139.0	
220.0	CARBONDALE	ANVIL ROCK	SHALE	5.5	150.0	DARK
214.5	CARBONDALE	BRERETON	LIMESTONE	6.0	155.5	
208.5	CARBONDALE		CALCAREOUS SHALE	0.5	161.5	CALC
208.0	CARBONDALE	HERRIN	COAL	5.5	162.0	
202.5	CARBONDALE		UNCLASSIFIED	20.5	167.5	
182.0	CARBONDALE		SHALE	8.0	188.0	DARK
174.0	CARBONDALE		SANDY SHALE	4.0	196.0	
170.0	CARBONDALE		SHALE	6.0	200.0	DARK
164.0	CARBONDALE		SANDY SHALE	8.0	206.0	
156.0	CARBONDALE		SHALE	86.4	214.0	DARK
69.6	CARBONDALE	SPRINGFIELD	COAL	2.2	300.4	
67.4	CARBONDALE		SHALE	4.8	302.6	
62.7	CARBONDALE		LIMESTONE	1.7	307.3	
61.0	CARBONDALE		SHALE	3.0	309.0	
58.0	CARBONDALE		SANDY SHALE	11.0	312.0	
47.0	CARBONDALE		SANDSTONE	12.0	323.0	
35.0	CARBONDALE		SANDY SHALE	11.0	335.0	
24.0	CARBONDALE		SANDSTONE	5.0	346.0	
19.0	CARBONDALE		SHALE	5.0	351.0	DARK
14.0	CARBONDALE	EXCELLO	BLACK SHALE	3.2	356.0	
10.8	CARBONDALE	HOUCHIN CREEK	COAL	1.7	359.2	
9.2	CARBONDALE		SANDY SHALE	0.5	360.8	

8.7	CARBONDALE		UNCLASSIFIED	0.0	361.3

MAPID: 16500131000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542314 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.792038 **DATE COLLECTED:** 10 / 0 / 1905
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 304.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	30.0	0.0	
341.0	MODESTO		ARGILACEOUS SHALE	20.0	30.0	ARG
321.0	MODESTO		SANDY SHALE	37.0	50.0	
284.0	MODESTO	PIASA	LIMESTONE	3.5	87.0	
280.5			ARGILACEOUS SHALE	9.5	90.5	ARG
271.0			SHALE	18.0	100.0	DARK
253.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	118.0	
251.0	CARBONDALE		SHALE	20.0	120.0	
231.0	CARBONDALE	ANVIL ROCK	SANDSTONE	36.0	140.0	
195.0	CARBONDALE		SHALE	2.0	176.0	DARK
193.0	CARBONDALE	BRERETON	LIMESTONE	8.0	178.0	
185.0	CARBONDALE	HERRIN	COAL	2.5	186.0	
182.5	CARBONDALE		UNDERCLAY	1.5	188.5	
181.0	CARBONDALE		ARGILACEOUS SHALE	41.0	190.0	ARG
140.0	CARBONDALE		LIMESTONE	4.0	231.0	
136.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	235.0	
126.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	55.0	245.0	ARG
71.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.5	300.0	
68.5	CARBONDALE	SPRINGFIELD	COAL	2.0	302.5	

MAPID: 16500131000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.542314 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.792038 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 304.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
185.0	CARBONDALE	HERRIN	COAL	2.5	186.0	
71.0	CARBONDALE	SPRINGFIELD	COAL	2.5	300.0	

MAPID: 16502402000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.557259 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.793154 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2456.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WHITLOCK C O 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	372.0	
-45.0	CARBONDALE	SURVANT	COAL	0.5	410.0	
-143.0	CARBONDALE	COLCHESTER	COAL	0.5	508.0	
-147.0	CARBONDALE	DEKOVEN	COAL	3.0	512.0	
-163.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	528.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-168.0	CARBONDALE	DAVIS	COAL	3.8	533.0	
-197.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	562.0	
-247.0	TRADEWATER	MT. RORAH	COAL	0.5	612.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502402000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.557259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.793154 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2456.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
201.0	CARBONDALE	BRERETON	LIMESTONE	-	164.0	
-1338.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1703.0	
-1707.0			LIMESTONE	-	2072.0	
-2091.0		BASE BARLOW	LIMESTONE	-	2456.0	

MAPID: 16502427000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545777 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791148 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2490.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	BRERETON	LIMESTONE	-	205.0	
-1323.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	
-1701.0			LIMESTONE	-	2096.0	
-2095.0		BASE BARLOW	LIMESTONE	-	2490.0	

MAPID: 16503090000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552532 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800469 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2499.0 **LOG TYPE:** Electric Log
SOURCE: DOWN STATE DRLG CO, MCCONNELL M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-46.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	415.0	
-91.0	CARBONDALE	SURVANT	COAL	0.5	460.0	
-164.0	CARBONDALE	COLCHESTER	COAL	2.0	533.0	
-199.0	CARBONDALE	DEKOVEN	COAL	3.0	568.0	
-213.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	582.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-221.0	CARBONDALE	DAVIS	COAL	4.0	590.0	
-250.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	619.0	
-300.0	TRADEWATER	MT. RORAH	COAL	1.3	669.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503090000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552532 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800469 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2499.0 **LOG TYPE:**
SOURCE: DOWN STATE DRLG CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	BRERETON	LIMESTONE	-	205.0	
-1362.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1731.0	
-1737.0			LIMESTONE	-	2106.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2499.0	

MAPID: 16503171000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.557055 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804203 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., MCCONNELL-GRANVILLE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	425.0	
-37.0	CARBONDALE	SURVANT	COAL	0.5	412.0	
-167.0	CARBONDALE	COLCHESTER	COAL	1.8	542.0	
-205.0	CARBONDALE	DEKOVEN	COAL	0.0	580.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	595.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-225.0	CARBONDALE	DAVIS	COAL	3.5	600.0	
-255.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	
-310.0	TRADEWATER	MT. RORAH	COAL	1.3	685.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503171000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.557055 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804203 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	BRERETON	LIMESTONE	-	216.0	
-1359.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1734.0	
-1733.0			LIMESTONE	-	2108.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2501.0	

MAPID: 16503171000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.557055 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.804203 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 424.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRIAR HILL	COAL	-	255.0	
15.0	CARBONDALE	SPRINGFIELD	COAL	3.5	360.0	
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	-	424.0	

MAPID: 16503289000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.541053 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.800335 **DATE COLLECTED:** 8 / 0 / 1959
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1566.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-167.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	544.0	
-227.0	SPOON	DAVIS	UNCLASSIFIED	-	604.0	
-1189.0	BASE OF PENN.		UNCLASSIFIED	-	1566.0	

MAPID: 16503289000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.541053 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.800335 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2100.0 **LOG TYPE:**

SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	BRERETON	LIMESTONE	-	221.0	
-1344.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1721.0	
-1723.0			LIMESTONE	-	2100.0	

MAPID: 16503289000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.541053 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.800335 **DATE COLLECTED:** 8 / 0 / 1959

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2100.0 **LOG TYPE:** Electric Log

SOURCE: RUE EDWARD E, WHITLOCK LILLIE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-45.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	422.0	
-83.0	CARBONDALE	SURVANT	COAL	0.5	460.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	547.0	
-221.0	CARBONDALE	DEKOVEN	COAL	3.0	598.0	
-221.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	598.0	
-228.0	CARBONDALE	DAVIS	COAL	4.0	605.0	
-258.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	635.0	
-265.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	642.0	
-305.0	TRADEWATER	MT. RORAH	COAL	2.0	682.0	

MAPID: 16503302000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.543401 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796674 **DATE COLLECTED:** 8 / 0 / 1959
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2105.0 **LOG TYPE:** Electric Log
SOURCE: RUE EDWARD E, VANDERVORD-DAUGHERTY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-26.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-63.0	CARBONDALE	SURVANT	COAL	1.8	455.0	
-158.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-178.0	CARBONDALE	DEKOVEN	COAL	1.5	570.0	
-190.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	582.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-197.0	CARBONDALE	DAVIS	COAL	3.0	589.0	
-229.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	621.0	
-240.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	632.0	
-279.0	TRADEWATER	MT. RORAH	COAL	0.5	671.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503302000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.543401 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2105.0 **LOG TYPE:**
SOURCE: RUE EDWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.0	CARBONDALE	BRERETON	LIMESTONE	-	210.0	
-1338.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1713.0			LIMESTONE	-	2105.0	

MAPID: 16503313000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55247 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804154 **DATE COLLECTED:** 12 / 0 / 1959
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:** Electric Log
SOURCE: FLANNIGAN JAMES W, GLASSCOCK RAYMOND **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	422.0	
-85.0	CARBONDALE	SURVANT	COAL	0.5	460.0	
-160.0	CARBONDALE	COLCHESTER	COAL	2.0	535.0	
-194.0	CARBONDALE	DEKOVEN	COAL	3.0	569.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	590.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-220.0	CARBONDALE	DAVIS	COAL	3.0	595.0	
-245.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	620.0	
-250.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	625.0	
-303.0	TRADEWATER	MT. RORAH	COAL	0.5	678.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503313000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.55247 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804154 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:**
SOURCE: FLANNIGAN JAMES W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
162.0	CARBONDALE	BRERETON	LIMESTONE	-	213.0	
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1736.0			LIMESTONE	-	2111.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2512.0	

MAPID: 16503331000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.541077 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798469 **DATE COLLECTED:** 9 / 0 / 1960
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2103.0 **LOG TYPE:** Electric Log
SOURCE: IMMING WENDELL L, WHITLOCK LILLIE P **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	422.0	
-74.0	CARBONDALE	SURVANT	COAL	0.5	461.0	
-153.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-197.0	CARBONDALE	DEKOVEN	COAL	1.5	584.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	602.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-222.0	CARBONDALE	DAVIS	COAL	4.0	609.0	
-253.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	640.0	
-263.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	650.0	
-301.0	TRADEWATER	MT. RORAH	COAL	0.5	688.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503331000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.541077 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798469 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2103.0 **LOG TYPE:**
SOURCE: IMMING WENDELL L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.0	CARBONDALE	BRERETON	LIMESTONE	-	220.0	
-1345.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1732.0	
-1716.0			LIMESTONE	-	2103.0	

MAPID: 16500133000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567545 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.797846 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 425.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	43.0	0.0	
327.0			ARGILACEOUS SHALE	51.0	43.0	ARG
276.0			LIMESTONE	1.0	94.0	
275.0			ARGILACEOUS SHALE	35.0	95.0	ARG
240.0			SHALE	10.0	130.0	BLUE
230.0			ARGILACEOUS SHALE	55.0	140.0	ARG
175.0			SANDY SHALE	37.5	195.0	
137.5			BLACK SHALE	3.5	232.5	
134.0			ARGILACEOUS SHALE	4.0	236.0	ARG
130.0	CARBONDALE		COAL	1.0	240.0	
129.0	CARBONDALE		ARGILACEOUS SHALE	44.0	241.0	ARG
85.0	CARBONDALE		SANDY SHALE	15.0	285.0	
70.0	CARBONDALE		ARGILACEOUS SHALE	77.5	300.0	ARG
-7.5	CARBONDALE		SHALE	0.5	377.5	
-8.0	CARBONDALE		COAL	0.5	378.0	
-8.5	CARBONDALE		UNDERCLAY	2.0	378.5	
-10.5	CARBONDALE		SANDY SHALE	44.5	380.5	

MAPID: 16500134000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.567437 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.801572 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 354.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	182.0	
151.0	CARBONDALE	HERRIN	COAL	5.4	224.0	
117.0	CARBONDALE	BRIAR HILL	COAL	1.1	258.0	
96.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.0	279.0	
25.0	CARBONDALE	SPRINGFIELD	COAL	2.4	350.0	

MAPID: 16500134000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.567437 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.801572 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 229.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.2	CARBONDALE		SILTY SHALE	15.0	166.8	
193.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	181.8	
187.2	CARBONDALE	LAWSON	DARK GRAY SHALE	3.0	187.8	
184.2	CARBONDALE	LAWSON	SILTY SHALE	25.0	190.8	
159.2	CARBONDALE		DARK GRAY SHALE	0.5	215.8	
158.7	CARBONDALE	BRERETON	LIMESTONE	7.3	216.3	
151.5	CARBONDALE	ANNA	DARK GRAY SHALE	0.5	223.5	
151.0	CARBONDALE	HERRIN	COAL	5.4	224.0	

MAPID: 16500134000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.567437 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.801572 **DATE COLLECTED:** 8 / 5 / 1918

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 354.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	45.0	0.0	
330.0			CLAY	21.0	45.0	
309.0	MODESTO		SHALE	7.0	66.0	
302.0	MODESTO		SHALE	8.5	73.0	DARK
293.5	MODESTO		COAL	0.8	81.5	
292.7	MODESTO		SHALE	1.8	82.3	
291.0	MODESTO		SANDSTONE	16.0	84.0	
275.0	MODESTO		SHALE	5.0	100.0	
270.0	MODESTO		SHALE	23.0	105.0	
247.0	MODESTO		SANDY SHALE	10.0	128.0	
237.0	MODESTO		SHALE	5.0	138.0	
232.0	MODESTO		SANDY SHALE	24.0	143.0	
208.0	MODESTO		SHALE	15.0	167.0	
193.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	182.0	
187.0	CARBONDALE	ANVIL ROCK	SHALE	3.0	188.0	DARK
184.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.0	191.0	
159.0	CARBONDALE	ANVIL ROCK	SHALE	0.5	216.0	DARK
158.5	CARBONDALE	BRERETON	LIMESTONE	7.3	216.5	
151.2	CARBONDALE	ANNA	SHALE	0.5	223.8	DARK
150.7	CARBONDALE	HERRIN	COAL	5.4	224.3	
145.3	CARBONDALE		SHALE	12.3	229.7	
133.0	CARBONDALE		SANDY SHALE	8.0	242.0	
125.0	CARBONDALE		SHALE	8.0	250.0	DARK
117.0	CARBONDALE	BRIAR HILL	COAL	1.1	258.0	
115.9	CARBONDALE		UNDERCLAY	0.9	259.1	
115.0	CARBONDALE		SANDY SHALE	19.0	260.0	
96.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	279.0	
90.0	CARBONDALE	DYKERSBURG	SANDY SHALE	35.0	285.0	
55.0	CARBONDALE	DYKERSBURG	SHALE	30.3	320.0	DARK
24.7	CARBONDALE	SPRINGFIELD	COAL	2.4	350.3	
22.2	CARBONDALE		UNDERCLAY	1.3	352.8	

MAPID: 16500137000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.560718 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.792257 **DATE COLLECTED:** 6 / 0 / 1905

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 371.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3			UNCONSOLIDATED	20.0	0.0	
349.3	MODESTO		SANDSTONE	2.0	20.0	
347.3	MODESTO		CLAYSTONE	59.0	22.0	
288.3	MODESTO		SANDSTONE	2.0	81.0	
286.3	MODESTO		SHALE	2.0	83.0	
284.3	MODESTO	PIASA	LIMESTONE	5.0	85.0	
279.3			ARGILACEOUS SHALE	34.0	90.0	ARG
245.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	124.0	
241.3	CARBONDALE		ARGILACEOUS SHALE	21.0	128.0	ARG
220.3	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	149.0	
213.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	156.0	
207.3	CARBONDALE	ANVIL ROCK	BLACK SHALE	4.0	162.0	
203.3	CARBONDALE	BRERETON	LIMESTONE	5.0	166.0	
198.3	CARBONDALE	HERRIN	COAL	5.5	171.0	
192.8	CARBONDALE		SHALE	28.0	176.5	
164.8	CARBONDALE		BLACK SHALE	6.5	204.5	
158.3	CARBONDALE		SANDSTONE	5.0	211.0	
153.3	CARBONDALE	BRIAR HILL	COAL	0.5	216.0	
152.8	CARBONDALE		ARGILACEOUS SHALE	15.5	216.5	ARG
137.3	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	232.0	
131.3	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	58.0	238.0	LOG REPORTED 68',238 TO 296
73.3	CARBONDALE	DYKERSBURG	BLACK SHALE	1.5	296.0	
71.8	CARBONDALE	DYKERSBURG	LIMESTONE	0.5	297.5	
71.3	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	5.0	298.0	ARG
66.3	CARBONDALE	SPRINGFIELD	COAL	1.0	303.0	
65.3	CARBONDALE		SHALE	12.0	304.0	
53.3	CARBONDALE		SHALE	21.0	316.0	
32.3	CARBONDALE		SANDY SHALE	20.0	337.0	
12.3	CARBONDALE		ARGILACEOUS SHALE	2.0	357.0	ARG
10.3	CARBONDALE	EXCELLO	BLACK SHALE	8.0	359.0	
2.3	CARBONDALE	HOUCHIN CREEK	COAL	3.0	367.0	
-0.7	CARBONDALE		UNDERCLAY	1.0	370.0	

MAPID: 16500137000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.560718 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.792257 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 425.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	CARBONDALE	HERRIN	COAL	5.5	171.0	
153.0	CARBONDALE	BRIAR HILL	COAL	0.5	216.0	
66.0	CARBONDALE	SPRINGFIELD	COAL	0.5	303.0	
2.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	367.0	

MAPID: 16502584000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.575643 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.791448 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1552.0 **LOG TYPE:** Electric Log

SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-152.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	520.0	
-218.0	SPOON	DAVIS	UNCLASSIFIED	-	586.0	
-1184.0	BASE OF PENN.		UNCLASSIFIED	-	1552.0	

MAPID: 16502584000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.575643 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.791448 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:**

SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	BRERETON	LIMESTONE	-	204.0	
-1331.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1699.0	
-1719.0			LIMESTONE	-	2087.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2506.0	

MAPID: 16502584000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.575643 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791448 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., BARNES GEORGE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	403.0	
-84.0	CARBONDALE	SURVANT	COAL	0.5	452.0	
-151.0	CARBONDALE	COLCHESTER	COAL	2.5	519.0	
-172.0	CARBONDALE	DEKOVEN	COAL	0.0	540.0	
-207.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	575.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-216.0	CARBONDALE	DAVIS	COAL	4.0	584.0	
-242.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	610.0	
-302.0	TRADEWATER	MT. RORAH	COAL	1.3	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502584000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.575643 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.791448 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 588.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
157.0	CARBONDALE	HERRIN	COAL	-	211.0	
122.0	CARBONDALE	BRIAR HILL	COAL	-	246.0	
50.5	CARBONDALE	SPRINGFIELD	COAL	5.0	317.5	
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	-	403.0	
-151.0	CARBONDALE	COLCHESTER	COAL	1.5	519.0	
-215.0	SPOON	DAVIS	COAL	5.0	583.0	

MAPID: 16503150000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.559352 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804228 **DATE COLLECTED:** 9 / 0 / 1957
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2499.0 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP., MCCONNELL ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	423.0	
-192.0	CARBONDALE	SURVANT	COAL	0.5	565.0	
-167.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-190.0	CARBONDALE	DEKOVEN	COAL	0.0	563.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	595.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-227.0	CARBONDALE	DAVIS	COAL	3.0	600.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	
-262.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	635.0	
-307.0	TRADEWATER	MT. RORAH	COAL	1.3	680.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503150000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.559352 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804228 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2499.0 **LOG TYPE:**
SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	CARBONDALE	BRERETON	LIMESTONE	-	215.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1731.0	
-1734.0			LIMESTONE	-	2107.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2499.0	

MAPID: 16503152000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.55942 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800545 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., MCCONNELL-SIMPSON 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-43.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	415.0	
-83.0	CARBONDALE	SURVANT	COAL	0.5	455.0	
-158.0	CARBONDALE	COLCHESTER	COAL	1.2	530.0	
-182.0	CARBONDALE	DEKOVEN	COAL	0.0	554.0	
-213.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	585.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-221.0	CARBONDALE	DAVIS	COAL	3.8	593.0	
-248.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	620.0	
-298.0	TRADEWATER	MT. RORAH	COAL	0.5	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503152000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.55942 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	BRERETON	LIMESTONE	-	208.0	
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1725.0	
-1726.0			LIMESTONE	-	2098.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2486.0	

MAPID: 16503168000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566388 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	BRERETON	LIMESTONE	-	215.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1718.0	
-1731.0			LIMESTONE	-	2098.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2506.0	

MAPID: 16503243000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568664 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800629 **DATE COLLECTED:** 11 / 0 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:** Electric Log
SOURCE: R. K. PETROLEUM CORP., FIFE WILLIAM ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-46.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-88.0	CARBONDALE	SURVANT	COAL	0.5	460.0	
-163.0	CARBONDALE	COLCHESTER	COAL	0.5	535.0	
-185.0	CARBONDALE	DEKOVEN	COAL	0.0	557.0	
-223.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	595.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-228.0	CARBONDALE	DAVIS	COAL	4.0	600.0	
-258.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503243000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568664 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800629 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:**
SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
157.0	CARBONDALE	BRERETON	LIMESTONE	-	215.0	
-1347.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1719.0	
-1725.0			LIMESTONE	-	2097.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2506.0	

MAPID: 16503465000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566429 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.795059 **DATE COLLECTED:** 8 / 0 / 1963
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2082.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, GLASSCOCK GEORGE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-19.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	389.0	
-60.0	CARBONDALE	SURVANT	COAL	0.5	430.0	
-138.0	CARBONDALE	COLCHESTER	COAL	2.0	508.0	
-160.0	CARBONDALE	DEKOVEN	COAL	0.0	530.0	
-193.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	563.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-200.0	CARBONDALE	DAVIS	COAL	5.0	570.0	
-222.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	592.0	
-250.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	620.0	
-280.0	TRADEWATER	MT. RORAH	COAL	0.5	650.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503465000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.566429 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.795059 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2082.0 **LOG TYPE:**

SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
181.0	CARBONDALE	BRERETON	LIMESTONE	-	189.0	
-1324.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1694.0	
-1712.0			LIMESTONE	-	2082.0	

MAPID: 16500139000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.596573 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.805458 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 417.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
172.0	CARBONDALE	DANVILLE	COAL	2.0	198.0	
157.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	213.0	
137.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	233.0	
94.0	CARBONDALE	HERRIN	COAL	5.5	276.0	
63.0	CARBONDALE	BRIAR HILL	COAL	1.2	307.0	
-40.0	CARBONDALE	SPRINGFIELD	COAL	5.2	410.0	

MAPID: 16500139000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.596573 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.805458 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 282.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
187.5	MODESTO	PIASA	LIMESTONE & SHALE	4.0	182.5	
183.5	MODESTO		DARK GRAY SHALE	12.0	186.5	
171.5	CARBONDALE	DANVILLE	COAL	2.0	198.5	
169.5	CARBONDALE		SHALE & SANDSTONE	21.0	200.5	
148.5	CARBONDALE	GALUM	CALCAREOUS SHALE	6.0	221.5	
142.5	CARBONDALE		DARK GRAY SHALE	6.0	227.5	
136.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	233.5	
130.0	CARBONDALE	LAWSON	DARK GRAY SHALE	2.5	240.0	
127.5	CARBONDALE	LAWSON	SILTY SHALE	23.0	242.5	
104.5	CARBONDALE	ANNA	BLACK SHALE	3.0	265.5	
101.5	CARBONDALE	ENERGY	DARK GRAY SHALE	8.5	268.5	
93.0	CARBONDALE	HERRIN	COAL	5.5	277.0	

MAPID: 16500139000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.596573 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.805458 **DATE COLLECTED:** 8 / 15 / 1918

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 417.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	63.0	0.0	
307.0	MODESTO		SHALE	7.0	63.0	
300.0	MODESTO		SHALE	15.0	70.0	
285.0	MODESTO		SHALE	18.0	85.0	DARK
267.0	MODESTO		COAL	0.3	103.0	
266.7	MODESTO		SHALE	8.8	103.3	
258.0	MODESTO		SHALE	15.0	112.0	DARK
243.0	MODESTO		COAL	1.0	127.0	
242.0	MODESTO		UNCLASSIFIED	6.0	128.0	
236.0	MODESTO		SHALE	12.0	134.0	
224.0	MODESTO		LIMESTONE	2.0	146.0	
222.0	MODESTO		SHALE	2.0	148.0	
220.0	MODESTO		SANDSTONE	10.0	150.0	
210.0	MODESTO		SANDY SHALE	5.0	160.0	
205.0	MODESTO		SHALE	16.5	165.0	DARK
188.5	MODESTO		COAL	0.5	181.5	
188.0	MODESTO	PIASA	LIMESTONE	2.5	182.0	
185.5	MODESTO		CALCAREOUS SHALE	1.5	184.5	CALC
184.0	MODESTO		SHALE	4.0	186.0	
180.0	MODESTO		SHALE	8.0	190.0	DARK
172.0	CARBONDALE	DANVILLE	COAL	2.0	198.0	
170.0	CARBONDALE		SANDY SHALE	13.0	200.0	
157.0	CARBONDALE		SANDSTONE	5.0	213.0	
152.0	CARBONDALE		SHALE	3.0	218.0	DARK
149.0	CARBONDALE		CALCAREOUS SHALE	6.0	221.0	CALC
143.0	CARBONDALE		SHALE	6.0	227.0	DARK
137.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	233.0	
130.5	CARBONDALE	ANVIL ROCK	SHALE	2.5	239.5	DARK
128.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.0	242.0	
105.0	CARBONDALE	ANNA	BLACK SHALE	3.0	265.0	
102.0	CARBONDALE	ANNA	SHALE	8.5	268.0	DARK
93.5	CARBONDALE	HERRIN	COAL	5.5	276.5	
88.0	CARBONDALE		UNDERCLAY	1.5	282.0	
86.5	CARBONDALE		SANDY SHALE	16.5	283.5	
70.0	CARBONDALE		SHALE	7.2	300.0	DARK
62.8	CARBONDALE	BRIAR HILL	COAL	1.2	307.2	
61.7	CARBONDALE	DYKERSBURG	SANDY SHALE	101.9	308.3	
-40.3	CARBONDALE	SPRINGFIELD	COAL	5.2	410.3	
-45.4	CARBONDALE		SANDY SHALE	1.6	415.4	

MAPID: 16503009000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.582872 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800744 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., WILSON S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	424.0	
-94.0	CARBONDALE	SURVANT	COAL	1.0	465.0	
-161.0	CARBONDALE	COLCHESTER	COAL	0.5	532.0	
-197.0	CARBONDALE	DEKOVEN	COAL	3.0	568.0	
-211.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	582.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-219.0	CARBONDALE	DAVIS	COAL	5.0	590.0	
-249.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	620.0	
-269.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	640.0	
-299.0	TRADEWATER	MT. RORAH	COAL	1.3	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503009000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.582872 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	232.0	
-1345.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1716.0	
-1711.0			LIMESTONE	-	2082.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16503116000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.587862 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.795199 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:**
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	BRERETON	LIMESTONE	-	216.0	
-1333.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1705.0	
-1707.0			LIMESTONE	-	2079.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2510.0	

MAPID: 16503118000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.577899 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804356 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:** Electric Log
SOURCE: BREUER & CURREN OIL, THOMPSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-126.0	CARBONDALE	SURVANT	COAL	0.5	505.0	
-183.0	CARBONDALE	COLCHESTER	COAL	0.5	562.0	
-219.0	CARBONDALE	DEKOVEN	COAL	2.5	598.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	620.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-251.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	658.0	
-286.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	665.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503118000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.577899 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.804356 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**

SOURCE: BREUER & CURREN OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16503148000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.590511 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.798914 **DATE COLLECTED:** 3 / 0 / 1958

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:** Electric Log

SOURCE: SLAGTER PRODUCING CO., WILSON STANLEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-62.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	433.0	
-101.0	CARBONDALE	SURVANT	COAL	0.5	472.0	
-174.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-199.0	CARBONDALE	DEKOVEN	COAL	2.8	570.0	
-219.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	590.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-226.0	CARBONDALE	DAVIS	COAL	3.5	597.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	628.0	
-277.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	648.0	
-302.0	TRADEWATER	MT. RORAH	COAL	1.5	673.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503148000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590511 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	BRERETON	LIMESTONE	-	242.0	
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1681.0	
-1723.0			LIMESTONE	-	2094.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2511.0	

MAPID: 16503160000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.585518 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804462 **DATE COLLECTED:** 3 / 0 / 1958
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., RAPP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-68.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	447.0	
-109.0	CARBONDALE	SURVANT	COAL	1.5	488.0	
-172.0	CARBONDALE	COLCHESTER	COAL	0.5	551.0	
-211.0	CARBONDALE	DEKOVEN	COAL	1.8	590.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	610.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-237.0	CARBONDALE	DAVIS	COAL	4.0	616.0	
-321.0	TRADEWATER	MT. RORAH	COAL	0.5	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503160000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.585518 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804462 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	BRERETON	LIMESTONE	-	256.0	
-1341.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1720.0	
-1721.0			LIMESTONE	-	2100.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16503174000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.592797 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800812 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2492.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., SIMPSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-68.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	440.0	
-108.0	CARBONDALE	SURVANT	COAL	0.5	480.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-211.0	CARBONDALE	DEKOVEN	COAL	3.0	583.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	603.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-238.0	CARBONDALE	DAVIS	COAL	3.0	610.0	
-270.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	642.0	
-278.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	650.0	
-318.0	TRADEWATER	MT. RORAH	COAL	1.3	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503174000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.592797 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800812 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2492.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1318.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1690.0	
-1720.0			LIMESTONE	-	2092.0	
-2120.0		BASE BARLOW	LIMESTONE	-	2492.0	

MAPID: 16503193000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590488 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802677 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, RAPP 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	447.0	
-117.0	CARBONDALE	SURVANT	COAL	1.0	489.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	552.0	
-218.0	CARBONDALE	DEKOVEN	COAL	3.0	590.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	610.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-245.0	CARBONDALE	DAVIS	COAL	4.0	617.0	
-277.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	649.0	
-323.0	TRADEWATER	MT. RORAH	COAL	1.3	695.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503193000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590488 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802677 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	BRERETON	LIMESTONE	-	254.0	
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1684.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16503214000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595449 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802716 **DATE COLLECTED:** 10 / 0 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:** Electric Log
SOURCE: SLAGTER PRODUCING CO., MURPHY WILLIAM ET **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-128.0	CARBONDALE	SURVANT	COAL	1.0	500.0	
-198.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-218.0	CARBONDALE	DEKOVEN	COAL	0.8	590.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	615.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-248.0	CARBONDALE	DAVIS	COAL	4.0	620.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	655.0	
-296.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	668.0	
-333.0	TRADEWATER	MT. RORAH	COAL	1.0	705.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503214000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.595449 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802716 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:**
SOURCE: SLAGTER PRODUCING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	263.0	
-1326.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1698.0	
-1701.0			LIMESTONE	-	2073.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2501.0	

MAPID: 16503288000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.57792 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.797021 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., BARNES GEORGE ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	420.0	
-92.0	CARBONDALE	SURVANT	COAL	2.5	464.0	
-163.0	CARBONDALE	COLCHESTER	COAL	0.5	535.0	
-193.0	CARBONDALE	DEKOVEN	COAL	0.0	565.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	587.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-222.0	CARBONDALE	DAVIS	COAL	4.0	594.0	
-256.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	628.0	
-298.0	TRADEWATER	MT. RORAH	COAL	1.3	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503288000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.57792 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.797021 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 317.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	224.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1715.0	
-1782.0			LIMESTONE	-	2099.0	
-2199.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16503288000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.57792 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.797021 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 548.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	HERRIN	COAL	4.0	233.0	
102.0	CARBONDALE	BRIAR HILL	COAL	-	270.0	
26.0	CARBONDALE	SPRINGFIELD	COAL	5.0	346.0	
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	-	420.0	
-176.0	CARBONDALE	COLCHESTER	COAL	-	548.0	

MAPID: 16503327000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.585566 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.795189 **DATE COLLECTED:** 7 / 0 / 1960
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:** Electric Log
SOURCE: WEAL DRLG CO, BARNES GEORGE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-28.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-68.0	CARBONDALE	SURVANT	COAL	0.5	485.0	
-143.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-163.0	CARBONDALE	DEKOVEN	COAL	0.5	580.0	
-193.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-201.0	CARBONDALE	DAVIS	COAL	4.0	618.0	
-232.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	649.0	
-235.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	652.0	
-256.0	TRADEWATER	MT. RORAH	COAL	0.5	673.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503327000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.585566 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.795189 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: WEAL DRLG CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
161.0	CARBONDALE	BRERETON	LIMESTONE	-	256.0	
-1333.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1713.0			LIMESTONE	-	2130.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16503327000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.585566 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.795189 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 560.0 **LOG TYPE:** Electric Log
SOURCE: WEAL DRLG CO 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HERRIN	COAL	-	267.0	
28.0	CARBONDALE	SPRINGFIELD	COAL	7.5	389.0	
-26.0	CARBONDALE	HOUCHIN CREEK	COAL	-	443.0	
-143.0	CARBONDALE	COLCHESTER	COAL	-	560.0	

MAPID: 16523870000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 660' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.594298 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.802643 **DATE COLLECTED:** 10 / 0 / 1974
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1670.0 **LOG TYPE:** Electric Log
SOURCE: HISEY, W. M. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	575.0	
-244.0	SPOON	DAVIS	UNCLASSIFIED	-	620.0	
-1294.0	BASE OF PENN.		UNCLASSIFIED	-	1670.0	

MAPID: 16502679000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 338' S line, 990' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593303 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.784122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
156.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1319.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1721.0			LIMESTONE	-	2152.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2560.0	

MAPID: 16502679000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 338' S line, 990' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593303 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.784122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 290.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	MODESTO	PIASA	LIMESTONE & SHALE	13.0	190.0	
228.0	MODESTO		SHALE	12.0	203.0	
216.0	CARBONDALE	DANVILLE	COAL	1.0	215.0	
215.0	CARBONDALE		SILTY SHALE	11.0	216.0	
204.0	CARBONDALE	GALUM	LIMESTONE & SHALE	3.0	227.0	
201.0	CARBONDALE		SHALE	0.5	230.0	
200.5	CARBONDALE	ALLENBY	COAL	0.5	230.5	
200.0	CARBONDALE		CLAYSTONE	9.0	231.0	
191.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	240.0	
186.0	CARBONDALE	LAWSON	CLAYSTONE	3.0	245.0	
183.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	14.0	248.0	
169.0	CARBONDALE	LAWSON	SILTY SHALE	14.0	262.0	
155.0	CARBONDALE	BRERETON	LIMESTONE	7.0	276.0	
148.0	CARBONDALE	ANNA	BLACK SHALE	2.0	283.0	
146.0	CARBONDALE	HERRIN	COAL	5.0	285.0	

MAPID: 16502679000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 338' S line, 990' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593303 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.784122 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-159.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	590.0	
-219.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1169.0	BASE OF PENN.		UNCLASSIFIED	-	1600.0	

MAPID: 16502679000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 338' S line, 990' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593303 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.784122 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 290.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, BARNES HAROLD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	468.0	
-79.0	CARBONDALE	SURVANT	COAL	1.0	510.0	
-157.0	CARBONDALE	COLCHESTER	COAL	0.5	588.0	
-179.0	CARBONDALE	DEKOVEN	COAL	0.0	610.0	
-209.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-218.0	CARBONDALE	DAVIS	COAL	4.0	649.0	
-238.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	669.0	
-244.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	675.0	
-289.0	TRADEWATER	MT. RORAH	COAL	1.3	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502679000C **VERSION:** 5 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 338' S line, 990' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.593303 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.784122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 587.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
146.0	CARBONDALE	HERRIN	COAL	5.0	285.0	
3.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	5.5	428.0	
-36.0	CARBONDALE	HOUCHIN CREEK	COAL	-	467.0	
-156.0	CARBONDALE	COLCHESTER	COAL	-	587.0	

MAPID: 16500141000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.567687 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.786829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.0	CARBONDALE	DANVILLE	COAL	2.0	90.0	
271.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	12.0	94.0	
251.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	114.0	
236.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	129.0	
207.0	CARBONDALE	HERRIN	COAL	4.8	158.0	
171.0	CARBONDALE	BRIAR HILL	COAL	1.2	194.0	
168.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	10.0	197.0	
96.0	CARBONDALE	SPRINGFIELD	COAL	3.8	269.0	
92.0	CARBONDALE	SS BELOW NO. 5		-	273.0	

MAPID: 16500141000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.567687 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.786829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 162.8 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
292.8	MODESTO	PIASA	LIMESTONE	3.0	72.2	
289.8	MODESTO		DARK GRAY SHALE	15.5	75.2	
274.3	CARBONDALE	DANVILLE	COAL	2.0	90.7	
272.3	CARBONDALE		SHALE & SANDSTONE	15.7	92.7	
256.7	CARBONDALE	ALLENBY	COAL	0.3	108.3	
256.3	CARBONDALE		CLAYSTONE	5.0	108.7	
251.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	113.7	
246.3	CARBONDALE	LAWSON	SHALE	10.5	118.7	
235.8	CARBONDALE	LAWSON	SANDSTONE	7.0	129.2	
228.8	CARBONDALE	LAWSON	DARK GRAY SHALE	14.0	136.2	
214.8	CARBONDALE	LAWSON	SANDSTONE	2.0	150.2	
212.8	CARBONDALE	BRERETON	LIMESTONE	5.0	152.2	
207.8	CARBONDALE	ANNA	BLACK SHALE	0.8	157.2	
207.0	CARBONDALE	HERRIN	COAL	4.8	158.0	

MAPID: 16500141000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.567687 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.786829 **DATE COLLECTED:** 7 / 25 / 1918

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 274.7 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	57.0	0.0	
308.0	MODESTO		SHALE	15.0	57.0	
293.0	MODESTO	PIASA	LIMESTONE	3.0	72.0	
290.0	MODESTO		BLACK SHALE	5.0	75.0	
285.0	MODESTO		SHALE	10.5	80.0	
274.5	CARBONDALE		COAL	2.0	90.5	
272.5	CARBONDALE		SHALE	2.0	92.5	
270.5	CARBONDALE		SANDSTONE	4.5	94.5	
266.0	CARBONDALE		SHALE	2.0	99.0	DARK
264.0	CARBONDALE		SANDSTONE	6.6	101.0	
257.4	CARBONDALE		SHALE	0.7	107.6	
256.8	CARBONDALE	ALLENBY	COAL	0.3	108.2	
256.5	CARBONDALE		UNDERCLAY	5.0	108.5	
251.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	113.5	
246.5	CARBONDALE	ANVIL ROCK	SHALE	10.5	118.5	
236.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	129.0	
229.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	136.0	
225.0	CARBONDALE	ANVIL ROCK	SHALE	10.0	140.0	DARK
215.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	150.0	
213.0	CARBONDALE	BRERETON	LIMESTONE	5.0	152.0	
208.0	CARBONDALE	ANNA	BLACK SHALE	0.8	157.0	
207.2	CARBONDALE	HERRIN	COAL	4.8	157.8	
202.3	CARBONDALE		UNDERCLAY	3.0	162.7	
199.3	CARBONDALE		CALCAREOUS SHALE	3.3	165.7	CALC
196.0	CARBONDALE		SANDY SHALE	8.0	169.0	
188.0	CARBONDALE		SHALE	16.8	177.0	
171.2	CARBONDALE	BRIAR HILL	COAL	1.2	193.8	
170.0	CARBONDALE		SHALE	2.0	195.0	DARK
168.0	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	197.0	
158.0	CARBONDALE	DYKERSBURG	SANDY SHALE	58.0	207.0	
100.0	CARBONDALE	DYKERSBURG	SHALE	3.7	265.0	DARK
96.3	CARBONDALE	DYKERSBURG	SHALE	0.7	268.7	
95.7	CARBONDALE	SPRINGFIELD	COAL	3.8	269.3	
91.8	CARBONDALE		UNDERCLAY	0.8	273.2	
91.0	CARBONDALE		SANDSTONE	0.7	274.0	
90.3	CARBONDALE		UNCLASSIFIED	0.0	274.7	

MAPID: 16503077000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571327 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.776699 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1490.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	450.0	
-152.0	SPOON	DAVIS	UNCLASSIFIED	-	520.0	
-1122.0	BASE OF PENN.		UNCLASSIFIED	-	1490.0	

MAPID: 16503077000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571327 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.776699 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2432.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.0	CARBONDALE	BRERETON	LIMESTONE	-	137.0	
-1279.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1647.0	
-1682.0			LIMESTONE	-	2050.0	
-2064.0		BASE BARLOW	LIMESTONE	-	2432.0	

MAPID: 16503077000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571327 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.776699 **DATE COLLECTED:** 12 / 0 / 1956
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2432.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BARNES **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	335.0	
-12.0	CARBONDALE	SURVANT	COAL	2.0	380.0	
-81.0	CARBONDALE	COLCHESTER	COAL	0.5	449.0	
-112.0	CARBONDALE	DEKOVEN	COAL	1.8	480.0	
-142.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	510.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-149.0	CARBONDALE	DAVIS	COAL	4.0	517.0	
-182.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	550.0	
-190.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	558.0	
-242.0	TRADEWATER	MT. RORAH	COAL	0.5	610.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503077000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571327 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.776699 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 447.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
223.0	CARBONDALE	HERRIN	COAL	-	145.0	
181.0	CARBONDALE	BRIAR HILL	COAL	-	187.0	
86.0	CARBONDALE	SPRINGFIELD	COAL	8.0	282.0	
34.0	CARBONDALE	HOUCHIN CREEK	COAL	-	334.0	
-79.0	CARBONDALE	COLCHESTER	COAL	-	447.0	

MAPID: 16503290000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571116 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787734 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2496.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., BARNES-ZUGEL COMM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	382.0	
-60.0	CARBONDALE	SURVANT	COAL	1.3	428.0	
-142.0	CARBONDALE	COLCHESTER	COAL	2.5	510.0	
-162.0	CARBONDALE	DEKOVEN	COAL	0.0	530.0	
-192.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	560.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-200.0	CARBONDALE	DAVIS	COAL	2.5	568.0	
-232.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	600.0	
-285.0	TRADEWATER	MT. RORAH	COAL	0.5	653.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503290000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571116 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787734 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2496.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
185.0	CARBONDALE	BRERETON	LIMESTONE	-	183.0	
-1308.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1676.0	
-2128.0		BASE BARLOW	LIMESTONE	-	2496.0	

MAPID: 16590111000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572116 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.779491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.2 **LOGGED (FT.):** 165.0 **LOG TYPE:** Company map
SOURCE: AMAX X-53 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
207.2	CARBONDALE	HERRIN	COAL	5.0	160.0	

MAPID: 16500142000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 660' S line, 660' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.542488 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.777427 **DATE COLLECTED:** 1 / 0 / 1906

SURFACE ELEVATION (FT.): 361.5 **LOGGED (FT.):** 283.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.5			UNCONSOLIDATED	61.5	0.0	
300.0	MODESTO		SANDSTONE	13.0	61.5	
287.0	MODESTO		CLAYSTONE	16.0	74.5	
271.0	MODESTO		SANDSTONE	6.0	90.5	
265.0	MODESTO		BLACK SHALE	2.5	96.5	
262.5	CARBONDALE	DANVILLE	COAL	2.0	99.0	
260.5	CARBONDALE		UNDERCLAY	5.8	101.0	
254.7	CARBONDALE		BLACK SHALE	2.3	106.8	
252.5	CARBONDALE		SANDSTONE	4.6	109.0	
247.9	CARBONDALE	ALLENBY	BONE COAL	0.4	113.6	
247.5	CARBONDALE		UNDERCLAY	5.8	114.0	
241.7	CARBONDALE	BANKSTON FORK	LIMESTONE	9.2	119.8	
232.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.6	129.0	
225.9	CARBONDALE	ANNA	BLACK SHALE	24.4	135.6	
201.5	CARBONDALE	HERRIN	COAL	4.8	160.0	
196.7	CARBONDALE		UNDERCLAY	3.2	164.8	
193.5	CARBONDALE		SANDSTONE	12.0	168.0	
181.5	CARBONDALE		SANDSTONE	13.5	180.0	
168.0	CARBONDALE		SANDY SHALE	9.0	193.5	
159.0	CARBONDALE		BLACK SHALE	6.6	202.5	
152.5	CARBONDALE	BRIAR HILL	COAL	1.0	209.0	
151.5	CARBONDALE		UNDERCLAY	1.0	210.0	
150.5	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	211.0	
147.5	CARBONDALE	DYKERSBURG	SANDY SHALE	63.0	214.0	
84.5	CARBONDALE	SPRINGFIELD	COAL	5.0	277.0	
79.5	CARBONDALE		UNDERCLAY	1.0	282.0	

MAPID: 16500142000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 660' S line, 660' E line

QUADRANGLE: GALATIA **LONGITUDE:** -88.542488 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777427 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 164.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.5	MODESTO		BLACK SHALE	2.5	96.5	
263.0	CARBONDALE	DANVILLE	COAL	2.0	99.0	
261.0	CARBONDALE		SHALE & SANDSTONE	12.6	101.0	
248.4	CARBONDALE	ALLENBY	BONE COAL	0.4	113.6	
248.0	CARBONDALE		CLAYSTONE	5.8	114.0	
242.2	CARBONDALE	BANKSTON FORK	LIMESTONE	9.2	119.8	
233.0	CARBONDALE	LAWSON	SANDSTONE	6.6	129.0	
226.4	CARBONDALE	LAWSON	DARK GRAY SHALE	24.4	135.6	
202.0	CARBONDALE	HERRIN	COAL	4.8	160.0	

MAPID: 16500143000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.555098 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.78394 **DATE COLLECTED:** 7 / 15 / 1918

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 407.0 **LOG TYPE:** Drillers Log

SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCONSOLIDATED	64.0	0.0	
291.0	MODESTO		SHALE	11.0	64.0	
280.0	MODESTO		SHALE	4.0	75.0	DARK
276.0	MODESTO	PIASA	LIMESTONE	1.5	79.0	
274.5	MODESTO		SHALE	16.8	80.5	DARK
257.7	CARBONDALE	DANVILLE	COAL	2.0	97.3	
255.7	CARBONDALE		SANDY SHALE	8.8	99.3	
247.0	CARBONDALE		SHALE	4.3	108.0	
242.7	CARBONDALE	ALLENBY	COAL	0.4	112.3	
242.3	CARBONDALE		SHALE	4.3	112.7	
238.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	117.0	
232.0	CARBONDALE	ANVIL ROCK	SHALE	1.0	123.0	
231.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	124.0	
227.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	128.0	
225.0	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	130.0	
208.0	CARBONDALE	ANVIL ROCK	SHALE	7.0	147.0	DARK
201.0	CARBONDALE	BRERETON	LIMESTONE	7.0	154.0	
194.0	CARBONDALE	ANNA	SHALE	1.0	161.0	
193.0	CARBONDALE	HERRIN	COAL	2.3	162.0	
190.7	CARBONDALE		SHALE	3.7	164.3	DARK
187.0	CARBONDALE		SANDSTONE	10.0	168.0	
177.0	CARBONDALE		SANDY SHALE	24.0	178.0	
153.0	CARBONDALE	BRIAR HILL	COAL	2.7	202.0	
150.3	CARBONDALE	DYKERSBURG	SANDSTONE	0.3	204.7	
150.0	CARBONDALE	DYKERSBURG	SANDY SHALE	57.0	205.0	DARK
93.0	CARBONDALE	DYKERSBURG	SHALE	17.7	262.0	DARK
75.3	CARBONDALE	SPRINGFIELD	COAL	4.3	279.7	
71.0	CARBONDALE		UNDERCLAY	1.0	284.0	
70.0	CARBONDALE		LIMESTONE	7.0	285.0	
63.0	CARBONDALE		SANDSTONE	9.0	292.0	
54.0	CARBONDALE		CALCAREOUS SHALE	5.0	301.0	CALC
49.0	CARBONDALE		SANDY SHALE	32.0	306.0	
17.0	CARBONDALE		SANDY SHALE	15.0	338.0	DARK
2.0	CARBONDALE		SANDSTONE	2.0	353.0	
0.0	CARBONDALE	EXCELLO	BLACK SHALE	6.3	355.0	
-6.3	CARBONDALE	HOUCHIN CREEK	COAL	1.8	361.3	
-8.2	CARBONDALE		SHALE	1.8	363.2	
-10.0	CARBONDALE		SANDSTONE	10.0	365.0	
-20.0	CARBONDALE		SANDY SHALE	18.0	375.0	

-38.0	CARBONDALE		SHALE	11.3	393.0	DARK
-49.3	CARBONDALE	SURVANT	COAL	1.2	404.3	
-50.5	CARBONDALE		CALCAREOUS SHALE	1.5	405.5	CALC

MAPID: 16500143000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.555098 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.78394 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 407.0 **LOG TYPE:** Drillers Log
SOURCE: BIG CREEK COALS, INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.0	CARBONDALE	HERRIN	COAL	2.3	162.0	
153.0	CARBONDALE	BRIAR HILL	COAL	2.3	202.0	
76.0	CARBONDALE	SPRINGFIELD	COAL	4.3	279.0	
-6.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	361.0	

MAPID: 16501527000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.543672 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.776523 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2028.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
206.0	CARBONDALE	BRERETON	LIMESTONE	-	156.0	
-1305.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1667.0	
-1666.0			LIMESTONE	-	2028.0	

MAPID: 16501527000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.543672 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.776523 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2255.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	DANVILLE	COAL	-	102.0	
256.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	106.0	
238.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	124.0	
226.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	6.0	136.0	
198.0	CARBONDALE	HERRIN	COAL	4.0	164.0	
189.0	CARBONDALE	VERMILIONVILLE	SILTSTONE & SHALE	19.0	173.0	
149.0	CARBONDALE	BRIAR HILL	COAL	-	213.0	
80.0	CARBONDALE	SPRINGFIELD	COAL	4.0	282.0	
69.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE	21.0	293.0	
2.0	CARBONDALE	HOUCHIN CREEK	COAL	-	360.0	

MAPID: 16501527000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.543672 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.776523 **DATE COLLECTED:** 3 / 0 / 1953

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2028.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-3.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	365.0	
-41.0	CARBONDALE	SURVANT	COAL	1.8	403.0	
-117.0	CARBONDALE	COLCHESTER	COAL	0.5	479.0	
-152.0	CARBONDALE	DEKOVEN	COAL	2.8	514.0	
-173.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	535.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-186.0	CARBONDALE	DAVIS	COAL	4.0	548.0	
-218.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	580.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-223.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	585.0	
-308.0	TRADEWATER	MT. RORAH	COAL	1.3	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503208000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552744 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.787573 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 550.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-126.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	485.0	
-191.0	SPOON	DAVIS	UNCLASSIFIED	-	550.0	

MAPID: 16503208000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552744 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787573 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2455.0 **LOG TYPE:**
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.0	CARBONDALE	BRERETON	LIMESTONE	-	160.0	
-1331.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1690.0	
-1720.0			LIMESTONE	-	2079.0	
-2096.0		BASE BARLOW	LIMESTONE	-	2455.0	

MAPID: 16503208000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552744 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787573 **DATE COLLECTED:** 7 / 0 / 1958
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2455.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., UPCHURCH W H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	366.0	
-46.0	CARBONDALE	SURVANT	COAL	0.5	405.0	
-123.0	CARBONDALE	COLCHESTER	COAL	0.5	482.0	
-156.0	CARBONDALE	DEKOVEN	COAL	0.0	515.0	
-181.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	540.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-191.0	CARBONDALE	DAVIS	COAL	3.0	550.0	
-221.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	580.0	
-279.0	TRADEWATER	MT. RORAH	COAL	1.3	638.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503208000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552744 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.787573 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 364.0 **LOG TYPE:** Electric Log
SOURCE: NATIONAL ASSOC. PETROLEUM CO. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
192.0	CARBONDALE	HERRIN	COAL	-	167.0	
142.0	CARBONDALE	BRIAR HILL	COAL	-	217.0	
75.0	CARBONDALE	SPRINGFIELD	COAL	3.0	284.0	
-5.0	CARBONDALE	HOUCHIN CREEK	COAL	-	364.0	

MAPID: 16503819000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.548211 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.782047 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2060.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	BRERETON	LIMESTONE	-	160.0	
-1318.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1682.0	
-1696.0			LIMESTONE	-	2060.0	

MAPID: 16500144000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.540171 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.77923 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
262.0	CARBONDALE	DANVILLE	COAL	1.3	98.0	
261.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	13.0	99.0	
241.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	119.0	
235.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	44.0	125.0	
178.0	CARBONDALE	HERRIN	COAL	5.6	182.0	
145.0	CARBONDALE	BRIAR HILL	COAL	1.2	215.0	
142.0	CARBONDALE	CANTON	SANDSTONE/SHALE	48.0	218.0	
93.0	CARBONDALE	SPRINGFIELD	COAL	6.2	267.0	

MAPID: 16500144000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.540171 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.77923 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 187.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
261.9	CARBONDALE	DANVILLE	COAL	1.3	98.1	
260.6	CARBONDALE		SHALE & SANDSTONE	12.8	99.4	
247.8	CARBONDALE	ALLENBY	COAL WITH SHALE PARTINGS	3.8	112.2	
244.0	CARBONDALE		CLAYSTONE & SHALE	2.9	116.0	
241.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	118.9	
234.4	CARBONDALE	LAWSON	SANDSTONE	43.8	125.6	
190.7	CARBONDALE	LAWSON	SHALE	3.4	169.3	
187.2	CARBONDALE	JAMESTOWN	COAL	0.3	172.8	
187.0	CARBONDALE		BLACK SHALE	2.7	173.0	
184.3	CARBONDALE	BRERETON	LIMESTONE	6.0	175.7	
178.3	CARBONDALE	ANNA	BLACK SHALE	0.3	181.7	
178.0	CARBONDALE	HERRIN	COAL	5.6	182.0	

MAPID: 16500144000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.540171 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.77923 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 275.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	7.3	0.0	
352.7	MODESTO		SHALE	10.0	7.3	
342.7	MODESTO		COAL	0.3	17.3	
342.3	MODESTO		UNDERCLAY	15.5	17.7	
326.8	MODESTO		SHALE	11.1	33.2	
315.7	MODESTO		SANDSTONE	11.3	44.3	
304.5	MODESTO		SANDSTONE	6.0	55.5	W/SANDY SH
298.5	MODESTO		SANDSTONE	34.8	61.5	
263.7	MODESTO		CLAYSTONE	1.4	96.3	
262.2	CARBONDALE	DANVILLE	COAL	1.3	97.8	
260.9	CARBONDALE		SANDSTONE	12.8	99.1	
248.2	CARBONDALE		BONE COAL	0.4	111.8	
247.7	CARBONDALE		UNDERCLAY	2.9	112.3	
244.8	CARBONDALE	ALLENBY	COAL	0.5	115.2	
244.3	CARBONDALE		UNDERCLAY	2.9	115.7	W/SH
241.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	118.6	
234.7	CARBONDALE	ANVIL ROCK	SANDSTONE	43.8	125.3	
191.0	CARBONDALE	ANVIL ROCK	SHALE	3.4	169.0	
187.6	CARBONDALE	JAMESTOWN	COAL	0.3	172.4	
187.3	CARBONDALE		SHALE	2.7	172.7	
184.7	CARBONDALE	BRERETON	LIMESTONE	6.0	175.3	
178.7	CARBONDALE	ANNA	SHALE	0.3	181.3	
178.3	CARBONDALE	HERRIN	COAL	5.6	181.7	
172.7	CARBONDALE		UNDERCLAY	28.1	187.3	W/SH
144.7	CARBONDALE	BRIAR HILL	COAL	1.2	215.3	
143.5	CARBONDALE		UNDERCLAY	1.8	216.5	
141.7	CARBONDALE	DYKERSBURG	SANDSTONE	48.3	218.3	W/SANDY SH
93.4	CARBONDALE	SPRINGFIELD	COAL	6.2	266.6	
87.2	CARBONDALE		UNDERCLAY	2.8	272.8	

MAPID: 16500148000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.537858 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.7774 **DATE COLLECTED:** 10 / 28 / 1911
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 296.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: ELEVATION ESTIMATED BY COMPANY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	40.0	0.0	
320.0	MODESTO		SHALE	35.0	40.0	
285.0	MODESTO	PIASA	LIMESTONE	5.0	75.0	
280.0			SHALE	39.0	80.0	
241.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	119.0	
234.0	CARBONDALE		SANDSTONE	16.0	126.0	
218.0	CARBONDALE		SANDY SHALE	16.0	142.0	
202.0	CARBONDALE		BLACK SHALE	1.0	158.0	
201.0	CARBONDALE	BRERETON	LIMESTONE	4.0	159.0	
197.0	CARBONDALE	ANNA	BLACK SHALE	2.0	163.0	LOG REPORTED 4',163 TO 165
195.0	CARBONDALE	HERRIN	COAL	5.0	165.0	
190.0	CARBONDALE		UNDERCLAY	2.0	170.0	
188.0	CARBONDALE		SANDSTONE	19.0	172.0	
169.0	CARBONDALE		SHALE	18.0	191.0	
151.0	CARBONDALE	BRIAR HILL	COAL	2.0	209.0	
149.0	CARBONDALE	DYKERSBURG	SHALE	79.0	211.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	4.7	290.0	
65.3	CARBONDALE		UNDERCLAY	2.0	294.7	

MAPID: 16500148000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.537858 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.7774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 297.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	119.0	
234.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	16.0	126.0	
195.0	CARBONDALE	HERRIN	COAL	5.0	165.0	
188.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	19.0	172.0	
151.0	CARBONDALE	BRIAR HILL	COAL	2.0	209.0	
70.0	CARBONDALE	SPRINGFIELD	COAL	4.7	290.0	

MAPID: 16501528000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 200' N line, 330' W line of SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.539031 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.778677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2024.0 **LOG TYPE:**

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
219.0	CARBONDALE	BRERETON	LIMESTONE	-	151.0	
-1283.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1653.0	
-1654.0			LIMESTONE	-	2024.0	

MAPID: 16501528000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 200' N line, 330' W line of SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.539031 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.778677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2149.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
274.0	CARBONDALE	DANVILLE	COAL	-	96.0	
272.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SILTSTONE	6.0	98.0	
250.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	120.0	
242.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	8.0	128.0	
212.0	CARBONDALE	HERRIN	COAL	4.0	158.0	
204.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	8.0	166.0	
162.0	CARBONDALE	BRIAR HILL	COAL	-	208.0	
148.0	CARBONDALE	CANTON	SILTSTONE	10.0	222.0	
88.0	CARBONDALE	SPRINGFIELD	COAL	5.0	282.0	
82.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE	24.0	288.0	
14.0	CARBONDALE	HOUCHIN CREEK	COAL	-	356.0	

MAPID: 16502217000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' W line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53322 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.778294 **DATE COLLECTED:** 4 / 0 / 1953

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 1495.0 **LOG TYPE:** Electric Log

SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	485.0	
-206.0	SPOON	DAVIS	UNCLASSIFIED	-	570.0	
-1131.0	BASE OF PENN.		UNCLASSIFIED	-	1495.0	

MAPID: 16502217000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' W line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.53322 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.778294 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2435.0 **LOG TYPE:**

SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.0	CARBONDALE	BRERETON	LIMESTONE	-	154.0	
-1298.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1662.0	
-1655.0			LIMESTONE	-	2019.0	
-2071.0		BASE BARLOW	LIMESTONE	-	2435.0	

MAPID: 16502217000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 660' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53322 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.778294 **DATE COLLECTED:** 4 / 0 / 1953
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2435.0 **LOG TYPE:** Electric Log
SOURCE: SCHOONMAKER, GEORGE C., BASHMAN JOE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
2.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	362.0	
-40.0	CARBONDALE	SURVANT	COAL	2.8	404.0	
-114.0	CARBONDALE	COLCHESTER	COAL	0.5	478.0	
-156.0	CARBONDALE	DEKOVEN	COAL	2.8	520.0	
-180.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	544.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-201.0	CARBONDALE	DAVIS	COAL	5.0	565.0	
-228.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	592.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-256.0	TRADEWATER	MT. RORAH	COAL	1.3	620.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502218000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 459' S line, 330' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.539007 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.780496 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2442.0 **LOG TYPE:** Electric Log
SOURCE: WALKER SAM G, BURG DE VERA 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
20.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	365.0	
-23.0	CARBONDALE	SURVANT	COAL	0.8	408.0	
-88.0	CARBONDALE	COLCHESTER	COAL	0.5	473.0	
-128.0	CARBONDALE	DEKOVEN	COAL	4.0	513.0	
-150.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	535.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-163.0	CARBONDALE	DAVIS	COAL	5.0	548.0	
-203.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	588.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-212.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	597.0	
-285.0	TRADEWATER	MT. RORAH	COAL	0.5	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502218000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 459' S line, 330' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.539007 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.780496 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2442.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	BRERETON	LIMESTONE	-	154.0	
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1667.0	
-1666.0			LIMESTONE	-	2024.0	
-2084.0		BASE BARLOW	LIMESTONE	-	2442.0	

MAPID: 16502219000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531886 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787503 **DATE COLLECTED:** 9 / 0 / 1954
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2440.0 **LOG TYPE:** Electric Log
SOURCE: REDWINE NASH ETAL, FRANTZ F-JAMES V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-17.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	379.0	
-58.0	CARBONDALE	SURVANT	COAL	0.5	420.0	
-135.0	CARBONDALE	COLCHESTER	COAL	0.5	497.0	
-180.0	CARBONDALE	DEKOVEN	COAL	2.0	542.0	
-202.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	564.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-219.0	CARBONDALE	DAVIS	COAL	4.0	581.0	
-248.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	610.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-278.0	TRADEWATER	MT. RORAH	COAL	1.3	640.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502219000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 370' S line, 330' E line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.531886 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787503 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2440.0 **LOG TYPE:**
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
200.0	CARBONDALE	BRERETON	LIMESTONE	-	167.0	
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1674.0	
-1669.0			LIMESTONE	-	2036.0	
-2073.0		BASE BARLOW	LIMESTONE	-	2440.0	

MAPID: 16502403000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 400' N line, 300' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522475 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.785333 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, MAY COMM UNIT 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-42.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-89.0	CARBONDALE	SURVANT	COAL	1.5	500.0	
-174.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-209.0	CARBONDALE	DEKOVEN	COAL	4.0	620.0	
-219.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	630.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-239.0	CARBONDALE	DAVIS	COAL	5.0	650.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	689.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-283.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	694.0	
-301.0	TRADEWATER	MT. RORAH	COAL	1.8	712.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502403000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 400' N line, 300' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522475 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1298.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1709.0	
-1664.0			LIMESTONE	-	2075.0	

MAPID: 16502497000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522555 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787349 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, BERTINO 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-38.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	450.0	
-88.0	CARBONDALE	SURVANT	COAL	2.0	500.0	
-158.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-198.0	CARBONDALE	DEKOVEN	COAL	2.8	610.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	630.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-233.0	CARBONDALE	DAVIS	COAL	5.0	645.0	
-239.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	651.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-283.0	TRADEWATER	MT. RORAH	COAL	3.0	695.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502497000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.522555 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787349 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1300.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1712.0	
-1663.0			LIMESTONE	-	2075.0	

MAPID: 16502514000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524994 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.781898 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2013.0 **LOG TYPE:** Electric Log
SOURCE: WALKER SAM G, RUFFO 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-15.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	375.0	
-55.0	CARBONDALE	SURVANT	COAL	0.5	415.0	
-142.0	CARBONDALE	COLCHESTER	COAL	0.5	502.0	
-184.0	CARBONDALE	DEKOVEN	COAL	2.0	544.0	
-208.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	568.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-230.0	CARBONDALE	DAVIS	COAL	5.0	590.0	
-242.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	602.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-258.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	618.0	
-285.0	TRADEWATER	MT. RORAH	COAL	1.3	645.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502514000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524994 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781898 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2013.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1293.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1653.0	
-1653.0			LIMESTONE	-	2013.0	

MAPID: 16502536000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524924 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787361 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 1714.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, BERTINO JOSEPH 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	443.0	
-87.0	CARBONDALE	SURVANT	COAL	2.0	493.0	
-164.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-202.0	CARBONDALE	DEKOVEN	COAL	2.5	608.0	
-224.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	630.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-239.0	CARBONDALE	DAVIS	COAL	4.5	645.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	684.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-304.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	710.0	
-329.0	TRADEWATER	MT. RORAH	COAL	2.0	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502536000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524924 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787361 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 1714.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1308.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1714.0	

MAPID: 16502547000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52722 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.78737 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2038.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, JAMES 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-23.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	393.0	
-65.0	CARBONDALE	SURVANT	COAL	0.8	435.0	
-149.0	CARBONDALE	COLCHESTER	COAL	0.5	519.0	
-180.0	CARBONDALE	DEKOVEN	COAL	2.8	550.0	
-200.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	570.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-214.0	CARBONDALE	DAVIS	COAL	4.0	584.0	
-230.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	600.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-242.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	612.0	
-262.0	TRADEWATER	MT. RORAH	COAL	2.0	632.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502547000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52722 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.78737 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2038.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
187.0	CARBONDALE	BRERETON	LIMESTONE	-	183.0	
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1679.0	
-1668.0			LIMESTONE	-	2038.0	

MAPID: 16502558000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.527244 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.785548 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2016.0 **LOG TYPE:** Electric Log
SOURCE: WALKER SAM G, JAMES VERLIE O 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-12.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	374.0	
-53.0	CARBONDALE	SURVANT	COAL	0.5	415.0	
-138.0	CARBONDALE	COLCHESTER	COAL	0.5	500.0	
-173.0	CARBONDALE	DEKOVEN	COAL	2.8	535.0	
-196.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	558.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-213.0	CARBONDALE	DAVIS	COAL	4.0	575.0	
-251.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	613.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-278.0	TRADEWATER	MT. RORAH	COAL	1.3	640.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502558000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.527244 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785548 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2016.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.0	CARBONDALE	BRERETON	LIMESTONE	-	156.0	
-1286.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1652.0	
-1650.0			LIMESTONE	-	2016.0	

MAPID: 16502603000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 340' N line, 300' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52714 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785522 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2026.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
201.0	CARBONDALE	BRERETON	LIMESTONE	-	163.0	
-1299.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1663.0	
-1662.0			LIMESTONE	-	2026.0	

MAPID: 16502666000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 390' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536641 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.780294 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2028.0 **LOG TYPE:** Electric Log
SOURCE: WALKER SAM G, BURG 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-6.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	368.0	
-48.0	CARBONDALE	SURVANT	COAL	1.3	410.0	
-118.0	CARBONDALE	COLCHESTER	COAL	0.5	480.0	
-162.0	CARBONDALE	DEKOVEN	COAL	2.8	524.0	
-188.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	550.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-201.0	CARBONDALE	DAVIS	COAL	5.0	563.0	
-230.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	592.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-243.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	605.0	
-308.0	TRADEWATER	MT. RORAH	COAL	1.8	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502666000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 390' S line, 330' E line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.536641 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.780294 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2028.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
202.0	CARBONDALE	BRERETON	LIMESTONE	-	160.0	
-1302.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1664.0	
-1666.0			LIMESTONE	-	2028.0	

MAPID: 16502680000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.522531 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789166 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2430.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, BERTINO JOSEPHINE 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	417.0	
-93.0	CARBONDALE	SURVANT	COAL	1.8	463.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-200.0	CARBONDALE	DEKOVEN	COAL	2.8	570.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	590.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-234.0	CARBONDALE	DAVIS	COAL	4.0	604.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	654.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-305.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	675.0	
-334.0	TRADEWATER	MT. RORAH	COAL	2.0	704.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502680000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.522531 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789166 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2430.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1315.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1685.0	
-1669.0			LIMESTONE	-	2039.0	
-2060.0		BASE BARLOW	LIMESTONE	-	2430.0	

MAPID: 16502706000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.524949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785539 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1677.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1299.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1677.0	

MAPID: 16502707000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.52497 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.78372 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2030.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1294.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1666.0	
-1658.0			LIMESTONE	-	2030.0	

MAPID: 16502724000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 455' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534343 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.780465 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2445.0 **LOG TYPE:** Electric Log
SOURCE: WALKER SAM G, BASHAM HEIRS 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	375.0	
-57.0	CARBONDALE	SURVANT	COAL	1.8	418.0	
-129.0	CARBONDALE	COLCHESTER	COAL	0.5	490.0	
-174.0	CARBONDALE	DEKOVEN	COAL	3.0	535.0	
-195.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	556.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-214.0	CARBONDALE	DAVIS	COAL	6.0	575.0	
-239.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	600.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-277.0	TRADEWATER	MT. RORAH	COAL	1.3	638.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502724000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 455' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534343 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.780465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2445.0 **LOG TYPE:**
SOURCE: WALKER SAM G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	CARBONDALE	BRERETON	LIMESTONE	-	163.0	
-1297.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1658.0	
-1664.0			LIMESTONE	-	2025.0	
-2084.0		BASE BARLOW	LIMESTONE	-	2445.0	

MAPID: 16502750000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 360' S line, 380' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.532106 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.783836 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1669.0 **LOG TYPE:** Electric Log
SOURCE: GRANT N L, HALE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	368.0	
-49.0	CARBONDALE	SURVANT	COAL	1.0	410.0	
-117.0	CARBONDALE	COLCHESTER	COAL	0.5	478.0	
-174.0	CARBONDALE	DEKOVEN	COAL	1.8	535.0	
-198.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	559.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	5.0	578.0	
-247.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	608.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-278.0	TRADEWATER	MT. RORAH	COAL	1.3	639.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502750000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 360' S line, 380' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.532106 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1669.0 **LOG TYPE:**
SOURCE: GRANT N L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	CARBONDALE	BRERETON	LIMESTONE	-	158.0	
-1308.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1669.0	

MAPID: 16503332000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 800' N line, 300' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529781 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.780622 **DATE COLLECTED:** 9 / 0 / 1960
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2012.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., WALKER SAM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
2.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	365.0	
-38.0	CARBONDALE	SURVANT	COAL	1.5	405.0	
-112.0	CARBONDALE	COLCHESTER	COAL	0.5	479.0	
-163.0	CARBONDALE	DEKOVEN	COAL	1.8	530.0	
-190.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	557.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-203.0	CARBONDALE	DAVIS	COAL	5.0	570.0	
-233.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	600.0	
-263.0	TRADEWATER	MT. RORAH	COAL	1.3	630.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503332000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 800' N line, 300' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.529781 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.780622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2012.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.0	CARBONDALE	BRERETON	LIMESTONE	-	154.0	
-1294.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1661.0	
-1645.0			LIMESTONE	-	2012.0	

MAPID: 16503342000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 15' N line, 5' E line of SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.530812 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.782793 **DATE COLLECTED:** 12 / 0 / 1960

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC., BASHAM HEIRS **WELL TYPE:** Water Injection

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	COLCHESTER	COAL	0.5	478.0	
-163.0	CARBONDALE	DEKOVEN	COAL	2.5	530.0	
-187.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	554.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-210.0	CARBONDALE	DAVIS	COAL	4.0	577.0	
-238.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	605.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-271.0	TRADEWATER	MT. RORAH	COAL	1.5	638.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503342000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 15' N line, 5' E line of SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.530812 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.782793 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:**

SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Water Injection

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1293.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1660.0	

MAPID: 16500145000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.519114 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.784589 **DATE COLLECTED:** 12 / 29 / 1905

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	30.0	0.0	
345.0	MODESTO		LIMESTONE	4.0	30.0	
341.0	MODESTO		SHALE	20.0	34.0	DARK
321.0	MODESTO		LIMESTONE	5.0	54.0	
316.0			ARGILACEOUS SHALE	22.0	59.0	ARG
294.0			SHALE	15.0	81.0	
279.0			SANDSTONE	10.0	96.0	
269.0			SANDY SHALE	20.0	106.0	
249.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	126.0	
245.0	CARBONDALE	ANVIL ROCK	SHALE	30.0	130.0	DARK
215.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	160.0	
211.0	CARBONDALE	ANVIL ROCK	SHALE	8.0	164.0	DARK
203.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	172.0	
183.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.0	192.0	
175.0	CARBONDALE	BRERETON	LIMESTONE	6.0	200.0	
169.0	CARBONDALE	ANNA	BLACK SHALE	1.0	206.0	
168.0	CARBONDALE	HERRIN	COAL	4.0	207.0	
164.0	CARBONDALE		UNDERCLAY	2.0	211.0	
162.0	CARBONDALE		SANDSTONE	22.0	213.0	
140.0	CARBONDALE		SANDY SHALE	15.0	235.0	
125.0	CARBONDALE	BRIAR HILL	COAL	1.0	250.0	
124.0	CARBONDALE		SANDSTONE	6.0	251.0	
118.0	CARBONDALE		SHALE	33.0	257.0	DARK
85.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	290.0	
84.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	291.0	
83.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	292.0	
79.0	CARBONDALE	DYKERSBURG	SHALE	31.0	296.0	
48.0	CARBONDALE	SPRINGFIELD	COAL	5.0	327.0	

MAPID: 16500145000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.519114 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.784589 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA OIL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	HERRIN	COAL	4.0	207.0	
125.0	CARBONDALE	BRIAR HILL	COAL	1.0	250.0	
48.0	CARBONDALE	SPRINGFIELD	COAL	5.0	327.0	

MAPID: 16500146000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.51922 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.777319 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 275.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: ELEVATION ESITMATED BY COMPANY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	20.0	0.0	
340.0	MODESTO		SANDY SHALE	13.0	20.0	
327.0	MODESTO		SHALE	22.0	33.0	
305.0	MODESTO	PIASA	LIMESTONE	4.0	55.0	
301.0	MODESTO		SHALE	34.0	59.0	
267.0	CARBONDALE		SANDSTONE	2.0	93.0	
265.0	CARBONDALE	ALLENBY	COAL	1.0	95.0	
264.0	CARBONDALE		UNDERCLAY	2.0	96.0	
262.0	CARBONDALE		CALCAREOUS SHALE	11.0	98.0	CALC
251.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	109.0	
240.0	CARBONDALE	ANVIL ROCK	SHALE	20.0	120.0	
220.0	CARBONDALE	BRERETON	LIMESTONE	5.0	140.0	
215.0	CARBONDALE	ANNA	BLACK SHALE	1.0	145.0	
214.0	CARBONDALE	HERRIN	COAL	5.0	146.0	
209.0	CARBONDALE		UNDERCLAY	2.0	151.0	
207.0	CARBONDALE		SANDSTONE	16.0	153.0	
191.0	CARBONDALE		SHALE	30.0	169.0	
161.0	CARBONDALE	BRIAR HILL	COAL	1.0	199.0	
160.0	CARBONDALE	DYKERSBURG	SHALE	70.4	200.0	
89.6	CARBONDALE	SPRINGFIELD	COAL	5.1	270.4	

MAPID: 16500147000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.518102 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.776403 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 291.8 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: ELEVATION ESTIMATED BY COMPANY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	35.0	0.0	
325.0	MODESTO		SANDSTONE	5.0	35.0	
320.0	MODESTO		SHALE	30.0	40.0	
290.0	MODESTO	PIASA	LIMESTONE	4.0	70.0	
286.0			SHALE	18.0	74.0	
268.0			SANDSTONE	15.0	92.0	
253.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	107.0	
249.0	CARBONDALE		SHALE	6.0	111.0	
243.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	117.0	
231.0	CARBONDALE	ANVIL ROCK	SHALE	12.0	129.0	
219.0	CARBONDALE	ANVIL ROCK	BLACK SHALE	1.0	141.0	
218.0	CARBONDALE	BRERETON	LIMESTONE	7.0	142.0	
211.0	CARBONDALE	ANNA	BLACK SHALE	1.0	149.0	
210.0	CARBONDALE	HERRIN	COAL	5.0	150.0	
205.0	CARBONDALE		UNDERCLAY	2.0	155.0	
203.0	CARBONDALE		SANDSTONE	11.0	157.0	
192.0	CARBONDALE		SHALE	29.0	168.0	
163.0	CARBONDALE	BRIAR HILL	COAL	2.5	197.0	
160.5	CARBONDALE	DYKERSBURG	SHALE	10.0	199.5	
150.5	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	209.5	
145.5	CARBONDALE	DYKERSBURG	SHALE	72.3	214.5	
73.2	CARBONDALE	SPRINGFIELD	COAL	5.1	286.8	
68.2	CARBONDALE		UNCLASSIFIED	0.0	291.8	

MAPID: 16500147000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 990' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.518102 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.776403 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.0	MODESTO	PIASA	LIMESTONE	4.0	85.0	
271.0	CARBONDALE		SHALE & SANDSTONE	23.0	89.0	
248.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	112.0	
244.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	116.0	
238.0	CARBONDALE	LAWSON	SANDSTONE	12.0	122.0	
226.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	134.0	
214.0	CARBONDALE		BLACK SHALE	1.0	146.0	
213.0	CARBONDALE	BRERETON	LIMESTONE	7.0	147.0	
206.0	CARBONDALE	ANNA	BLACK SHALE	1.0	154.0	
205.0	CARBONDALE	HERRIN	COAL	5.0	155.0	

MAPID: 16500149000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.51922 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.777319 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 283.9 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION GIVEN (OR DATE)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	30.0	0.0	
-			SHALE	42.0	30.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	72.0	
-	CARBONDALE		SHALE	39.0	76.0	
-	CARBONDALE		CALCAREOUS SHALE	14.0	115.0	CALC
-	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	129.0	GRAY
-	CARBONDALE	ANVIL ROCK	SHALE	21.0	132.0	
-	CARBONDALE	BRERETON	LIMESTONE	2.0	153.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	155.0	
-	CARBONDALE		CLAYSTONE	2.0	157.0	
-	CARBONDALE		SHALE	41.0	159.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	200.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	55.0	202.0	GRAY
-	CARBONDALE	DYKERSBURG	SHALE	20.4	257.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.5	277.4	
-	CARBONDALE		UNDERCLAY	1.0	282.9	
-	CARBONDALE		UNCLASSIFIED	0.0	283.9	T/D

MAPID: 16502498000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.52026 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.78733 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, BRAMLET 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-32.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	412.0	
-84.0	CARBONDALE	SURVANT	COAL	0.5	464.0	
-155.0	CARBONDALE	COLCHESTER	COAL	0.5	535.0	
-194.0	CARBONDALE	DEKOVEN	COAL	3.0	574.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	598.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-233.0	CARBONDALE	DAVIS	COAL	4.0	613.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	658.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-282.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	662.0	
-328.0	TRADEWATER	MT. RORAH	COAL	2.5	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502498000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.52026 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.78733 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1690.0	

MAPID: 16502528000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 350' N line, 450' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515267 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.781771 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2046.0 **LOG TYPE:** Electric Log
SOURCE: VAN DRESSER H, LEITCH E E 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-12.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	404.0	
-51.0	CARBONDALE	SURVANT	COAL	0.8	443.0	
-133.0	CARBONDALE	COLCHESTER	COAL	0.5	525.0	
-168.0	CARBONDALE	DEKOVEN	COAL	3.0	560.0	
-193.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	585.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-203.0	CARBONDALE	DAVIS	COAL	2.8	595.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-248.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	640.0	
-292.0	TRADEWATER	MT. RORAH	COAL	1.0	684.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502528000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 350' N line, 450' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.515267 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2046.0 **LOG TYPE:**
SOURCE: VAN DRESSER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1285.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1681.0	
-1650.0			LIMESTONE	-	2046.0	

MAPID: 16502537000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.520281 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.785508 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2078.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, LEITCH 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-40.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-89.0	CARBONDALE	SURVANT	COAL	1.5	499.0	
-154.0	CARBONDALE	COLCHESTER	COAL	0.5	564.0	
-195.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	630.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-235.0	CARBONDALE	DAVIS	COAL	4.0	645.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-285.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	695.0	
-330.0	TRADEWATER	MT. RORAH	COAL	2.0	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502537000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.520281 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785508 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2078.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1300.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	
-1668.0			LIMESTONE	-	2078.0	

MAPID: 16503107000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 340' N line, 990' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508746 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.781737 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2394.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, WALTERS ETAL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.8	398.0	
-84.0	CARBONDALE	SURVANT	COAL	0.5	449.0	
-154.0	CARBONDALE	COLCHESTER	COAL	0.5	519.0	
-185.0	CARBONDALE	DEKOVEN	COAL	2.0	550.0	
-211.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	576.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-223.0	CARBONDALE	DAVIS	COAL	3.0	588.0	
-275.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	640.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-278.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	643.0	
-325.0	TRADEWATER	MT. RORAH	COAL	2.0	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503107000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 340' N line, 990' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.508746 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781737 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2394.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
185.0	CARBONDALE	BRERETON	LIMESTONE	-	180.0	
-1304.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1669.0	
-1657.0			LIMESTONE	-	2022.0	
-2029.0		BASE BARLOW	LIMESTONE	-	2394.0	

MAPID: 16503388000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510896 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789035 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2054.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, SPRICH-LORCH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-40.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	412.0	
-87.0	CARBONDALE	SURVANT	COAL	0.8	459.0	
-164.0	CARBONDALE	COLCHESTER	COAL	0.5	536.0	
-197.0	CARBONDALE	DEKOVEN	COAL	2.5	569.0	
-217.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	589.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-232.0	CARBONDALE	DAVIS	COAL	4.0	604.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	650.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-286.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	658.0	
-330.0	TRADEWATER	MT. RORAH	COAL	0.0	702.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503388000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510896 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789035 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2054.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
181.0	CARBONDALE	BRERETON	LIMESTONE	-	198.0	
-1313.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1692.0	
-1675.0			LIMESTONE	-	2054.0	

MAPID: 16503410000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.517923 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2050.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.0	CARBONDALE	BRERETON	LIMESTONE	-	200.0	
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1683.0	
-1674.0			LIMESTONE	-	2050.0	

MAPID: 16503416000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513192 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789063 **DATE COLLECTED:** 7 / 0 / 1962
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2047.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, SPRICH-LORCH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-27.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	395.0	
-82.0	CARBONDALE	SURVANT	COAL	0.5	450.0	
-160.0	CARBONDALE	COLCHESTER	COAL	0.5	528.0	
-196.0	CARBONDALE	DEKOVEN	COAL	2.8	564.0	
-214.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	582.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-231.0	CARBONDALE	DAVIS	COAL	4.0	599.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-280.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	648.0	
-322.0	TRADEWATER	MT. RORAH	COAL	1.8	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503416000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513192 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2047.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
181.0	CARBONDALE	BRERETON	LIMESTONE	-	190.0	
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1680.0	
-1676.0			LIMESTONE	-	2047.0	

MAPID: 16503439000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 350' N line, 330' E line
QUADRANGLE: GALATIA **LONGITUDE:** -88.503853 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788897 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2048.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1696.0	
-1659.0			LIMESTONE	-	2048.0	

MAPID: 16503444000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 500' W line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.510379 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2412.0 **LOG TYPE:**
SOURCE: MENHALL, J. W. DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1674.0	
-1669.0			LIMESTONE	-	2033.0	
-2048.0		BASE BARLOW	LIMESTONE	-	2412.0	

MAPID: 16503479000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.504 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783542 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2400.0 **LOG TYPE:**
SOURCE: FARRAR OIL CO., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1302.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1674.0	
-1650.0			LIMESTONE	-	2022.0	
-2028.0		BASE BARLOW	LIMESTONE	-	2400.0	

MAPID: 16503488000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513266 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2035.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1288.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1661.0	
-1662.0			LIMESTONE	-	2035.0	

MAPID: 16503502000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 920' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513692 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.778182 **DATE COLLECTED:** 8 / 0 / 1965
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 1510.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-146.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	510.0	
-221.0	SPOON	DAVIS	UNCLASSIFIED	-	585.0	
-1146.0	BASE OF PENN.		UNCLASSIFIED	-	1510.0	

MAPID: 16503502000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 920' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.513692 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.778182 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2416.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
197.0	CARBONDALE	BRERETON	LIMESTONE	-	167.0	
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1680.0	
-1678.0			LIMESTONE	-	2042.0	
-2052.0		BASE BARLOW	LIMESTONE	-	2416.0	

MAPID: 16503506000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.504053 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781721 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2400.0 **LOG TYPE:**
SOURCE: IMMING PET DV&OPRTNG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1301.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1668.0	
-1658.0			LIMESTONE	-	2025.0	
-2033.0		BASE BARLOW	LIMESTONE	-	2400.0	

MAPID: 16503516000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 357' N line, 341' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.506364 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781669 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2398.0 **LOG TYPE:**
SOURCE: IMMING PET DV&OPRTNG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1306.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1675.0	
-1655.0			LIMESTONE	-	2024.0	
-2029.0		BASE BARLOW	LIMESTONE	-	2398.0	

MAPID: 16503517000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.504103 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.779927 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2400.0 **LOG TYPE:**
SOURCE: IMMING PET DV&OPRTNG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1298.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1668.0	
-1654.0			LIMESTONE	-	2024.0	
-2030.0		BASE BARLOW	LIMESTONE	-	2400.0	

MAPID: 16500150000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.489307 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.786326 **DATE COLLECTED:** 5 / 0 / 1906

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	25.0	0.0	
350.0	MODESTO		SHALE	14.0	25.0	
336.0	MODESTO		BLACK SHALE	2.0	39.0	
334.0	MODESTO		SHALE	20.0	41.0	
314.0	MODESTO		COAL	1.0	61.0	
313.0	MODESTO		SHALE	8.0	62.0	
305.0	MODESTO		SANDSTONE	11.0	70.0	
294.0	MODESTO		SHALE	15.0	81.0	
279.0	MODESTO		COAL	1.0	96.0	
278.0	MODESTO		SANDSTONE	5.0	97.0	
273.0	MODESTO		SANDY SHALE	4.0	102.0	
269.0	MODESTO		BLACK SHALE	1.0	106.0	
268.0	MODESTO		SHALE	15.0	107.0	
253.0	CARBONDALE	DANVILLE	COAL	2.0	122.0	
251.0	CARBONDALE		UNDERCLAY	1.0	124.0	
250.0	CARBONDALE		SANDSTONE	10.0	125.0	
240.0	CARBONDALE		SANDY SHALE	10.0	135.0	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	145.0	LOG REPORTED 7',145 TO 153
222.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	153.0	
218.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	157.0	
214.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	161.0	
199.0	CARBONDALE		BLACK SHALE	1.0	176.0	
198.0	CARBONDALE		SHALE	8.0	177.0	DARK
190.0	CARBONDALE	HERRIN	COAL	5.0	185.0	
185.0	CARBONDALE		UNDERCLAY	3.0	190.0	
182.0	CARBONDALE		SANDSTONE	27.0	193.0	
155.0	CARBONDALE		SHALE	20.0	220.0	
135.0	CARBONDALE	BRIAR HILL	COAL	2.0	240.0	
133.0	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	242.0	
121.0	CARBONDALE	DYKERSBURG	SHALE	10.0	254.0	
111.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	264.0	
109.0	CARBONDALE	DYKERSBURG	SANDY SHALE	29.0	266.0	
80.0	CARBONDALE	DYKERSBURG	SHALE	19.5	295.0	
60.5	CARBONDALE	SPRINGFIELD	COAL	5.2	314.5	
55.3	CARBONDALE		UNDERCLAY	1.3	319.7	

MAPID: 16500151000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.493852 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.782664 **DATE COLLECTED:** 10 / 10 / 1905

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 339.5 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0			UNCONSOLIDATED	20.0	0.0	
363.0	MODESTO		SHALE	8.0	20.0	
355.0	MODESTO		ARGILACEOUS SHALE	35.0	28.0	ARG
320.0	MODESTO		SHALE	2.0	63.0	
318.0	CARBONDALE	DANVILLE	COAL	2.0	65.0	
316.0	CARBONDALE		UNDERCLAY	3.0	67.0	
313.0	CARBONDALE		SHALE	13.0	70.0	
300.0	CARBONDALE		SANDSTONE	12.0	83.0	
288.0	CARBONDALE		ARGILACEOUS SHALE	15.0	95.0	ARG
273.0	CARBONDALE		SANDSTONE	2.0	110.0	
271.0	CARBONDALE		SHALE	25.0	112.0	
246.0	CARBONDALE		SANDSTONE	25.0	137.0	
221.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	162.0	
213.0	CARBONDALE	ANVIL ROCK	SHALE	28.0	170.0	
185.0	CARBONDALE	BRERETON	LIMESTONE	7.0	198.0	
178.0	CARBONDALE	ANNA	SHALE	1.5	205.0	
176.5	CARBONDALE	HERRIN	COAL	4.7	206.5	
171.8	CARBONDALE		UNDERCLAY	1.8	211.2	
170.0	CARBONDALE		SANDSTONE	15.0	213.0	
155.0	CARBONDALE		ARGILACEOUS SHALE	7.0	228.0	ARG
148.0	CARBONDALE		SANDSTONE	20.0	235.0	
128.0	CARBONDALE	BRIAR HILL	COAL	0.5	255.0	
127.5	CARBONDALE		UNDERCLAY	0.5	255.5	
127.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	256.0	
123.0	CARBONDALE	DYKERSBURG	SHALE	15.0	260.0	
108.0	CARBONDALE	DYKERSBURG	SHALE	5.0	275.0	
103.0	CARBONDALE	DYKERSBURG	SHALE	54.0	280.0	
49.0	CARBONDALE	SPRINGFIELD	COAL	5.5	334.0	

MAPID: 16500152000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.491708 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.784478 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 840.0 **LOG TYPE:** Drillers Log

SOURCE: NEAR WASSON COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
261.0	CARBONDALE	DANVILLE	COAL	2.2	109.0	
257.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	12.0	113.0	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	140.0	
220.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	4.0	150.0	
193.0	CARBONDALE	HERRIN	COAL	5.0	177.0	
169.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	3.0	201.0	
135.0	CARBONDALE	BRIAR HILL	COAL	1.8	235.0	
113.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	3.0	257.0	
66.0	CARBONDALE	SPRINGFIELD	COAL	5.1	304.0	
16.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	10.0	354.0	
-12.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	382.0	

MAPID: 16500152000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.491708 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.784478 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 182.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
272.4	MODESTO	PIASA	LIMESTONE	2.6	97.6	
269.8	MODESTO		SHALE	17.8	100.2	
252.1	CARBONDALE	DANVILLE	COAL	2.2	117.9	
249.9	CARBONDALE		SHALE & SANDSTONE	13.0	120.1	
236.9	CARBONDALE	ALLENBY	COAL	0.2	133.1	
236.7	CARBONDALE		CLAYSTONE	4.3	133.3	
232.4	CARBONDALE	BANKSTON FORK	LIMESTONE	0.8	137.6	
231.6	CARBONDALE	BANKSTON FORK	CLAYSTONE	0.2	138.4	
231.4	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	138.6	
223.4	CARBONDALE	LAWSON	SHALE	2.0	146.6	
221.4	CARBONDALE	LAWSON	SANDSTONE	4.0	148.6	
217.4	CARBONDALE	LAWSON	SILTY SHALE	15.4	152.6	
202.0	CARBONDALE	BRERETON	LIMESTONE	0.5	168.0	
201.5	CARBONDALE	ENERGY	DARK GRAY SHALE	8.5	168.5	
193.0	CARBONDALE	HERRIN	COAL	5.0	177.0	

MAPID: 16500152000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.491708 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.784478 **DATE COLLECTED:** 5 / 0 / 1916
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 840.0 **LOG TYPE:** Drillers Log
SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	30.7	0.0	
339.3	MODESTO		SHALE	4.5	30.7	
334.8	MODESTO		SHALE	1.5	35.2	DARK
333.3	MODESTO		SHALE	4.8	36.7	
328.5	MODESTO		COAL	0.7	41.5	
327.8	MODESTO		UNDERCLAY	1.0	42.2	
326.8	MODESTO		SHALE	10.5	43.2	
316.3	MODESTO		COAL	0.3	53.7	
316.1	MODESTO		UNDERCLAY	1.0	53.9	
315.1	MODESTO		LIMESTONE	1.1	54.9	
314.0	MODESTO		SHALE	4.0	56.0	
310.0	MODESTO		SANDSTONE	9.0	60.0	W/SH
301.0	MODESTO		SANDY SHALE	11.0	69.0	GRAY
290.0	MODESTO		SHALE	6.5	80.0	
283.5	MODESTO		COAL	0.2	86.5	
283.3	MODESTO		UNDERCLAY	2.3	86.7	
281.0	MODESTO	PIASA	LIMESTONE	2.6	89.0	
278.4	MODESTO		CALCAREOUS SHALE	1.4	91.6	CALC
277.0	MODESTO		SHALE	4.0	93.0	DARK
273.0	MODESTO		SHALE	3.0	97.0	
270.0	MODESTO		SHALE	9.3	100.0	
260.7	CARBONDALE	DANVILLE	COAL	2.2	109.3	
258.5	CARBONDALE		UNDERCLAY	1.5	111.5	
257.0	CARBONDALE		SANDSTONE	21.5	113.0	
235.5	CARBONDALE	ALLENBY	COAL	0.2	134.5	
235.3	CARBONDALE		UNDERCLAY	4.3	134.7	
231.0	CARBONDALE		LIMESTONE	0.8	139.0	
230.2	CARBONDALE		CLAYSTONE	0.2	139.8	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	140.0	
222.0	CARBONDALE		SHALE	2.0	148.0	
220.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	150.0	
216.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.4	154.0	GRAY
200.6	CARBONDALE	BRERETON	LIMESTONE	0.5	169.4	
200.1	CARBONDALE	ANNA	SHALE	7.5	169.9	DARK,LOG REPORTED 8.5,169.92-177.42
192.6	CARBONDALE	HERRIN	COAL	5.0	177.4	
187.6	CARBONDALE		UNDERCLAY	3.6	182.4	
184.0	CARBONDALE		SANDY SHALE	6.0	186.0	
178.0	CARBONDALE		LIMESTONE	2.0	192.0	
176.0	CARBONDALE		SANDY SHALE	7.0	194.0	

169.0	CARBONDALE		SANDSTONE	3.0	201.0	
166.0	CARBONDALE		SANDY SHALE	18.0	204.0	
148.0	CARBONDALE		SHALE	12.6	222.0	
135.4	CARBONDALE	BRIAR HILL	COAL	1.8	234.6	
133.7	CARBONDALE		UNDERCLAY	0.3	236.3	
133.4	CARBONDALE		SANDSTONE	0.4	236.6	
133.0	CARBONDALE		SANDY SHALE	2.0	237.0	
131.0	CARBONDALE		SHALE	10.0	239.0	
121.0	CARBONDALE		BLACK SHALE	1.0	249.0	
120.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	250.0	
119.0	CARBONDALE	DYKERSBURG	SHALE	1.0	251.0	DARK
118.0	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	252.0	GRAY
113.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	257.0	W/SH PARTINGS
110.0	CARBONDALE	DYKERSBURG	SANDY SHALE	41.0	260.0	
69.0	CARBONDALE	DYKERSBURG	SANDY SHALE	2.8	301.0	
66.2	CARBONDALE	SPRINGFIELD	COAL	5.1	303.8	
61.1	CARBONDALE		UNDERCLAY	0.3	308.9	
60.8	CARBONDALE		SANDY SHALE	9.8	309.2	
51.0	CARBONDALE		SANDSTONE	1.0	319.0	
50.0	CARBONDALE		SANDY SHALE	14.0	320.0	
36.0	CARBONDALE		SANDY SHALE	16.0	334.0	
20.0	CARBONDALE		SANDY SHALE	4.0	350.0	
16.0	CARBONDALE		SANDSTONE	6.0	354.0	
10.0	CARBONDALE		SHALE	0.5	360.0	
9.5	CARBONDALE		SANDSTONE	3.0	360.5	
6.5	CARBONDALE		SHALE	15.0	363.5	LOG REPORTED 13.5,363.5 TO 378.5
-8.5	CARBONDALE		SHALE	3.3	378.5	DARK,LOG REPORTED 3.75,378.5 TO 381.75
-11.8	CARBONDALE	HOUCHIN CREEK	COAL	2.2	381.8	
-13.9	CARBONDALE		UNDERCLAY	0.7	383.9	
-14.6	CARBONDALE		SANDY SHALE	28.4	384.6	
-43.0	CARBONDALE		SHALE	8.0	413.0	DARK
-51.0	CARBONDALE		SHALE	3.4	421.0	
-54.4	CARBONDALE	SURVANT	COAL	0.9	424.4	
-55.3	CARBONDALE		SANDSTONE	7.7	425.3	
-63.0	CARBONDALE		SHALE	4.0	433.0	
-67.0	CARBONDALE		SHALE	21.0	437.0	W/SS, DARK
-88.0	CARBONDALE		SHALE	10.0	458.0	DARK
-98.0	CARBONDALE		SANDY SHALE	9.0	468.0	
-107.0	CARBONDALE		SANDSTONE	2.5	477.0	
-109.5	CARBONDALE		SANDY SHALE	15.5	479.5	
-125.0	CARBONDALE		SHALE	6.3	495.0	
-131.3	CARBONDALE	COLCHESTER	COAL	0.7	501.3	
-132.0	SPOON		UNDERCLAY	3.0	502.0	
-135.0	SPOON		SANDSTONE	9.0	505.0	
-144.0	SPOON		SANDY SHALE	11.0	514.0	
-155.0	SPOON		SHALE	9.7	525.0	DARK
-164.7	SPOON	DEKOVEN	COAL	2.1	534.7	

-166.8	SPOON		SANDY SHALE	1.3	536.8	
-168.0	SPOON		SANDSTONE	6.0	538.0	
-174.0	SPOON		SANDSTONE	1.0	544.0	
-175.0	SPOON		SANDY SHALE	7.0	545.0	
-182.0	SPOON		SHALE	3.4	552.0	
-185.4	SPOON	LOWER DEKOVEN	COAL	1.5	555.4	
-186.9	SPOON		SANDY SHALE	3.1	556.9	
-190.0	SPOON		SANDSTONE	6.0	560.0	
-196.0	SPOON		SHALE	6.7	566.0	
-202.7	SPOON	DAVIS	COAL	0.3	572.7	
-203.0	SPOON	DAVIS	COAL	3.3	573.0	
-206.3	SPOON		UNDERCLAY	1.8	576.3	
-208.0	SPOON		LIMESTONE	4.0	578.0	
-212.0	SPOON		CALCAREOUS SHALE	9.0	582.0	CALC
-221.0	SPOON		SANDY SHALE	3.0	591.0	
-224.0	SPOON		SANDSTONE	2.0	594.0	
-226.0	SPOON		SANDY SHALE	12.0	596.0	GRAY
-238.0	SPOON		SHALE	13.0	608.0	
-251.0	SPOON	CARRIER MILLS	SHALE	2.3	621.0	DARK
-253.3	SPOON	SEAHORNE LS	COAL	0.4	623.3	
-253.7	SPOON		SANDSTONE	0.3	623.7	
-254.0	SPOON		SANDSTONE	4.0	624.0	
-258.0	SPOON		SANDY SHALE	4.0	628.0	GRAY
-262.0	SPOON		SHALE	2.0	632.0	
-264.0	SPOON	STONEFORT	LIMESTONE	2.0	634.0	
-266.0	SPOON		BLACK SHALE	2.0	636.0	
-268.0	SPOON		SHALE	6.0	638.0	
-274.0	SPOON		BLACK SHALE	1.2	644.0	
-275.2	SPOON	WISE RIDGE	COAL	0.8	645.2	CORRELATION UNCERTAIN
-276.0	SPOON		SANDSTONE	4.0	646.0	
-280.0	SPOON		SHALE	2.0	650.0	SANDY
-282.0	SPOON		SANDY SHALE	15.0	652.0	GRAY
-297.0	SPOON		SHALE	2.2	667.0	DARK
-299.2	SPOON	MT. RORAH	COAL	1.3	669.2	
-300.5	SPOON		SANDY SHALE	26.5	670.5	
-327.0	SPOON		SANDSTONE	2.0	697.0	
-329.0	SPOON		SANDY SHALE	23.0	699.0	
-352.0	SPOON	CREAL SPRING	LIMESTONE	2.0	722.0	CORRELATION UNCERTAIN
-354.0	SPOON		SHALE	0.7	724.0	DARK
-354.7	SPOON		COAL	0.3	724.7	
-354.9	SPOON		SHALE	6.1	724.9	
-361.0	SPOON		SANDY SHALE	18.0	731.0	
-379.0	SPOON		SANDY SHALE	6.0	749.0	W/SS
-385.0	SPOON	MURPHYSBORO	COAL	9.3	755.0	CORRELATION UNCERTAIN
-394.3	SPOON	MURPHYSBORO	SANDSTONE	11.8	764.3	UNCERTAIN CORRELATION
-406.0	SPOON	MURPHYSBORO	SHALE	1.2	776.0	UNCERTAIN CORRELATION
-407.2	SPOON	MURPHYSBORO	COAL	3.8	777.2	

-411.0	SPOON	SANDY SHALE	28.0	781.0	
-439.0	SPOON	SHALE	12.3	809.0	W/SS, DARK
-451.3	SPOON	COAL	0.1	821.3	
-451.4	SPOON	UNDERCLAY	1.6	821.4	
-453.0	SPOON	SANDSTONE	2.0	823.0	
-455.0	SPOON	SANDY SHALE	15.0	825.0	GRAY

MAPID: 16500152000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.491708 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.784478 **DATE COLLECTED:** 5 / 0 / 1916

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 840.0 **LOG TYPE:** Other Core Study

SOURCE: NEAR WASSON COAL, **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-11.7	CARBONDALE	HOUCHIN CREEK	COAL	2.2	381.7	
-54.4	CARBONDALE	SURVANT	COAL	0.9	424.4	
-131.3	CARBONDALE	COLCHESTER	COAL	0.7	501.3	
-164.7	CARBONDALE	DEKOVEN	COAL	2.1	534.7	
-185.4	CARBONDALE	LOWER DEKOVEN	COAL	1.5	555.4	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-202.7	CARBONDALE	DAVIS	COAL	3.6	572.7	
-253.2	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	623.2	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-263.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	633.0	
-299.1	TRADEWATER	MT. RORAH	COAL	1.7	669.1	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502654000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 310' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.501827 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.781715 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2403.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, SAHARA COAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	COLCHESTER	COAL	0.5	508.0	
-180.0	CARBONDALE	DEKOVEN	COAL	2.0	548.0	
-200.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	568.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-214.0	CARBONDALE	DAVIS	COAL	4.0	582.0	
-267.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	635.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-276.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	644.0	
-312.0	TRADEWATER	MT. RORAH	COAL	1.8	680.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502654000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 310' W line of SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.501827 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781715 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2403.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1305.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1676.0	
-1665.0			LIMESTONE	-	2036.0	
-2032.0		BASE BARLOW	LIMESTONE	-	2403.0	

MAPID: 16502811000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.485971 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.783613 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2453.0 **LOG TYPE:** Electric Log
SOURCE: ATHENE DEV. CO., INC., CUMMINGS ANN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	396.0	
-77.0	CARBONDALE	SURVANT	COAL	0.9	438.0	
-158.0	CARBONDALE	COLCHESTER	COAL	0.5	519.0	
-194.0	CARBONDALE	DEKOVEN	COAL	2.5	555.0	
-214.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	575.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-229.0	CARBONDALE	DAVIS	COAL	3.8	590.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	640.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-292.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	653.0	
-329.0	TRADEWATER	MT. RORAH	COAL	1.8	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502811000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.485971 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783613 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2453.0 **LOG TYPE:**
SOURCE: ATHENE DEV. CO., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1714.0	
-1706.0			LIMESTONE	-	2067.0	
-2092.0		BASE BARLOW	LIMESTONE	-	2453.0	

MAPID: 16503004000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 360' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.501558 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.788866 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2062.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., MOORE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-22.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	413.0	
-64.0	CARBONDALE	SURVANT	COAL	0.8	455.0	
-140.0	CARBONDALE	COLCHESTER	COAL	0.5	531.0	
-180.0	CARBONDALE	DEKOVEN	COAL	2.5	571.0	
-208.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	599.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	4.0	608.0	
-269.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-278.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	669.0	
-313.0	TRADEWATER	MT. RORAH	COAL	1.8	704.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503004000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 360' N line, 330' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.501558 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788866 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2062.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1315.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1706.0	
-1671.0			LIMESTONE	-	2062.0	

MAPID: 16503292000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 300' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499378 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.789048 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 391.8 **LOGGED (FT.):** 1540.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.2	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	540.0	
-228.2	SPOON	DAVIS	UNCLASSIFIED	-	620.0	
-1148.2	BASE OF PENN.		UNCLASSIFIED	-	1540.0	

MAPID: 16503292000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 300' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499378 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789048 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2426.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1710.0	
-1665.0			LIMESTONE	-	2061.0	
-2030.0		BASE BARLOW	LIMESTONE	-	2426.0	

MAPID: 16503292000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 300' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499378 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789048 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2426.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, GATES FRIEDA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-28.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	420.0	
-68.0	CARBONDALE	SURVANT	COAL	0.8	460.0	
-148.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-183.0	CARBONDALE	DEKOVEN	COAL	4.0	575.0	
-207.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	599.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-223.0	CARBONDALE	DAVIS	COAL	4.3	615.0	
-276.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	668.0	70% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-282.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	674.0	
-318.0	TRADEWATER	MT. RORAH	COAL	1.7	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503413000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788987 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2425.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1708.0	
-1670.0			LIMESTONE	-	2066.0	
-2029.0		BASE BARLOW	LIMESTONE	-	2425.0	

MAPID: 16503423000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 400' N line, 380' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497068 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.781546 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2406.0 **LOG TYPE:**
SOURCE: COBB RUSSELL JR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1684.0	
-2036.0		BASE BARLOW	LIMESTONE	-	2406.0	

MAPID: 16503445000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 380' S line, 340' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497085 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787322 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2067.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1312.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1694.0	
-1685.0			LIMESTONE	-	2067.0	

MAPID: 16503448000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 360' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494932 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787281 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2406.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1696.0	
-2026.0		BASE BARLOW	LIMESTONE	-	2406.0	

MAPID: 16503452000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 360' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.494906 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.788924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1309.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1690.0	

MAPID: 16503461000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 370' S line, 390' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.496986 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783672 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2399.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1311.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1678.0	
-1672.0			LIMESTONE	-	2039.0	
-2032.0		BASE BARLOW	LIMESTONE	-	2399.0	

MAPID: 16503462000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499457 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785347 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2406.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1308.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1686.0	
-1663.0			LIMESTONE	-	2041.0	
-2028.0		BASE BARLOW	LIMESTONE	-	2406.0	

MAPID: 16503463000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.48599 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.776319 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2402.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
196.0	CARBONDALE	BRERETON	LIMESTONE	-	174.0	
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1680.0	
-1664.0			LIMESTONE	-	2034.0	
-2032.0		BASE BARLOW	LIMESTONE	-	2402.0	

MAPID: 16503464000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.497161 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785363 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2037.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1310.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1683.0	
-1664.0			LIMESTONE	-	2037.0	

MAPID: 16503467000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 345' S line, 430' W line of NW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.501258 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787198 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2054.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1316.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1702.0	
-1668.0			LIMESTONE	-	2054.0	

MAPID: 16503468000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.499418 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.787169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2416.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1698.0	
-1664.0			LIMESTONE	-	2048.0	
-2032.0		BASE BARLOW	LIMESTONE	-	2416.0	

MAPID: 16503470000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 360' S line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.501704 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2396.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1303.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1675.0	
-2024.0		BASE BARLOW	LIMESTONE	-	2396.0	

MAPID: 16503471000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 355' S line, 400' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.49523 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.783637 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2408.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1686.0	
-1670.0			LIMESTONE	-	2042.0	
-2036.0		BASE BARLOW	LIMESTONE	-	2408.0	

MAPID: 16503477000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 350' N line, 330' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.501656 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785278 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2403.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1314.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1688.0	
-1674.0			LIMESTONE	-	2048.0	
-2029.0		BASE BARLOW	LIMESTONE	-	2403.0	

MAPID: 16503478000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 350' N line, 400' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.495203 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.785321 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2046.0 **LOG TYPE:**
SOURCE: POC OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1313.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1690.0	
-1669.0			LIMESTONE	-	2046.0	

MAPID: 16590679000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446371 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.789608 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.4		

MAPID: 16590680000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460563 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.789961 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16590681000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469558 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.802684 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		

MAPID: 16500656000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.391775 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.85002 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 376.7 **LOGGED (FT.):** 420.0 **LOG TYPE:** Drillers Log

SOURCE: TRI COUNTY COAL CORP. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.7			UNCONSOLIDATED	32.0	0.0	
344.7			CLAY	11.0	32.0	
333.7	MODESTO		SHALY SANDSTONE	11.0	43.0	
322.7	MODESTO		SHALE	4.7	54.0	
318.0	MODESTO		COAL	0.5	58.7	
317.5	MODESTO		UNDERCLAY	0.5	59.2	
317.0	MODESTO		SHALE	13.3	59.7	W/SS
303.7	MODESTO		SANDY SHALE	18.0	73.0	
285.7	MODESTO		SHALE	19.0	91.0	
266.7	MODESTO		LIMESTONE	3.2	110.0	
263.5	MODESTO		SHALE	12.5	113.2	
251.0	MODESTO		COAL	0.1	125.7	
250.9	MODESTO		UNDERCLAY	1.0	125.8	
249.9	MODESTO		SANDSTONE	5.3	126.8	
244.7	MODESTO		SHALE	16.0	132.0	
228.7	MODESTO		SHALE	9.7	148.0	
219.0	MODESTO		BLACK SHALE	5.5	157.7	
213.5	MODESTO		COAL	0.8	163.2	
212.8	MODESTO		UNDERCLAY	3.7	163.9	
209.1	MODESTO		SANDY SHALE	7.0	167.6	
202.1	MODESTO		SHALE	11.4	174.6	
190.7	MODESTO		SHALE	3.0	186.0	
187.7	MODESTO		SHALY LIMESTONE	3.0	189.0	
184.7	MODESTO		SHALE	1.0	192.0	
183.7	MODESTO		SHALE	27.0	193.0	
156.7	MODESTO		SHALE	19.2	220.0	
137.5	CARBONDALE	DANVILLE	COAL	1.8	239.2	
135.8	CARBONDALE		SANDY SHALE	13.1	240.9	
122.7	CARBONDALE		SHALE	6.0	254.0	
116.7	CARBONDALE	"Allenby rider"	COAL	0.1	260.0	
116.6	CARBONDALE		UNDERCLAY	0.3	260.1	
116.3	CARBONDALE		SHALE	3.8	260.4	
112.5	CARBONDALE	ALLENBY	COAL	0.5	264.2	
112.0	CARBONDALE		UNDERCLAY	0.7	264.7	
111.4	CARBONDALE		GRAY SHALE	2.7	265.3	
108.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	268.0	
103.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.4	273.6	
98.7	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	278.0	
91.7	CARBONDALE	ANVIL ROCK	SHALE	17.1	285.0	

74.6	CARBONDALE	BRERETON	LIMESTONE	3.7	302.1
70.9	CARBONDALE	ANNA	BLACK SHALE	1.0	305.8
69.9	CARBONDALE	HERRIN	COAL	3.7	306.8
66.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.1	310.4
66.2	CARBONDALE	HERRIN	COAL	1.3	310.5
64.9	CARBONDALE		UNDERCLAY	4.3	311.8
60.7	CARBONDALE		SANDY SHALE	42.0	316.0
18.7	CARBONDALE		SHALE	6.0	358.0
12.7	CARBONDALE	BRIAR HILL	COAL	1.9	364.0
10.9	CARBONDALE		SANDY SHALE	45.4	365.8
-34.6	CARBONDALE	ST. DAVID	LIMESTONE	1.0	411.3
-35.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	412.3
-38.3	CARBONDALE	SPRINGFIELD	COAL	4.4	415.0
-42.7	CARBONDALE		UNDERCLAY	0.5	419.4

MAPID: 16500656000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.391775 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.85002 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 420.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.0	CARBONDALE	DANVILLE	COAL	1.8	239.0	
109.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	268.0	
99.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	278.0	
70.0	CARBONDALE	HERRIN	COAL	5.0	307.0	
13.0	CARBONDALE	BRIAR HILL	COAL	1.8	364.0	
-38.0	CARBONDALE	SPRINGFIELD	COAL	4.3	415.0	

MAPID: 16500840000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382469 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849963 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**
SOURCE: HENRY SIMON ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1755.0	
-1747.0			LIMESTONE	-	2122.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16501398000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38721 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862885 **DATE COLLECTED:** 12 / 0 / 1948
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: HEATH B M ETAL, GARNER CLIFTON 10 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.4	486.0	
-137.0	CARBONDALE	SURVANT	COAL	1.2	510.0	
-189.0	CARBONDALE	COLCHESTER	COAL	0.5	562.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	607.0	
-258.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	631.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-272.0	CARBONDALE	DAVIS	COAL	4.5	645.0	
-307.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-341.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	714.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501398000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38721 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862885 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2132.0 **LOG TYPE:**
SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1759.0			LIMESTONE	-	2132.0	

MAPID: 16501399000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380105 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.849951 **DATE COLLECTED:** 3 / 0 / 1952
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: GRIFFITH WILBUR L, SETEN C E ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	482.0	
-129.0	CARBONDALE	SURVANT	COAL	1.2	505.0	
-190.0	CARBONDALE	COLCHESTER	COAL	0.5	566.0	
-234.0	CARBONDALE	DEKOVEN	COAL	2.5	610.0	
-260.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	636.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-274.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	688.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-342.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	718.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501399000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380105 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2480.0 **LOG TYPE:**
SOURCE: GRIFFITH WILBUR L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	291.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1734.0			LIMESTONE	-	2112.0	
-2102.0		BASE BARLOW	LIMESTONE	-	2480.0	

MAPID: 16501529000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382551 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862901 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1747.0			LIMESTONE	-	2120.0	
-2128.0		BASE BARLOW	LIMESTONE	-	2501.0	

MAPID: 16501529000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382551 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.862901 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3025.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
157.0	CARBONDALE	DANVILLE	COAL	-	216.0	
127.0	CARBONDALE	SS BELOW NO. 7		-	246.0	
87.0	CARBONDALE	HERRIN	COAL	4.0	286.0	
73.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	14.0	300.0	
35.0	CARBONDALE	BRIAR HILL	COAL	-	338.0	
20.0	CARBONDALE	CANTON	SANDSTONE/SILTSTONE	13.0	353.0	
-22.0	CARBONDALE	SPRINGFIELD	COAL	5.0	395.0	
-32.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SILTSTONE	8.0	405.0	
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	-	472.0	

MAPID: 16501529000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382551 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862901 **DATE COLLECTED:** 9 / 0 / 1954
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., GARNER C E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	477.0	
-126.0	CARBONDALE	SURVANT	COAL	0.8	499.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-225.0	CARBONDALE	DEKOVEN	COAL	2.5	598.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	624.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	3.7	636.0	
-297.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-327.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502221000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380189 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862908 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:**
SOURCE: MITCHELL, Q. B. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	BRERETON	LIMESTONE	-	284.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1759.0	
-1734.0			LIMESTONE	-	2107.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2486.0	

MAPID: 16502222000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38018 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.861033 **DATE COLLECTED:** 1 / 0 / 1953
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, Q. B., GARNER C E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	470.0	
-117.0	CARBONDALE	SURVANT	COAL	0.9	490.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-226.0	CARBONDALE	DEKOVEN	COAL	2.5	599.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	628.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	636.0	
-300.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	673.0	
-342.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502222000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38018 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.861033 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2487.0 **LOG TYPE:**
SOURCE: MITCHELL, Q. B. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1759.0	
-1740.0			LIMESTONE	-	2113.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2487.0	

MAPID: 16502534000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377894 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.862913 **DATE COLLECTED:** 4 / 0 / 1967
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1595.0 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONT. CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-185.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	560.0	
-275.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1220.0	BASE OF PENN.		UNCLASSIFIED	-	1595.0	

MAPID: 16502534000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377894 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862913 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2465.0 **LOG TYPE:**
SOURCE: IL MID-CONT. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1715.0			LIMESTONE	-	2090.0	
-2090.0		BASE BARLOW	LIMESTONE	-	2465.0	

MAPID: 16502534000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377894 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862913 **DATE COLLECTED:** 4 / 0 / 1967
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONT. CO., GARNER C E "C" **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	480.0	
-133.0	CARBONDALE	SURVANT	COAL	1.5	508.0	
-185.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-233.0	CARBONDALE	DEKOVEN	COAL	2.8	608.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	640.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-275.0	CARBONDALE	DAVIS	COAL	3.8	650.0	
-309.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	684.0	
-315.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	690.0	
-355.0	TRADEWATER	MT. RORAH	COAL	0.8	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503000000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.389442 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851853 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, FLANDERS HARRY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	485.0	
-136.0	CARBONDALE	SURVANT	COAL	1.8	508.0	
-198.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-236.0	CARBONDALE	DEKOVEN	COAL	3.5	608.0	
-266.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	638.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-278.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	692.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-345.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	717.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503000000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.389442 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851853 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2494.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	294.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1754.0	
-1733.0			LIMESTONE	-	2105.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2494.0	

MAPID: 16503005000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375444 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.849924 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: JET OIL CO., SETEN C E 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	487.0	
-122.0	CARBONDALE	SURVANT	COAL	0.9	509.0	
-183.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.8	613.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	636.0	20 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	2.5	650.0	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	689.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-335.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	722.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503005000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375444 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2495.0 **LOG TYPE:**
SOURCE: JET OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	BRERETON	LIMESTONE	-	292.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1739.0			LIMESTONE	-	2126.0	
-2108.0		BASE BARLOW	LIMESTONE	-	2495.0	

MAPID: 16503211000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380154 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.857339 **DATE COLLECTED:** 8 / 0 / 1958
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: KUZMICH, R. W., GARNER C E 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-90.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-107.0	CARBONDALE	SURVANT	COAL	0.7	482.0	
-168.0	CARBONDALE	COLCHESTER	COAL	0.5	543.0	
-210.0	CARBONDALE	DEKOVEN	COAL	2.0	585.0	
-247.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	622.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	3.8	637.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-335.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503211000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.380154 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.857339 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2492.0 **LOG TYPE:**
SOURCE: KUZMICH, R. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1765.0	
-1742.0			LIMESTONE	-	2117.0	
-2117.0		BASE BARLOW	LIMESTONE	-	2492.0	

MAPID: 16503286000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2590' N line, 0' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.392983 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.85663 **DATE COLLECTED:** 6 / 0 / 1959
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-118.0	CARBONDALE	HOUCHIN CREEK	COAL	1.2	483.0	
-150.0	CARBONDALE	SURVANT	COAL	1.7	515.0	
-203.0	CARBONDALE	COLCHESTER	COAL	0.2	568.0	
-236.0	CARBONDALE	DEKOVEN	COAL	1.2	601.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	630.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-272.5	CARBONDALE	DAVIS	COAL	2.5	637.5	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	667.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-328.0	TRADEWATER	STONEFORT	LIMESTONE	0.5	693.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503286000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2590' N line, 0' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.392983 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.85663 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 304.5 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
131.5	CARBONDALE	DANVILLE	COAL	1.4	233.5	
130.1	CARBONDALE		SHALE & SANDSTONE	24.0	234.9	
106.1	CARBONDALE	ALLENBY	BONE COAL	0.5	258.9	
105.5	CARBONDALE		CLAYSTONE	6.0	259.5	
99.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	265.5	
93.9	CARBONDALE	LAWSON	SHALE & SANDSTONE	2.7	271.1	
91.2	CARBONDALE	LAWSON	SANDSTONE	5.5	273.8	
85.7	CARBONDALE	LAWSON	DARK GRAY SHALE	10.0	279.3	
75.7	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	1.2	289.3	
74.6	CARBONDALE	LAWSON	DARK GRAY SHALE	2.8	290.4	
71.7	CARBONDALE		CALCAREOUS SHALE	1.3	293.3	
70.5	CARBONDALE	BRERETON	LIMESTONE	4.3	294.5	
66.2	CARBONDALE	ANNA	BLACK SHALE	1.2	298.8	
65.0	CARBONDALE	HERRIN	COAL	4.5	300.0	

MAPID: 16503305000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.384826 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.85921 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:**

SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1747.0			LIMESTONE	-	2124.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2510.0	

MAPID: 16503305000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384826 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.85921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2855.0 **LOG TYPE:** Electric Log
SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	HERRIN	COAL	3.0	282.0	
45.0	CARBONDALE	BRIAR HILL	COAL	-	332.0	
-10.0	CARBONDALE	SPRINGFIELD	COAL	4.0	387.0	
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	-	464.0	

MAPID: 16503538000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377816 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.861038 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2478.0 **LOG TYPE:**
SOURCE: IL MID-CONT. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1720.0			LIMESTONE	-	2100.0	
-2098.0		BASE BARLOW	LIMESTONE	-	2478.0	

MAPID: 16503553000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375508 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.859218 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2478.0 **LOG TYPE:**
SOURCE: IL MID-CONT. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1756.0	
-1713.0			LIMESTONE	-	2100.0	
-2091.0		BASE BARLOW	LIMESTONE	-	2478.0	

MAPID: 16503681000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.376631 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855513 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2490.0 **LOG TYPE:**
SOURCE: MCCOLLUM, JAMES R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	BRERETON	LIMESTONE	-	278.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1727.0			LIMESTONE	-	2112.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2490.0	

MAPID: 16523869000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375512 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.857349 **DATE COLLECTED:** 1 / 0 / 1975
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: IL MIDCONTINENT/DEE DRLG, GARNER C E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-88.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	474.0	
-113.0	CARBONDALE	SURVANT	COAL	1.8	499.0	
-172.0	CARBONDALE	COLCHESTER	COAL	0.5	558.0	
-212.0	CARBONDALE	DEKOVEN	COAL	2.5	598.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	635.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	3.0	648.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-334.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501530000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403232 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853758 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2172.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
20.0	CARBONDALE	BRERETON	LIMESTONE	-	364.0	
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1788.0			LIMESTONE	-	2172.0	

MAPID: 16501530000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403232 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.853758 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2242.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	DANVILLE	COAL	-	272.0	
86.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	298.0	
73.0	CARBONDALE	ANVIL ROCK	SILTSTONE/SANDSTONE	49.0	311.0	
16.0	CARBONDALE	HERRIN	COAL	4.0	368.0	
-39.0	CARBONDALE	BRIAR HILL	COAL	-	423.0	
-90.0	CARBONDALE	SPRINGFIELD	COAL	4.0	474.0	
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	-	548.0	

MAPID: 16502223000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400913 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.851919 **DATE COLLECTED:** 10 / 0 / 1954
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 1650.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-255.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	638.0	
-327.0	SPOON	DAVIS	UNCLASSIFIED	-	710.0	
-1267.0	BASE OF PENN.		UNCLASSIFIED	-	1650.0	

MAPID: 16502223000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400913 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851919 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2663.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	BRERETON	LIMESTONE	-	344.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1799.0	
-1780.0			LIMESTONE	-	2163.0	
-2280.0		BASE BARLOW	LIMESTONE	-	2663.0	

MAPID: 16502223000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400913 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851919 **DATE COLLECTED:** 10 / 0 / 1954
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., ENDICOTT M M **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-152.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	535.0	
-182.0	CARBONDALE	SURVANT	COAL	0.9	565.0	
-250.0	CARBONDALE	COLCHESTER	COAL	0.5	633.0	
-282.0	CARBONDALE	DEKOVEN	COAL	2.0	665.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	695.0	35 PERCENT SANDSTONE IN DEKOVEN SPLIT
-327.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-361.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	744.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-387.0	TRADEWATER	STONEFORT	LIMESTONE	0.8	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502224000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 280' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398497 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853724 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., ENDICOTT M M **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-172.0	CARBONDALE	SURVANT	COAL	0.9	552.0	
-232.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-272.0	CARBONDALE	DEKOVEN	COAL	2.5	652.0	
-300.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	680.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-316.0	CARBONDALE	DAVIS	COAL	4.0	696.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	732.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-370.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502224000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 280' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398497 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853724 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1796.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	

MAPID: 16502225000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398654 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851903 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2167.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	334.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1784.0			LIMESTONE	-	2167.0	

MAPID: 16502226000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 1050' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398448 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855551 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1801.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	BRERETON	LIMESTONE	-	333.0	
-1424.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1801.0	

MAPID: 16502227000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.40319 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.850124 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2154.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
38.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1418.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1776.0			LIMESTONE	-	2154.0	

MAPID: 16502228000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403211 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851936 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., SCROGGIN A ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	550.0	
-204.0	CARBONDALE	SURVANT	COAL	2.5	587.0	
-263.0	CARBONDALE	COLCHESTER	COAL	0.5	646.0	
-292.0	CARBONDALE	DEKOVEN	COAL	1.8	675.0	
-321.0	CARBONDALE	LOWER DEKOVEN	COAL	4.0	704.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-335.0	CARBONDALE	DAVIS	COAL	3.0	718.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-407.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502228000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403211 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851936 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 1804.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
29.0	CARBONDALE	BRERETON	LIMESTONE	-	354.0	
-1421.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	

MAPID: 16502229000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405439 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.850146 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., SCROGGINS A ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	522.0	
-170.0	CARBONDALE	SURVANT	COAL	0.7	550.0	
-235.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-268.0	CARBONDALE	DEKOVEN	COAL	2.0	648.0	
-295.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	675.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-310.0	CARBONDALE	DAVIS	COAL	4.0	690.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-358.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	738.0	
-380.0	TRADEWATER	MT. RORAH	COAL	0.8	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502229000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405439 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.850146 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1800.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	333.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	

MAPID: 16502550000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396405 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.857367 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2164.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
47.0	CARBONDALE	BRERETON	LIMESTONE	-	323.0	
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1794.0			LIMESTONE	-	2164.0	

MAPID: 16502550000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396405 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.857367 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 334.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	DANVILLE	COAL	1.0	260.0	
109.0	CARBONDALE		SILTY SHALE	22.5	261.0	
86.5	CARBONDALE	ALLENBY	BONE COAL	0.5	283.5	
86.0	CARBONDALE		CLAYSTONE	9.0	284.0	
77.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	293.0	
70.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	4.0	300.0	
66.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	12.0	304.0	
54.0	CARBONDALE	LAWSON	DARK GRAY SHALE	7.0	316.0	
47.0	CARBONDALE	BRERETON	LIMESTONE	5.5	323.0	
41.5	CARBONDALE	ANNA	BLACK SHALE	1.5	328.5	
40.0	CARBONDALE	HERRIN	COAL	4.0	330.0	

MAPID: 16502550000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396405 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.857367 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., BRILL J COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	515.0	
-169.0	CARBONDALE	SURVANT	COAL	0.8	539.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.5	639.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	669.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-313.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	718.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-371.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	741.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502684000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394124 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855537 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, FLANDERS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	494.0	
-145.0	CARBONDALE	SURVANT	COAL	0.8	514.0	
-210.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-241.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	638.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	3.5	648.0	
-313.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	682.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-341.0	TRADEWATER	STONEFORT	LIMESTONE	0.9	710.0	
-369.0	TRADEWATER	MT. RORAH	COAL	0.8	738.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502684000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394124 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855537 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2147.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	304.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	
-1778.0			LIMESTONE	-	2147.0	

MAPID: 16503088000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419343 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.859118 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-18.0	CARBONDALE	BRERETON	LIMESTONE	-	392.0	
-1450.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1813.0			LIMESTONE	-	2187.0	
-2205.0		BASE BARLOW	LIMESTONE	-	2579.0	

MAPID: 16503088000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.419343 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.859118 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 401.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
61.0	CARBONDALE	DANVILLE	COAL	3.0	313.0	
58.0	CARBONDALE		SILTY SHALE	13.0	316.0	
45.0	CARBONDALE		CLAYSTONE	7.0	329.0	
38.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	336.0	
35.0	CARBONDALE	LAWSON	SHALE	7.0	339.0	
28.0	CARBONDALE	LAWSON	SANDSTONE	45.0	346.0	
-17.0	CARBONDALE	BRERETON	LIMESTONE	4.0	391.0	
-21.0	CARBONDALE	ANNA	BLACK SHALE	2.0	395.0	
-23.0	CARBONDALE	HERRIN	COAL	4.0	397.0	

MAPID: 16503088000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.419343 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.859118 **DATE COLLECTED:** 1 / 0 / 1957

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1680.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-316.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	690.0	
-334.0	SPOON	DAVIS	UNCLASSIFIED	-	708.0	
-1306.0	BASE OF PENN.		UNCLASSIFIED	-	1680.0	

MAPID: 16503088000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419343 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.859118 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, BAIRD C M **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	HOUCHIN CREEK	COAL	2.4	585.0	
-245.0	CARBONDALE	SURVANT	COAL	0.8	619.0	
-315.0	CARBONDALE	COLCHESTER	COAL	0.5	689.0	
-344.0	CARBONDALE	DEKOVEN	COAL	2.4	718.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	748.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-384.0	CARBONDALE	DAVIS	COAL	4.0	758.0	
-418.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	792.0	
-423.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	797.0	
-446.0	TRADEWATER	MT. RORAH	COAL	0.8	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503422000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426162 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.853683 **DATE COLLECTED:** 6 / 0 / 1962
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR., HEREFORD **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-197.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	584.0	
-233.0	CARBONDALE	SURVANT	COAL	0.7	620.0	
-311.0	CARBONDALE	COLCHESTER	COAL	0.5	698.0	
-331.0	CARBONDALE	DEKOVEN	COAL	3.0	718.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	742.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-365.0	CARBONDALE	DAVIS	COAL	4.0	752.0	
-401.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	788.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-407.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	794.0	
-428.0	TRADEWATER	MT. RORAH	COAL	1.2	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503422000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426162 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853683 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.0	CARBONDALE	BRERETON	LIMESTONE	-	394.0	
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1781.0			LIMESTONE	-	2168.0	
-2195.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16503437000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428442 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851843 **DATE COLLECTED:** 6 / 0 / 1962
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., CLAYPOOL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	579.0	
-231.0	CARBONDALE	SURVANT	COAL	0.9	615.0	
-301.0	CARBONDALE	COLCHESTER	COAL	0.5	685.0	
-330.0	CARBONDALE	DEKOVEN	COAL	3.0	714.0	
-356.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	740.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-366.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-402.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	786.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-406.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	790.0	
-431.0	TRADEWATER	MT. RORAH	COAL	1.2	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503437000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428442 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-6.0	CARBONDALE	BRERETON	LIMESTONE	-	390.0	
-1430.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1791.0			LIMESTONE	-	2175.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502230000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439949 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.849971 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:** Electric Log
SOURCE: NATIONAL DRLG CO INC, NEEL ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-182.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	575.0	
-217.0	CARBONDALE	SURVANT	COAL	0.8	610.0	
-287.0	CARBONDALE	COLCHESTER	COAL	0.2	680.0	
-312.0	CARBONDALE	DEKOVEN	COAL	2.5	705.0	
-334.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	727.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-346.0	CARBONDALE	DAVIS	COAL	3.0	739.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502230000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.849971 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:**
SOURCE: NATIONAL DRLG CO INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
12.0	CARBONDALE	BRERETON	LIMESTONE	-	381.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2565.0	

MAPID: 16502404000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440103 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.860803 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, ROBERTS AUSTIN ETA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-210.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	590.0	
-240.0	CARBONDALE	SURVANT	COAL	0.8	620.0	
-307.0	CARBONDALE	COLCHESTER	COAL	0.5	687.0	
-343.0	CARBONDALE	DEKOVEN	COAL	3.0	723.0	
-372.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	752.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-382.0	CARBONDALE	DAVIS	COAL	4.0	762.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	799.0	
-440.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	820.0	
-470.0	TRADEWATER	MT. RORAH	COAL	1.8	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502404000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440103 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.860803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2593.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	BRERETON	LIMESTONE	-	388.0	
-1452.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-2213.0		BASE BARLOW	LIMESTONE	-	2593.0	

MAPID: 16503434000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433084 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.853631 **DATE COLLECTED:** 3 / 0 / 1962
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1670.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-313.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	710.0	
-373.0	SPOON	DAVIS	UNCLASSIFIED	-	770.0	
-1273.0	BASE OF PENN.		UNCLASSIFIED	-	1670.0	

MAPID: 16503434000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433084 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	BRERETON	LIMESTONE	-	405.0	
-1431.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1800.0			LIMESTONE	-	2197.0	
-2185.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16503435000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430718 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.850056 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
5.0	CARBONDALE	BRERETON	LIMESTONE	-	387.0	
-1422.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1785.0			LIMESTONE	-	2177.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2572.0	

MAPID: 16503435000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430718 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.850056 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 391.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	270.0	
118.0	MODESTO		SHALE	37.0	274.0	
81.0	CARBONDALE	DANVILLE	COAL	3.0	311.0	
78.0	CARBONDALE		SHALE	16.0	314.0	
62.0	CARBONDALE	LAWSON	SHALE	20.0	330.0	
42.0	CARBONDALE	LAWSON	SANDSTONE	35.0	350.0	
7.0	CARBONDALE	ANNA	BLACK SHALE	2.0	385.0	
5.0	CARBONDALE	HERRIN	COAL	4.0	387.0	

MAPID: 16503435000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430718 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.850056 **DATE COLLECTED:** 5 / 0 / 1962
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 391.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BUTLER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	575.0	
-218.0	CARBONDALE	SURVANT	COAL	0.8	610.0	
-288.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-317.0	CARBONDALE	DEKOVEN	COAL	3.0	709.0	
-346.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	738.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-353.0	CARBONDALE	DAVIS	COAL	3.8	745.0	
-390.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	782.0	
-395.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	787.0	
-448.0	TRADEWATER	MT. RORAH	COAL	0.0	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503436000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435383 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.853614 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
0.0	CARBONDALE	BRERETON	LIMESTONE	-	400.0	
-1432.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-2189.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16503438000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433059 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851809 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
4.0	CARBONDALE	BRERETON	LIMESTONE	-	393.0	
-1425.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-2188.0		BASE BARLOW	LIMESTONE	-	2585.0	

MAPID: 16503446000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435357 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.851792 **DATE COLLECTED:** 10 / 0 / 1962
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BARNEY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-188.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-226.0	CARBONDALE	SURVANT	COAL	0.7	628.0	
-298.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-318.0	CARBONDALE	DEKOVEN	COAL	2.8	720.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	740.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-350.0	CARBONDALE	DAVIS	COAL	3.0	752.0	
-398.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-416.0	TRADEWATER	STONEFORT	LIMESTONE	0.9	818.0	
-447.0	TRADEWATER	MT. RORAH	COAL	1.3	849.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503446000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435357 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.851792 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
10.0	CARBONDALE	BRERETON	LIMESTONE	-	392.0	
-1422.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1793.0			LIMESTONE	-	2195.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16500972000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of NW SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.459728 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.857957 **DATE COLLECTED:** 1 / 24 / 1943

SURFACE ELEVATION (FT.): 390.1 **LOGGED (FT.):** 435.8 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 15 **WELL TYPE:** Coal Test

COMMENT: SE CORNER OF NW1/4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.1			SOIL	1.0	0.0	DARK SOIL
389.1			CLAY	29.0	1.0	
360.1			CLAY	20.0	30.0	
340.1			CLAY	15.0	50.0	
325.1	MODESTO		SANDY SHALE	5.0	65.0	
320.1	MODESTO		GRAY SHALE	30.0	70.0	
290.1	MODESTO		BLUE SHALE	54.0	100.0	
236.1	MODESTO		SHALE	12.3	154.0	
223.8	MODESTO		COAL	0.3	166.3	
223.6	MODESTO		SHALE	25.3	166.5	
198.3	MODESTO		COAL	1.1	191.8	
197.3	MODESTO		SHALE	14.2	192.8	
183.1	MODESTO		GRAY SHALE	13.0	207.0	
170.1	MODESTO		BLUE SHALE	15.0	220.0	
155.1	MODESTO		SHALE	8.0	235.0	
147.1	CARBONDALE	DANVILLE	COAL	2.3	243.0	
144.8	CARBONDALE		SHALE	29.7	245.3	SHALE AND SANDSTONE
115.1	CARBONDALE		BLUE SHALE	3.0	275.0	
112.1	CARBONDALE		SANDSTONE	36.0	278.0	WITH SHALE PARTINGS
76.1	CARBONDALE	BRERETON	LIMESTONE	4.8	314.0	
71.3	CARBONDALE	HERRIN	COAL	4.2	318.8	
67.2	CARBONDALE		SHALE	2.1	322.9	
65.1	CARBONDALE		UNDERCLAY	1.0	325.0	
64.1	CARBONDALE		SHALE	36.5	326.0	
27.6	CARBONDALE	BRIAR HILL	COAL	1.5	362.5	
26.1	CARBONDALE	DYKERSBURG	SHALE	2.0	364.0	SHALE AND SANDSTONE
24.1	CARBONDALE	DYKERSBURG	SHALE	6.0	366.0	
18.1	CARBONDALE	DYKERSBURG	SHALY SANDSTONE	27.0	372.0	
-8.9	CARBONDALE	DYKERSBURG	SANDSTONE	25.1	399.0	
-34.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.3	424.1	WITH COAL STREAKS
-37.3	CARBONDALE	SPRINGFIELD	COAL	0.5	427.4	
-37.9	CARBONDALE	SPRINGFIELD	SANDSTONE	0.5	428.0	WITH COAL STREAKS
-38.4	CARBONDALE	SPRINGFIELD	COAL	4.9	428.5	
-43.3	CARBONDALE		UNDERCLAY	2.4	433.4	

MAPID: 16501531000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463053 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.84976 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3072.0 **LOG TYPE:** Electric Log

SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
121.0	CARBONDALE	DANVILLE	COAL	-	274.0	
115.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SILTSTONE	10.0	280.0	
97.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	298.0	
85.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	8.0	310.0	
58.0	CARBONDALE	HERRIN	COAL	6.0	337.0	
17.0	CARBONDALE	BRIAR HILL	COAL	-	378.0	
-11.0	CARBONDALE	CANTON	SILTSTONE	14.0	406.0	
-53.0	CARBONDALE	SPRINGFIELD	COAL	4.0	448.0	
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	-	530.0	

MAPID: 16501531000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463053 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.84976 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 340.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	MODESTO	PIASA	LIMESTONE	4.0	240.0	
151.0	MODESTO		SHALE	31.0	244.0	
120.0	CARBONDALE	DANVILLE	COAL	2.0	275.0	
118.0	CARBONDALE		SHALE & SANDSTONE	13.0	277.0	
105.0	CARBONDALE		CLAYSTONE	9.0	290.0	
96.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	299.0	
93.0	CARBONDALE	LAWSON	SHALE	8.0	302.0	
85.0	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	10.0	310.0	
75.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	4.0	320.0	
71.0	CARBONDALE	LAWSON	SHALE	6.0	324.0	
65.0	CARBONDALE	BRERETON	LIMESTONE	5.0	330.0	
60.0	CARBONDALE	ANNA	BLACK SHALE	2.0	335.0	
58.0	CARBONDALE	HERRIN	COAL	3.0	337.0	

MAPID: 16501531000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.463053 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.84976 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:**
SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1430.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1810.0			LIMESTONE	-	2205.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2556.0	

MAPID: 16501531000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.463053 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.84976 **DATE COLLECTED:** 7 / 0 / 1953
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 340.0 **LOG TYPE:** Electric Log
SOURCE: SCHOONMAKER, GEORGE C., CARTER O A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	535.0	
-175.0	CARBONDALE	SURVANT	COAL	0.8	570.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-273.0	CARBONDALE	DEKOVEN	COAL	1.2	668.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	705.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-319.0	CARBONDALE	DAVIS	COAL	3.0	714.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	746.0	
-366.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	761.0	
-404.0	TRADEWATER	MT. RORAH	COAL	1.2	799.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502516000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.449261 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855322 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1650.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-277.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	650.0	
-337.0	SPOON	DAVIS	UNCLASSIFIED	-	710.0	
-1277.0	BASE OF PENN.		UNCLASSIFIED	-	1650.0	

MAPID: 16502516000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.449261 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.855322 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:**

SOURCE: FELMONT CORPORATION **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	342.0	
-1447.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-2202.0		BASE BARLOW	LIMESTONE	-	2575.0	

MAPID: 16502516000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.449261 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855322 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2575.0 **LOG TYPE:** Electric Log
SOURCE: FELMONT CORPORATION, HOLT CHARLEY R **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	544.0	
-206.0	CARBONDALE	SURVANT	COAL	0.8	579.0	
-277.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-305.0	CARBONDALE	DEKOVEN	COAL	3.8	678.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	702.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-337.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	745.0	
-381.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	754.0	
-417.0	TRADEWATER	MT. RORAH	COAL	0.8	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502740000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465475 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.855179 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: CLARK & CLARK PETROL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1455.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1847.0	
-2184.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16503431000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460969 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.862479 **DATE COLLECTED:** 10 / 0 / 1962
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., CARTER HEIRS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.3	554.0	
-222.0	CARBONDALE	SURVANT	COAL	1.8	593.0	
-289.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-354.0	CARBONDALE	DEKOVEN	COAL	3.0	725.0	
-388.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	759.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-401.0	CARBONDALE	DAVIS	COAL	3.0	772.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	790.0	100% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-439.0	TRADEWATER	STONEFORT	LIMESTONE	0.5	810.0	
-484.0	TRADEWATER	MT. RORAH	COAL	1.8	855.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503431000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460969 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.862479 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
31.0	CARBONDALE	BRERETON	LIMESTONE	-	340.0	
-1461.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-2197.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16500659000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476296 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.849136 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 396.5 **LOGGED (FT.):** 554.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 12 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.5			UNCONSOLIDATED	1.0	0.0	BLACK SOIL
395.5			CLAY	17.0	1.0	
378.5			SAND	6.0	18.0	
372.5			CLAY & GRAVEL	7.0	24.0	HARD, GRAVELY CLAY
365.5			CLAY	29.0	31.0	
336.5	MODESTO		BLUE SHALE	10.0	60.0	
326.5	MODESTO		BLUE SHALE	20.0	70.0	
306.5	MODESTO	MOUND CITY	BLACK SHALE	3.5	90.0	
303.0	MODESTO	CHAPEL	COAL	0.5	93.5	
302.5	MODESTO		UNDERCLAY	3.0	94.0	
299.5	MODESTO		SANDY SHALE	9.0	97.0	
290.5	MODESTO		SANDSTONE	29.0	106.0	
261.5	MODESTO		SHALE	19.0	135.0	WITH SS STREAKS
242.5	MODESTO		BLUE SHALE	26.0	154.0	
216.5	MODESTO		LIMESTONE	2.0	180.0	
214.5	MODESTO		BLUE SHALE	20.9	182.0	
193.6	MODESTO		COAL	0.3	202.9	
193.2	MODESTO		UNDERCLAY	1.5	203.3	
191.7	MODESTO		BLUE SHALE	19.3	204.8	
172.5	MODESTO		BLACK SHALE	2.0	224.0	
170.5	MODESTO		COAL	1.0	226.0	
169.5	MODESTO		UNDERCLAY	4.0	227.0	
165.5	MODESTO		LIMESTONE	1.0	231.0	
164.5	MODESTO		GRAY SHALE	3.0	232.0	
161.5	MODESTO		LIMESTONE	1.5	235.0	
160.0	MODESTO		SANDSTONE	6.0	236.5	
154.0	MODESTO		SANDY SHALE	3.5	242.5	
150.5	MODESTO		BLUE SHALE	11.3	246.0	
139.2	MODESTO		SHALY LIMESTONE	5.0	257.3	
134.2	MODESTO		BLUE SHALE	5.0	262.3	
129.2	MODESTO		BLACK SHALE	2.7	267.3	
126.5	MODESTO		BLUE SHALE	14.0	270.0	WITH BROWN BANDS
112.5	MODESTO		BLUE SHALE	4.0	284.0	
108.5	CARBONDALE	DANVILLE	COAL	2.0	288.0	
106.5	CARBONDALE		UNDERCLAY	2.0	290.0	
104.5	CARBONDALE		BLUE SHALE	2.5	292.0	
102.0	CARBONDALE		SANDSTONE	6.0	294.5	
96.0	CARBONDALE		BLUE SHALE	5.5	300.5	
90.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	306.0	

88.5	CARBONDALE		BLUE SHALE	6.4	308.0	
82.1	CARBONDALE		COAL	0.8	314.4	
81.2	CARBONDALE	ANVIL ROCK	SANDSTONE	10.4	315.3	WITH SH STREAKS
70.8	CARBONDALE		BLUE SHALE	14.3	325.7	
56.5	CARBONDALE	BRERETON	LIMESTONE	5.8	340.0	
50.7	CARBONDALE	HERRIN	COAL	4.5	345.8	
46.2	CARBONDALE		SANDSTONE	16.7	350.3	
29.5	CARBONDALE		BLUE SHALE	20.5	367.0	
9.0	CARBONDALE	BRIAR HILL	COAL	2.0	387.5	
7.0	CARBONDALE		SANDY SHALE	6.5	389.5	
0.5	CARBONDALE		SHALY COAL	0.7	396.0	
-0.2	CARBONDALE		BLUE SHALE	6.0	396.7	
-6.2	CARBONDALE		SANDSTONE	22.3	402.7	
-28.5	CARBONDALE		SANDY SHALE	40.0	425.0	
-68.5	CARBONDALE	SPRINGFIELD	COAL	0.0	465.0	GALATIA CHANNEL - COAL MISSING
-68.5	CARBONDALE		SANDY SHALE	57.0	465.0	
-125.5	CARBONDALE		BLUE SHALE	23.2	522.0	
-148.7	CARBONDALE	EXCELLO	BLACK SHALE	4.9	545.2	
-153.6	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.1	
-155.6	CARBONDALE		UNDERCLAY	1.9	552.1	

MAPID: 16500659000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476296 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.849136 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 350.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.5	MODESTO	PIASA	LIMESTONE/UNDERCLAY	5.0	257.5	
134.5	MODESTO		SHALE	25.7	262.5	
108.8	CARBONDALE	DANVILLE	COAL	2.0	288.2	
106.8	CARBONDALE		SHALE & SANDSTONE	16.0	290.2	
90.8	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	306.2	
88.8	CARBONDALE	LAWSON	GRAY SHALE	6.4	308.2	
82.4	CARBONDALE	LAWSON	COAL	0.8	314.6	
81.6	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.4	315.4	
71.2	CARBONDALE	LAWSON	GRAY SHALE	14.3	325.8	
56.8	CARBONDALE	BRERETON	LIMESTONE	5.8	340.2	
51.0	CARBONDALE	HERRIN	COAL	4.5	346.0	

MAPID: 16501400000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.47466 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.856899 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:**
SOURCE: OLSON, C. H. & JANS, P N **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1471.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-1843.0			LIMESTONE	-	2222.0	
-2200.0		BASE BARLOW	LIMESTONE	-	2579.0	

MAPID: 16501400000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.47466 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.856899 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3016.0 **LOG TYPE:** Electric Log
SOURCE: OLSON, C. H. & JANS, P N **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	DANVILLE	COAL	-	282.0	
76.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	303.0	
69.0	CARBONDALE	ANVIL ROCK	SILTSTONE	4.0	310.0	
32.0	CARBONDALE	HERRIN	COAL	4.0	347.0	
3.0	CARBONDALE	BRIAR HILL	COAL	-	376.0	
1.0	CARBONDALE	CANTON	SANDSTONE/SHALE	68.0	378.0	
-101.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	56.0	480.0	
-178.0	CARBONDALE	HOUCHIN CREEK	COAL	-	557.0	

MAPID: 16501400000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.47466 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.856899 **DATE COLLECTED:** 9 / 0 / 1948
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1740.0 **LOG TYPE:** Electric Log
SOURCE: OLSON, C. H. & JANS, P N **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-291.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	670.0	
-356.0	SPOON	DAVIS	UNCLASSIFIED	-	735.0	
-1361.0	BASE OF PENN.		UNCLASSIFIED	-	1740.0	

MAPID: 16501400000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.47466 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856899 **DATE COLLECTED:** 9 / 0 / 1948
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:** Electric Log
SOURCE: OLSON, C. H. & JANS, P N, WASSON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-178.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	557.0	
-215.0	CARBONDALE	SURVANT	COAL	3.5	594.0	
-263.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-290.0	CARBONDALE	DEKOVEN	COAL	2.0	669.0	
-347.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	726.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-356.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-379.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	758.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500652000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.483741 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.840418 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 443.2 **LOGGED (FT.):** 482.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.2			CLAY	30.0	0.0	
413.2			CLAY	40.0	30.0	PEBBLY BLU CLY
373.2	MODESTO		BLUE SHALE	35.0	70.0	
338.2	MODESTO		BLUE SHALE	2.0	105.0	BLUE CLY SH
336.2	MODESTO		BLUE SHALE	9.0	107.0	LIGHT BLUE CLY SH
327.2	MODESTO	MOUND CITY	BLACK SHALE	2.0	116.0	
325.2	MODESTO	CHAPEL	COAL	0.8	118.0	
324.4	MODESTO		UNDERCLAY	1.2	118.8	
323.2	MODESTO		SANDSTONE	3.0	120.0	
320.2	MODESTO		SANDSTONE/SHALE	17.0	123.0	
303.2	MODESTO		SANDSTONE	20.0	140.0	
283.2	MODESTO		BLUE SHALE	41.0	160.0	VERY SOFT,STICKY BLU SH
242.2	MODESTO		LIMESTONE	1.0	201.0	BOSTERLY LS
241.2	MODESTO		BLUE SHALE	24.0	202.0	
217.2	MODESTO		COAL	0.5	226.0	
216.7	MODESTO		BLUE SHALE	15.5	226.5	
201.2	MODESTO		DARK SHALE	1.3	242.0	
199.9	MODESTO		COAL	0.7	243.3	
199.2	MODESTO		SANDSTONE	10.0	244.0	
189.2	MODESTO		CALCAREOUS SHALE	10.0	254.0	
179.2	MODESTO		BLUE SHALE	17.0	264.0	
162.2	MODESTO		BLUE SHALE	15.0	281.0	
147.2	MODESTO		DARK SHALE	2.5	296.0	
144.7	MODESTO		COAL	0.5	298.5	
144.2	MODESTO		GRAY SHALE	11.0	299.0	
133.2	MODESTO		GRAY SHALE	5.0	310.0	
128.2	CARBONDALE	DANVILLE	COAL	2.2	315.0	
126.0	CARBONDALE		BLUE SHALE	13.8	317.2	
112.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	331.0	
108.2	CARBONDALE		ARGILACEOUS SHALE	5.0	335.0	LIGHT CLY SH
103.2	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	10.0	340.0	
93.2	CARBONDALE	ANVIL ROCK	SANDSTONE	26.0	350.0	
67.2	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	376.0	
59.2	CARBONDALE		LIMESTONE	1.0	384.0	
58.2	CARBONDALE		SANDSTONE	3.0	385.0	
55.2	CARBONDALE		DARK SHALE	1.4	388.0	
53.8	CARBONDALE	HERRIN	COAL	5.6	389.4	
48.2	CARBONDALE		UNDERCLAY	10.0	395.0	
38.2	CARBONDALE		SANDSTONE	15.0	405.0	

23.2	CARBONDALE		SANDSTONE/SHALE	11.0	420.0	
12.2	CARBONDALE		BLUE SHALE	16.0	431.0	
-3.8	CARBONDALE	BRIAR HILL	COAL	1.7	447.0	
-5.5	CARBONDALE		SANDSTONE/SHALE	8.3	448.7	
-13.8	CARBONDALE	ST. DAVID	LIMESTONE	3.0	457.0	'BASTARDLY' LS
-16.8	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	14.8	460.0	
-31.6	CARBONDALE	SPRINGFIELD	COAL	5.9	474.8	
-37.6	CARBONDALE	SPRINGFIELD	SHALE	0.3	480.8	
-37.8	CARBONDALE	SPRINGFIELD	COAL	0.1	481.0	
-37.9	CARBONDALE		SHALE	0.9	481.1	

MAPID: 16500660000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.474507 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.840512 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 397.2 **LOGGED (FT.):** 479.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.2			CLAY	20.0	0.0	
377.2			CLAY	20.0	20.0	PEBBLY BLU CLY
357.2			GRAVEL	4.0	40.0	
353.2			CLAY	22.0	44.0	
331.2	MODESTO		BLUE SHALE	4.0	66.0	
327.2	MODESTO		SHALE	5.5	70.0	DARK CLY SH
321.7	MODESTO	CHAPEL	COAL	0.5	75.5	
321.2	MODESTO		UNDERCLAY	2.0	76.0	
319.2	MODESTO		SANDSTONE/SHALE	12.0	78.0	
307.2	MODESTO		BLUE SHALE	6.0	90.0	
301.2	MODESTO		SANDSTONE	9.0	96.0	
292.2	MODESTO		SANDSTONE/SHALE	5.0	105.0	
287.2	MODESTO		SANDSTONE	10.0	110.0	WITH SHALE PARTINGS
277.2	MODESTO		BLUE SHALE	40.0	120.0	
237.2	MODESTO		LIMESTONE	2.0	160.0	'BASTARDLY' LS
235.2	MODESTO		BLUE SHALE	19.0	162.0	
216.2	MODESTO		SHALE	3.0	181.0	DK CLY SH
213.2	MODESTO		COAL	0.5	184.0	
212.7	MODESTO		UNDERCLAY	1.5	184.5	
211.2	MODESTO		BLUE SHALE	19.0	186.0	
192.2	MODESTO		COAL	1.2	205.0	
191.0	MODESTO		UNDERCLAY	0.8	206.2	
190.2	MODESTO		SANDSTONE/SHALE	11.0	207.0	
179.2	MODESTO		BLUE SHALE	39.0	218.0	WITH GRAY MUD SEAMS
140.2	MODESTO		BLUE SHALE	3.0	257.0	
137.2	MODESTO		COAL	0.3	260.0	
136.9	MODESTO		BLUE SHALE	11.7	260.3	WITH HARD BANDS
125.2	CARBONDALE	DANVILLE	COAL	1.7	272.0	
123.5	CARBONDALE		SANDY SHALE	14.3	273.7	LIGHT SDY SH
109.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	288.0	
105.2	CARBONDALE		LIGHT SHALE	2.0	292.0	LIGHT CLY SH
103.2	CARBONDALE		SHALE	1.0	294.0	
102.2	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	21.0	295.0	
81.2	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	316.0	
62.2	CARBONDALE		SHALE	1.0	335.0	DARK CLY SH
61.2	CARBONDALE	BRERETON	LIMESTONE	5.0	336.0	
56.2	CARBONDALE	ANNA	DARK SHALE	0.8	341.0	
55.4	CARBONDALE	HERRIN	COAL	5.8	341.8	
49.6	CARBONDALE		CALCAREOUS SHALE	9.4	347.6	

40.2	CARBONDALE		BLUE SHALE	24.8	357.0	
15.4	CARBONDALE		LIMESTONE	1.9	381.8	'BASTARDLY' LS
13.4	CARBONDALE	BRIAR HILL	COAL	2.3	383.8	
11.2	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	9.0	386.0	
2.2	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	17.0	395.0	WITH SS PARTINGS BADLY BROKEN UP
-14.8	CARBONDALE	DYKERSBURG	SHALE	28.0	412.0	WITH SS STREAKS
-42.8	CARBONDALE	DYKERSBURG	SHALE	10.0	440.0	WITH SANDY STREAKS
-52.8	CARBONDALE	DYKERSBURG	SANDY SHALE	21.8	450.0	
-74.6	CARBONDALE	SPRINGFIELD	COAL	6.7	471.8	
-81.3	CARBONDALE		SANDY CLAYSTONE	0.5	478.5	SANDY UCLY

MAPID: 16500660000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.474507 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.840512 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 347.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.8	CARBONDALE	DANVILLE	COAL	1.7	272.2	
123.2	CARBONDALE		SILTY SHALE	14.3	273.8	
108.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	288.2	
104.8	CARBONDALE	LAWSON	CLAYSTONE & SHALE	3.0	292.2	
101.8	CARBONDALE	LAWSON	SILTY SHALE	21.0	295.2	
80.8	CARBONDALE	LAWSON	SANDSTONE	19.0	316.2	
61.8	CARBONDALE		BLACK SHALE	1.0	335.2	
60.8	CARBONDALE	BRERETON	LIMESTONE	5.0	336.2	
55.8	CARBONDALE	ANNA	DARK GRAY SHALE	0.8	341.2	
55.0	CARBONDALE	HERRIN	COAL	5.8	342.0	

MAPID: 16500973000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.483767 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.847671 **DATE COLLECTED:** 1 / 5 / 1944

SURFACE ELEVATION (FT.): 413.1 **LOGGED (FT.):** 532.0 **LOG TYPE:** Drillers Log

SOURCE: DERING COAL CO. 16 **WELL TYPE:** Coal Test

COMMENT: NEAR NW CORNER OF NW1/4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.1			CLAY	20.0	0.0	
393.1			CLAY	46.0	20.0	
347.1			CLAY	9.0	66.0	
338.1	MODESTO		GRAY SHALE	52.0	75.0	
286.1	MODESTO	CHAPEL	COAL	0.8	127.0	
285.3	MODESTO		SANDY SHALE	109.7	127.8	
175.6	MODESTO		COAL	0.3	237.5	
175.3	MODESTO		GRAY SHALE	35.2	237.8	
140.1	MODESTO		SANDSTONE	2.0	273.0	
138.1	MODESTO		SHALE	31.0	275.0	
107.1	MODESTO		CALCAREOUS SHALE	18.5	306.0	
88.6	CARBONDALE	DANVILLE	COAL	2.3	324.5	
86.3	CARBONDALE		SHALE	6.2	326.8	
80.1	CARBONDALE		SANDSTONE	3.0	333.0	
77.1	CARBONDALE		SANDY SHALE	21.0	336.0	
56.1	CARBONDALE		COAL	0.3	357.0	
55.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.7	357.3	
38.1	CARBONDALE	ANVIL ROCK	SHALE	6.0	375.0	
32.1	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	381.0	
25.1	CARBONDALE		UNDERCLAY	0.7	388.0	
24.4	CARBONDALE	HERRIN	COAL	3.8	388.7	
20.6	CARBONDALE		UNDERCLAY	1.5	392.5	
19.1	CARBONDALE		UNDERCLAY	4.7	394.0	
14.4	CARBONDALE		SANDSTONE	21.3	398.7	
-6.9	CARBONDALE		SHALE	14.0	420.0	
-20.9	CARBONDALE		SANDY SHALE	9.0	434.0	
-29.9	CARBONDALE	BRIAR HILL	COAL	1.0	443.0	
-30.9	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	444.0	
-50.9	CARBONDALE	DYKERSBURG	SHALE	33.0	464.0	SHALE AND SANDSTONE
-83.9	CARBONDALE	DYKERSBURG	COAL	0.6	497.0	
-84.5	CARBONDALE	DYKERSBURG	SHALE	19.2	497.6	WITH COAL STREAKS
-103.7	CARBONDALE	SPRINGFIELD	COAL	5.3	516.8	
-109.0	CARBONDALE		UNDERCLAY	2.0	522.1	
-111.0	CARBONDALE		SANDSTONE	7.9	524.1	

MAPID: 16501401000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476833 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.844125 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**

SOURCE: JANS P N-OLSON C H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1437.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-1818.0			LIMESTONE	-	2217.0	
-2172.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16501401000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476833 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.844125 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 3059.0 **LOG TYPE:** Electric Log

SOURCE: JANS P N-OLSON C H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	DANVILLE	COAL	-	277.0	
104.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	295.0	
77.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	26.0	322.0	
43.0	CARBONDALE	HERRIN	COAL	4.0	356.0	
3.0	CARBONDALE	BRIAR HILL	COAL	-	396.0	
-45.0	CARBONDALE	CANTON	SILTSTONE	12.0	444.0	
-66.0	CARBONDALE	SPRINGFIELD	COAL	5.0	465.0	
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	-	540.0	

MAPID: 16501403000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 577' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468416 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838749 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:**
SOURCE: OLSON, C. H. & JANS, P N **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.0	CARBONDALE	BRERETON	LIMESTONE	-	328.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1782.0			LIMESTONE	-	2190.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2566.0	

MAPID: 16502232000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 780' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478375 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840472 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2588.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, BARRETT CLARA ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-181.0	CARBONDALE	SURVANT	COAL	0.7	600.0	
-276.0	CARBONDALE	DEKOVEN	COAL	2.8	695.0	
-309.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	728.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-316.0	CARBONDALE	DAVIS	COAL	5.0	735.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	755.0	
-416.0	TRADEWATER	MT. RORAH	COAL	1.2	835.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502232000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 780' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478375 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2588.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1436.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1855.0	
-1803.0			LIMESTONE	-	2222.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2588.0	

MAPID: 16502233000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 316' N line, 363' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467689 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840625 **DATE COLLECTED:** 11 / 0 / 1953
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:** Electric Log
SOURCE: DORAN THOMAS S, BAYER-WATSON COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	550.0	
-165.0	CARBONDALE	SURVANT	COAL	0.8	576.0	
-238.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-271.0	CARBONDALE	DEKOVEN	COAL	3.0	682.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	700.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	
-343.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	754.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502233000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 316' N line, 363' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467689 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840625 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: DORAN THOMAS S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1413.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1789.0			LIMESTONE	-	2200.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16502234000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467632 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.84606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1421.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1833.0	
-1804.0			LIMESTONE	-	2216.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502234000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467632 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.84606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.0	CARBONDALE	HERRIN	COAL	-	336.0	
34.0	CARBONDALE	BRIAR HILL	COAL	-	378.0	
-38.0	CARBONDALE	SPRINGFIELD	COAL	5.0	450.0	
-115.0	CARBONDALE	HOUCHIN CREEK	COAL	-	527.0	

MAPID: 16502235000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467613 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844238 **DATE COLLECTED:** 9 / 0 / 1953
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, MOYE L W **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	2.4	530.0	
-155.0	CARBONDALE	SURVANT	COAL	0.9	565.0	
-228.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-266.0	CARBONDALE	DEKOVEN	COAL	0.0	676.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	700.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-298.0	CARBONDALE	DAVIS	COAL	4.0	708.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-370.0	TRADEWATER	MT. RORAH	COAL	0.8	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502235000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467613 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844238 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1829.0	
-1797.0			LIMESTONE	-	2207.0	
-2154.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502236000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.469847 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835087 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 1670.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-235.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	660.0	
-320.0	SPOON	DAVIS	UNCLASSIFIED	-	745.0	
-1245.0	BASE OF PENN.		UNCLASSIFIED	-	1670.0	

MAPID: 16502236000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.469847 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.835087 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:**

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1761.0			LIMESTONE	-	2186.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2559.0	

MAPID: 16502237000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472144 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835069 **DATE COLLECTED:** 10 / 0 / 1954
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log
SOURCE: PEP DRILLING COMPANY, SUTTNER VICTOR **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	548.0	
-173.0	CARBONDALE	SURVANT	COAL	0.9	583.0	
-240.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-275.0	CARBONDALE	DEKOVEN	COAL	3.0	685.0	
-305.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	715.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-314.0	CARBONDALE	DAVIS	COAL	4.0	724.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	758.0	
-360.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	770.0	
-428.0	TRADEWATER	MT. RORAH	COAL	1.5	838.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502237000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472144 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835069 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: PEP DRILLING COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1772.0			LIMESTONE	-	2182.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502238000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 400' S line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472177 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838907 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: MISENER, WAYNE DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
71.0	CARBONDALE	BRERETON	LIMESTONE	-	330.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1793.0			LIMESTONE	-	2194.0	
-2153.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16502239000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467537 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.836935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1770.0			LIMESTONE	-	2182.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2558.0	

MAPID: 16502240000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467518 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835105 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., SUTTNER VICTOR **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	543.0	
-163.0	CARBONDALE	SURVANT	COAL	0.8	582.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-262.0	CARBONDALE	DEKOVEN	COAL	3.0	681.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	710.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-301.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-340.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	759.0	
-346.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	765.0	
-435.0	TRADEWATER	MT. RORAH	COAL	1.8	854.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502240000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467518 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835105 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1755.0			LIMESTONE	-	2174.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502483000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.479109 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.836829 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, BARRETT CLARA ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-142.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	567.0	
-175.0	CARBONDALE	SURVANT	COAL	0.8	600.0	
-250.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-275.0	CARBONDALE	DEKOVEN	COAL	1.8	700.0	
-311.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	736.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-319.0	CARBONDALE	DAVIS	COAL	4.0	744.0	
-340.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	765.0	
-425.0	TRADEWATER	MT. RORAH	COAL	1.2	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502483000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.479109 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.836829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
50.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1430.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1855.0	
-1802.0			LIMESTONE	-	2227.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2587.0	

MAPID: 16502491000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 382' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472436 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:**
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1434.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1816.0			LIMESTONE	-	2202.0	
-2173.0		BASE BARLOW	LIMESTONE	-	2559.0	

MAPID: 16502491000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 382' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472436 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.847824 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 3104.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
61.0	CARBONDALE	HERRIN	COAL	4.0	325.0	
18.0	CARBONDALE	BRIAR HILL	COAL	-	368.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	3.0	430.0	
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	-	508.0	

MAPID: 16502491000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 382' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472436 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.847824 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES H V, HOLLAND-SUTNER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	513.0	
-159.0	CARBONDALE	SURVANT	COAL	0.8	545.0	
-234.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-254.0	CARBONDALE	DEKOVEN	COAL	1.5	640.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	673.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	4.0	682.0	
-324.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	
-373.0	TRADEWATER	MT. RORAH	COAL	1.3	759.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503614000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1050' N line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481415 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838451 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 2620.0 **LOG TYPE:**
SOURCE: ZIPCO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1808.0			LIMESTONE	-	2250.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2620.0	

MAPID: 16500661000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.464635 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.835584 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 429.2 **LOGGED (FT.):** 471.0 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.2			CLAY	47.0	0.0	
382.2			CLAY	35.0	47.0	GRAVELY BLUE CLAY
347.2	MODESTO		BLUE SHALE	9.0	82.0	
338.2	MODESTO		SANDY SHALE	15.8	91.0	
322.4	MODESTO		BLUE SHALE	14.2	106.8	
308.2	MODESTO		SANDY SHALE	29.0	121.0	
279.2	MODESTO		BLUE SHALE	9.5	150.0	
269.7	MODESTO		BLUE SHALE	10.5	159.5	WITH BROWN BANDS
259.2	MODESTO		BLUE LIMESTONE	1.9	170.0	
257.3	MODESTO		SANDY SHALE	6.1	171.9	WITH STREAKS
251.2	MODESTO		SANDY SHALE	4.0	178.0	
247.2	MODESTO		BLUE SHALE	14.0	182.0	WITH BROWN BANDS
233.2	MODESTO		COAL	0.5	196.0	
232.7	MODESTO		GRAY SHALE	8.5	196.5	
224.2	MODESTO		SANDY SHALE	7.0	205.0	
217.2	MODESTO		BLACK SHALE	3.3	212.0	
213.9	MODESTO		COAL	0.8	215.3	
213.2	MODESTO		UNDERCLAY	2.0	216.0	
211.2	MODESTO		GRAY SHALE	30.0	218.0	
181.2	MODESTO		BLUE SHALE	3.0	248.0	WITH BROWN BANDS
178.2	MODESTO		SHALE	1.7	251.0	
176.5	MODESTO		LIMESTONE	2.7	252.7	
173.9	MODESTO		SHALE	3.0	255.3	WITH LIME BANDS
170.9	MODESTO		DARK SHALE	2.7	258.3	
168.2	MODESTO		BLACK SHALE	6.3	261.0	
161.9	MODESTO		GRAY SHALE	16.7	267.3	
145.2	MODESTO		BLUE SHALE	1.8	284.0	
143.4	CARBONDALE	DANVILLE	COAL	2.3	285.8	
141.1	CARBONDALE		DARK SHALE	3.2	288.1	
137.9	CARBONDALE		GRAY SHALE	0.5	291.3	
137.4	CARBONDALE		SANDSTONE	7.8	291.8	
129.6	CARBONDALE		BLUE SHALE	2.2	299.6	
127.4	CARBONDALE		COAL	0.4	301.8	
127.0	CARBONDALE		UNDERCLAY	2.8	302.2	
124.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	305.0	
117.5	CARBONDALE		CALCAREOUS SHALE	0.3	311.7	
117.2	CARBONDALE		GRAY SHALE	2.0	312.0	
115.2	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	314.0	
96.2	CARBONDALE		BLUE SHALE	7.0	333.0	

89.2	CARBONDALE		BLUE SHALE	4.5	340.0	WITH BROWN BANDS
84.7	CARBONDALE	BRERETON	BLUE LIMESTONE	5.5	344.5	
79.2	CARBONDALE	ANNA	BLACK SHALE	0.5	350.0	
78.7	CARBONDALE	HERRIN	COAL	3.6	350.5	
75.1	CARBONDALE	HERRIN	SHALE	0.1	354.1	BLUE BAND
75.0	CARBONDALE	HERRIN	COAL	0.8	354.2	
74.3	CARBONDALE	HERRIN	PYRITE	0.1	354.9	SULPHUR LAYER
74.2	CARBONDALE	HERRIN	COAL	0.6	355.0	
73.6	CARBONDALE		DARK CLAYSTONE	1.0	355.6	
72.6	CARBONDALE		SHALE	2.7	356.6	
69.9	CARBONDALE		SANDY SHALE	8.8	359.3	
61.2	CARBONDALE		LIMESTONE	1.5	368.0	
59.7	CARBONDALE		GRAY SHALE	9.0	369.5	
50.7	CARBONDALE		BLUE SHALE	13.4	378.5	
37.3	CARBONDALE	BRIAR HILL	COAL	1.3	391.9	
35.9	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	393.3	
29.9	CARBONDALE	DYKERSBURG	BLUE SHALE	15.8	399.3	
14.2	CARBONDALE	DYKERSBURG	SANDY SHALE	50.2	415.0	
-36.0	CARBONDALE	SPRINGFIELD	COAL	4.8	465.2	
-40.8	CARBONDALE		UNDERCLAY	1.0	470.0	

MAPID: 16500661000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.464635 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835584 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 354.6 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
173.8	MODESTO	PIASA	LIMESTONE	2.7	255.2	
171.2	MODESTO		SHALE	30.5	257.8	
140.7	CARBONDALE	DANVILLE	COAL	2.3	288.3	
138.4	CARBONDALE		SHALE & SANDSTONE	11.7	290.6	
126.7	CARBONDALE	ALLENBY	COAL	0.4	302.3	
126.3	CARBONDALE		CLAYSTONE	2.8	302.7	
123.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	305.5	
116.8	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.3	312.2	
116.5	CARBONDALE	LAWSON	GRAY SHALE	2.0	312.5	
114.5	CARBONDALE	LAWSON	SANDSTONE	19.0	314.5	
95.5	CARBONDALE	LAWSON	GRAY SHALE	11.5	333.5	
84.0	CARBONDALE	BRERETON	LIMESTONE	5.5	345.0	
78.5	CARBONDALE	ANNA	BLACK SHALE	0.5	350.5	
78.0	CARBONDALE	HERRIN	COAL	3.6	351.0	

MAPID: 16500842000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453753 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846186 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1768.0			LIMESTONE	-	2143.0	
-2163.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16500843000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453727 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844363 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**
SOURCE: THOMPSON DRILLING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1762.0			LIMESTONE	-	2139.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16501402000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 340' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455907 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83519 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 1778.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	BRERETON	LIMESTONE	-	306.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	

MAPID: 16501532000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 440' S line, 330' W line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.465337 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.846388 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:**

SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1856.0	
-1795.0			LIMESTONE	-	2232.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2584.0	

MAPID: 16501532000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 440' S line, 330' W line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.465337 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.846388 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2959.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	DANVILLE	COAL	-	278.0	
141.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	296.0	
132.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	305.0	
111.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	34.0	326.0	
73.0	CARBONDALE	HERRIN	COAL	3.0	364.0	
31.0	CARBONDALE	BRIAR HILL	COAL	-	406.0	
-7.0	CARBONDALE	CANTON		40.0	444.0	
-41.0	CARBONDALE	SPRINGFIELD	COAL	5.0	478.0	
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	-	560.0	

MAPID: 16502241000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 380' S line, 330' E line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463006 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.846242 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 1675.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-238.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	645.0	
-315.0	SPOON	DAVIS	UNCLASSIFIED	-	722.0	
-1268.0	BASE OF PENN.		UNCLASSIFIED	-	1675.0	

MAPID: 16502241000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 380' S line, 330' E line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463006 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.846242 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:**

SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	338.0	
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-1790.0			LIMESTONE	-	2201.0	
-2142.0		BASE BARLOW	LIMESTONE	-	2553.0	

MAPID: 16502241000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 380' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.463006 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846242 **DATE COLLECTED:** 11 / 0 / 1953
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, ASHBY LELAND **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-176.0	CARBONDALE	SURVANT	COAL	0.7	583.0	
-239.0	CARBONDALE	COLCHESTER	COAL	0.5	646.0	
-276.0	CARBONDALE	DEKOVEN	COAL	1.8	683.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	711.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-313.0	CARBONDALE	DAVIS	COAL	3.0	720.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	751.0	
-355.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	762.0	
-391.0	TRADEWATER	MT. RORAH	COAL	0.8	798.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502243000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 460' S line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462968 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	BRERETON	LIMESTONE	-	347.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1780.0			LIMESTONE	-	2190.0	
-2142.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502243000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 460' S line, 330' E line of SW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.462968 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.842808 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
62.0	CARBONDALE	HERRIN	COAL	4.0	348.0	
20.0	CARBONDALE	BRIAR HILL	COAL	-	390.0	
-56.0	CARBONDALE	SPRINGFIELD	COAL	5.0	466.0	
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	542.0	

MAPID: 16502243000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 460' S line, 330' E line of SW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.462968 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842808 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD H E HOWELL J, CRAWFORD CHARLES **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	548.0	
-183.0	CARBONDALE	SURVANT	COAL	0.7	593.0	
-240.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-270.0	CARBONDALE	DEKOVEN	COAL	3.8	680.0	
-296.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	706.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-305.0	CARBONDALE	DAVIS	COAL	3.9	715.0	
-340.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-346.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	756.0	
-380.0	TRADEWATER	MT. RORAH	COAL	1.2	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502244000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462985 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844285 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	367.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1823.0	
-1782.0			LIMESTONE	-	2198.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2553.0	

MAPID: 16502245000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 440' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.464932 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844266 **DATE COLLECTED:** 11 / 0 / 1953
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, CRAWFORD CHARLES **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.0	
-179.0	CARBONDALE	SURVANT	COAL	0.8	604.0	
-247.0	CARBONDALE	COLCHESTER	COAL	1.3	672.0	
-268.0	CARBONDALE	DEKOVEN	COAL	1.8	693.0	
-300.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	725.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-309.0	CARBONDALE	DAVIS	COAL	3.7	734.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	768.0	
-355.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	780.0	
-387.0	TRADEWATER	MT. RORAH	COAL	1.2	812.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502245000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 440' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.464932 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844266 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
71.0	CARBONDALE	BRERETON	LIMESTONE	-	354.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1837.0	
-1790.0			LIMESTONE	-	2215.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2566.0	

MAPID: 16502246000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451381 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840725 **DATE COLLECTED:** 10 / 0 / 1953
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., FOWLER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	506.0	
-162.0	CARBONDALE	SURVANT	COAL	1.2	543.0	
-229.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-262.0	CARBONDALE	DEKOVEN	COAL	3.0	643.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	668.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-297.0	CARBONDALE	DAVIS	COAL	3.0	678.0	
-334.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	715.0	
-337.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	718.0	
-372.0	TRADEWATER	MT. RORAH	COAL	0.8	753.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502246000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451381 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840725 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1757.0			LIMESTONE	-	2138.0	
-2154.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16502247000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458377 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846145 **DATE COLLECTED:** 9 / 0 / 1953
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:** Electric Log
SOURCE: MILLER, DEE DRLG. CO., HAMMOND-DAVIS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	516.0	
-173.0	CARBONDALE	SURVANT	COAL	0.7	550.0	
-248.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-273.0	CARBONDALE	DEKOVEN	COAL	4.5	650.0	
-295.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	672.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-305.0	CARBONDALE	DAVIS	COAL	4.0	682.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	712.0	
-343.0	TRADEWATER	STONEFORT	LIMESTONE	0.4	720.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.2	754.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502247000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458377 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846145 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: MILLER, DEE DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	CARBONDALE	BRERETON	LIMESTONE	-	319.0	
-1414.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1784.0			LIMESTONE	-	2161.0	
-2151.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502248000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460646 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840647 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2526.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1764.0			LIMESTONE	-	2155.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2526.0	

MAPID: 16502249000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455968 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837026 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: GRANDIN JAMES R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	
-1750.0			LIMESTONE	-	2140.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502250000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 377' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455896 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844345 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2527.0 **LOG TYPE:**
SOURCE: THOMPSON DRILLING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1763.0			LIMESTONE	-	2141.0	
-2149.0		BASE BARLOW	LIMESTONE	-	2527.0	

MAPID: 16502251000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460687 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
58.0	CARBONDALE	BRERETON	LIMESTONE	-	333.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1781.0			LIMESTONE	-	2172.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502252000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458355 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844323 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD H E HOWELL J, HIRST DON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-167.0	CARBONDALE	SURVANT	COAL	0.8	545.0	
-247.0	CARBONDALE	COLCHESTER	COAL	2.0	625.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.0	647.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	672.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	5.0	677.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	708.0	
-336.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	714.0	
-372.0	TRADEWATER	MT. RORAH	COAL	1.3	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502252000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458355 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844323 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: HOWARD H E HOWELL J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1781.0	
-1772.0			LIMESTONE	-	2150.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16502253000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460624 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.838814 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, HORN JAMES E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-254.0	CARBONDALE	COLCHESTER	COAL	2.8	649.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.0	664.0	
-295.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	690.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-305.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-339.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	734.0	
-340.0	TRADEWATER	MT. RORAH	COAL	1.3	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502253000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460624 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838814 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1783.0	
-1759.0			LIMESTONE	-	2154.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16502255000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.456082 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846166 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2537.0 **LOG TYPE:**
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
63.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1785.0			LIMESTONE	-	2160.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2537.0	

MAPID: 16502256000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460665 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842469 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1776.0			LIMESTONE	-	2165.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502257000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458332 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842489 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1764.0			LIMESTONE	-	2146.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16502258000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45831 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840667 **DATE COLLECTED:** 11 / 0 / 1953
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2520.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, REEDER T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-179.0	CARBONDALE	SURVANT	COAL	1.2	564.0	
-241.0	CARBONDALE	COLCHESTER	COAL	2.5	626.0	
-255.0	CARBONDALE	DEKOVEN	COAL	2.8	640.0	
-285.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	670.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-293.0	CARBONDALE	DAVIS	COAL	0.0	678.0	
-328.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	713.0	
-331.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	716.0	
-365.0	TRADEWATER	MT. RORAH	COAL	1.1	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502258000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45831 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840667 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2520.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1753.0			LIMESTONE	-	2138.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2520.0	

MAPID: 16502259000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458284 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1762.0			LIMESTONE	-	2150.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16502260000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.456034 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842507 **DATE COLLECTED:** 12 / 0 / 1953
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, REICH LEO **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-246.0	CARBONDALE	COLCHESTER	COAL	3.0	624.0	
-257.0	CARBONDALE	DEKOVEN	COAL	4.0	635.0	
-284.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	662.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-292.0	CARBONDALE	DAVIS	COAL	3.8	670.0	
-328.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	706.0	
-332.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	710.0	
-362.0	TRADEWATER	MT. RORAH	COAL	1.3	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502260000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.456034 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842507 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1761.0			LIMESTONE	-	2139.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16502261000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462941 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.840629 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1768.0			LIMESTONE	-	2188.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16502262000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462922 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838793 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1756.0			LIMESTONE	-	2163.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16502263000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 397' S line, 330' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83896 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1765.0			LIMESTONE	-	2180.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2553.0	

MAPID: 16502264000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460583 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835155 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1753.0			LIMESTONE	-	2160.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2547.0	

MAPID: 16502265000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460601 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.836991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1759.0			LIMESTONE	-	2166.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502266000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.458262 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837009 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1752.0			LIMESTONE	-	2144.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502267000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462899 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.836973 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2174.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1761.0			LIMESTONE	-	2174.0	

MAPID: 16502268000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465239 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.836953 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, TURNER-WILSON COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-260.0	CARBONDALE	DEKOVEN	COAL	3.0	679.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	709.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-333.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	752.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-343.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	762.0	
-380.0	TRADEWATER	MT. RORAH	COAL	1.2	799.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502268000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.465239 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.836953 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1765.0			LIMESTONE	-	2184.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2558.0	

MAPID: 16502269000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462877 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835137 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2184.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1759.0			LIMESTONE	-	2184.0	

MAPID: 16502270000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 357' S line, 190' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462392 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835216 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1761.0			LIMESTONE	-	2182.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502271000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46522 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83512 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1834.0	
-1761.0			LIMESTONE	-	2195.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502585000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460706 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846125 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
53.0	CARBONDALE	BRERETON	LIMESTONE	-	332.0	
-1417.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1791.0			LIMESTONE	-	2176.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16503340000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45148 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1781.0			LIMESTONE	-	2157.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16503389000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453625 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.837046 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log
SOURCE: THOMPSON RICHARD S, KITTINGER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	505.0	
-155.0	CARBONDALE	SURVANT	COAL	0.8	543.0	
-237.0	CARBONDALE	COLCHESTER	COAL	1.7	625.0	
-248.0	CARBONDALE	DEKOVEN	COAL	3.0	636.0	
-277.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	665.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	676.0	
-323.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	711.0	
-328.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	716.0	
-362.0	TRADEWATER	MT. RORAH	COAL	1.3	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503389000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453625 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: THOMPSON RICHARD S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	302.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1748.0			LIMESTONE	-	2136.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16501533000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437621 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.847241 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: WISER OIL CO., THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
26.0	CARBONDALE	BRERETON	LIMESTONE	-	375.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1789.0			LIMESTONE	-	2190.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16501533000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437621 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.847241 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 3109.0 **LOG TYPE:** Electric Log
SOURCE: WISER OIL CO., THE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	DANVILLE	COAL	-	302.0	
77.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	324.0	
66.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	38.0	335.0	
26.0	CARBONDALE	HERRIN	COAL	4.0	375.0	
-24.0	CARBONDALE	BRIAR HILL	COAL	-	425.0	
-86.0	CARBONDALE	SPRINGFIELD	COAL	5.0	487.0	
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	-	565.0	

MAPID: 16502220000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435298 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.84635 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: SOUTHERN OIL DEV **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	BRERETON	LIMESTONE	-	365.0	
-1419.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1790.0			LIMESTONE	-	2190.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16502220000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435298 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.84635 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 382.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
138.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	262.0	
133.0	MODESTO		SHALE	35.5	267.0	
97.5	CARBONDALE	DANVILLE	COAL	2.5	302.5	
95.0	CARBONDALE		SHALE	12.0	305.0	
83.0	CARBONDALE	LAWSON	SHALE	18.0	317.0	
65.0	CARBONDALE	LAWSON	SANDSTONE	36.0	335.0	
29.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	371.0	
23.0	CARBONDALE	HERRIN	COAL	5.0	377.0	

MAPID: 16502220000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435298 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.84635 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 382.0 **LOG TYPE:** Electric Log
SOURCE: SOUTHERN OIL DEV, NEEL BARNEY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-160.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	560.0	
-199.0	CARBONDALE	SURVANT	COAL	0.8	599.0	
-260.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-289.0	CARBONDALE	DEKOVEN	COAL	1.8	689.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	715.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-325.0	CARBONDALE	DAVIS	COAL	1.3	725.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	745.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502478000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 480' S line, 350' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430706 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835816 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, HANSEMAN FRANK **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	554.0	
-160.0	CARBONDALE	SURVANT	COAL	0.8	585.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-270.0	CARBONDALE	DEKOVEN	COAL	2.8	695.0	
-297.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	722.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-309.0	CARBONDALE	DAVIS	COAL	4.0	734.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	770.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-349.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	774.0	
-385.0	TRADEWATER	MT. RORAH	COAL	1.3	810.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502478000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 480' S line, 350' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430706 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1835.0	
-1772.0			LIMESTONE	-	2197.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2584.0	

MAPID: 16503129000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 270' S line, 405' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435477 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835195 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:**
SOURCE: BREUER & CURREN OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	
-1757.0			LIMESTONE	-	2189.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2567.0	

MAPID: 16503149000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435243 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839025 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2579.0 **LOG TYPE:**
SOURCE: BREUER & CURREN OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1764.0			LIMESTONE	-	2187.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2579.0	

MAPID: 16503352000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835303 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: BIANUCCI, RAY MANAGEMENT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1728.0			LIMESTONE	-	2145.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16503357000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 350' S line, 250' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446945 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835315 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	311.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1725.0			LIMESTONE	-	2124.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16503362000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 550' S line, 440' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441755 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
98.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1360.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1729.0			LIMESTONE	-	2132.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2522.0	

MAPID: 16503364000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 350' S line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444471 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842661 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2521.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	BRERETON	LIMESTONE	-	288.0	
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1740.0	
-1747.0			LIMESTONE	-	2132.0	
-2136.0		BASE BARLOW	LIMESTONE	-	2521.0	

MAPID: 16503378000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 450' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444798 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835279 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
94.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1779.0	
-1723.0			LIMESTONE	-	2135.0	
-2120.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16503381000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 360' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442105 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837059 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**
SOURCE: BIANUCCI, RAY MANAGEMENT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1723.0			LIMESTONE	-	2144.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16503382000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444424 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.838944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2526.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1781.0	
-1731.0			LIMESTONE	-	2143.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2526.0	

MAPID: 16503390000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437574 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842669 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	BRERETON	LIMESTONE	-	357.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1761.0			LIMESTONE	-	2169.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16503396000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444402 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
127.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1360.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1718.0			LIMESTONE	-	2138.0	
-2116.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16503433000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433015 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.848214 **DATE COLLECTED:** 4 / 0 / 1962
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 1675.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-278.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	680.0	
-348.0	SPOON	DAVIS	UNCLASSIFIED	-	750.0	
-1273.0	BASE OF PENN.		UNCLASSIFIED	-	1675.0	

MAPID: 16503433000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433015 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848214 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
25.0	CARBONDALE	BRERETON	LIMESTONE	-	377.0	
-1418.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1789.0			LIMESTONE	-	2191.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2580.0	

MAPID: 16503433000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433015 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.848214 **DATE COLLECTED:** 4 / 0 / 1962
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2580.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., BRAMLET ET AL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-168.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	570.0	
-203.0	CARBONDALE	SURVANT	COAL	0.7	605.0	
-273.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-300.0	CARBONDALE	DEKOVEN	COAL	2.5	702.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	732.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-343.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	779.0	
-373.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	775.0	
-423.0	TRADEWATER	MT. RORAH	COAL	1.4	825.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503443000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432919 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835384 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:**
SOURCE: WEAL DRLG CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1826.0	
-1760.0			LIMESTONE	-	2196.0	
-2142.0		BASE BARLOW	LIMESTONE	-	2578.0	

MAPID: 16500158000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422655 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.847386 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 485.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	DANVILLE	COAL	1.0	288.0	
99.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	296.0	
83.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	312.0	
61.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	30.0	334.0	
25.0	CARBONDALE	HERRIN	COAL	5.0	370.0	
-28.0	CARBONDALE	BRIAR HILL	COAL	1.0	423.0	
-37.0	CARBONDALE	CANTON		31.0	432.0	
-84.0	CARBONDALE	SPRINGFIELD	COAL	4.8	479.0	

MAPID: 16500158000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422655 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.847386 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 375.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	DANVILLE	COAL	1.0	288.0	
106.0	CARBONDALE		SHALE & SANDSTONE	17.0	289.0	
89.0	CARBONDALE		CLAYSTONE	2.5	306.0	
86.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	9.0	308.5	
77.5	CARBONDALE	LAWSON	CLAYSTONE	2.0	317.5	
75.5	CARBONDALE	LAWSON	CALCAREOUS SHALE	6.0	319.5	
69.5	CARBONDALE	LAWSON	GRAY SHALE	8.0	325.5	
61.5	CARBONDALE	LAWSON	SANDSTONE	29.5	333.5	
32.0	CARBONDALE	ANNA	BLACK SHALE	7.0	363.0	
25.0	CARBONDALE	HERRIN	COAL	5.0	370.0	

MAPID: 16500158000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 1980' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.422655 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.847386 **DATE COLLECTED:** 5 / 0 / 1906
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 485.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	49.0	0.0	
346.0	MODESTO		SHALE	35.0	49.0	
311.0	MODESTO		BLACK SHALE	2.0	84.0	
309.0	MODESTO		COAL	1.5	86.0	
307.5	MODESTO		UNDERCLAY	4.5	87.5	
303.0	MODESTO		SANDSTONE	12.0	92.0	
291.0	MODESTO		SANDY SHALE	8.0	104.0	
283.0	MODESTO		SANDSTONE	20.0	112.0	
263.0	MODESTO		SANDY SHALE	24.0	132.0	
239.0	MODESTO		SHALE	5.5	156.0	
233.5	MODESTO		LIMESTONE	4.5	161.5	
229.0	MODESTO		SHALE	14.0	166.0	
215.0	MODESTO		SANDY SHALE	13.0	180.0	
202.0	MODESTO		SANDSTONE	8.0	193.0	
194.0	MODESTO		BLACK SHALE	6.0	201.0	
188.0	MODESTO		CLAYSTONE	5.0	207.0	
183.0	MODESTO		SHALE	6.0	212.0	
177.0	MODESTO		BLACK SHALE	5.0	218.0	
172.0	MODESTO		COAL	1.0	223.0	
171.0	MODESTO		UNDERCLAY	14.0	224.0	
157.0	MODESTO		CALCAREOUS SHALE	5.0	238.0	CALC
152.0	MODESTO		CLAYSTONE	3.0	243.0	
149.0	MODESTO		LIMESTONE	3.0	246.0	
146.0	MODESTO		SHALE	17.0	249.0	
129.0	MODESTO		SANDY SHALE	10.0	266.0	
119.0	MODESTO		CLAYSTONE	11.5	276.0	
107.5	MODESTO		BLACK SHALE	0.5	287.5	
107.0	CARBONDALE	DANVILLE	COAL	1.0	288.0	
106.0	CARBONDALE		UNDERCLAY	3.0	289.0	
103.0	CARBONDALE		SHALE	4.0	292.0	
99.0	CARBONDALE		SANDSTONE	6.0	296.0	
93.0	CARBONDALE		SANDY SHALE	4.0	302.0	
89.0	CARBONDALE		CLAYSTONE	2.5	306.0	
86.5	CARBONDALE		CALCAREOUS SHALE	4.0	308.5	CALC
82.5	CARBONDALE		LIMESTONE	1.0	312.5	
81.5	CARBONDALE		CALCAREOUS SHALE	2.5	313.5	CALC
79.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	316.0	
77.5	CARBONDALE		CLAYSTONE	2.0	317.5	
75.5	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	6.0	319.5	CALC

69.5	CARBONDALE	ANVIL ROCK	SHALE	8.0	325.5	
61.5	CARBONDALE	ANVIL ROCK	SANDSTONE	29.5	333.5	
32.0	CARBONDALE	ANNA	BLACK SHALE	7.0	363.0	
25.0	CARBONDALE	HERRIN	COAL	5.0	370.0	
20.0	CARBONDALE		UNDERCLAY	2.0	375.0	
18.0	CARBONDALE		LIMESTONE	5.0	377.0	
13.0	CARBONDALE		CALCAREOUS SHALE	19.0	382.0	CALC
-6.0	CARBONDALE		SHALE	22.0	401.0	
-28.0	CARBONDALE	BRIAR HILL	COAL	1.0	423.0	
-29.0	CARBONDALE		SHALE	8.0	424.0	
-37.0	CARBONDALE		SANDSTONE	31.0	432.0	
-68.0	CARBONDALE		SANDY SHALE	5.0	463.0	
-73.0	CARBONDALE		SHALE	2.0	468.0	
-75.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	470.0	
-76.0	CARBONDALE	TURNER MINE	BLACK SHALE	7.7	471.0	
-83.7	CARBONDALE	SPRINGFIELD	BONE COAL	4.8	478.7	
-88.5	CARBONDALE		UNDERCLAY	1.5	483.5	
-90.0	CARBONDALE		UNCLASSIFIED	0.0	485.0	T.D

MAPID: 16502188000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 345' S line, 374' E line of NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.416971 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83921 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC., BOSCARINE GUIDO **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.4	520.0	
-152.0	CARBONDALE	SURVANT	COAL	0.8	550.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-257.0	CARBONDALE	DEKOVEN	COAL	2.8	655.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	685.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-301.0	CARBONDALE	DAVIS	COAL	4.0	699.0	
-337.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-342.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502188000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 345' S line, 374' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416971 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	BRERETON	LIMESTONE	-	325.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1761.0			LIMESTONE	-	2159.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2567.0	

MAPID: 16502272000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414521 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839186 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1765.0			LIMESTONE	-	2169.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502273000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41451 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2169.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1766.0			LIMESTONE	-	2169.0	

MAPID: 16502274000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42141 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1763.0			LIMESTONE	-	2166.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2560.0	

MAPID: 16502275000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416862 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846497 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: GULF REFINING CO., JACKSON BLANCHE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	530.0	
-175.0	CARBONDALE	SURVANT	COAL	0.7	560.0	
-244.0	CARBONDALE	COLCHESTER	COAL	0.5	629.0	
-275.0	CARBONDALE	DEKOVEN	COAL	2.5	660.0	
-305.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	690.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-318.0	CARBONDALE	DAVIS	COAL	4.0	703.0	
-360.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	745.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-367.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	752.0	
-405.0	TRADEWATER	MT. RORAH	COAL	0.5	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502275000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416862 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: GULF REFINING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	BRERETON	LIMESTONE	-	345.0	
-1413.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1778.0			LIMESTONE	-	2163.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502461000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419112 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835489 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., CARDER NONA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.8	538.0	
-170.0	CARBONDALE	SURVANT	COAL	0.8	572.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.5	644.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	669.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	700.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	713.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.2	750.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-351.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	753.0	
-388.0	TRADEWATER	MT. RORAH	COAL	1.3	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502461000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419112 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835489 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1752.0			LIMESTONE	-	2154.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502462000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412184 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835537 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	313.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1801.0	
-1768.0			LIMESTONE	-	2180.0	

MAPID: 16502463000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412195 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837381 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2165.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	BRERETON	LIMESTONE	-	298.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1767.0			LIMESTONE	-	2165.0	

MAPID: 16502486000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412205 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839203 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
98.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1767.0			LIMESTONE	-	2165.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2559.0	

MAPID: 16502562000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416797 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835506 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1803.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	BRERETON	LIMESTONE	-	324.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	

MAPID: 16502566000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.412219 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.841045 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC., FLANDERS C O **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	503.0	
-129.0	CARBONDALE	SURVANT	COAL	0.6	532.0	
-197.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-226.0	CARBONDALE	DEKOVEN	COAL	2.5	629.0	
-252.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	655.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-306.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.4	709.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-309.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	712.0	
-337.0	TRADEWATER	MT. RORAH	COAL	1.3	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502566000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.412219 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.841045 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2171.0 **LOG TYPE:**

SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1768.0			LIMESTONE	-	2171.0	

MAPID: 16502642000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41223 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842867 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2164.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	308.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1765.0			LIMESTONE	-	2164.0	

MAPID: 16502911000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426093 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.848271 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-270.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	660.0	
-340.0	SPOON	DAVIS	UNCLASSIFIED	-	730.0	
-1270.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16502911000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426093 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848271 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2569.0 **LOG TYPE:**
SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
23.0	CARBONDALE	BRERETON	LIMESTONE	-	367.0	
-1421.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1811.0	
-1784.0			LIMESTONE	-	2174.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2569.0	

MAPID: 16502911000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426093 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.848271 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MORAN, E. F., INC., CHOISSER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-166.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	556.0	
-200.0	CARBONDALE	SURVANT	COAL	0.8	590.0	
-270.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-298.0	CARBONDALE	DEKOVEN	COAL	3.7	688.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.9	720.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-339.0	CARBONDALE	DAVIS	COAL	4.0	729.0	
-379.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	769.0	
-382.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	772.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502929000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423725 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835455 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., GLASCOCK E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	540.0	
-172.0	CARBONDALE	SURVANT	COAL	0.7	575.0	
-251.0	CARBONDALE	COLCHESTER	COAL	0.5	654.0	
-270.0	CARBONDALE	DEKOVEN	COAL	4.0	673.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	702.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-317.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	748.0	
-350.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	753.0	
-395.0	TRADEWATER	MT. RORAH	COAL	1.8	798.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502929000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423725 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835455 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2569.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1771.0			LIMESTONE	-	2174.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2569.0	

MAPID: 16502949000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426023 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2574.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1417.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1826.0	
-1771.0			LIMESTONE	-	2180.0	
-2165.0		BASE BARLOW	LIMESTONE	-	2574.0	

MAPID: 16503348000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423765 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842783 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1774.0			LIMESTONE	-	2178.0	
-2178.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16503518000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 255' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41476 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83552 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1805.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	

MAPID: 16501404000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403018 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835546 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2561.0 **LOG TYPE:**
SOURCE: SOIL TESTING SERVICE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1785.0			LIMESTONE	-	2188.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2561.0	

MAPID: 16501404000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403018 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.835546 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log
SOURCE: SOIL TESTING SERVICE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.0	CARBONDALE	DANVILLE	COAL	-	236.0	
147.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	256.0	
135.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	12.0	268.0	
107.0	CARBONDALE	HERRIN	COAL	4.0	296.0	
49.0	CARBONDALE	BRIAR HILL	COAL	-	354.0	
3.0	CARBONDALE	SPRINGFIELD	COAL	4.0	400.0	
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	-	476.0	

MAPID: 16501404000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403018 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835546 **DATE COLLECTED:** 2 / 0 / 1951
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: SOIL TESTING SERVICE, PANKY I **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	479.0	
-107.0	CARBONDALE	SURVANT	COAL	0.8	510.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-205.0	CARBONDALE	DEKOVEN	COAL	0.8	608.0	
-233.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	636.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	3.8	653.0	
-291.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	694.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502276000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.39401 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.844586 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1635.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	575.0	
-272.0	SPOON	DAVIS	UNCLASSIFIED	-	648.0	
-1259.0	BASE OF PENN.		UNCLASSIFIED	-	1635.0	

MAPID: 16502276000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.39401 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844586 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1754.0			LIMESTONE	-	2130.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16502276000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.39401 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844586 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., FOWLER G F **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	484.0	
-134.0	CARBONDALE	SURVANT	COAL	0.9	510.0	
-196.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-257.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	633.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	3.5	645.0	
-313.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	689.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502277000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405418 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848324 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2160.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1780.0			LIMESTONE	-	2160.0	

MAPID: 16502278000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403165 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.848302 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2149.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1768.0			LIMESTONE	-	2149.0	

MAPID: 16502279000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.40085 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.846463 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., VANGAMPELAERE D **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	500.0	
-152.0	CARBONDALE	SURVANT	COAL	0.8	530.0	
-220.0	CARBONDALE	COLCHESTER	COAL	0.5	598.0	
-250.0	CARBONDALE	DEKOVEN	COAL	2.5	628.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	656.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	4.0	672.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	704.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-330.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502279000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.40085 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.846463 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2154.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	BRERETON	LIMESTONE	-	308.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1776.0			LIMESTONE	-	2154.0	

MAPID: 16502405000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409886 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835545 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, KOKER CLYDE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-123.0	CARBONDALE	SURVANT	COAL	0.8	525.0	
-194.0	CARBONDALE	COLCHESTER	COAL	0.5	596.0	
-223.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	656.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	4.0	671.0	
-308.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-316.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	718.0	
-356.0	TRADEWATER	MT. RORAH	COAL	0.8	758.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502405000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409886 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 1780.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	BRERETON	LIMESTONE	-	298.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	

MAPID: 16502406000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407635 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839201 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1775.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	BRERETON	LIMESTONE	-	284.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	

MAPID: 16502406000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407635 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.839201 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 295.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
205.0	MODESTO	PIASA	LIMESTONE & SHALE	3.0	189.0	
202.0	MODESTO		SHALE	40.0	192.0	
162.0	CARBONDALE	DANVILLE	COAL	2.0	232.0	
160.0	CARBONDALE		SHALE	20.0	234.0	
140.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	254.0	
134.0	CARBONDALE	LAWSON	CLAYSTONE	4.0	260.0	
130.0	CARBONDALE	LAWSON	SHALE	3.0	264.0	
127.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	10.0	267.0	
117.0	CARBONDALE	LAWSON	DARK GRAY SHALE	8.0	277.0	
109.0	CARBONDALE	BRERETON	LIMESTONE	5.0	285.0	
104.0	CARBONDALE	ANNA	BLACK SHALE	1.0	290.0	
103.0	CARBONDALE	HERRIN	COAL	4.0	291.0	

MAPID: 16502420000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405386 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844674 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ALLEN TRACT 14 5 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-126.0	CARBONDALE	SURVANT	COAL	0.8	513.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-228.0	CARBONDALE	DEKOVEN	COAL	2.0	615.0	
-258.0	CARBONDALE	LOWER DEKOVEN	COAL	2.4	645.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-273.0	CARBONDALE	DAVIS	COAL	3.5	660.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-363.0	TRADEWATER	MT. RORAH	COAL	0.5	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502420000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405386 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2153.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1766.0			LIMESTONE	-	2153.0	

MAPID: 16502421000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 280' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405367 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842708 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2148.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
101.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1757.0			LIMESTONE	-	2148.0	

MAPID: 16502447000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407684 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844693 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2548.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1766.0			LIMESTONE	-	2150.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2548.0	

MAPID: 16502459000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403081 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.841013 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ALLEN TRACT 14 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-90.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-119.0	CARBONDALE	SURVANT	COAL	0.8	507.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-212.0	CARBONDALE	DEKOVEN	COAL	0.8	600.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	629.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-254.0	CARBONDALE	DAVIS	COAL	3.8	642.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-300.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	688.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502459000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403081 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.841013 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2157.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1769.0			LIMESTONE	-	2157.0	

MAPID: 16502472000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405337 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839196 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2168.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	BRERETON	LIMESTONE	-	283.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1769.0	
-1778.0			LIMESTONE	-	2168.0	

MAPID: 16502492000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405355 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.841023 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ALLEN TRACT 14 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.4	482.0	
-115.0	CARBONDALE	SURVANT	COAL	0.7	510.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-210.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	2.2	636.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-300.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	695.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502492000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405355 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.841023 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2150.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	305.0	
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1779.0	
-1755.0			LIMESTONE	-	2150.0	

MAPID: 16502493000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405323 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 1778.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	

MAPID: 16502499000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409911 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.839209 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1781.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	288.0	
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1781.0	

MAPID: 16502515000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407652 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.841037 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1773.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
110.0	CARBONDALE	BRERETON	LIMESTONE	-	284.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	

MAPID: 16502532000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409897 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837387 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2158.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1761.0			LIMESTONE	-	2158.0	

MAPID: 16502538000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407617 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.837381 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, KOKER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-80.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-111.0	CARBONDALE	SURVANT	COAL	0.6	509.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	578.0	
-207.0	CARBONDALE	DEKOVEN	COAL	2.0	605.0	
-236.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	634.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	653.0	
-288.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	686.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-294.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	692.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502538000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407617 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837381 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 1774.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	

MAPID: 16502539000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409922 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.841048 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1784.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	

MAPID: 16502561000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 310' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409933 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842815 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 1787.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
96.0	CARBONDALE	BRERETON	LIMESTONE	-	297.0	
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	

MAPID: 16502586000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407603 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 1780.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	

MAPID: 16502615000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409943 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844709 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., DODD L **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	485.0	
-122.0	CARBONDALE	SURVANT	COAL	1.2	512.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-215.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	635.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-260.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-305.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	695.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-325.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502615000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409943 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844709 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2160.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1770.0			LIMESTONE	-	2160.0	

MAPID: 16502648000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 325' S line, 330' E line of SE SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407666 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.842846 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, KOKER COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	476.0	
-115.0	CARBONDALE	SURVANT	COAL	0.7	500.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-213.0	CARBONDALE	DEKOVEN	COAL	3.0	598.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	0.6	628.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-300.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	685.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-324.0	TRADEWATER	STONEFORT	LIMESTONE	0.8	709.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502648000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 325' S line, 330' E line of SE SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407666 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.842846 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1774.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	286.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	

MAPID: 16502663000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405305 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835546 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 1793.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	295.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1793.0	

MAPID: 16502816000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 430' N line, 330' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409898 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.837111 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 1778.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	BRERETON	LIMESTONE	-	293.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	

MAPID: 16501534000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382317 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.835536 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: ROTSTEIN DAVID ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	BRERETON	LIMESTONE	-	303.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1741.0			LIMESTONE	-	2135.0	
-2120.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16501534000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382317 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.835536 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 3006.0 **LOG TYPE:** Electric Log

SOURCE: ROTSTEIN DAVID ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	DANVILLE	COAL	-	243.0	
124.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	270.0	
114.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	15.0	280.0	
85.0	CARBONDALE	HERRIN	COAL	3.0	309.0	
71.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	19.0	323.0	
24.0	CARBONDALE	BRIAR HILL	COAL	-	370.0	
8.0	CARBONDALE	CANTON	SILTSTONE	20.0	386.0	
-31.0	CARBONDALE	SPRINGFIELD	COAL	5.0	425.0	
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	-	494.0	

MAPID: 16501534000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382317 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835536 **DATE COLLECTED:** 11 / 0 / 1952

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: ROTSTEIN DAVID ETAL, HARRELLSON **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	498.0	
-136.0	CARBONDALE	SURVANT	COAL	0.8	530.0	
-196.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-239.0	CARBONDALE	DEKOVEN	COAL	3.0	633.0	
-266.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	660.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-281.0	CARBONDALE	DAVIS	COAL	3.8	675.0	
-316.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-321.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502473000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.3754 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.840904 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 1655.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	610.0	
-289.0	SPOON	DAVIS	UNCLASSIFIED	-	700.0	
-1244.0	BASE OF PENN.		UNCLASSIFIED	-	1655.0	

MAPID: 16502473000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.3754 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.840904 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
84.0	CARBONDALE	BRERETON	LIMESTONE	-	327.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1753.0			LIMESTONE	-	2164.0	
-2121.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502473000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.3754 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840904 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., WOOLARD ERMA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	522.0	
-134.0	CARBONDALE	SURVANT	COAL	0.8	545.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-249.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	0.9	680.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	699.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	731.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-325.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	736.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503019000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377767 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844514 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., REED MABEL ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	518.0	
-151.0	CARBONDALE	SURVANT	COAL	0.8	545.0	
-210.0	CARBONDALE	COLCHESTER	COAL	0.5	604.0	
-256.0	CARBONDALE	DEKOVEN	COAL	3.0	650.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	0.6	684.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-306.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503019000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.377767 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.844514 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1748.0			LIMESTONE	-	2142.0	
-2111.0		BASE BARLOW	LIMESTONE	-	2505.0	

MAPID: 16503284000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.383446 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.84177 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 316.8 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.5	CARBONDALE	DANVILLE	COAL	0.8	245.5	
133.7	CARBONDALE		GRAY SHALE	28.9	246.3	
104.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	275.3	
100.5	CARBONDALE	LAWSON	GRAY SHALE	1.2	279.5	
99.3	CARBONDALE	LAWSON	SILTY SHALE	18.6	280.7	
80.7	CARBONDALE	LAWSON	DARK GRAY SHALE	5.1	299.3	
75.7	CARBONDALE	BRERETON	LIMESTONE	5.9	304.3	
69.7	CARBONDALE	ANNA	BLACK SHALE	0.8	310.3	
69.0	CARBONDALE	HERRIN	COAL	5.8	311.0	

MAPID: 16500662000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.3833 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.827338 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 362.0 **LOG TYPE:** Drillers Log
SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	DANVILLE	COAL	1.9	183.0	
171.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	202.0	
158.0	CARBONDALE	ANVIL ROCK		6.0	215.0	
133.0	CARBONDALE	HERRIN	COAL	4.7	240.0	
127.0	CARBONDALE	VERMILIONVILLE		28.0	246.0	
74.0	CARBONDALE	BRIAR HILL	COAL	1.5	299.0	
16.0	CARBONDALE	SPRINGFIELD	COAL	4.8	357.0	

MAPID: 16500662000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.3833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.827338 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 244.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
189.2	CARBONDALE	DANVILLE	COAL	1.9	183.8	
187.2	CARBONDALE		GRAY SHALE	11.0	185.8	
176.2	CARBONDALE	ALLENBY	COAL	0.5	196.8	
175.7	CARBONDALE		CLAYSTONE	5.0	197.3	
170.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	202.3	
164.7	CARBONDALE	LAWSON	GRAY SHALE	7.3	208.3	
157.5	CARBONDALE	LAWSON	SANDSTONE	6.0	215.5	
151.5	CARBONDALE	LAWSON	SILTY SHALE	5.0	221.5	
146.5	CARBONDALE	LAWSON	GRAY SHALE	7.2	226.5	
139.3	CARBONDALE	BRERETON	LIMESTONE	5.5	233.7	
133.8	CARBONDALE	ANNA	BLACK SHALE	0.8	239.2	
133.0	CARBONDALE	HERRIN	COAL	4.7	240.0	

MAPID: 16500662000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.3833 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.827338 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 372.8 **LOGGED (FT.):** 362.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.8			UNCONSOLIDATED	25.0	0.0	
347.8	MODESTO		SHALE	20.0	25.0	
327.8	MODESTO		SHALE	7.8	45.0	
320.0	MODESTO		LIMESTONE	3.8	52.8	
316.2	MODESTO		SANDY SHALE	8.0	56.6	
308.2	MODESTO		SHALE	3.7	64.6	
304.5	MODESTO		COAL	0.2	68.3	
304.4	MODESTO		UNDERCLAY	2.8	68.4	
301.5	MODESTO		SANDSTONE	6.0	71.3	
295.5	MODESTO		SHALE	7.8	77.3	
287.8	MODESTO		SHALE	14.0	85.0	
273.8	MODESTO		BLACK SHALE	0.2	99.0	
273.6	MODESTO		SHALE	6.0	99.2	
267.6	MODESTO		BLACK SHALE	3.3	105.2	
264.3	MODESTO		COAL	0.5	108.5	
263.8	MODESTO		UNDERCLAY	2.0	109.0	
261.8	MODESTO		SHALE	12.5	111.0	
249.3	MODESTO		SHALE	1.5	123.5	
247.8	MODESTO		SHALE	8.0	125.0	
239.8	MODESTO		SHALE	5.1	133.0	
234.7	MODESTO		SHALY LIMESTONE	3.1	138.1	
231.6	MODESTO		CALCAREOUS SHALE	7.8	141.2	CALC
223.8	MODESTO		SHALE	23.0	149.0	
200.8	MODESTO		SHALE	11.3	172.0	
189.5	CARBONDALE	DANVILLE	COAL	1.9	183.3	
187.5	CARBONDALE		SHALE	11.0	185.3	
176.5	CARBONDALE		COAL	0.5	196.3	
176.0	CARBONDALE		UNDERCLAY	5.0	196.8	
171.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	201.8	
165.0	CARBONDALE		SHALE	7.3	207.8	
157.8	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	215.0	
151.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	221.0	
146.8	CARBONDALE		SHALE	7.2	226.0	
139.6	CARBONDALE	BRERETON	LIMESTONE	5.5	233.2	
134.1	CARBONDALE	ANNA	BLACK SHALE	0.8	238.7	
133.3	CARBONDALE	HERRIN	COAL	3.3	239.5	
130.0	CARBONDALE	HERRIN	UNDERCLAY	0.2	242.8	
130.0	CARBONDALE	HERRIN	COAL	1.3	242.8	
128.6	CARBONDALE		SANDY CLAYSTONE	1.8	244.2	SANDY

126.8	CARBONDALE		SANDSTONE	28.0	246.0	
98.8	CARBONDALE		SANDY SHALE	17.0	274.0	
81.8	CARBONDALE		SHALE	8.4	291.0	
73.4	CARBONDALE	BRIAR HILL	COAL	1.5	299.4	
71.9	CARBONDALE		SHALE	25.1	300.9	W/SS STREAKS
46.8	CARBONDALE		SANDY SHALE	25.2	326.0	
21.6	CARBONDALE		SHALE	1.0	351.2	
20.6	CARBONDALE	ST. DAVID	LIMESTONE	0.8	352.2	
19.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	353.0	
16.0	CARBONDALE	SPRINGFIELD	COAL	4.8	356.8	
11.2	CARBONDALE		UNDERCLAY	0.4	361.6	

MAPID: 16502280000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382094 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820962 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, WM CRAWFORD COMM **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-187.0	CARBONDALE	DEKOVEN	COAL	3.0	582.0	
-211.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	606.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-227.0	CARBONDALE	DAVIS	COAL	4.0	622.0	
-265.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-225.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	620.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502280000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382094 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.820962 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2495.0 **LOG TYPE:**

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1721.0			LIMESTONE	-	2116.0	
-2100.0		BASE BARLOW	LIMESTONE	-	2495.0	

MAPID: 16502281000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384388 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820949 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2490.0 **LOG TYPE:**
SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1750.0	
-1715.0			LIMESTONE	-	2100.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2490.0	

MAPID: 16502444000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384418 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2104.0 **LOG TYPE:**
SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
154.0	CARBONDALE	BRERETON	LIMESTONE	-	231.0	
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1749.0	
-1719.0			LIMESTONE	-	2104.0	

MAPID: 16502563000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384504 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.828244 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: LAZICH MAX E, SKELTON S H COM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	1.7	505.0	
-138.0	CARBONDALE	SURVANT	COAL	0.7	539.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-243.0	CARBONDALE	DEKOVEN	COAL	2.2	644.0	
-264.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	665.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	4.0	684.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-329.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502563000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384504 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828244 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2520.0 **LOG TYPE:**
SOURCE: LAZICH MAX E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
109.0	CARBONDALE	BRERETON	LIMESTONE	-	292.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1733.0			LIMESTONE	-	2134.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2520.0	

MAPID: 16503021000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375277 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.828264 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1630.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR, FLETCHER F. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-180.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	595.0	
-265.0	SPOON	DAVIS	UNCLASSIFIED	-	680.0	
-1215.0	BASE OF PENN.		UNCLASSIFIED	-	1630.0	

MAPID: 16503021000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375277 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828264 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: FARRAR, FLETCHER F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
115.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1715.0			LIMESTONE	-	2130.0	
-2099.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16503021000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375277 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.828264 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR, FLETCHER F., SAULS L C **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-118.0	CARBONDALE	SURVANT	COAL	1.2	533.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-225.0	CARBONDALE	DEKOVEN	COAL	2.0	640.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	668.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	4.0	682.0	
-305.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-313.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	728.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503432000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.375222 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824633 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2517.0 **LOG TYPE:**
SOURCE: N V DUNCAN DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1718.0			LIMESTONE	-	2130.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2517.0	

MAPID: 16500160000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.404118 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.829171 **DATE COLLECTED:** 1 / 0 / 1906

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 431.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	20.0	0.0	
370.0	MODESTO		SHALE	30.0	20.0	
340.0	MODESTO		SANDSTONE	8.0	50.0	
332.0	MODESTO		SANDY SHALE	7.0	58.0	
325.0	MODESTO		SANDSTONE	23.0	65.0	
302.0	MODESTO		SANDY SHALE	31.0	88.0	
271.0	MODESTO		LIMESTONE	5.0	119.0	
266.0	MODESTO		SHALE	4.0	124.0	
262.0	MODESTO		SANDSTONE	19.0	128.0	
243.0	MODESTO		SANDY SHALE	22.0	147.0	
221.0	MODESTO		SHALE	29.0	169.0	
192.0	MODESTO		CLAYSTONE	2.0	198.0	
190.0	MODESTO		SHALE	20.0	200.0	
170.0	MODESTO	PIASA	LIMESTONE	11.0	220.0	
159.0	MODESTO		SHALE	3.0	231.0	
156.0	CARBONDALE	DANVILLE	BLACK SHALE	2.0	234.0	
154.0	CARBONDALE		SHALE	15.0	236.0	
139.0	CARBONDALE		SANDSTONE	8.0	251.0	
131.0	CARBONDALE		BLACK SHALE	2.0	259.0	
129.0	CARBONDALE	ALLENBY	COAL	1.0	261.0	
128.0	CARBONDALE		UNDERCLAY	2.0	262.0	
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	264.0	
116.0	CARBONDALE	ANVIL ROCK	SHALE	1.0	274.0	
115.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	275.0	
105.0	CARBONDALE	ANVIL ROCK	SHALE	6.0	285.0	SANDY
99.0	CARBONDALE	ANVIL ROCK	SHALE	5.0	291.0	
94.0	CARBONDALE	BRERETON	LIMESTONE	9.0	296.0	
85.0	CARBONDALE	ANNA	BLACK SHALE	1.0	305.0	
84.0	CARBONDALE	HERRIN	COAL	5.5	306.0	
78.5	CARBONDALE		UNDERCLAY	2.5	311.5	
76.0	CARBONDALE		SANDSTONE	20.0	314.0	
56.0	CARBONDALE		SANDY SHALE	22.0	334.0	
34.0	CARBONDALE		SHALE	2.0	356.0	
32.0	CARBONDALE	BRIAR HILL	COAL	2.0	358.0	
30.0	CARBONDALE		UNDERCLAY	1.0	360.0	
29.0	CARBONDALE		SANDSTONE	46.0	361.0	
-17.0	CARBONDALE		SHALE	8.0	407.0	
-25.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	415.0	
-27.0	CARBONDALE	TURNER MINE	BLACK SHALE	9.0	417.0	

-36.0	CARBONDALE	SPRINGFIELD	COAL	4.2	426.0
-40.2	CARBONDALE		UNDERCLAY	0.8	430.2

MAPID: 16500160000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.404118 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829171 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 311.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.0	MODESTO	PIASA	LIMESTONE	11.0	214.0	
165.0	MODESTO		GRAY SHALE	3.0	225.0	
162.0	CARBONDALE	DANVILLE	BLACK SHALE	2.0	228.0	
160.0	CARBONDALE		SHALE & SANDSTONE	31.0	230.0	
129.0	CARBONDALE	ALLENBY	COAL	1.0	261.0	
128.0	CARBONDALE		CLAYSTONE	2.0	262.0	
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	264.0	
116.0	CARBONDALE	LAWSON	GRAY SHALE	1.0	274.0	
115.0	CARBONDALE	LAWSON	SANDSTONE	10.0	275.0	
105.0	CARBONDALE	LAWSON	SILTY SHALE	6.0	285.0	
99.0	CARBONDALE	LAWSON	GRAY SHALE	5.0	291.0	
94.0	CARBONDALE	BRERETON	LIMESTONE	9.0	296.0	
85.0	CARBONDALE	ANNA	BLACK SHALE	1.0	305.0	
84.0	CARBONDALE	HERRIN	COAL	5.5	306.0	

MAPID: 16501535000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.39367 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.824567 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2508.0 **LOG TYPE:**

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
117.0	CARBONDALE	BRERETON	LIMESTONE	-	261.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1748.0			LIMESTONE	-	2126.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2508.0	

MAPID: 16501535000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.39367 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.824567 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3057.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	DANVILLE	COAL	-	210.0	
148.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	230.0	
136.0	CARBONDALE	ANVIL ROCK	SILTSTONE/SANDSTONE	8.0	242.0	
110.0	CARBONDALE	HERRIN	COAL	3.0	268.0	
96.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	8.0	282.0	
51.0	CARBONDALE	BRIAR HILL	COAL	-	327.0	
44.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	24.0	334.0	
-6.0	CARBONDALE	SPRINGFIELD	COAL	5.0	384.0	
-72.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	

MAPID: 16501535000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.39367 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824567 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., PATTON-MATHIAS **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-77.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-107.0	CARBONDALE	SURVANT	COAL	0.6	485.0	
-174.0	CARBONDALE	COLCHESTER	COAL	0.5	552.0	
-215.0	CARBONDALE	DEKOVEN	COAL	2.8	593.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	620.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-260.0	CARBONDALE	DAVIS	COAL	4.0	638.0	
-200.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	578.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-307.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	685.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502282000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400665 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.830071 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: NEW IL MID CONT. OIL, GARRETT ESTEL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-115.0	CARBONDALE	SURVANT	COAL	0.8	525.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	592.0	
-220.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	655.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	4.0	674.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	711.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-308.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	718.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502282000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400665 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: NEW IL MID CONT. OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
114.0	CARBONDALE	BRERETON	LIMESTONE	-	296.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1778.0			LIMESTONE	-	2188.0	
-2163.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502283000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409865 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.830076 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-221.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	630.0	
-291.0	SPOON	DAVIS	UNCLASSIFIED	-	700.0	
-1251.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16502283000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409865 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830076 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2160.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1751.0			LIMESTONE	-	2160.0	

MAPID: 16502283000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409865 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.830076 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, HECK TRACT 16 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-144.0	CARBONDALE	SURVANT	COAL	0.8	553.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-241.0	CARBONDALE	DEKOVEN	COAL	3.2	650.0	
-268.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	677.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-284.0	CARBONDALE	DAVIS	COAL	4.0	693.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-329.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	738.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502284000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409872 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831898 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1766.0			LIMESTONE	-	2181.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16502407000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409879 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833726 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, PATTON ERNEST H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-206.0	CARBONDALE	COLCHESTER	COAL	0.5	619.0	
-232.0	CARBONDALE	DEKOVEN	COAL	1.3	645.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	674.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-275.0	CARBONDALE	DAVIS	COAL	3.8	688.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	727.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-320.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	733.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502407000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409879 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833726 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 1793.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1793.0	

MAPID: 16502643000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.407589 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.833726 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1788.0 **LOG TYPE:**

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1788.0	

MAPID: 16500161000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.417896 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.829103 **DATE COLLECTED:** 2 / 24 / 1906

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 452.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	69.0	0.0	
339.0	MODESTO		SANDSTONE	24.0	69.0	
315.0	MODESTO		SANDY SHALE	33.0	93.0	
282.0	MODESTO		SHALE	15.0	126.0	
267.0	MODESTO		LIMESTONE	5.0	141.0	
262.0	MODESTO		SHALE	7.0	146.0	
255.0	MODESTO		SANDSTONE	22.0	153.0	
233.0	MODESTO		SHALE	9.0	175.0	
224.0	MODESTO		BLACK SHALE	2.0	184.0	
222.0	MODESTO		SANDY SHALE	12.0	186.0	
210.0	MODESTO		SANDSTONE	29.0	198.0	
181.0	MODESTO		SHALE	5.0	227.0	
176.0	MODESTO		BLACK SHALE	2.0	232.0	
174.0	MODESTO		COAL	1.0	234.0	
173.0	MODESTO		UNDERCLAY	1.0	235.0	
172.0	MODESTO		LIMESTONE	6.0	236.0	
166.0	MODESTO		CLAYSTONE	1.0	242.0	
165.0	MODESTO		COAL	2.0	243.0	
163.0	MODESTO		SHALE	8.0	245.0	
155.0	MODESTO		SANDSTONE	4.0	253.0	
151.0	MODESTO		SHALE	23.0	257.0	
128.0	MODESTO		SANDSTONE	6.0	280.0	
122.0	MODESTO		SANDY SHALE	4.0	286.0	
118.0	CARBONDALE	DANVILLE	COAL	2.0	290.0	
116.0	CARBONDALE		UNDERCLAY	1.0	292.0	
115.0	CARBONDALE		LIMESTONE	7.5	293.0	
107.5	CARBONDALE		CLAYSTONE	0.5	300.5	
107.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	301.0	
104.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	304.0	
98.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	310.0	
90.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.0	318.0	
82.0	CARBONDALE	BRERETON	LIMESTONE	6.5	326.0	
75.5	CARBONDALE	ANNA	BLACK SHALE	2.0	332.5	
73.5	CARBONDALE	HERRIN	COAL	5.5	334.5	
68.0	CARBONDALE		UNDERCLAY	2.0	340.0	
66.0	CARBONDALE		SANDSTONE	4.0	342.0	
62.0	CARBONDALE		SANDY SHALE	32.0	346.0	
30.0	CARBONDALE		SHALE	10.0	378.0	
20.0	CARBONDALE	BRIAR HILL	COAL	2.0	388.0	

18.0	CARBONDALE		UNDERCLAY	1.0	390.0
17.0	CARBONDALE		SHALE	3.0	391.0
14.0	CARBONDALE		SANDSTONE	29.0	394.0
-15.0	CARBONDALE		SANDY SHALE	15.0	423.0
-30.0	CARBONDALE		SHALE	2.0	438.0
-32.0	CARBONDALE		LIMESTONE	2.5	440.0
-34.5	CARBONDALE		BLACK SHALE	1.5	442.5
-36.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	444.0
-38.0	CARBONDALE	TURNER MINE	BLACK SHALE	0.2	446.0
-38.2	CARBONDALE	SPRINGFIELD	COAL	4.1	446.2
-42.3	CARBONDALE	SPRINGFIELD	SHALE	0.3	450.3
-42.5	CARBONDALE	SPRINGFIELD	COAL	0.3	450.5
-42.8	CARBONDALE		UNDERCLAY	1.2	450.8

MAPID: 16500162000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422421 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.825374 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 449.0 **LOG TYPE:** Drillers Log

SOURCE: ELDORADO COAL MNG **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	DANVILLE	COAL	2.0	268.0	
133.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	15.0	270.0	
113.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	290.0	
69.0	CARBONDALE	HERRIN	COAL	6.0	334.0	
58.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	20.0	345.0	
8.0	CARBONDALE	BRIAR HILL	COAL	2.0	395.0	
6.0	CARBONDALE	CANTON		3.0	397.0	
-40.0	CARBONDALE	SPRINGFIELD	COAL	6.0	443.0	

MAPID: 16500162000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422421 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825374 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 340.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	DANVILLE	COAL	2.0	268.0	
133.0	CARBONDALE		SHALE & SANDSTONE	20.0	270.0	
113.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	290.0	
105.0	CARBONDALE	LAWSON	SHALE	27.0	298.0	
78.0	CARBONDALE	BRERETON	LIMESTONE	9.0	325.0	
69.0	CARBONDALE	HERRIN	COAL	6.0	334.0	

MAPID: 16500162000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1980' S line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422421 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.825374 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 449.0 **LOG TYPE:** Drillers Log

SOURCE: ELDORADO COAL ENG. CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.0			UNCONSOLIDATED	62.0	0.0	
341.0	MODESTO		SANDSTONE	43.0	62.0	
298.0	MODESTO		SHALE	31.0	105.0	
267.0	MODESTO		LIMESTONE	4.0	136.0	
263.0	MODESTO		SHALE	41.0	140.0	
222.0	MODESTO		BLACK SHALE	1.0	181.0	
221.0	MODESTO		SHALE	33.0	182.0	
188.0	MODESTO		COAL	1.0	215.0	
187.0	MODESTO		SHALE	22.0	216.0	
165.0	MODESTO	PIASA	LIMESTONE	1.0	238.0	
164.0	MODESTO		BLACK SHALE	2.0	239.0	
162.0	MODESTO		ARGILACEOUS SHALE	27.0	241.0	ARG
135.0	CARBONDALE	DANVILLE	COAL	2.0	268.0	
133.0	CARBONDALE		SANDSTONE	15.0	270.0	
118.0	CARBONDALE		SHALE	5.0	285.0	
113.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	290.0	
105.0	CARBONDALE	ANVIL ROCK	SHALE	27.0	298.0	
78.0	CARBONDALE	BRERETON	LIMESTONE	9.0	325.0	
69.0	CARBONDALE	HERRIN	COAL	6.0	334.0	
63.0	CARBONDALE		UNDERCLAY	5.0	340.0	
58.0	CARBONDALE		SANDSTONE	20.0	345.0	
38.0	CARBONDALE		SHALE	30.0	365.0	
8.0	CARBONDALE	BRIAR HILL	COAL	2.0	395.0	
6.0	CARBONDALE		SANDSTONE	3.0	397.0	
3.0	CARBONDALE		SANDY SHALE	38.0	400.0	
-35.0	CARBONDALE	ST. DAVID	LIMESTONE	4.0	438.0	
-39.0	CARBONDALE	TURNER MINE	SHALE	1.0	442.0	
-40.0	CARBONDALE	SPRINGFIELD	COAL	6.0	443.0	

MAPID: 16502156000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428214 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828087 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1769.0			LIMESTONE	-	2180.0	

MAPID: 16502285000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42365 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829971 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log
SOURCE: STELLE, JOHN ASSOC., BLANKENSHIP ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	550.0	
-155.0	CARBONDALE	SURVANT	COAL	0.8	570.0	
-227.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-263.0	CARBONDALE	DEKOVEN	COAL	3.5	678.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	704.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	4.0	719.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-343.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	758.0	
-385.0	TRADEWATER	MT. RORAH	COAL	1.2	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502285000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42365 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829971 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2576.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1769.0			LIMESTONE	-	2184.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2576.0	

MAPID: 16502286000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421374 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-1753.0			LIMESTONE	-	2160.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2563.0	

MAPID: 16502287000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421392 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83365 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., C H BURNETT COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-174.0	CARBONDALE	SURVANT	COAL	1.2	579.0	
-247.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-273.0	CARBONDALE	DEKOVEN	COAL	2.5	678.0	
-301.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	706.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	5.5	725.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-352.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	757.0	
-395.0	TRADEWATER	MT. RORAH	COAL	1.3	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502287000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421392 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83365 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2561.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1756.0			LIMESTONE	-	2161.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2561.0	

MAPID: 16502288000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42131 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82633 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, COOK-SPEER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-196.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	526.0	
-234.0	CARBONDALE	SURVANT	COAL	1.2	564.0	
-308.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-343.0	CARBONDALE	DEKOVEN	COAL	3.0	673.0	
-368.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	698.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-380.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-420.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-428.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	758.0	
-469.0	TRADEWATER	MT. RORAH	COAL	1.3	799.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502288000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42131 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82633 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 1813.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	

MAPID: 16502289000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423597 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2169.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1764.0			LIMESTONE	-	2169.0	

MAPID: 16502290000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 500' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421296 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824961 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, COOK-SPEER 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	553.0	
-224.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-264.0	CARBONDALE	DEKOVEN	COAL	1.8	665.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	690.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	5.0	705.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-349.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	750.0	
-397.0	TRADEWATER	MT. RORAH	COAL	1.3	798.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502290000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 500' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421296 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824961 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2163.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1762.0			LIMESTONE	-	2163.0	

MAPID: 16502291000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412166 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831889 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2178.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1763.0			LIMESTONE	-	2178.0	

MAPID: 16502292000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 320' N line, 300' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414535 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.826423 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, HECK TRACT 16 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	519.0	
-153.0	CARBONDALE	SURVANT	COAL	0.5	556.0	
-227.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-259.0	CARBONDALE	DEKOVEN	COAL	3.0	662.0	
-285.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	688.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-302.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-337.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-345.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	748.0	
-387.0	TRADEWATER	MT. RORAH	COAL	0.5	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502292000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 320' N line, 300' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414535 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826423 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1803.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	

MAPID: 16502293000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419034 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.828175 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2636.0 **LOG TYPE:** Electric Log
SOURCE: PORTIS, R. W. DRLG., LASSATER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	530.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	565.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	635.0	
-254.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-277.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	690.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-292.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	743.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-337.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	750.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.2	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502293000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419034 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828175 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	
-1761.0			LIMESTONE	-	2174.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502294000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419016 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826353 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2174.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	BRERETON	LIMESTONE	-	323.0	
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1769.0			LIMESTONE	-	2174.0	

MAPID: 16502295000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416743 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828195 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 1808.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	BRERETON	LIMESTONE	-	334.0	
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	

MAPID: 16502296000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416729 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826375 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1811.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1811.0	

MAPID: 16502297000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41446 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830048 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2184.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	324.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1774.0			LIMESTONE	-	2184.0	

MAPID: 16502298000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412151 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2171.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	320.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1764.0			LIMESTONE	-	2171.0	

MAPID: 16502299000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412159 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830067 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2183.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	BRERETON	LIMESTONE	-	321.0	
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1769.0			LIMESTONE	-	2183.0	

MAPID: 16502301000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419055 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830011 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2177.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1764.0			LIMESTONE	-	2177.0	

MAPID: 16502302000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416757 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830028 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2182.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	BRERETON	LIMESTONE	-	337.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1763.0			LIMESTONE	-	2182.0	

MAPID: 16502303000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419076 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1765.0			LIMESTONE	-	2174.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502304000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416768 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83185 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2183.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1767.0			LIMESTONE	-	2183.0	

MAPID: 16502305000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419098 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833667 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1772.0			LIMESTONE	-	2178.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2558.0	

MAPID: 16502306000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421353 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: MILLER, GENE, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-1764.0			LIMESTONE	-	2172.0	
-2156.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502307000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 310' S line, 310' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421263 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828099 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2175.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
71.0	CARBONDALE	BRERETON	LIMESTONE	-	337.0	
-1399.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1767.0			LIMESTONE	-	2175.0	

MAPID: 16502308000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' S line, 280' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423801 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828267 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1771.0			LIMESTONE	-	2181.0	
-2163.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502409000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414474 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.83187 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., FLANDERS HARRY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-110.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	524.0	
-146.0	CARBONDALE	SURVANT	COAL	0.5	560.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	632.0	
-239.0	CARBONDALE	DEKOVEN	COAL	4.0	653.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	679.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-280.0	CARBONDALE	DAVIS	COAL	5.0	694.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	733.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-326.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502409000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414474 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2176.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1762.0			LIMESTONE	-	2176.0	

MAPID: 16502410000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 500' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418998 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824986 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 1813.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	

MAPID: 16502411000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' N line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42589 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82615 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1769.0			LIMESTONE	-	2180.0	

MAPID: 16502412000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425919 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2178.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1768.0			LIMESTONE	-	2178.0	

MAPID: 16502434000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414446 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.828217 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 1803.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	323.0	
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	

MAPID: 16502474000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423569 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824468 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log
SOURCE: DUNCAN, WALTER, COOK-SPEER 5 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	519.0	
-155.0	CARBONDALE	SURVANT	COAL	1.1	553.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.5	623.0	
-266.0	CARBONDALE	DEKOVEN	COAL	3.5	664.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	688.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-307.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-352.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	750.0	
-392.0	TRADEWATER	MT. RORAH	COAL	1.8	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502474000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423569 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2564.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1805.0	
-1762.0			LIMESTONE	-	2160.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2564.0	

MAPID: 16502475000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423679 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831794 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1760.0			LIMESTONE	-	2172.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502479000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425948 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829952 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-1771.0			LIMESTONE	-	2196.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16502494000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 180' N line, 335' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421292 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823086 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2157.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1801.0	
-1761.0			LIMESTONE	-	2157.0	

MAPID: 16502495000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423544 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2160.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1763.0			LIMESTONE	-	2160.0	

MAPID: 16502500000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 230' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42586 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82417 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2168.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1765.0			LIMESTONE	-	2168.0	

MAPID: 16502501000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 300' S line, 285' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428301 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824336 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2176.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1414.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1774.0			LIMESTONE	-	2176.0	

MAPID: 16502502000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 280' N line, 425' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.427852 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826408 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2573.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1405.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1773.0			LIMESTONE	-	2176.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2573.0	

MAPID: 16502503000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425976 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.831774 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 1680.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-235.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	655.0	
-302.0	SPOON	DAVIS	UNCLASSIFIED	-	722.0	
-1260.0	BASE OF PENN.		UNCLASSIFIED	-	1680.0	

MAPID: 16502503000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425976 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2586.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1414.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1834.0	
-1767.0			LIMESTONE	-	2187.0	
-2166.0		BASE BARLOW	LIMESTONE	-	2586.0	

MAPID: 16502504000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412173 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833717 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., FLANDERS HARRY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	511.0	
-129.0	CARBONDALE	SURVANT	COAL	0.8	544.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-225.0	CARBONDALE	DEKOVEN	COAL	3.0	640.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	670.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-270.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-310.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-315.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502504000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412173 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833717 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2176.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1761.0			LIMESTONE	-	2176.0	

MAPID: 16502529000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423515 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820807 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, COOK-SPEER 7 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-141.0	CARBONDALE	SURVANT	COAL	1.5	540.0	
-213.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-257.0	CARBONDALE	DEKOVEN	COAL	3.0	656.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	680.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-295.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	742.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-351.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	750.0	
-391.0	TRADEWATER	MT. RORAH	COAL	1.5	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502529000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423515 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820807 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2158.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1759.0			LIMESTONE	-	2158.0	

MAPID: 16502540000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 430' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425835 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822347 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2165.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1770.0			LIMESTONE	-	2165.0	

MAPID: 16502565000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416783 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833683 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 1807.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	

MAPID: 16502587000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' S line, 400' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426055 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820914 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., BUTLER J **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-153.0	CARBONDALE	SURVANT	COAL	1.1	549.0	
-219.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-264.0	CARBONDALE	DEKOVEN	COAL	2.5	660.0	
-288.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	684.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	5.0	695.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	738.0	
-359.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	755.0	
-389.0	TRADEWATER	MT. RORAH	COAL	1.3	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502587000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' S line, 400' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426055 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 1807.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	

MAPID: 16502588000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414488 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8337 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 1806.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	

MAPID: 16502589000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428249 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1769.0			LIMESTONE	-	2197.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502590000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 190' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418978 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823081 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 1804.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	

MAPID: 16502651000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428281 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831754 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., BURNETT C H "A" **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	555.0	
-155.0	CARBONDALE	SURVANT	COAL	0.8	585.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-262.0	CARBONDALE	DEKOVEN	COAL	2.5	692.0	
-289.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	719.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-300.0	CARBONDALE	DAVIS	COAL	5.0	730.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	768.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-344.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	774.0	
-384.0	TRADEWATER	MT. RORAH	COAL	1.3	814.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502651000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428281 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831754 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1840.0	
-1770.0			LIMESTONE	-	2200.0	
-2160.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502692000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 310' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42818 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822599 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 1818.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1407.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	

MAPID: 16502798000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.423707 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833633 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1411.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1767.0			LIMESTONE	-	2176.0	
-2163.0		BASE BARLOW	LIMESTONE	-	2572.0	

MAPID: 16502912000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426004 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833619 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2584.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1417.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-1771.0			LIMESTONE	-	2186.0	
-2169.0		BASE BARLOW	LIMESTONE	-	2584.0	

MAPID: 16503034000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 280' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414577 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822741 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1804.0 **LOG TYPE:**
SOURCE: YEMM L & JANSEN V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	300.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	

MAPID: 16503486000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 160' N line, 20' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.415514 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826855 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 1817.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Water Injection
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	333.0	
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	

MAPID: 16503520000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418952 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820861 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, HAUSSER JOHN **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-126.0	CARBONDALE	SURVANT	COAL	0.5	522.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-239.0	CARBONDALE	DEKOVEN	COAL	3.5	635.0	
-262.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	658.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-277.0	CARBONDALE	DAVIS	COAL	4.3	673.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	710.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-324.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	720.0	
-361.0	TRADEWATER	MT. RORAH	COAL	1.2	757.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503520000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418952 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820861 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
99.0	CARBONDALE	BRERETON	LIMESTONE	-	297.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1768.0			LIMESTONE	-	2164.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2563.0	

MAPID: 16502413000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 310' N line, 400' E line of NE SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435274 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822574 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2275.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, HIGH SCHOOL UNIT **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-152.0	CARBONDALE	SURVANT	COAL	0.8	580.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-264.0	CARBONDALE	DEKOVEN	COAL	2.8	692.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	715.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-297.0	CARBONDALE	DAVIS	COAL	4.0	725.0	
-346.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	774.0	
-354.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	782.0	
-394.0	TRADEWATER	MT. RORAH	COAL	1.3	822.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502413000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 310' N line, 400' E line of NE SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435274 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2194.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	
-1763.0			LIMESTONE	-	2194.0	

MAPID: 16502414000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 345' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442019 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827984 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2930.0 **LOG TYPE:** Electric Log
SOURCE: HEDRICK LAWTON, DOER PAUL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-131.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-166.0	CARBONDALE	SURVANT	COAL	0.5	580.0	
-244.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-276.0	CARBONDALE	DEKOVEN	COAL	3.0	690.0	
-305.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	719.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	725.0	
-356.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	770.0	
-361.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	775.0	
-404.0	TRADEWATER	MT. RORAH	COAL	1.3	818.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502414000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 345' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442019 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827984 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: HEDRICK LAWTON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1758.0			LIMESTONE	-	2172.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502442000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 360' S line, 290' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.434919 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824428 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1811.0	
-1769.0			LIMESTONE	-	2194.0	
-2091.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16502448000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 270' S line, 452' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441532 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820423 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1767.0			LIMESTONE	-	2189.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2572.0	

MAPID: 16502457000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 390' N line, 300' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442079 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822275 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2216.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1830.0	
-1784.0			LIMESTONE	-	2216.0	

MAPID: 16502465000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 310' S line, 350' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439696 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820555 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2923.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., MCKINNIS ETAL COM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	544.0	
-180.0	CARBONDALE	SURVANT	COAL	0.5	584.0	
-253.0	CARBONDALE	COLCHESTER	COAL	0.5	657.0	
-290.0	CARBONDALE	DEKOVEN	COAL	1.5	694.0	
-316.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	720.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-325.0	CARBONDALE	DAVIS	COAL	5.0	729.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-385.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	789.0	
-425.0	TRADEWATER	MT. RORAH	COAL	1.8	829.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502465000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 310' S line, 350' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439696 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820555 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1762.0			LIMESTONE	-	2166.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16502466000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 450' N line, 440' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435462 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.825861 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2203.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1771.0			LIMESTONE	-	2203.0	

MAPID: 16502481000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 361' N line, 280' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444097 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822332 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 2218.0 **LOG TYPE:**
SOURCE: RUNYON FLOYD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1856.0	
-1766.0			LIMESTONE	-	2218.0	

MAPID: 16502489000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 305' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444168 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820555 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 2222.0 **LOG TYPE:**
SOURCE: RUNYON FLOYD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1858.0	
-1772.0			LIMESTONE	-	2222.0	

MAPID: 16502490000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437353 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822494 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2217.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, GATES COMM UNIT **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	541.0	
-160.0	CARBONDALE	SURVANT	COAL	0.5	580.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.0	689.0	
-297.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	717.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-306.0	CARBONDALE	DAVIS	COAL	5.0	726.0	
-355.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-364.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	784.0	
-404.0	TRADEWATER	MT. RORAH	COAL	1.3	824.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502490000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437353 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2185.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1765.0			LIMESTONE	-	2185.0	

MAPID: 16502505000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432759 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82437 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1762.0			LIMESTONE	-	2185.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2571.0	

MAPID: 16502506000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446622 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827894 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2219.0 **LOG TYPE:** Electric Log
SOURCE: CENTRAL OIL PROD INC, HEATH COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-180.0	CARBONDALE	SURVANT	COAL	0.8	595.0	
-261.0	CARBONDALE	COLCHESTER	COAL	0.5	676.0	
-280.0	CARBONDALE	DEKOVEN	COAL	3.0	695.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	727.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-319.0	CARBONDALE	DAVIS	COAL	4.0	734.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-370.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	785.0	
-407.0	TRADEWATER	MT. RORAH	COAL	1.4	822.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502506000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446622 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827894 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2157.0 **LOG TYPE:**
SOURCE: CENTRAL OIL PROD INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1742.0			LIMESTONE	-	2157.0	

MAPID: 16502507000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 407' S line, 330' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437335 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820853 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2177.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1760.0			LIMESTONE	-	2177.0	

MAPID: 16502508000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 320' S line, 360' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437271 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82429 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2209.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1830.0	
-1770.0			LIMESTONE	-	2209.0	

MAPID: 16502509000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 440' N line, 413' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437105 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82587 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2205.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-1765.0			LIMESTONE	-	2205.0	

MAPID: 16502518000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 250' S line, 276' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.434807 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820452 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2190.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1400.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-1771.0			LIMESTONE	-	2190.0	

MAPID: 16502524000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 280' S line, 410' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435387 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827875 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 2265.0 **LOG TYPE:** Electric Log
SOURCE: BEARD, FRANCIS L., ADAMS COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	555.0	
-142.0	CARBONDALE	SURVANT	COAL	0.8	586.0	
-214.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-253.0	CARBONDALE	DEKOVEN	COAL	3.5	697.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	725.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-290.0	CARBONDALE	DAVIS	COAL	5.0	734.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-337.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	781.0	
-376.0	TRADEWATER	MT. RORAH	COAL	1.8	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502524000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 280' S line, 410' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435387 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827875 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 2213.0 **LOG TYPE:**
SOURCE: BEARD, FRANCIS L. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1837.0	
-1769.0			LIMESTONE	-	2213.0	

MAPID: 16502531000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446603 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824211 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:**
SOURCE: SANDERS & FYE DRILLING **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1837.0	
-1760.0			LIMESTONE	-	2204.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2585.0	

MAPID: 16502541000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 265' N line, 345' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432682 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822726 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2156.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1771.0			LIMESTONE	-	2200.0	
-1727.0		BASE BARLOW	LIMESTONE	-	2156.0	

MAPID: 16502542000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 300' S line, 300' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430404 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827984 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-1766.0			LIMESTONE	-	2180.0	

MAPID: 16502544000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.43965 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2166.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1761.0			LIMESTONE	-	2166.0	

MAPID: 16502591000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 350' N line, 410' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430751 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826184 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1765.0			LIMESTONE	-	2178.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502592000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 205' N line, 395' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432566 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826565 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1394.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1834.0	
-1765.0			LIMESTONE	-	2205.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502593000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 190' S line, 290' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.43295 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827654 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 2207.0 **LOG TYPE:**
SOURCE: PORTIS, R. W. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-1769.0			LIMESTONE	-	2207.0	

MAPID: 16502623000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 337' S line, 286' E line of SE NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439519 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.824311 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2921.0 **LOG TYPE:** Electric Log
SOURCE: BURY DRLG. CO., BRIDDOCK WM COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	538.0	
-159.0	CARBONDALE	SURVANT	COAL	1.0	570.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	678.0	
-292.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	703.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-303.0	CARBONDALE	DAVIS	COAL	4.0	714.0	
-349.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-359.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	770.0	
-398.0	TRADEWATER	MT. RORAH	COAL	1.3	809.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502623000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 337' S line, 286' E line of SE NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439519 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824311 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:**
SOURCE: BURY DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1766.0			LIMESTONE	-	2177.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2558.0	

MAPID: 16502636000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 355' S line, 355' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.43053 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824462 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1769.0			LIMESTONE	-	2189.0	
-2157.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16502708000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 430' S line, 360' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432604 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820975 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 1820.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	

MAPID: 16502745000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 310' N line, 315' E line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.430355 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1827.0	
-1767.0			LIMESTONE	-	2188.0	
-2160.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16503202000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 360' N line, 260' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437724 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2567.0 **LOG TYPE:**
SOURCE: BREUER & CURREN OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	
-1751.0			LIMESTONE	-	2188.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2567.0	

MAPID: 16503310000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.432898 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833561 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: WITHERSPOON R DWIGHT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
74.0	CARBONDALE	BRERETON	LIMESTONE	-	366.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1832.0	
-1765.0			LIMESTONE	-	2205.0	
-2149.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16503310000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.432898 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.833561 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
170.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	271.0	
166.0	MODESTO		SHALE	34.0	275.0	
132.0	CARBONDALE	DANVILLE	COAL	1.5	309.0	
130.5	CARBONDALE		SHALE	9.5	310.5	
121.0	CARBONDALE	GALUM	CALCAREOUS SANDSTONE	9.0	320.0	
112.0	CARBONDALE	ALLENBY	COAL	1.0	329.0	
111.0	CARBONDALE		CLAYSTONE	4.0	330.0	
107.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	334.0	
101.0	CARBONDALE	LAWSON	GRAY SHALE	4.0	340.0	
97.0	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	16.0	344.0	
81.0	CARBONDALE	LAWSON	DARK GRAY SHALE	6.0	360.0	
75.0	CARBONDALE	BRERETON	LIMESTONE	9.0	366.0	
66.0	CARBONDALE	ANNA	BLACK SHALE	1.0	375.0	
65.0	CARBONDALE	HERRIN	COAL	4.0	376.0	

MAPID: 16503316000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.430614 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.833582 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2597.0 **LOG TYPE:**

SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1835.0	
-1777.0			LIMESTONE	-	2210.0	
-2164.0		BASE BARLOW	LIMESTONE	-	2597.0	

MAPID: 16503325000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 370' N line, 300' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435032 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829758 **DATE COLLECTED:** 6 / 0 / 1960
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2654.0 **LOG TYPE:** Electric Log
SOURCE: WALKER S G & DRLG, MCDANIEL-WESTBROOK **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	556.0	
-147.0	CARBONDALE	SURVANT	COAL	0.8	590.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-249.0	CARBONDALE	DEKOVEN	COAL	3.0	692.0	
-277.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	720.0	56 PERCENT SANDSTONE IN DEKOVEN SPLIT
-287.0	CARBONDALE	DAVIS	COAL	4.0	730.0	
-327.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	770.0	
-335.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	778.0	
-374.0	TRADEWATER	MT. RORAH	COAL	1.3	817.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503325000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 370' N line, 300' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435032 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829758 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: WALKER S G & DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1836.0	
-1767.0			LIMESTONE	-	2210.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16503347000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 350' S line, 200' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44709 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831628 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2558.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	BRERETON	LIMESTONE	-	351.0	
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	
-1742.0			LIMESTONE	-	2172.0	
-2128.0		BASE BARLOW	LIMESTONE	-	2558.0	

MAPID: 16503350000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444332 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82978 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2537.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1740.0			LIMESTONE	-	2148.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2537.0	

MAPID: 16503358000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 520' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.445988 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833445 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	326.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1783.0	
-1730.0			LIMESTONE	-	2142.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16503359000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439777 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833501 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2955.0 **LOG TYPE:** Electric Log
SOURCE: CAHABA OIL CO., ADAMS UNIT 1-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	SURVANT	COAL	1.0	567.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-258.0	CARBONDALE	DEKOVEN	COAL	3.5	677.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	710.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	755.0	
-341.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	760.0	
-380.0	TRADEWATER	MT. RORAH	COAL	1.3	799.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503359000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439777 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833501 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:**
SOURCE: CAHABA OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1741.0			LIMESTONE	-	2160.0	
-2127.0		BASE BARLOW	LIMESTONE	-	2546.0	

MAPID: 16503374000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44663 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829757 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 1796.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	

MAPID: 16503375000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 360' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444359 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833378 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1727.0			LIMESTONE	-	2156.0	
-2128.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16503379000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442064 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.833481 **DATE COLLECTED:** 8 / 0 / 1961
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 1615.0 **LOG TYPE:** Electric Log
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-217.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	630.0	
-287.0	SPOON	DAVIS	UNCLASSIFIED	-	700.0	
-1202.0	BASE OF PENN.		UNCLASSIFIED	-	1615.0	

MAPID: 16503379000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442064 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1733.0			LIMESTONE	-	2146.0	
-2121.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16500163000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1980' N line, 660' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450071 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.828859 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 489.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
116.0	CARBONDALE	DANVILLE	COAL	2.0	294.0	
106.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	9.0	304.0	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	321.0	
48.0	CARBONDALE	HERRIN	COAL	5.2	362.0	
41.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	6.3	369.0	
4.0	CARBONDALE	BRIAR HILL	COAL	2.0	406.0	
1.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.0	409.0	
-73.0	CARBONDALE	SPRINGFIELD	COAL	4.9	483.0	

MAPID: 16500163000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1980' N line, 660' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450071 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.828859 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 367.2 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	MODESTO	PIASA	LIMESTONE	3.0	258.0	
149.0	MODESTO		GRAY SHALE	33.5	261.0	
115.5	CARBONDALE	DANVILLE	COAL	2.0	294.5	
113.5	CARBONDALE		SHALE & SANDSTONE	18.0	296.5	
95.5	CARBONDALE	ALLENBY	COAL	0.5	314.5	
95.0	CARBONDALE		CLAYSTONE	6.5	315.0	
88.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	321.5	
83.0	CARBONDALE	LAWSON	SILTY SHALE	24.0	327.0	
59.0	CARBONDALE	LAWSON	CLAYSTONE	2.0	351.0	
57.0	CARBONDALE	LAWSON	BLACK SHALE	1.0	353.0	
56.0	CARBONDALE	BRERETON	LIMESTONE	7.5	354.0	
48.5	CARBONDALE	ANNA	BLACK SHALE	0.5	361.5	
48.0	CARBONDALE	HERRIN	COAL	5.2	362.0	

MAPID: 16500163000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1980' N line, 660' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450071 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.828859 **DATE COLLECTED:** 5 / 10 / 1906
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 488.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	63.0	0.0	
347.0	MODESTO		SHALE	28.0	63.0	
319.0	MODESTO		BLACK SHALE	4.0	91.0	
315.0	MODESTO	CHAPEL	COAL	1.0	95.0	
314.0	MODESTO		UNDERCLAY	1.0	96.0	
313.0	MODESTO		SHALE	2.0	97.0	
311.0	MODESTO		SANDSTONE	8.0	99.0	
303.0	MODESTO		SHALE	65.0	107.0	
238.0	MODESTO		LIMESTONE	3.0	172.0	
235.0	MODESTO		SANDY SHALE	42.0	175.0	
193.0	MODESTO		SHALE	4.0	217.0	BALCK
189.0	MODESTO		COAL	0.5	221.0	
188.5	MODESTO		UNDERCLAY	4.5	221.5	
184.0	MODESTO		SANDY SHALE	16.0	226.0	
168.0	MODESTO		SANDSTONE	4.0	242.0	
164.0	MODESTO		CALCAREOUS SHALE	11.5	246.0	CALC
152.5	MODESTO	PIASA	LIMESTONE	3.0	257.5	
149.5	MODESTO		SHALE	9.5	260.5	
140.0	MODESTO		SHALE	4.0	270.0	
136.0	MODESTO		SHALE	20.0	274.0	
116.0	CARBONDALE	DANVILLE	COAL	2.0	294.0	
114.0	CARBONDALE		UNDERCLAY	2.0	296.0	
112.0	CARBONDALE		SHALE	6.0	298.0	
106.0	CARBONDALE		SANDSTONE	9.0	304.0	
97.0	CARBONDALE		SHALE	1.0	313.0	
96.0	CARBONDALE	ALLENBY	COAL	0.5	314.0	
95.5	CARBONDALE		UNDERCLAY	6.5	314.5	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	321.0	
83.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.0	326.5	
59.5	CARBONDALE		CLAYSTONE	2.0	350.5	
57.5	CARBONDALE		BLACK SHALE	1.0	352.5	
56.5	CARBONDALE	BRERETON	LIMESTONE	7.5	353.5	
49.0	CARBONDALE	ANNA	BLACK SHALE	0.5	361.0	
48.5	CARBONDALE	HERRIN	COAL	5.2	361.5	
43.3	CARBONDALE		UNDERCLAY	2.0	366.7	
41.3	CARBONDALE		SANDSTONE	6.3	368.7	
35.0	CARBONDALE		SANDY SHALE	31.0	375.0	
4.0	CARBONDALE		BLACK SHALE	2.0	406.0	
2.0	CARBONDALE	BRIAR HILL	COAL	0.5	408.0	

1.5	CARBONDALE		UNDERCLAY	0.5	408.5
1.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	409.0
-5.0	CARBONDALE	DYKERSBURG	SANDY SHALE	51.0	415.0
-56.0	CARBONDALE	DYKERSBURG	SHALE	17.0	466.0
-73.0	CARBONDALE	SPRINGFIELD	COAL	4.9	483.0
-77.9	CARBONDALE		UNDERCLAY	1.0	487.9

MAPID: 16500857000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 361' N line, 411' W line of NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.450921 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.825951 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2572.0 **LOG TYPE:**

SOURCE: THOMPSON DRILLING CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	345.0	
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1745.0			LIMESTONE	-	2173.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2572.0	

MAPID: 16501405000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.458181 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.83153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 1679.0 **LOG TYPE:**

SOURCE: RYAN OIL CO., ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1274.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1679.0	

MAPID: 16501406000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 280' N line, 375' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455761 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.83351 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1741.0			LIMESTONE	-	2149.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16501536000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' S line, 365' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455579 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82037 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	BRERETON	LIMESTONE	-	322.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1732.0			LIMESTONE	-	2156.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16501536000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' S line, 365' W line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455579 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.82037 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2907.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
160.0	CARBONDALE	DANVILLE	COAL	-	264.0	
150.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	274.0	
134.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	290.0	
94.0	CARBONDALE	HERRIN	COAL	4.0	330.0	
56.0	CARBONDALE	BRIAR HILL	COAL	-	368.0	
-23.0	CARBONDALE	SPRINGFIELD	COAL	4.0	447.0	
-42.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE	4.0	466.0	
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	-	523.0	

MAPID: 16501536000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' S line, 365' W line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455579 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.82037 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2907.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., ASHBROOK EMMA **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	528.0	
-145.0	CARBONDALE	SURVANT	COAL	0.7	569.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-246.0	CARBONDALE	DEKOVEN	COAL	2.8	670.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	695.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	4.0	703.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-336.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	760.0	
-375.0	TRADEWATER	MT. RORAH	COAL	1.3	799.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502309000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462722 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827767 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 2271.0 **LOG TYPE:** Electric Log
SOURCE: RUCKER B L, BOOTEN J 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	573.0	
-153.0	CARBONDALE	SURVANT	COAL	0.8	610.0	
-223.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-258.0	CARBONDALE	DEKOVEN	COAL	3.0	715.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	743.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-293.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-346.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	803.0	
-382.0	TRADEWATER	MT. RORAH	COAL	1.3	839.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502309000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462722 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827767 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 2198.0 **LOG TYPE:**
SOURCE: RUCKER B L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1840.0	
-1741.0			LIMESTONE	-	2198.0	

MAPID: 16502310000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 290' S line, 300' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451246 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820374 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 2578.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1754.0			LIMESTONE	-	2188.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2578.0	

MAPID: 16502311000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 450' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46259 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82193 **DATE COLLECTED:** 9 / 0 / 1954
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2910.0 **LOG TYPE:** Electric Log
SOURCE: FORD, W. P., FARRIS ETAL COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	547.0	
-170.0	CARBONDALE	SURVANT	COAL	0.8	589.0	
-241.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.3	688.0	
-296.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	715.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-301.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	769.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	775.0	
-386.0	TRADEWATER	MT. RORAH	COAL	0.0	805.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502311000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 450' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82193 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: FORD, W. P. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	335.0	
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1746.0			LIMESTONE	-	2169.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16502312000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462678 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.825948 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: RUCKER B L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1823.0	
-1741.0			LIMESTONE	-	2181.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502313000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453559 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831524 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 3060.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., STINSON ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-151.0	CARBONDALE	SURVANT	COAL	0.5	553.0	
-232.0	CARBONDALE	COLCHESTER	COAL	0.5	634.0	
-253.0	CARBONDALE	DEKOVEN	COAL	3.0	655.0	
-280.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	682.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	3.0	690.0	
-333.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	
-338.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-373.0	TRADEWATER	MT. RORAH	COAL	1.5	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502313000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453559 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831524 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1740.0			LIMESTONE	-	2142.0	
-2152.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16502314000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46055 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833335 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONTINENT OIL, STINSON LESLIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-223.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-258.0	CARBONDALE	DEKOVEN	COAL	3.0	665.0	
-292.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	699.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-298.0	CARBONDALE	DAVIS	COAL	5.0	705.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	742.0	
-341.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	748.0	
-373.0	TRADEWATER	MT. RORAH	COAL	1.2	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502314000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46055 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833335 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: IL MID-CONTINENT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1751.0			LIMESTONE	-	2158.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502315000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460424 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827785 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: IL MID-CONTINENT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-1739.0			LIMESTONE	-	2176.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502316000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460342 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 2589.0 **LOG TYPE:**
SOURCE: NEW IL MID CONT. OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1743.0			LIMESTONE	-	2194.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2589.0	

MAPID: 16502317000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 420' N line, 990' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451241 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833157 **DATE COLLECTED:** 11 / 0 / 1952
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3015.0 **LOG TYPE:** Electric Log
SOURCE: IL MID-CONTINENT OIL, STINSON O N **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	516.0	
-155.0	CARBONDALE	SURVANT	COAL	0.7	552.0	
-243.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-258.0	CARBONDALE	DEKOVEN	COAL	3.0	655.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	683.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-296.0	CARBONDALE	DAVIS	COAL	3.7	693.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	
-343.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	740.0	
-375.0	TRADEWATER	MT. RORAH	COAL	1.2	772.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502317000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 420' N line, 990' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451241 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833157 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**
SOURCE: IL MID-CONTINENT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	310.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1740.0			LIMESTONE	-	2137.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16502318000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462636 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824084 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2555.0 **LOG TYPE:**
SOURCE: RUCKER B L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1744.0			LIMESTONE	-	2174.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2555.0	

MAPID: 16502319000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462765 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829631 **DATE COLLECTED:** 9 / 0 / 1954
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2989.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., WILSON BOBBIE G **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-156.0	CARBONDALE	SURVANT	COAL	0.8	580.0	
-228.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-261.0	CARBONDALE	DEKOVEN	COAL	3.0	685.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	723.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-306.0	CARBONDALE	DAVIS	COAL	3.0	730.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	780.0	
-389.0	TRADEWATER	MT. RORAH	COAL	1.2	813.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502319000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462765 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	BRERETON	LIMESTONE	-	338.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1750.0			LIMESTONE	-	2174.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2556.0	

MAPID: 16502419000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 320' S line, 310' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462484 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2154.0 **LOG TYPE:**
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
87.0	CARBONDALE	BRERETON	LIMESTONE	-	328.0	
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1739.0			LIMESTONE	-	2154.0	

MAPID: 16502510000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 365' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.449038 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827872 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:**
SOURCE: EDENS E-SALTINK J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	
-1748.0			LIMESTONE	-	2176.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2566.0	

MAPID: 16502521000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460302 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.822279 **DATE COLLECTED:** 10 / 0 / 1954
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: ROBERTS J M **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-230.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	680.0	
-295.0	SPOON	DAVIS	UNCLASSIFIED	-	745.0	
-1210.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16502521000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460302 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822279 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 2582.0 **LOG TYPE:**
SOURCE: ROBERTS J M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
94.0	CARBONDALE	BRERETON	LIMESTONE	-	356.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1822.0	
-1732.0			LIMESTONE	-	2182.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2582.0	

MAPID: 16502543000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' N line, 310' E line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448841 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.826136 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 2191.0 **LOG TYPE:**
SOURCE: YORK,B. & OLIVER, J. L. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1740.0			LIMESTONE	-	2191.0	

MAPID: 16502574000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.464815 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820379 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2161.0 **LOG TYPE:**
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1738.0			LIMESTONE	-	2161.0	

MAPID: 16502652000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460259 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820415 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2248.0 **LOG TYPE:** Electric Log
SOURCE: ROBERTS J M, BUTLER 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	529.0	
-148.0	CARBONDALE	SURVANT	COAL	0.8	569.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	643.0	
-251.0	CARBONDALE	DEKOVEN	COAL	2.8	672.0	
-275.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	696.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	3.7	704.0	
-333.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	754.0	
-339.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	760.0	
-374.0	TRADEWATER	MT. RORAH	COAL	1.2	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502652000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460259 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.820415 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2151.0 **LOG TYPE:**
SOURCE: ROBERTS J M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1730.0			LIMESTONE	-	2151.0	

MAPID: 16503345000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 375' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455604 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.824136 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	BRERETON	LIMESTONE	-	355.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1826.0	
-1741.0			LIMESTONE	-	2188.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16503353000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451261 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831542 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2494.0 **LOG TYPE:**
SOURCE: CONTINENTAL OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	BRERETON	LIMESTONE	-	321.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1786.0	
-1754.0			LIMESTONE	-	2154.0	
-2094.0		BASE BARLOW	LIMESTONE	-	2494.0	

MAPID: 16503354000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 415' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448927 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829502 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.0	CARBONDALE	BRERETON	LIMESTONE	-	337.0	
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1731.0			LIMESTONE	-	2144.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16503355000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 350' S line, 200' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448482 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831616 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	BRERETON	LIMESTONE	-	326.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1739.0			LIMESTONE	-	2148.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16503492000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 990' S line, 355' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455768 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829642 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	BRERETON	LIMESTONE	-	315.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1727.0			LIMESTONE	-	2150.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2560.0	

MAPID: 16503500000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1650' S line, 355' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455798 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2548.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	312.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1781.0	
-1731.0			LIMESTONE	-	2146.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2548.0	

MAPID: 16503509000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45812 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2577.0 **LOG TYPE:**
SOURCE: SANTORO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1814.0	
-1742.0			LIMESTONE	-	2181.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2577.0	

MAPID: 16500663000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467341 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.82774 **DATE COLLECTED:** 0 / 0 / 1917
SURFACE ELEVATION (FT.): 457.1 **LOGGED (FT.):** 527.0 **LOG TYPE:** Drillers Log
SOURCE: REX COAL CO. 8A **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
457.1			UNCONSOLIDATED	73.0	0.0	LOGS SAYS 'SOIL AND LOOSE ROCK'
384.1			SAND	5.0	73.0	LOG SAYS 'QUICKSAND'
379.1	MODESTO		SANDSTONE	28.0	78.0	
351.1	MODESTO		SANDSTONE/SHALE	153.0	106.0	SAND SHALE AND SAND ROCK
198.1	MODESTO		SANDSTONE/SHALE	28.0	259.0	
170.1	CARBONDALE	DANVILLE	COAL	4.5	287.0	
165.6	CARBONDALE		SANDSTONE/SHALE	40.5	291.5	
125.1	CARBONDALE	BRERETON	LIMESTONE	5.0	332.0	
120.1	CARBONDALE	HERRIN	COAL	5.3	337.0	
114.8	CARBONDALE		SHALE	36.7	342.3	
78.1	CARBONDALE		LIMESTONE	8.0	379.0	
70.1	CARBONDALE	BRIAR HILL	COAL	1.7	387.0	
68.4	CARBONDALE		SANDSTONE/SHALE	88.3	388.7	SAND ROCK AND SAND SHALE
-19.9	CARBONDALE	SPRINGFIELD	COAL	0.0	477.0	GALATIA CHANNEL - COAL MISSING
-19.9	CARBONDALE		SANDSTONE/SHALE	40.0	477.0	
-59.9	CARBONDALE	HOUCHIN CREEK	COAL	3.5	517.0	
-63.4	CARBONDALE		WHITE SANDSTONE	6.5	520.5	

MAPID: 16500664000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.471969 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.825844 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 464.3 **LOGGED (FT.):** 541.3 **LOG TYPE:** Drillers Log

SOURCE: REX COAL CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
464.3			CLAY	20.0	0.0	
444.3			CLAY	24.0	20.0	BLUE, PEBBLY CLY
420.3			CLAY	21.0	44.0	
399.3	MODESTO		BLUE SHALE	56.6	65.0	
342.7	MODESTO		BLUE SHALE	5.4	121.6	
337.3	MODESTO	CHAPEL	COAL	1.2	127.0	
336.1	MODESTO		UNDERCLAY	0.8	128.2	
335.3	MODESTO		BLUE SHALE	6.0	129.0	
329.3	MODESTO		SANDSTONE	9.0	135.0	
320.3	MODESTO		SANDSTONE	9.0	144.0	WITH CLY SH MIXED
311.3	MODESTO		DARK SHALE	3.5	153.0	
307.8	MODESTO		COAL	0.5	156.5	
307.3	MODESTO		UNDERCLAY	2.0	157.0	
305.3	MODESTO		SANDSTONE	19.0	159.0	WITH CLY SH MIXED, BROKEN UP
286.3	MODESTO		SANDSTONE	1.0	178.0	
285.3	MODESTO		BLUE SHALE	15.0	179.0	
270.3	MODESTO		BLUE SHALE	40.0	194.0	
230.3	MODESTO		BLUE SHALE	9.0	234.0	
221.3	MODESTO		COAL	0.3	243.0	
221.0	MODESTO		BLUE SHALE	16.7	243.3	
204.3	MODESTO		BLACK SHALE	4.0	260.0	
200.3	MODESTO		COAL	0.7	264.0	
199.6	MODESTO		UNDERCLAY	1.3	264.7	
198.3	MODESTO		GRAY SHALE	6.0	266.0	
192.3	MODESTO		BLUE SHALE	27.0	272.0	
165.3	MODESTO		BLACK SHALE	2.7	299.0	
162.6	MODESTO		COAL	0.3	301.7	
162.3	MODESTO		UNDERCLAY	3.0	302.0	
159.3	MODESTO		LIMESTONE	4.0	305.0	
155.3	MODESTO		BLUE SHALE	7.0	309.0	
148.3	MODESTO		BLACK SHALE	2.0	316.0	
146.3	MODESTO		LIMESTONE	0.8	318.0	
145.5	MODESTO		BLACK SHALE	2.3	318.8	
143.3	MODESTO		BLUE SHALE	15.0	321.0	WITH HARD BANDS
128.3	MODESTO		BLUE SHALE	0.6	336.0	
127.7	CARBONDALE	DANVILLE	COAL	2.6	336.6	
125.1	CARBONDALE		SHALE	4.8	339.2	DARK CLY SH
120.3	CARBONDALE	ALLENBY	COAL	0.7	344.0	
119.6	CARBONDALE		LIGHT SHALE	9.3	344.7	LIGHT CLY SH

110.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	354.0	
104.3	CARBONDALE		BLUE SHALE	5.0	360.0	WITH SS PARTINGS
99.3	CARBONDALE		BLUE SHALE	10.0	365.0	
89.3	CARBONDALE		DARK SHALE	10.0	375.0	
79.3	CARBONDALE	BRERETON	LIMESTONE	9.0	385.0	
70.3	CARBONDALE	ANNA	DARK SHALE	1.8	394.0	
68.5	CARBONDALE	HERRIN	COAL	6.0	395.8	
62.5	CARBONDALE		SANDY SHALE	16.3	401.8	
46.3	CARBONDALE		BLUE SHALE	10.0	418.0	WITH HARD BANDS
36.3	CARBONDALE		SANDSTONE/SHALE	7.0	428.0	
29.3	CARBONDALE		DARK SHALE	2.2	435.0	
27.1	CARBONDALE	BRIAR HILL	COAL	2.2	437.2	
25.0	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	18.7	439.3	
6.3	CARBONDALE	DYKERSBURG	BLUE SHALE	14.0	458.0	
-7.7	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	18.0	472.0	MIXED WITH SS
-25.7	CARBONDALE	DYKERSBURG	BLUE SHALE	7.0	490.0	
-32.7	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	497.0	WITH SH PARTINGS
-40.7	CARBONDALE	DYKERSBURG	BLUE SHALE	28.0	505.0	
-68.7	CARBONDALE	DYKERSBURG	DARK SHALE	1.3	533.0	
-70.0	CARBONDALE	SPRINGFIELD	COAL	6.3	534.3	
-76.2	CARBONDALE		UNDERCLAY	0.8	540.5	

MAPID: 16500664000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.471969 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825844 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.1	MODESTO	PIASA	LIMESTONE	4.0	304.9	
155.1	MODESTO		GRAY SHALE	27.6	308.9	
127.5	CARBONDALE	DANVILLE	COAL	2.6	336.5	
124.9	CARBONDALE		DARK GRAY SHALE	4.8	339.1	
120.1	CARBONDALE	ALLENBY	COAL	0.7	343.9	
119.4	CARBONDALE		CLAYSTONE	9.7	344.6	
109.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	354.3	
103.7	CARBONDALE	LAWSON	SILTY SHALE	5.0	360.3	
98.7	CARBONDALE	LAWSON	GRAY SHALE	10.0	365.3	
88.7	CARBONDALE	LAWSON	DARK GRAY SHALE	10.0	375.3	
78.7	CARBONDALE	BRERETON	LIMESTONE	9.0	385.3	
69.7	CARBONDALE	ANNA	DARK GRAY SHALE	1.8	394.3	
68.0	CARBONDALE	HERRIN	COAL	6.0	396.0	

MAPID: 16501542000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467374 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1825.0	
-1758.0			LIMESTONE	-	2188.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16501542000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467374 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.829596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 3082.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
125.0	CARBONDALE	DANVILLE	COAL	-	305.0	
104.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	326.0	
63.0	CARBONDALE	HERRIN	COAL	4.0	367.0	
20.0	CARBONDALE	BRIAR HILL	COAL	-	410.0	
-54.0	CARBONDALE	SPRINGFIELD	COAL	6.0	484.0	
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	-	556.0	

MAPID: 16501542000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467374 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829596 **DATE COLLECTED:** 12 / 0 / 1953
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 3082.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., WATSON L F **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	562.0	
-169.0	CARBONDALE	SURVANT	COAL	1.0	599.0	
-240.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-275.0	CARBONDALE	DEKOVEN	COAL	3.0	705.0	
-302.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	732.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	741.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	782.0	
-356.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	786.0	
-390.0	TRADEWATER	MT. RORAH	COAL	1.2	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502320000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467481 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833282 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2953.0 **LOG TYPE:** Electric Log
SOURCE: PEP DRILLING COMPANY, WATSON GEORGE ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	549.0	
-157.0	CARBONDALE	SURVANT	COAL	0.8	582.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-255.0	CARBONDALE	DEKOVEN	COAL	2.8	680.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	715.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	4.0	724.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	763.0	
-345.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	770.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.3	802.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502320000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467481 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:**
SOURCE: PEP DRILLING COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	
-1751.0			LIMESTONE	-	2176.0	
-2137.0		BASE BARLOW	LIMESTONE	-	2562.0	

MAPID: 16502321000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46982 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.833265 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2938.0 **LOG TYPE:** Electric Log
SOURCE: PEP DRILLING COMPANY, WATSON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-167.0	CARBONDALE	SURVANT	COAL	0.7	580.0	
-236.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-300.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	713.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-310.0	CARBONDALE	DAVIS	COAL	4.0	723.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	
-351.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	764.0	
-372.0	TRADEWATER	MT. RORAH	COAL	2.5	785.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502321000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46982 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: PEP DRILLING COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1753.0			LIMESTONE	-	2166.0	
-2127.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16502580000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476595 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.823922 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 2292.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	SURVANT	COAL	0.8	605.0	
-198.0	CARBONDALE	COLCHESTER	COAL	0.5	674.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	705.0	
-264.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	740.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-272.0	CARBONDALE	DAVIS	COAL	4.0	748.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	790.0	
-322.0	TRADEWATER	STONEFORT	LIMESTONE	3.7	798.0	
-357.0	TRADEWATER	MT. RORAH	COAL	1.3	833.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502580000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476595 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823922 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 2206.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1848.0	
-1730.0			LIMESTONE	-	2206.0	

MAPID: 16502594000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 420' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467423 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.82035 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2929.0 **LOG TYPE:** Electric Log
SOURCE: REDWINE NASH ETAL, WHYTE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-175.0	CARBONDALE	SURVANT	COAL	0.8	590.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-285.0	CARBONDALE	DEKOVEN	COAL	2.5	700.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	725.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-318.0	CARBONDALE	DAVIS	COAL	4.0	733.0	
-366.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	781.0	
-375.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	790.0	
-400.0	TRADEWATER	MT. RORAH	COAL	1.4	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502594000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 420' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467423 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.82035 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:**
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	BRERETON	LIMESTONE	-	350.0	
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1786.0	
-1739.0			LIMESTONE	-	2154.0	
-2124.0		BASE BARLOW	LIMESTONE	-	2539.0	

MAPID: 16502633000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476565 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.8221 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 2055.0 **LOG TYPE:** Electric Log

SOURCE: SCHLAFLY H J ETAL, YOUNG-GENET COMM **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	552.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	590.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-261.0	CARBONDALE	DEKOVEN	COAL	3.0	699.0	
-288.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	726.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-302.0	CARBONDALE	DAVIS	COAL	3.0	740.0	
-362.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	
-365.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	803.0	
-382.0	TRADEWATER	MT. RORAH	COAL	1.4	820.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502633000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.476565 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.8221 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 1824.0 **LOG TYPE:**

SOURCE: SCHLAFLY H J ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	

MAPID: 16502681000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469651 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.825881 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 3110.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., SLOW RALPH **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	612.0	
-182.0	CARBONDALE	SURVANT	COAL	0.5	649.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	726.0	
-293.0	CARBONDALE	DEKOVEN	COAL	3.5	760.0	
-321.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	788.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-331.0	CARBONDALE	DAVIS	COAL	4.0	798.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	844.0	
-383.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502681000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469651 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.825881 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1859.0	
-1749.0			LIMESTONE	-	2216.0	
-2123.0		BASE BARLOW	LIMESTONE	-	2590.0	

MAPID: 16502709000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 420' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471995 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827926 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 2969.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY F E, WATSON L F 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-183.0	CARBONDALE	SURVANT	COAL	0.8	635.0	
-258.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-293.0	CARBONDALE	DEKOVEN	COAL	3.0	745.0	
-323.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	775.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-331.0	CARBONDALE	DAVIS	COAL	4.0	783.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	823.0	
-380.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	832.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502709000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 420' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471995 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.827926 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: LINDSAY F E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	BRERETON	LIMESTONE	-	396.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1850.0	
-1750.0			LIMESTONE	-	2202.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16502735000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.474297 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.823951 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2056.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, TUCKER RALPH **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-239.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-279.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	720.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	729.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	770.0	
-339.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	780.0	
-373.0	TRADEWATER	MT. RORAH	COAL	1.2	814.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502735000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.474297 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823951 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 1821.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1821.0	

MAPID: 16502839000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 165' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469601 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823556 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 1815.0 **LOG TYPE:**
SOURCE: LOVELAGE, HOYT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	

MAPID: 16502913000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 155' N line, 340' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469544 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822672 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2172.0 **LOG TYPE:**
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	BRERETON	LIMESTONE	-	360.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1806.0	
-1744.0			LIMESTONE	-	2172.0	

MAPID: 16502928000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 154' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471876 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822646 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2028.0 **LOG TYPE:** Electric Log
SOURCE: REDWINE NASH ETAL, WHYTE JARJORIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	532.0	
-144.0	CARBONDALE	SURVANT	COAL	0.8	568.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	633.0	
-247.0	CARBONDALE	DEKOVEN	COAL	3.0	671.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	705.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-285.0	CARBONDALE	DAVIS	COAL	4.0	709.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-331.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	755.0	
-366.0	TRADEWATER	MT. RORAH	COAL	0.8	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502928000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 154' N line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471876 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.822646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 1803.0 **LOG TYPE:**
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	BRERETON	LIMESTONE	-	352.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	

MAPID: 16503063000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 165' S line, 292' E line of SE NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471762 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.823528 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2032.0 **LOG TYPE:** Electric Log
SOURCE: FOX GERALD H, TUCKER COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	560.0	
-176.0	CARBONDALE	SURVANT	COAL	0.7	599.0	
-227.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-265.0	CARBONDALE	DEKOVEN	COAL	2.8	688.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	722.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-305.0	CARBONDALE	DAVIS	COAL	3.8	728.0	
-346.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	769.0	
-351.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	774.0	
-385.0	TRADEWATER	MT. RORAH	COAL	1.5	808.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503063000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 165' S line, 292' E line of SE NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471762 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 1804.0 **LOG TYPE:**
SOURCE: FOX GERALD H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
74.0	CARBONDALE	BRERETON	LIMESTONE	-	363.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	

MAPID: 16503393000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481363 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831286 **DATE COLLECTED:** 10 / 0 / 1961
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 3051.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, WATSON HUME **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	595.0	
-180.0	CARBONDALE	SURVANT	COAL	0.7	630.0	
-253.0	CARBONDALE	COLCHESTER	COAL	0.5	703.0	
-292.0	CARBONDALE	DEKOVEN	COAL	3.0	742.0	
-322.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	772.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	3.8	780.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	815.0	
-390.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	840.0	
-425.0	TRADEWATER	MT. RORAH	COAL	1.2	875.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503393000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481363 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.831286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 2610.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.0	CARBONDALE	BRERETON	LIMESTONE	-	394.0	
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1862.0	
-1785.0			LIMESTONE	-	2235.0	
-2160.0		BASE BARLOW	LIMESTONE	-	2610.0	

MAPID: 16503397000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 380' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481556 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.833176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 1866.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
48.0	CARBONDALE	BRERETON	LIMESTONE	-	403.0	
-1415.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1866.0	

MAPID: 16503401000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 400' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478802 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.829488 **DATE COLLECTED:** 12 / 0 / 1961
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1675.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-275.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	675.0	
-352.0	SPOON	DAVIS	UNCLASSIFIED	-	752.0	
-1275.0	BASE OF PENN.		UNCLASSIFIED	-	1675.0	

MAPID: 16503401000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 400' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478802 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.829488 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:**
SOURCE: BUFAY OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	BRERETON	LIMESTONE	-	370.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1838.0	
-1773.0			LIMESTONE	-	2213.0	
-2145.0		BASE BARLOW	LIMESTONE	-	2585.0	

MAPID: 16503401000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 400' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478802 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.829488 **DATE COLLECTED:** 12 / 0 / 1961
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2986.0 **LOG TYPE:** Electric Log
SOURCE: BUFAY OIL COMPANY, WATSON HEIRS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	569.0	
-163.0	CARBONDALE	SURVANT	COAL	0.8	603.0	
-238.0	CARBONDALE	COLCHESTER	COAL	0.5	678.0	
-274.0	CARBONDALE	DEKOVEN	COAL	3.0	714.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	744.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-313.0	CARBONDALE	DAVIS	COAL	4.0	753.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	788.0	
-360.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	800.0	
-397.0	TRADEWATER	MT. RORAH	COAL	0.8	837.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503607000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 970' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478819 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.823892 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 2592.0 **LOG TYPE:**
SOURCE: ZIPCO OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	337.0	
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1841.0	
-1751.0			LIMESTONE	-	2207.0	
-2136.0		BASE BARLOW	LIMESTONE	-	2592.0	

MAPID: 16500164000C **VERSION:** 1 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.474178 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.809332 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 383.0 **LOG TYPE:** Drillers Log
SOURCE: S. C. COVER **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	33.0	0.0	
365.0	MODESTO		SANDSTONE	3.0	33.0	
362.0	MODESTO		ARGILACEOUS SHALE	47.5	36.0	ARG
314.5	MODESTO		LIMESTONE	2.0	83.5	
312.5	MODESTO		ARGILACEOUS SHALE	48.5	85.5	ARG
264.0	MODESTO		COAL	1.0	134.0	
263.0	MODESTO		UNDERCLAY	3.0	135.0	
260.0	MODESTO		SHALE	10.0	138.0	
250.0	MODESTO		SANDSTONE	12.0	148.0	
238.0	MODESTO		ARGILACEOUS SHALE	10.0	160.0	ARG
228.0	MODESTO		SANDSTONE	4.0	170.0	
224.0	MODESTO		SHALE	5.0	174.0	
219.0	CARBONDALE	DANVILLE	COAL	1.0	179.0	
218.0	CARBONDALE		UNDERCLAY	3.0	180.0	
215.0	CARBONDALE		ARGILACEOUS SHALE	27.0	183.0	ARG
188.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	210.0	
185.0	CARBONDALE	ANVIL ROCK	SHALE	32.0	213.0	
153.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	245.0	
145.0	CARBONDALE		ARGILACEOUS SHALE	6.0	253.0	ARG
139.0	CARBONDALE	BRERETON	LIMESTONE	8.0	259.0	
131.0	CARBONDALE	ANNA	BLACK SHALE	2.0	267.0	
129.0	CARBONDALE	HERRIN	COAL	4.5	269.0	
124.5	CARBONDALE		UNDERCLAY	2.5	273.5	
122.0	CARBONDALE		SANDSTONE	9.0	276.0	
113.0	CARBONDALE		ARGILACEOUS SHALE	20.0	285.0	ARG
93.0	CARBONDALE	BRIAR HILL	COAL	1.5	305.0	
91.5	CARBONDALE		UNDERCLAY	3.5	306.5	
88.0	CARBONDALE	DYKERSBURG	SANDSTONE	35.0	310.0	
53.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	15.0	345.0	ARG
38.0	CARBONDALE	DYKERSBURG	SHALE	18.0	360.0	
20.0	CARBONDALE	SPRINGFIELD	COAL	5.0	378.0	

MAPID: 16500164000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.474178 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.809332 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 383.0 **LOG TYPE:** Drillers Log

SOURCE: COVER S C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	HERRIN	COAL	4.5	269.0	
93.0	CARBONDALE	BRIAR HILL	COAL	1.5	305.0	
20.0	CARBONDALE	SPRINGFIELD	COAL	5.0	378.0	

MAPID: 16500165000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1980' S line, 660' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.482511 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.810113 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 453.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.0	CARBONDALE	DANVILLE	COAL	2.0	235.0	
158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	257.0	
111.0	CARBONDALE	HERRIN	COAL	3.5	304.0	
47.0	CARBONDALE	BRIAR HILL	COAL	1.0	368.0	
-32.0	CARBONDALE	SPRINGFIELD	COAL	6.0	447.0	

MAPID: 16500165000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1980' S line, 660' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.482511 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.810113 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 307.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
201.5	MODESTO	PIASA	LIMESTONE	4.0	213.5	
197.5	MODESTO		SHALE & SANDSTONE	18.0	217.5	
179.5	CARBONDALE	DANVILLE	COAL	2.0	235.5	
177.5	CARBONDALE		SHALE	20.0	237.5	
157.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	257.5	
151.5	CARBONDALE	LAWSON	SILTY SHALE	12.0	263.5	
139.5	CARBONDALE	LAWSON	GRAY SHALE	18.0	275.5	
121.5	CARBONDALE	BRERETON	LIMESTONE	5.0	293.5	
116.5	CARBONDALE	ANNA	BLACK SHALE	5.5	298.5	
111.0	CARBONDALE	HERRIN	COAL	3.5	304.0	

MAPID: 16500165000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1980' S line, 660' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.482511 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.810113 **DATE COLLECTED:** 4 / 0 / 1906

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 453.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	56.0	0.0	
359.0	MODESTO		SANDSTONE	24.0	56.0	
335.0	MODESTO		SHALE	42.0	80.0	
293.0	MODESTO		LIMESTONE	3.0	122.0	
290.0	MODESTO		SHALE	25.0	125.0	
265.0	MODESTO		COAL	2.0	150.0	
263.0	MODESTO		UNDERCLAY	1.0	152.0	
262.0	MODESTO		SHALE	17.0	153.0	
245.0	MODESTO		BLACK SHALE	1.0	170.0	
244.0	MODESTO		COAL	2.0	171.0	
242.0	MODESTO		UNDERCLAY	2.0	173.0	
240.0	MODESTO		SANDY SHALE	34.0	175.0	
206.0	MODESTO		SHALE	4.0	209.0	
202.0	MODESTO	PIASA	LIMESTONE	4.0	213.0	
198.0	MODESTO		UNDERCLAY	1.0	217.0	
197.0	MODESTO		BLACK SHALE	2.0	218.0	
195.0	MODESTO		SHALE	4.0	220.0	
191.0	MODESTO		SANDSTONE	5.0	224.0	
186.0	MODESTO		BLACK SHALE	6.0	229.0	
180.0	CARBONDALE	DANVILLE	COAL	2.0	235.0	
178.0	CARBONDALE		UNDERCLAY	1.0	237.0	
177.0	CARBONDALE		SHALE	19.0	238.0	
158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	257.0	
152.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	263.0	
140.0	CARBONDALE	ANVIL ROCK	SHALE	18.0	275.0	
122.0	CARBONDALE	BRERETON	LIMESTONE	5.0	293.0	
117.0	CARBONDALE	ANNA	BLACK SHALE	5.5	298.0	
111.5	CARBONDALE	HERRIN	COAL	3.5	303.5	
108.0	CARBONDALE		UNDERCLAY	1.0	307.0	
107.0	CARBONDALE		SANDY SHALE	15.0	308.0	
92.0	CARBONDALE		SHALE	45.0	323.0	
47.0	CARBONDALE	BRIAR HILL	COAL	1.0	368.0	
46.0	CARBONDALE		UNDERCLAY	2.0	369.0	
44.0	CARBONDALE		SANDY SHALE	27.0	371.0	
17.0	CARBONDALE		LIMESTONE	2.0	398.0	
15.0	CARBONDALE	DYKERSBURG	SANDY SHALE	45.0	400.0	
-30.0	CARBONDALE	DYKERSBURG	SHALE	2.0	445.0	
-32.0	CARBONDALE	SPRINGFIELD	COAL	6.0	447.0	

MAPID: 16501407000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469493 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2136.0 **LOG TYPE:**
SOURCE: TURNER J O **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1769.0	
-1725.0			LIMESTONE	-	2136.0	

MAPID: 16501408000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2111.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	BRERETON	LIMESTONE	-	256.0	
-1347.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1752.0	
-1706.0			LIMESTONE	-	2111.0	

MAPID: 16501408000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46949 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.809406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2358.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
202.0	CARBONDALE	DANVILLE	COAL	-	203.0	
179.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	226.0	
141.0	CARBONDALE	HERRIN	COAL	3.0	264.0	
95.0	CARBONDALE	BRIAR HILL	COAL	-	310.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	5.0	384.0	
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	-	458.0	

MAPID: 16501408000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46949 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809406 **DATE COLLECTED:** 8 / 0 / 1951
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2358.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-57.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	462.0	
-151.0	CARBONDALE	SURVANT	COAL	2.8	556.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	597.0	
-217.0	CARBONDALE	DEKOVEN	COAL	2.0	622.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	3.3	643.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	4.0	651.0	
-299.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	704.0	
-306.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	711.0	
-339.0	TRADEWATER	MT. RORAH	COAL	1.2	744.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501409000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1615' S line, 630' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468123 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816613 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2158.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	BRERETON	LIMESTONE	-	339.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1793.0	
-1731.0			LIMESTONE	-	2158.0	

MAPID: 16502488000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' N line, 385' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481424 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807481 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 3005.0 **LOG TYPE:** Electric Log
SOURCE: VAN DRESSER H, BRAMLET HARRY SR 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-167.0	CARBONDALE	COLCHESTER	COAL	3.5	568.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-258.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	659.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	4.0	666.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	723.0	
-327.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	728.0	
-359.0	TRADEWATER	MT. RORAH	COAL	1.8	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502488000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' N line, 385' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481424 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2476.0 **LOG TYPE:**
SOURCE: VAN DRESSER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1334.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1735.0	
-1701.0			LIMESTONE	-	2102.0	
-2075.0		BASE BARLOW	LIMESTONE	-	2476.0	

MAPID: 16502511000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467073 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.814897 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 1622.0 **LOG TYPE:** Electric Log
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-199.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	620.0	
-269.0	SPOON	DAVIS	UNCLASSIFIED	-	690.0	
-1201.0	BASE OF PENN.		UNCLASSIFIED	-	1622.0	

MAPID: 16502511000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467073 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814897 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2530.0 **LOG TYPE:**
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
103.0	CARBONDALE	BRERETON	LIMESTONE	-	318.0	
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1731.0			LIMESTONE	-	2152.0	
-2109.0		BASE BARLOW	LIMESTONE	-	2530.0	

MAPID: 16502511000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467073 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.814897 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2909.0 **LOG TYPE:** Electric Log
SOURCE: DAVIS & MENHALL DRLG., BRAMLETT K ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	503.0	
-119.0	CARBONDALE	SURVANT	COAL	0.8	540.0	
-198.0	CARBONDALE	COLCHESTER	COAL	0.5	619.0	
-236.0	CARBONDALE	DEKOVEN	COAL	3.5	657.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	680.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	689.0	
-324.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	745.0	
-329.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	750.0	
-359.0	TRADEWATER	MT. RORAH	COAL	1.0	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502568000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476512 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.812854 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2219.0 **LOG TYPE:** Electric Log
SOURCE: VAN DRESSER H, MCDONALD 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-80.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-110.0	CARBONDALE	SURVANT	COAL	0.8	520.0	
-190.0	CARBONDALE	COLCHESTER	COAL	1.0	600.0	
-240.0	CARBONDALE	DEKOVEN	COAL	3.0	650.0	
-270.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	680.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	4.0	689.0	
-332.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	742.0	
-340.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	750.0	
-372.0	TRADEWATER	MT. RORAH	COAL	1.2	782.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502568000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476512 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.812854 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:**
SOURCE: VAN DRESSER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	BRERETON	LIMESTONE	-	290.0	
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1771.0	
-1720.0			LIMESTONE	-	2134.0	

MAPID: 16502595000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.467083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818533 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2136.0 **LOG TYPE:**
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1725.0			LIMESTONE	-	2136.0	

MAPID: 16502596000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471791 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81301 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:** Electric Log
SOURCE: TURNER, J. D., K BRAMLETT COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	472.0	
-196.0	CARBONDALE	COLCHESTER	COAL	0.5	601.0	
-230.0	CARBONDALE	DEKOVEN	COAL	2.4	635.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	660.0	62 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	3.0	667.0	
-315.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	720.0	
-322.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	727.0	
-354.0	TRADEWATER	MT. RORAH	COAL	1.2	759.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502596000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.471791 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81301 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2507.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1766.0	
-1725.0			LIMESTONE	-	2130.0	
-2102.0		BASE BARLOW	LIMESTONE	-	2507.0	

MAPID: 16502617000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.475361 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.812043 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2551.0 **LOG TYPE:** Electric Log
SOURCE: GENTLES, ALBERT, WHITE MARJORIE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-107.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-147.0	CARBONDALE	SURVANT	COAL	0.8	580.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-252.0	CARBONDALE	DEKOVEN	COAL	3.0	685.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	720.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-295.0	CARBONDALE	DAVIS	COAL	4.0	728.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	772.0	
-347.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	780.0	
-380.0	TRADEWATER	MT. RORAH	COAL	1.2	813.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502617000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.475361 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.812043 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2551.0 **LOG TYPE:**
SOURCE: GENTLES, ALBERT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1808.0	
-1742.0			LIMESTONE	-	2175.0	
-2118.0		BASE BARLOW	LIMESTONE	-	2551.0	

MAPID: 16502630000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 350' S line, 310' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.48373 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805594 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:** Electric Log
SOURCE: VAN DRESSER H, BRAMLET H A 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-161.0	CARBONDALE	SURVANT	COAL	1.8	575.0	
-204.0	CARBONDALE	COLCHESTER	COAL	0.5	618.0	
-231.0	CARBONDALE	DEKOVEN	COAL	3.0	645.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	675.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-271.0	CARBONDALE	DAVIS	COAL	5.0	685.0	
-316.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-324.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	738.0	
-356.0	TRADEWATER	MT. RORAH	COAL	1.3	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502630000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 350' S line, 310' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.48373 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805594 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2479.0 **LOG TYPE:**
SOURCE: VAN DRESSER H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1332.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1692.0			LIMESTONE	-	2106.0	
-2065.0		BASE BARLOW	LIMESTONE	-	2479.0	

MAPID: 16502637000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.481233 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818326 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 3119.0 **LOG TYPE:** Electric Log

SOURCE: MCKELVY & SIPOHA DRLG., MCDONALD O D **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	543.0	
-153.0	CARBONDALE	SURVANT	COAL	0.8	582.0	
-230.0	CARBONDALE	COLCHESTER	COAL	0.5	659.0	
-264.0	CARBONDALE	DEKOVEN	COAL	2.5	693.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	720.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-299.0	CARBONDALE	DAVIS	COAL	3.8	728.0	
-346.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	775.0	
-354.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	783.0	
-383.0	TRADEWATER	MT. RORAH	COAL	0.8	812.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502637000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.481233 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.818326 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:**

SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1746.0			LIMESTONE	-	2175.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2554.0	

MAPID: 16502664000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476508 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.807476 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2978.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., BRAMLET H A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-157.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-217.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-256.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	649.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	656.0	
-317.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	710.0	
-326.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	719.0	
-357.0	TRADEWATER	MT. RORAH	COAL	1.3	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502664000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.476508 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2474.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1349.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1712.0			LIMESTONE	-	2105.0	
-2081.0		BASE BARLOW	LIMESTONE	-	2474.0	

MAPID: 16502720000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481233 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809221 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2178.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., BARTON LLOYD **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-84.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-194.0	CARBONDALE	COLCHESTER	COAL	3.0	600.0	
-224.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-254.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	660.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-261.0	CARBONDALE	DAVIS	COAL	4.0	667.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	724.0	
-322.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	728.0	
-354.0	TRADEWATER	MT. RORAH	COAL	1.2	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502720000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481233 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809221 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2107.0 **LOG TYPE:**
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1337.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1743.0	
-1701.0			LIMESTONE	-	2107.0	

MAPID: 16502831000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' N line, 390' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472007 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818545 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Electric Log
SOURCE: WAGGONER & BIANUCCI, BRAMLET H K ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-143.0	CARBONDALE	SURVANT	COAL	0.8	569.0	
-212.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-244.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-285.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	711.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-292.0	CARBONDALE	DAVIS	COAL	3.5	718.0	
-337.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	763.0	
-344.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	770.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.2	803.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502831000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 300' N line, 390' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.472007 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2166.0 **LOG TYPE:**
SOURCE: WAGGONER & BIANUCCI **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1375.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1801.0	
-1740.0			LIMESTONE	-	2166.0	

MAPID: 16503304000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.467078 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.816717 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2940.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-115.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-154.0	CARBONDALE	SURVANT	COAL	0.8	579.0	
-220.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-257.0	CARBONDALE	DEKOVEN	COAL	2.8	682.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	712.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-293.0	CARBONDALE	DAVIS	COAL	3.8	718.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	
-335.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	760.0	
-379.0	TRADEWATER	MT. RORAH	COAL	1.2	804.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503304000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.467078 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.816717 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1365.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1725.0			LIMESTONE	-	2150.0	
-2106.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16503440000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 580' N line, 515' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.478293 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.810399 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2113.0 **LOG TYPE:**
SOURCE: BIANUCCI, RAY MANAGEMENT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
127.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1344.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1747.0	
-1710.0			LIMESTONE	-	2113.0	

MAPID: 16503512000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 375' N line, 385' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481425 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814557 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: STAPP, JACK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1745.0			LIMESTONE	-	2162.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502322000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 420' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455342 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813195 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2539.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
128.0	CARBONDALE	BRERETON	LIMESTONE	-	294.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-2117.0		BASE BARLOW	LIMESTONE	-	2539.0	

MAPID: 16502322000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 420' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455342 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813195 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
214.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	208.0	
210.0	MODESTO		SHALE	25.5	212.0	
184.5	CARBONDALE	DANVILLE	COAL	2.5	237.5	
182.0	CARBONDALE		SHALE & SANDSTONE	18.5	240.0	
163.5	CARBONDALE	ALLENBY	COAL	0.5	258.5	
163.0	CARBONDALE		CLAYSTONE	5.0	259.0	
158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	264.0	
152.0	CARBONDALE	LAWSON	SILTY SHALE	13.0	270.0	
139.0	CARBONDALE	LAWSON	GRAY SHALE	11.0	283.0	
128.0	CARBONDALE	BRERETON	LIMESTONE	6.0	294.0	
122.0	CARBONDALE	ANNA	BLACK SHALE	1.0	300.0	
121.0	CARBONDALE	HERRIN	COAL	4.0	301.0	

MAPID: 16502322000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 420' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455342 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813195 **DATE COLLECTED:** 8 / 0 / 1954

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2905.0 **LOG TYPE:** Electric Log

SOURCE: STELLE, JOHN ASSOC., BARTOK **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-74.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	496.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.0	600.0	
-227.0	CARBONDALE	DEKOVEN	COAL	2.5	649.0	
-250.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	672.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-258.0	CARBONDALE	DAVIS	COAL	3.0	680.0	
-308.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	730.0	
-318.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-352.0	TRADEWATER	MT. RORAH	COAL	1.2	774.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502323000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 245' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453389 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.812979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2156.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1741.0			LIMESTONE	-	2156.0	

MAPID: 16502324000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 414' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453401 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.814787 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 2172.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., BARTOK **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	530.0	
-165.0	CARBONDALE	SURVANT	COAL	0.8	600.0	
-203.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-235.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	700.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-270.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	755.0	
-331.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	766.0	
-365.0	TRADEWATER	MT. RORAH	COAL	1.2	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502324000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 414' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453401 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814787 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 1798.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	

MAPID: 16502325000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 300' N line, 400' E line of SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.462735 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.807755 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2881.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., BERRY-COX COMM **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-147.0	CARBONDALE	SURVANT	COAL	0.0	539.0	
-207.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-233.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	651.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	660.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	713.0	
-330.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	722.0	
-363.0	TRADEWATER	MT. RORAH	COAL	1.0	755.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502325000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 300' N line, 400' E line of SW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.462735 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.807755 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2515.0 **LOG TYPE:**

SOURCE: EASTERN PETROLEUM CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1727.0			LIMESTONE	-	2119.0	
-2123.0		BASE BARLOW	LIMESTONE	-	2515.0	

MAPID: 16502326000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 520' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.454985 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811375 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: HUMPHREY & TREMONT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
403.0		BASE L. MENARD	UNCLASSIFIED	-	3.0	
-1734.0			LIMESTONE	-	2140.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502327000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46022 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.814962 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2893.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., BROWN-BUTLER COM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	484.0	
-122.0	CARBONDALE	SURVANT	COAL	1.2	524.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	594.0	
-223.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-253.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	655.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-261.0	CARBONDALE	DAVIS	COAL	4.0	663.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	713.0	
-321.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	723.0	
-351.0	TRADEWATER	MT. RORAH	COAL	1.2	753.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502327000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46022 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814962 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1763.0	
-1720.0			LIMESTONE	-	2122.0	
-2121.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16502328000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457949 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813172 **DATE COLLECTED:** 6 / 0 / 1954
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2879.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., BROWN C ETAL COM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-72.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-216.0	CARBONDALE	DEKOVEN	COAL	1.5	622.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	648.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-249.0	CARBONDALE	DAVIS	COAL	3.0	655.0	
-303.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	709.0	
-312.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	718.0	
-358.0	TRADEWATER	MT. RORAH	COAL	1.0	764.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502328000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813172 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2518.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1717.0			LIMESTONE	-	2123.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2518.0	

MAPID: 16502329000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460228 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.816782 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2886.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., BUTLER J H COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-116.0	CARBONDALE	SURVANT	COAL	1.2	530.0	
-188.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-222.0	CARBONDALE	DEKOVEN	COAL	2.8	636.0	
-246.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	660.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-256.0	CARBONDALE	DAVIS	COAL	0.9	670.0	
-306.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	720.0	
-316.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	730.0	
-350.0	TRADEWATER	MT. RORAH	COAL	1.2	764.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502329000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460228 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816782 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1356.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1720.0			LIMESTONE	-	2134.0	
-2120.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502330000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 485' S line, 385' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453561 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81001 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2198.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, CAMPBELL COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-249.0	CARBONDALE	DEKOVEN	COAL	2.5	653.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	675.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-280.0	CARBONDALE	DAVIS	COAL	4.0	684.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	
-344.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	748.0	
-376.0	TRADEWATER	MT. RORAH	COAL	1.3	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502330000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 485' S line, 385' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453561 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2156.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1388.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1752.0			LIMESTONE	-	2156.0	

MAPID: 16502331000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 320' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462468 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811308 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2944.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., CHOISSER-COLE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-171.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-201.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-226.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	635.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-235.0	CARBONDALE	DAVIS	COAL	3.5	644.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	693.0	
-293.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	702.0	
-321.0	TRADEWATER	MT. RORAH	COAL	1.0	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502331000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 320' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462468 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811308 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1704.0			LIMESTONE	-	2113.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16502332000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 324' S line, 448' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450682 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.813219 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 1650.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-189.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	605.0	
-279.0	SPOON	DAVIS	UNCLASSIFIED	-	695.0	
-1234.0	BASE OF PENN.		UNCLASSIFIED	-	1650.0	

MAPID: 16502332000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 324' S line, 448' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450682 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813219 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2170.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1377.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1793.0	
-1754.0			LIMESTONE	-	2170.0	

MAPID: 16502333000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451084 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811411 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2188.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., COLLINS J P ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-243.0	CARBONDALE	DEKOVEN	COAL	3.0	662.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	684.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-274.0	CARBONDALE	DAVIS	COAL	3.8	693.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	745.0	
-338.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	757.0	
-371.0	TRADEWATER	MT. RORAH	COAL	1.2	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502333000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451084 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811411 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2170.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1751.0			LIMESTONE	-	2170.0	

MAPID: 16502334000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448818 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811432 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2543.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1786.0	
-1758.0			LIMESTONE	-	2163.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2543.0	

MAPID: 16502335000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 416' N line, 373' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.450955 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8148 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2569.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1804.0	
-1737.0			LIMESTONE	-	2174.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2569.0	

MAPID: 16502336000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 350' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455548 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.805933 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2974.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., FRANCIS-HRS-SAHARA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	COLCHESTER	COAL	0.5	605.0	
-236.0	CARBONDALE	DEKOVEN	COAL	1.8	630.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	653.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	4.0	663.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	715.0	
-335.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	729.0	
-366.0	TRADEWATER	MT. RORAH	COAL	1.2	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502336000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 350' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455548 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805933 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1743.0			LIMESTONE	-	2137.0	
-2140.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502337000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462517 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814942 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1367.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1719.0			LIMESTONE	-	2125.0	
-2118.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16502338000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45794 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2521.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1360.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1767.0	
-1725.0			LIMESTONE	-	2132.0	
-2114.0		BASE BARLOW	LIMESTONE	-	2521.0	

MAPID: 16502339000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460206 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-1712.0			LIMESTONE	-	2116.0	
-2110.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16502340000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457931 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809539 **DATE COLLECTED:** 6 / 0 / 1954
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2885.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., JONES JOHN J **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.0	619.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	645.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-243.0	CARBONDALE	DAVIS	COAL	2.0	653.0	
-294.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	704.0	
-305.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502340000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457931 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809539 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1364.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	
-1725.0			LIMESTONE	-	2135.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16502341000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 335' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451099 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816859 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2169.0 **LOG TYPE:**
SOURCE: NATION OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1789.0	
-1751.0			LIMESTONE	-	2169.0	

MAPID: 16502342000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457923 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807719 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1732.0			LIMESTONE	-	2132.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2525.0	

MAPID: 16502343000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457914 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.805908 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1742.0			LIMESTONE	-	2133.0	
-2134.0		BASE BARLOW	LIMESTONE	-	2525.0	

MAPID: 16502344000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 380' S line, 210' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.452997 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816981 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1373.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1743.0			LIMESTONE	-	2164.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16502345000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 340' N line, 256' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455884 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807712 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2530.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1742.0			LIMESTONE	-	2136.0	
-2136.0		BASE BARLOW	LIMESTONE	-	2530.0	

MAPID: 16502346000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 478' S line, 355' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455552 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809973 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1734.0			LIMESTONE	-	2135.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502415000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 340' N line, 350' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451059 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818636 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:**
SOURCE: NATION OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1385.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1815.0	
-1750.0			LIMESTONE	-	2180.0	

MAPID: 16502435000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448776 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.806001 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:** Electric Log
SOURCE: HUMPHREY & TREMONT, SAHARA COAL ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-146.0	CARBONDALE	SURVANT	COAL	0.5	520.0	
-271.0	CARBONDALE	DEKOVEN	COAL	3.5	645.0	
-301.0	CARBONDALE	LOWER DEKOVEN	COAL	0.9	675.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.5	685.0	
-361.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	
-375.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	749.0	
-406.0	TRADEWATER	MT. RORAH	COAL	1.2	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502435000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448776 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**
SOURCE: HUMPHREY & TREMONT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1787.0	
-1783.0			LIMESTONE	-	2160.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16502496000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 360' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460234 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81851 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2263.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	512.0	
-131.0	CARBONDALE	SURVANT	COAL	0.5	550.0	
-205.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-235.0	CARBONDALE	DEKOVEN	COAL	1.8	654.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	680.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	2.5	686.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	733.0	
-321.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	740.0	
-351.0	TRADEWATER	MT. RORAH	COAL	1.0	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502496000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 360' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460234 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81851 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2146.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1727.0			LIMESTONE	-	2146.0	

MAPID: 16502512000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 310' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448845 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815112 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2205.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E, MAHONEY PK COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-118.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	665.0	
-264.0	CARBONDALE	DEKOVEN	COAL	3.0	696.0	
-288.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	720.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-298.0	CARBONDALE	DAVIS	COAL	3.5	730.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	780.0	
-358.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	790.0	
-393.0	TRADEWATER	MT. RORAH	COAL	1.4	825.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502512000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 310' N line, 330' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448845 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2189.0 **LOG TYPE:**
SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1757.0			LIMESTONE	-	2189.0	

MAPID: 16502513000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 356' S line, 232' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448491 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813328 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2168.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1764.0			LIMESTONE	-	2168.0	

MAPID: 16502517000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 590' S line, 380' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453546 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.810299 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2548.0 **LOG TYPE:**
SOURCE: GRANT N L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1754.0			LIMESTONE	-	2158.0	
-2144.0		BASE BARLOW	LIMESTONE	-	2548.0	

MAPID: 16502519000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448873 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818682 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2261.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES H V, CARAWAY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-167.0	CARBONDALE	SURVANT	COAL	1.2	590.0	
-237.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-269.0	CARBONDALE	DEKOVEN	COAL	2.5	692.0	
-302.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	725.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-307.0	CARBONDALE	DAVIS	COAL	3.0	730.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	775.0	
-362.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	785.0	
-399.0	TRADEWATER	MT. RORAH	COAL	1.2	822.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502519000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448873 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818682 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2176.0 **LOG TYPE:**
SOURCE: SPIRES H V **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1753.0			LIMESTONE	-	2176.0	

MAPID: 16502520000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 437' S line, 336' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448881 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817172 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 1812.0 **LOG TYPE:**
SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	

MAPID: 16502522000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 245' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453381 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811626 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 1783.0 **LOG TYPE:**
SOURCE: HUMPHREY & TREMONT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1783.0	

MAPID: 16502569000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462504 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816764 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 2131.0 **LOG TYPE:**
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1729.0			LIMESTONE	-	2131.0	

MAPID: 16502644000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.451072 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809606 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2169.0 **LOG TYPE:**
SOURCE: RUNYON FLOYD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1774.0			LIMESTONE	-	2169.0	

MAPID: 16502689000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453377 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811391 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2125.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1355.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1720.0			LIMESTONE	-	2125.0	

MAPID: 16502693000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 200' S line, 415' W line of NW NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455383 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818278 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2012.0 **LOG TYPE:** Electric Log
SOURCE: CENTRAL OIL & GAS, WOOLARD HEIRS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	524.0	
-133.0	CARBONDALE	SURVANT	COAL	0.8	562.0	
-206.0	CARBONDALE	COLCHESTER	COAL	0.5	635.0	
-235.0	CARBONDALE	DEKOVEN	COAL	3.0	664.0	
-259.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	688.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-266.0	CARBONDALE	DAVIS	COAL	4.0	695.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	743.0	
-321.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	750.0	
-354.0	TRADEWATER	MT. RORAH	COAL	1.0	783.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502693000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 200' S line, 415' W line of NW NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455383 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818278 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 1797.0 **LOG TYPE:**
SOURCE: CENTRAL OIL & GAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1368.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	

MAPID: 16502698000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457969 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.816803 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2133.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., BUTLER J H COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-107.0	CARBONDALE	SURVANT	COAL	1.5	504.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-219.0	CARBONDALE	DEKOVEN	COAL	2.0	616.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	640.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-251.0	CARBONDALE	DAVIS	COAL	4.4	648.0	
-286.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	
-348.0	TRADEWATER	MT. RORAH	COAL	3.3	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502698000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457969 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2133.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	
-1726.0			LIMESTONE	-	2133.0	

MAPID: 16502700000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 245' N line, 350' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453451 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811624 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log
SOURCE: HUMPHREY & TREMONT, BEULAH HTS SCH **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-81.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	496.0	
-204.0	CARBONDALE	COLCHESTER	COAL	0.0	619.0	
-235.0	CARBONDALE	DEKOVEN	COAL	3.0	650.0	
-258.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	673.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	734.0	
-330.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	745.0	
-361.0	TRADEWATER	MT. RORAH	COAL	1.0	776.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502700000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 245' N line, 350' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.453451 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811624 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: HUMPHREY & TREMONT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1369.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1738.0			LIMESTONE	-	2153.0	
-2130.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502701000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 510' W line of SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.45502 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2142.0 **LOG TYPE:**
SOURCE: HUMPHREY & TREMONT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1734.0			LIMESTONE	-	2142.0	

MAPID: 16502710000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455664 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 1768.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	

MAPID: 16502938000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 490' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.46253 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: BRYANT, G. & M. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1732.0			LIMESTONE	-	2138.0	
-2129.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16503373000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 420' N line, 400' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.464525 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2520.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1717.0			LIMESTONE	-	2120.0	
-2117.0		BASE BARLOW	LIMESTONE	-	2520.0	

MAPID: 16502347000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 438' N line, 247' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.443952 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 2212.0 **LOG TYPE:**
SOURCE: WOOD, D. L. & SONS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1843.0	
-1771.0			LIMESTONE	-	2212.0	

MAPID: 16502348000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44656 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2195.0 **LOG TYPE:**
SOURCE: WOOD, D. L. & SONS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1396.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1828.0	
-1763.0			LIMESTONE	-	2195.0	

MAPID: 16502349000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 200' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444226 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.816563 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2192.0 **LOG TYPE:**
SOURCE: WOOD, D. L. & SONS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1402.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1823.0	
-1771.0			LIMESTONE	-	2192.0	

MAPID: 16502350000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 313' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446608 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1771.0			LIMESTONE	-	2202.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2570.0	

MAPID: 16502416000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 388' S line, 300' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442036 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817104 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2591.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1780.0			LIMESTONE	-	2204.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2591.0	

MAPID: 16502417000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 355' N line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441943 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818693 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2581.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1416.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1839.0	
-1785.0			LIMESTONE	-	2208.0	
-2158.0		BASE BARLOW	LIMESTONE	-	2581.0	

MAPID: 16502436000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 430' E line of SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.439867 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.80603 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2361.0 **LOG TYPE:** Electric Log

SOURCE: BEARD, FRANCIS L., BARTON COMM **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-271.0	CARBONDALE	DEKOVEN	COAL	2.0	646.0	
-305.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	680.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	0.8	695.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	727.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-365.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-395.0	TRADEWATER	MT. RORAH	COAL	1.2	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502436000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 430' E line of SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.439867 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.80603 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2166.0 **LOG TYPE:**

SOURCE: BEARD, FRANCIS L. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1428.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	
-1791.0			LIMESTONE	-	2166.0	

MAPID: 16502437000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 315' N line, 290' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44405 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81151 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2270.0 **LOG TYPE:** Electric Log
SOURCE: ROBERTS J M, ROBERTS J M 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-274.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-296.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	689.0	68 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	704.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	750.0	
-370.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	763.0	
-399.0	TRADEWATER	MT. RORAH	COAL	1.2	792.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502437000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 315' N line, 290' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44405 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81151 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2168.0 **LOG TYPE:**
SOURCE: ROBERTS J M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1410.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	
-1775.0			LIMESTONE	-	2168.0	

MAPID: 16502438000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 425' N line, 303' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444119 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81484 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, SIMONS COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	653.0	
-266.0	CARBONDALE	DEKOVEN	COAL	3.0	688.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	709.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-297.0	CARBONDALE	DAVIS	COAL	4.0	719.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	770.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-358.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	780.0	
-388.0	TRADEWATER	MT. RORAH	COAL	1.2	810.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502438000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 425' N line, 303' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444119 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81484 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 2583.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1819.0	
-2161.0		BASE BARLOW	LIMESTONE	-	2583.0	

MAPID: 16502441000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 251' S line, 300' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446637 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813052 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E, TOWLE CECIL COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-262.0	CARBONDALE	DEKOVEN	COAL	2.0	663.0	
-283.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	684.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	4.0	695.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	749.0	
-359.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	760.0	
-389.0	TRADEWATER	MT. RORAH	COAL	1.2	790.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502441000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 251' S line, 300' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446637 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813052 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2555.0 **LOG TYPE:**
SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1764.0			LIMESTONE	-	2165.0	
-2154.0		BASE BARLOW	LIMESTONE	-	2555.0	

MAPID: 16502443000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 305' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439523 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818792 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2563.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1406.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-1771.0			LIMESTONE	-	2175.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2563.0	

MAPID: 16502545000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446575 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.818705 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-247.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	680.0	
-297.0	SPOON	DAVIS	UNCLASSIFIED	-	730.0	
-1227.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 16502545000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446575 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818705 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 1817.0 **LOG TYPE:**
SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1817.0	

MAPID: 16502545000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446575 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818705 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2172.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E, MCDONALD OSCAR **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	559.0	
-167.0	CARBONDALE	SURVANT	COAL	0.8	600.0	
-247.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-269.0	CARBONDALE	DEKOVEN	COAL	4.0	702.0	
-296.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	729.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-302.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	785.0	
-362.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	795.0	
-396.0	TRADEWATER	MT. RORAH	COAL	1.2	829.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502597000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 246' N line, 250' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442198 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2185.0 **LOG TYPE:**
SOURCE: INLAND OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1816.0	
-1777.0			LIMESTONE	-	2185.0	

MAPID: 16502598000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 300' N line, 360' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.446416 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811534 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2159.0 **LOG TYPE:**
SOURCE: RUNYON FLOYD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1795.0	
-1765.0			LIMESTONE	-	2159.0	

MAPID: 16502645000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 360' S line, 305' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439511 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81705 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2182.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1820.0	
-1771.0			LIMESTONE	-	2182.0	

MAPID: 16502682000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 275' N line, 426' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.435316 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818996 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2178.0 **LOG TYPE:**
SOURCE: KING JOHN M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1813.0	
-1763.0			LIMESTONE	-	2178.0	

MAPID: 16502712000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 442' N line, 425' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439912 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.814834 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2923.0 **LOG TYPE:** Electric Log
SOURCE: KING JOHN M, BURNETT COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-247.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-277.0	CARBONDALE	DEKOVEN	COAL	3.0	675.0	
-302.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	700.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-312.0	CARBONDALE	DAVIS	COAL	5.0	710.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	755.0	
-368.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	766.0	
-402.0	TRADEWATER	MT. RORAH	COAL	1.2	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502712000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 442' N line, 425' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439912 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.814834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2568.0 **LOG TYPE:**
SOURCE: KING JOHN M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1420.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1818.0	
-1778.0			LIMESTONE	-	2176.0	
-2170.0		BASE BARLOW	LIMESTONE	-	2568.0	

MAPID: 16502713000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 365' S line, 230' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437652 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817082 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2252.0 **LOG TYPE:** Electric Log
SOURCE: KING JOHN M, JOHNSON 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	540.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-294.0	CARBONDALE	DEKOVEN	COAL	3.0	695.0	
-321.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	722.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-334.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-374.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	775.0	
-384.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	785.0	
-421.0	TRADEWATER	MT. RORAH	COAL	1.3	822.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502713000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 365' S line, 230' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437652 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817082 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2175.0 **LOG TYPE:**
SOURCE: KING JOHN M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1408.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1774.0			LIMESTONE	-	2175.0	

MAPID: 16502714000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 250' N line, 250' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437595 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819037 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2248.0 **LOG TYPE:** Electric Log
SOURCE: KING J M & SHURE OIL, MAHONEY EST COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	535.0	
-168.0	CARBONDALE	SURVANT	COAL	1.3	580.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	629.0	
-253.0	CARBONDALE	DEKOVEN	COAL	3.0	665.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	690.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-291.0	CARBONDALE	DAVIS	COAL	3.5	703.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	750.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-350.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	762.0	
-388.0	TRADEWATER	MT. RORAH	COAL	1.2	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502714000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 250' N line, 250' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.437595 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819037 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2175.0 **LOG TYPE:**
SOURCE: KING J M & SHURE OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1763.0			LIMESTONE	-	2175.0	

MAPID: 16500166000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.417777 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.814497 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 411.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
181.0	CARBONDALE	DANVILLE	COAL	2.0	229.0	
170.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	240.0	
156.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	254.0	
148.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	2.0	262.0	
116.0	CARBONDALE	HERRIN	COAL	4.5	294.0	
110.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	16.0	300.0	
62.0	CARBONDALE	BRIAR HILL	COAL	2.0	348.0	
56.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	44.0	354.0	
5.0	CARBONDALE	SPRINGFIELD	COAL	5.3	405.0	

MAPID: 16500166000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.417777 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.814497 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 298.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
207.0	MODESTO	PIASA	LIMESTONE	2.0	203.0	
205.0	MODESTO		SILTY SHALE	24.5	205.0	
180.5	CARBONDALE	DANVILLE	COAL	2.0	229.5	
178.5	CARBONDALE		SHALE & SANDSTONE	23.5	231.5	
155.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	255.0	
149.5	CARBONDALE	LAWSON	CLAYSTONE	2.5	260.5	
147.0	CARBONDALE	LAWSON	SANDSTONE	6.5	263.0	
140.5	CARBONDALE	LAWSON	SILTY SHALE	19.0	269.5	
121.5	CARBONDALE	BRERETON	LIMESTONE	4.0	288.5	
117.5	CARBONDALE	ANNA	BLACK SHALE	1.5	292.5	
116.0	CARBONDALE	HERRIN	COAL	4.5	294.0	

MAPID: 16500166000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1980' N line, 1980' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.417777 **GEOLOGIST:** FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.814497 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 410.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	45.0	0.0	
365.0	MODESTO		SHALE	12.0	45.0	
353.0	MODESTO		SANDSTONE	2.0	57.0	
351.0	MODESTO		SHALE	49.0	59.0	
302.0	MODESTO		LIMESTONE	4.0	108.0	
298.0	MODESTO		SANDY SHALE	30.0	112.0	
268.0	MODESTO		SANDSTONE	3.0	142.0	
265.0	MODESTO		SHALE	12.0	145.0	
253.0	MODESTO		BLACK SHALE	4.0	157.0	
249.0	MODESTO		COAL	1.0	161.0	
248.0	MODESTO		UNDERCLAY	2.0	162.0	
246.0	MODESTO		SANDY SHALE	21.0	164.0	
225.0	MODESTO		ARGILACEOUS SHALE	7.0	185.0	ARG
218.0	MODESTO		SANDSTONE	4.0	192.0	
214.0	MODESTO		CLAYSTONE	1.5	196.0	
212.5	MODESTO		SHALE	5.0	197.5	
207.5	MODESTO	PIASA	LIMESTONE	2.0	202.5	
205.5	MODESTO		BLACK SHALE	2.5	204.5	
203.0	MODESTO		UNDERCLAY	1.5	207.0	
201.5	MODESTO		SANDY SHALE	20.5	208.5	
181.0	CARBONDALE	DANVILLE	COAL	2.0	229.0	
179.0	CARBONDALE		UNDERCLAY	1.0	231.0	
178.0	CARBONDALE		SHALE	8.0	232.0	
170.0	CARBONDALE		SANDSTONE	7.0	240.0	
163.0	CARBONDALE		SANDY SHALE	7.5	247.0	
155.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	254.5	
150.0	CARBONDALE		CLAYSTONE	2.5	260.0	
147.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	262.5	
141.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.0	269.0	
122.0	CARBONDALE	BRERETON	LIMESTONE	4.0	288.0	
118.0	CARBONDALE	ANNA	BLACK SHALE	1.5	292.0	
116.5	CARBONDALE	HERRIN	COAL	4.5	293.5	
112.0	CARBONDALE		UNDERCLAY	2.0	298.0	
110.0	CARBONDALE		SANDSTONE	16.0	300.0	
94.0	CARBONDALE		SANDY SHALE	31.5	316.0	
62.5	CARBONDALE	BRIAR HILL	COAL	2.0	347.5	
60.5	CARBONDALE		UNDERCLAY	1.0	349.5	
59.5	CARBONDALE		SHALE	3.0	350.5	
56.5	CARBONDALE		SANDSTONE	44.0	353.5	

12.5	CARBONDALE		SANDY SHALE	3.0	397.5
9.5	CARBONDALE	ST. DAVID	LIMESTONE	2.0	400.5
7.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	402.5
5.0	CARBONDALE	SPRINGFIELD	COAL	5.3	405.0
-0.3	CARBONDALE		UNDERCLAY	0.3	410.3

MAPID: 16502480000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 360' N line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428052 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818848 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 3019.0 **LOG TYPE:** Electric Log
SOURCE: HOWARD ORBA, THOMPSON DR N A 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-222.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-270.0	CARBONDALE	DEKOVEN	COAL	2.5	668.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	692.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-312.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	743.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-357.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	755.0	
-397.0	TRADEWATER	MT. RORAH	COAL	1.2	795.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502480000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 360' N line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428052 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:**
SOURCE: HOWARD ORBA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1412.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1810.0	
-2167.0		BASE BARLOW	LIMESTONE	-	2565.0	

MAPID: 16502621000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425788 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818959 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2230.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, COOK-SPEER 9 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	609.0	
-254.0	CARBONDALE	DEKOVEN	COAL	3.0	654.0	
-275.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	675.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-290.0	CARBONDALE	DAVIS	COAL	5.5	690.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	735.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-348.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	748.0	
-382.0	TRADEWATER	MT. RORAH	COAL	1.0	782.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502621000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.425788 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.818959 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2162.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1409.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1762.0			LIMESTONE	-	2162.0	

MAPID: 16502632000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414252 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.809839 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 1645.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-180.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	595.0	
-260.0	SPOON	DAVIS	UNCLASSIFIED	-	675.0	
-1230.0	BASE OF PENN.		UNCLASSIFIED	-	1645.0	

MAPID: 16502632000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414252 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809839 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2565.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
130.0	CARBONDALE	BRERETON	LIMESTONE	-	285.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1751.0			LIMESTONE	-	2166.0	
-2150.0		BASE BARLOW	LIMESTONE	-	2565.0	

MAPID: 16502632000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.414252 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809839 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 3101.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, SHAVER HENRY 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-104.0	CARBONDALE	SURVANT	COAL	0.5	519.0	
-178.0	CARBONDALE	COLCHESTER	COAL	0.5	593.0	
-225.0	CARBONDALE	DEKOVEN	COAL	1.2	640.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	660.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-258.0	CARBONDALE	DAVIS	COAL	5.0	673.0	
-304.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	719.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-314.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	729.0	
-354.0	TRADEWATER	MT. RORAH	COAL	1.2	769.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500167000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.404002 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.814557 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	HERRIN	COAL	6.5	281.0	
73.0	CARBONDALE	BRIAR HILL	COAL	2.0	332.0	
1.0	CARBONDALE	SPRINGFIELD	COAL	3.6	404.0	

MAPID: 16500167000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.404002 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.814557 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 290.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.5	MODESTO	PIASA	LIMESTONE	2.0	200.5	
202.5	CARBONDALE		SHALE	42.0	202.5	
160.5	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	244.5	
150.5	CARBONDALE	LAWSON	CALCAREOUS SHALE	6.0	254.5	
144.5	CARBONDALE	LAWSON	SANDSTONE	3.0	260.5	
141.5	CARBONDALE	LAWSON	SILTY SHALE	12.0	263.5	
129.5	CARBONDALE	BRERETON	LIMESTONE	6.5	275.5	
123.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	8.5	282.0	

MAPID: 16500167000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.404002 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.814557 **DATE COLLECTED:** 1 / 1 / 1906

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	32.0	0.0	
373.0	MODESTO		SANDSTONE	8.0	32.0	
365.0	MODESTO		SHALE	12.0	40.0	
353.0	MODESTO		SANDSTONE	2.0	52.0	
351.0	MODESTO		SHALE	16.0	54.0	
335.0	MODESTO		SANDSTONE	12.0	70.0	
323.0	MODESTO		SANDY SHALE	16.0	82.0	
307.0	MODESTO		LIMESTONE	4.5	98.0	
302.5	MODESTO		SANDY SHALE	22.5	102.5	
280.0	MODESTO		COAL	0.5	125.0	
279.5	MODESTO		UNDERCLAY	1.5	125.5	
278.0	MODESTO		SANDSTONE	2.0	127.0	
276.0	MODESTO		SANDY SHALE	9.0	129.0	
267.0	MODESTO		SHALE	9.0	138.0	DARK
258.0	MODESTO		BLACK SHALE	4.0	147.0	
254.0	MODESTO		CLAYSTONE	3.0	151.0	
251.0	MODESTO		SANDSTONE	1.0	154.0	
250.0	MODESTO		SANDY SHALE	8.0	155.0	
242.0	MODESTO		SANDSTONE	2.0	163.0	
240.0	MODESTO		SANDY SHALE	23.0	165.0	
217.0	MODESTO		SANDSTONE	5.0	188.0	
212.0	MODESTO		SHALE	7.0	193.0	
205.0	MODESTO	PIASA	LIMESTONE	2.0	200.0	
203.0			SHALE	6.0	202.0	DARK
197.0			SANDY SHALE	36.0	208.0	
161.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	244.0	
151.0	CARBONDALE		CALCAREOUS SHALE	6.0	254.0	CALC
145.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	260.0	
142.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	263.0	
130.0	CARBONDALE	BRERETON	LIMESTONE	6.5	275.0	
123.5	CARBONDALE	HERRIN	COAL	2.0	281.5	
121.5	CARBONDALE	HERRIN	COAL	6.6	283.5	W/SS
115.0	CARBONDALE		UNDERCLAY	1.0	290.0	
114.0	CARBONDALE		SANDSTONE	6.0	291.0	
108.0	CARBONDALE		SANDY SHALE	35.0	297.0	
73.0	CARBONDALE	BRIAR HILL	COAL	2.0	332.0	
71.0	CARBONDALE		UNDERCLAY	1.0	334.0	
70.0	CARBONDALE	DYKERSBURG	SANDSTONE	52.0	335.0	
18.0	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	387.0	GRAY

9.0	CARBONDALE	DYKERSBURG	SHALE	2.0	396.0	
7.0	CARBONDALE	SPRINGFIELD	BONE COAL	4.5	398.0	
2.5	CARBONDALE	SPRINGFIELD	SHALE	2.0	402.5	
0.5	CARBONDALE	SPRINGFIELD	COAL	3.6	404.5	
-3.1	CARBONDALE	SPRINGFIELD	COAL	0.9	408.1	W/SH
-4.0	CARBONDALE		UNDERCLAY	1.0	409.0	

MAPID: 16501537000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.40053 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.815426 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2523.0 **LOG TYPE:**

SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1395.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1761.0			LIMESTONE	-	2151.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2523.0	

MAPID: 16501537000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.40053 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.815426 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3060.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	DANVILLE	COAL	-	200.0	
172.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	218.0	
164.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	7.0	226.0	
134.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
78.0	CARBONDALE	BRIAR HILL	COAL	-	312.0	
64.0	CARBONDALE	CANTON	SANDSTONE/SHALE	22.0	326.0	
18.0	CARBONDALE	SPRINGFIELD	COAL	5.0	372.0	
-16.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	34.0	406.0	
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	-	440.0	

MAPID: 16501537000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.40053 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815426 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3060.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, ADAMS-SIMPSON COM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-213.0	CARBONDALE	DEKOVEN	COAL	3.0	603.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	625.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-253.0	CARBONDALE	DAVIS	COAL	3.8	643.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	685.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-305.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	695.0	
-339.0	TRADEWATER	MT. RORAH	COAL	3.0	729.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502351000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405065 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80806 **DATE COLLECTED:** 1 / 0 / 1954
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2903.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, BELTZ O & S ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-108.0	CARBONDALE	SURVANT	COAL	0.5	502.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	620.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	643.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	662.0	
-306.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	700.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-316.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	710.0	
-352.0	TRADEWATER	MT. RORAH	COAL	2.0	746.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502351000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405065 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80806 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
126.0	CARBONDALE	BRERETON	LIMESTONE	-	268.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1755.0			LIMESTONE	-	2149.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16502352000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395903 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808082 **DATE COLLECTED:** 2 / 0 / 1954
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 3666.0 **LOG TYPE:** Nuclear Log
SOURCE: MCBRIDE, W. C., INC., COLLIER CLARENCE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-95.0	CARBONDALE	SURVANT	COAL	0.7	510.0	
-158.0	CARBONDALE	COLCHESTER	COAL	0.5	573.0	
-208.0	CARBONDALE	DEKOVEN	COAL	3.5	623.0	
-228.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	643.0	
-249.0	CARBONDALE	DAVIS	COAL	4.0	664.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	698.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-298.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	713.0	
-331.0	TRADEWATER	MT. RORAH	COAL	3.0	746.0	

MAPID: 16502352000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395903 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808082 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2528.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
145.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1374.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1789.0	
-1735.0			LIMESTONE	-	2150.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2528.0	

MAPID: 16502353000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402769 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.806204 **DATE COLLECTED:** 11 / 0 / 1953
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2904.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, FURLONG ERTLA 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-53.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-90.0	CARBONDALE	SURVANT	COAL	0.7	490.0	
-160.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-205.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-225.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	625.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-243.0	CARBONDALE	DAVIS	COAL	4.5	643.0	
-286.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	686.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-297.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	697.0	
-335.0	TRADEWATER	MT. RORAH	COAL	0.0	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502353000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402769 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806204 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	260.0	
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1746.0			LIMESTONE	-	2146.0	
-2136.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16502354000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400482 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808071 **DATE COLLECTED:** 5 / 0 / 1953
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 3026.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., KITTINGER J L **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	470.0	
-81.0	CARBONDALE	SURVANT	COAL	0.5	499.0	
-162.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-206.0	CARBONDALE	DEKOVEN	COAL	3.0	624.0	
-225.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	643.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	3.8	664.0	
-282.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-295.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	713.0	
-332.0	TRADEWATER	MT. RORAH	COAL	2.0	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502354000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400482 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	278.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1797.0	
-1746.0			LIMESTONE	-	2164.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16502355000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398193 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.806224 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
151.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1799.0	
-1740.0			LIMESTONE	-	2161.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502356000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395912 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813573 **DATE COLLECTED:** 5 / 0 / 1954
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2920.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER, LEITHLITER J W ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-54.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-88.0	CARBONDALE	SURVANT	COAL	0.6	479.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.0	607.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	630.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-257.0	CARBONDALE	DAVIS	COAL	5.0	648.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-303.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	694.0	
-347.0	TRADEWATER	MT. RORAH	COAL	1.3	738.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502356000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395912 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813573 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
141.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1772.0	
-1735.0			LIMESTONE	-	2126.0	
-2113.0		BASE BARLOW	LIMESTONE	-	2504.0	

MAPID: 16502357000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400496 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809893 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1799.0	
-1748.0			LIMESTONE	-	2168.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2545.0	

MAPID: 16502358000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398206 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811751 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2906.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, PORTER JAMES H 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-95.0	CARBONDALE	SURVANT	COAL	0.8	498.0	
-167.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-207.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	634.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-247.0	CARBONDALE	DAVIS	COAL	3.8	650.0	
-289.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	692.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-345.0	TRADEWATER	MT. RORAH	COAL	2.0	748.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502358000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398206 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811751 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	264.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1739.0			LIMESTONE	-	2142.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2525.0	

MAPID: 16502359000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405083 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.809882 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2890.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, PORTER JAMES H 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	470.0	
-115.0	CARBONDALE	SURVANT	COAL	1.2	510.0	
-184.0	CARBONDALE	COLCHESTER	COAL	0.5	579.0	
-228.0	CARBONDALE	DEKOVEN	COAL	1.4	623.0	
-250.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	645.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	663.0	
-310.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-319.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	714.0	
-355.0	TRADEWATER	MT. RORAH	COAL	2.0	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502359000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405083 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
122.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1379.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1774.0	
-1747.0			LIMESTONE	-	2142.0	
-2139.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16502360000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402827 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815429 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2931.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, REHN E E 4 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-42.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	443.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	632.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	4.0	647.0	
-289.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	690.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-298.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	699.0	
-334.0	TRADEWATER	MT. RORAH	COAL	4.0	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502360000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402827 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.815429 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2542.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	262.0	
-1397.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1798.0	
-1758.0			LIMESTONE	-	2159.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2542.0	

MAPID: 16502361000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395906 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.809904 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 1768.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1768.0	

MAPID: 16502362000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395909 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811751 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2515.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1730.0			LIMESTONE	-	2130.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2515.0	

MAPID: 16502363000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407362 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808054 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 3038.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, SHAVER GEO ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-108.0	CARBONDALE	SURVANT	COAL	0.8	508.0	
-188.0	CARBONDALE	COLCHESTER	COAL	0.5	588.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	626.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	649.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-265.0	CARBONDALE	DAVIS	COAL	3.8	665.0	
-308.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	708.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-319.0	TRADEWATER	STONEFORT	LIMESTONE	3.3	719.0	
-353.0	TRADEWATER	MT. RORAH	COAL	1.2	753.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502363000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407362 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808054 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
120.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1700.0			LIMESTONE	-	2100.0	
-2138.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16502364000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.398219 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.817245 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2892.0 **LOG TYPE:** Electric Log

SOURCE: MAGNOLIA PETROLEUM, SIMPSON CECIL **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-217.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	630.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-257.0	CARBONDALE	DAVIS	COAL	4.0	645.0	
-300.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	688.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-307.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	695.0	
-345.0	TRADEWATER	MT. RORAH	COAL	1.8	733.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502364000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.398219 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.817245 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2515.0 **LOG TYPE:**

SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
136.0	CARBONDALE	BRERETON	LIMESTONE	-	252.0	
-1392.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1747.0			LIMESTONE	-	2135.0	
-2127.0		BASE BARLOW	LIMESTONE	-	2515.0	

MAPID: 16502365000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400554 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819104 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:**
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1398.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1788.0	
-1762.0			LIMESTONE	-	2152.0	
-2135.0		BASE BARLOW	LIMESTONE	-	2525.0	

MAPID: 16502366000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.398209 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813571 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:**
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
142.0	CARBONDALE	BRERETON	LIMESTONE	-	249.0	
-1389.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1740.0			LIMESTONE	-	2131.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2510.0	

MAPID: 16502484000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393594 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819086 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2896.0 **LOG TYPE:** Electric Log
SOURCE: POWELL GRAHAM, MELTON 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	437.0	
-136.0	CARBONDALE	COLCHESTER	COAL	0.6	518.0	
-193.0	CARBONDALE	DEKOVEN	COAL	3.0	575.0	
-221.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	603.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-237.0	CARBONDALE	DAVIS	COAL	3.8	619.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-286.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	668.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502484000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393594 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819086 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2507.0 **LOG TYPE:**
SOURCE: POWELL GRAHAM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	BRERETON	LIMESTONE	-	243.0	
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1744.0			LIMESTONE	-	2126.0	
-2125.0		BASE BARLOW	LIMESTONE	-	2507.0	

MAPID: 16502530000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402851 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819109 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2993.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, REHN E E 2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-84.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-157.0	CARBONDALE	SURVANT	COAL	2.0	548.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-222.0	CARBONDALE	DEKOVEN	COAL	3.0	613.0	
-244.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	635.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-262.0	CARBONDALE	DAVIS	COAL	4.0	653.0	
-308.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	699.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-319.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	710.0	
-357.0	TRADEWATER	MT. RORAH	COAL	3.0	748.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502530000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402851 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819109 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2538.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
118.0	CARBONDALE	BRERETON	LIMESTONE	-	273.0	
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1794.0	
-1769.0			LIMESTONE	-	2160.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2538.0	

MAPID: 16502727000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395922 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2502.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1393.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1776.0	
-1747.0			LIMESTONE	-	2130.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2502.0	

MAPID: 16503111000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405124 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813565 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, PORTER "A" J H 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-47.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-75.0	CARBONDALE	SURVANT	COAL	0.5	480.0	
-115.0	CARBONDALE	COLCHESTER	COAL	0.5	520.0	
-217.0	CARBONDALE	DEKOVEN	COAL	3.5	622.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	643.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	660.0	
-303.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	708.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-309.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	714.0	
-347.0	TRADEWATER	MT. RORAH	COAL	4.0	752.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503111000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405124 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813565 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1391.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1754.0			LIMESTONE	-	2159.0	
-2147.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16503175000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402803 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.811746 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2898.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, PORTER J H 4-A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-102.0	CARBONDALE	SURVANT	COAL	1.4	492.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-230.0	CARBONDALE	DEKOVEN	COAL	2.5	620.0	
-250.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	640.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-270.0	CARBONDALE	DAVIS	COAL	3.5	660.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	702.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-322.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	712.0	
-363.0	TRADEWATER	MT. RORAH	COAL	3.0	753.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503175000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402803 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
125.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1380.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	
-1753.0			LIMESTONE	-	2143.0	
-2143.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16503330000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 990' N line, 990' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405134 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.817292 **DATE COLLECTED:** 7 / 0 / 1960
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 1635.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-138.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	530.0	
-248.0	SPOON	DAVIS	UNCLASSIFIED	-	640.0	
-1243.0	BASE OF PENN.		UNCLASSIFIED	-	1635.0	

MAPID: 16503330000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 990' N line, 990' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405134 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817292 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
127.0	CARBONDALE	BRERETON	LIMESTONE	-	265.0	
-1401.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1793.0	
-1756.0			LIMESTONE	-	2148.0	
-2148.0		BASE BARLOW	LIMESTONE	-	2540.0	

MAPID: 16503383000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402779 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808065 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1785.0	
-1743.0			LIMESTONE	-	2150.0	
-2128.0		BASE BARLOW	LIMESTONE	-	2535.0	

MAPID: 16503419000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 430' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400134 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80807 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.0	CARBONDALE	BRERETON	LIMESTONE	-	275.0	
-1384.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1753.0			LIMESTONE	-	2161.0	
-2126.0		BASE BARLOW	LIMESTONE	-	2534.0	

MAPID: 16503622000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393613 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2532.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	BRERETON	LIMESTONE	-	280.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1786.0	
-1730.0			LIMESTONE	-	2150.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2532.0	

MAPID: 16501538000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382077 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.81914 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:**

SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
161.0	CARBONDALE	BRERETON	LIMESTONE	-	256.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1727.0			LIMESTONE	-	2144.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2524.0	

MAPID: 16501538000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382077 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.81914 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log

SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
209.0	CARBONDALE	DANVILLE	COAL	-	208.0	
189.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	228.0	
179.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	238.0	
154.0	CARBONDALE	HERRIN	COAL	3.0	263.0	
123.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	7.0	294.0	
99.0	CARBONDALE	BRIAR HILL	COAL	-	318.0	
87.0	CARBONDALE	CANTON	SANDSTONE/SHALE	16.0	330.0	
39.0	CARBONDALE	SPRINGFIELD	COAL	5.0	378.0	
3.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	36.0	414.0	
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	

MAPID: 16501538000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382077 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.81914 **DATE COLLECTED:** 12 / 0 / 1953
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log
SOURCE: MIAMI OPERATING CO, CRAWFORD WM J **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-38.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-177.0	CARBONDALE	DEKOVEN	COAL	3.0	594.0	
-198.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	615.0	
-218.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-558.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	975.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-266.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	683.0	
-323.0	TRADEWATER	MT. RORAH	COAL	1.2	740.0	

MAPID: 16502367000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386688 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808089 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, BLAKINSHIP-KITTI **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-156.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-209.0	CARBONDALE	DEKOVEN	COAL	2.5	598.0	
-231.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-246.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-271.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	660.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-281.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502367000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386688 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2501.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1746.0	
-1706.0			LIMESTONE	-	2095.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2501.0	

MAPID: 16502368000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382065 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:**
SOURCE: BELL, KENNETH C. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	BRERETON	LIMESTONE	-	220.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1743.0	
-1708.0			LIMESTONE	-	2093.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2497.0	

MAPID: 16502368000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382065 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813596 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.0	MODESTO		SHALE	30.0	142.0	
213.0	CARBONDALE	DANVILLE	COAL	2.0	172.0	
211.0	CARBONDALE		CALCAREOUS SHALE	7.0	174.0	
204.0	CARBONDALE	ALLENBY	COAL	0.5	181.0	
203.5	CARBONDALE		SHALE	8.5	181.5	
195.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	190.0	
190.0	CARBONDALE	LAWSON	CLAYSTONE	3.0	195.0	
187.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	16.0	198.0	
171.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	214.0	
165.0	CARBONDALE	BRERETON	LIMESTONE	4.0	220.0	
161.0	CARBONDALE	ANNA	BLACK SHALE	2.0	224.0	
159.0	CARBONDALE	HERRIN	COAL	4.0	226.0	

MAPID: 16502368000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382065 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813596 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: BELL, KENNETH C. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-135.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	520.0	
-215.0	SPOON	DAVIS	UNCLASSIFIED	-	600.0	
-1195.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 16502368000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382065 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.813596 **DATE COLLECTED:** 2 / 0 / 1955
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: BELL, KENNETH C., COLLINS JAMES P **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-67.0	CARBONDALE	SURVANT	COAL	0.8	452.0	
-135.0	CARBONDALE	COLCHESTER	COAL	0.5	520.0	
-175.0	CARBONDALE	DEKOVEN	COAL	3.0	560.0	
-197.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	582.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	4.0	602.0	
-254.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	639.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-261.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	646.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502369000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384374 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819129 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3076.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, DAVENPORT J R **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	COLCHESTER	COAL	1.2	512.0	
-179.0	CARBONDALE	DEKOVEN	COAL	2.0	582.0	
-209.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	612.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	4.0	620.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	
-267.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502369000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384374 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.819129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1764.0	
-1716.0			LIMESTONE	-	2119.0	
-2106.0		BASE BARLOW	LIMESTONE	-	2509.0	

MAPID: 16502370000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386686 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817261 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2895.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, DAVENPORT J R **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-185.0	CARBONDALE	DEKOVEN	COAL	2.5	585.0	
-205.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	605.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-224.0	CARBONDALE	DAVIS	COAL	4.0	624.0	
-263.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	663.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-272.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	672.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502370000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386686 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817261 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2513.0 **LOG TYPE:**
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1357.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1710.0			LIMESTONE	-	2113.0	
-2110.0		BASE BARLOW	LIMESTONE	-	2513.0	

MAPID: 16503349000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386656 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811766 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	BRERETON	LIMESTONE	-	243.0	
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1748.0	
-1709.0			LIMESTONE	-	2104.0	
-2105.0		BASE BARLOW	LIMESTONE	-	2500.0	

MAPID: 16503384000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 680' N line, 990' W line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.389024 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.807124 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2106.0 **LOG TYPE:**
SOURCE: MUTUAL OIL & GAS CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	BRERETON	LIMESTONE	-	224.0	
-1356.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1748.0	
-1714.0			LIMESTONE	-	2106.0	

MAPID: 16503623000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 300' S line, 990' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379775 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.817204 **DATE COLLECTED:** 10 / 0 / 1969
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2964.0 **LOG TYPE:** Electric Log
SOURCE: SHAWNEE PETRO. ASSOC., PHIPPS JUNIOR A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-27.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	427.0	
-168.0	CARBONDALE	DEKOVEN	COAL	3.0	568.0	
-190.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	590.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-208.0	CARBONDALE	DAVIS	COAL	4.0	608.0	
-249.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	649.0	63% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-252.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	652.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503623000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 300' S line, 990' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379775 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.817204 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.0	CARBONDALE	BRERETON	LIMESTONE	-	233.0	
-1351.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1751.0	
-1705.0			LIMESTONE	-	2105.0	
-2109.0		BASE BARLOW	LIMESTONE	-	2509.0	

MAPID: 16503632000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 400' N line, 400' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.381833 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.81895 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2135.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1778.0	
-1715.0			LIMESTONE	-	2135.0	

MAPID: 16503649000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379755 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.813601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2080.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1347.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1730.0	
-1697.0			LIMESTONE	-	2080.0	

MAPID: 16503665000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.382057 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.808091 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2114.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1350.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1742.0	
-1722.0			LIMESTONE	-	2114.0	

MAPID: 16503812000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384359 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.811769 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2100.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1714.0			LIMESTONE	-	2100.0	

MAPID: 16526538000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.382425 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.812203 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.5 **LOGGED (FT.):** 342.3 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-498 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
375.5	PLEISTOCENE		CLAY	24.5	2.0	
351.0	PLEISTOCENE		SANDY CLAY	0.5	26.5	
350.5	PLEISTOCENE		SAND	1.0	27.0	
349.5	PLEISTOCENE		CLAY	1.0	28.0	
348.5	PATOKA		SANDSTONE	1.5	29.0	
347.0	PATOKA		SANDY SHALE	3.2	30.5	
343.9	PATOKA		SHALE	0.4	33.6	
343.5	PATOKA		SANDSTONE	11.7	34.0	TRIVOLI?
331.9	PATOKA		SHALY SANDSTONE	7.4	45.6	TRIVOLI?
324.5	PATOKA		SANDY SHALE	2.4	53.0	TRIVOLI?
322.2	SHELBURN		LIMESTONE	0.3	55.3	
321.9	SHELBURN		SANDY SHALE	0.7	55.6	
321.1	SHELBURN		SHALY SANDSTONE	0.7	56.4	
320.5	SHELBURN		SANDY SHALE	8.0	57.0	
312.5	SHELBURN		DARK SHALE	2.8	65.0	
309.7	SHELBURN		SANDY SHALE	1.5	67.8	
308.3	SHELBURN		BLACK SHALE & COAL	0.5	69.2	
307.8	SHELBURN		SHALE	6.0	69.7	
301.8	SHELBURN		BLACK SHALE	0.6	75.7	
301.2	SHELBURN		SHALE	1.3	76.3	
300.0	SHELBURN		COAL	0.7	77.5	BKSH
299.3	SHELBURN		SHALE	6.9	78.2	
292.4	SHELBURN		SANDSTONE	7.5	85.1	W/ SHALE STREAKS
284.9	SHELBURN		SANDSTONE	0.4	92.6	
284.5	SHELBURN		SHALE	0.8	93.0	W/ SS STREAKS
283.7	SHELBURN		SANDSTONE	1.6	93.8	
282.2	SHELBURN		SANDY SHALE	2.0	95.3	
280.1	SHELBURN		SANDSTONE	0.3	97.4	
279.9	SHELBURN		SHALE	1.4	97.6	
278.5	SHELBURN		SANDSTONE	3.5	99.0	
275.0	SHELBURN		COAL	0.1	102.5	
274.9	SHELBURN		SHALE	5.1	102.6	
269.8	SHELBURN		SANDSTONE	0.3	107.7	
269.6	SHELBURN		SHALE	6.7	107.9	
262.9	SHELBURN		BLACK SHALE	0.6	114.6	W/ COAL STREAKS
262.3	SHELBURN		GRAY SHALE	4.0	115.2	
258.4	SHELBURN		SHALE	0.3	119.1	W/ LS STREAKS
258.1	SHELBURN		SHALE	6.0	119.4	

252.1	SHELBURN		SHALE	0.4	125.4	W/ LS STREAKS
251.8	SHELBURN		SHALE	2.3	125.7	
249.5	SHELBURN	PIASA	LIMESTONE	0.2	128.0	
249.3	SHELBURN		SHALE	4.8	128.2	
244.6	SHELBURN		SHALE	26.1	132.9	SIDERITE
218.5	SHELBURN	DANVILLE	COAL	2.1	159.0	
216.4	SHELBURN		SHALY SANDSTONE	4.9	161.1	
211.5	SHELBURN		SANDSTONE	0.8	166.0	
210.7	SHELBURN		DARK SHALE	2.4	166.8	
207.3	SHELBURN	ALLENBY	COAL	1.0	170.2	
206.3	SHELBURN	ALLENBY	SHALE	2.0	171.2	
204.3	SHELBURN	ALLENBY	COAL	0.3	173.2	
204.0	SHELBURN		SHALE	2.6	173.5	
201.4	SHELBURN		CALCAREOUS SHALE	2.3	176.1	
199.1	SHELBURN	BANKSTON FORK	LIMESTONE	5.4	178.4	
193.7	SHELBURN	BANKSTON FORK	NODULAR LIMESTONE	0.7	183.8	
193.0	SHELBURN		SHALE	0.5	184.5	
192.5	SHELBURN		SILTSTONE	3.4	185.0	SANDY
189.2	SHELBURN		SANDSTONE	8.0	188.3	
181.2	SHELBURN		SANDSTONE	1.2	196.3	SHALE BANDS
180.1	SHELBURN		SHALE	4.1	197.4	
176.0	SHELBURN		SHALY SANDSTONE	0.5	201.5	
175.5	SHELBURN		SANDSTONE	0.6	202.0	
174.9	SHELBURN		SHALY SANDSTONE	1.0	202.6	
173.9	SHELBURN		SHALE	5.8	203.6	
168.1	SHELBURN		LIMESTONE	0.3	209.4	
167.8	SHELBURN		CALCAREOUS SHALE	1.6	209.7	
166.3	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	3.3	211.2	
163.0	CARBONDALE	ANNA	BLACK SHALE	1.5	214.5	
161.5	CARBONDALE	HERRIN	COAL	4.6	216.0	
157.0	CARBONDALE		UNDERCLAY	1.5	220.5	
155.5	CARBONDALE		CALCAREOUS SHALE	5.3	222.0	
150.2	CARBONDALE		CALCAREOUS SHALE	1.2	227.3	
149.0	CARBONDALE		SANDSTONE	7.0	228.5	SHALE STREAKS
142.0	CARBONDALE		SANDSTONE	1.1	235.5	
140.9	CARBONDALE		SHALY SANDSTONE	11.9	236.6	SIDERITE
129.0	CARBONDALE		SANDY SHALE	17.5	248.5	SIDERITE
111.5	CARBONDALE		SANDY SHALE	0.1	266.0	
111.4	CARBONDALE		GRAY SHALE	1.5	266.1	
109.9	CARBONDALE		GRAY SHALE	4.8	267.6	SIDERITE
105.1	CARBONDALE	BRIAR HILL	COAL	1.7	272.4	
103.4	CARBONDALE		UNDERCLAY	1.7	274.1	
101.7	CARBONDALE		GRAY SHALE	3.2	275.8	
98.5	CARBONDALE		SANDSTONE	0.2	279.0	SHALE STREAKS
98.3	CARBONDALE		GRAY SHALE	0.8	279.2	
97.5	CARBONDALE		GRAY SHALE	11.0	280.0	SIDERITE
86.5	CARBONDALE		SANDSTONE	6.1	291.0	SHALE STREAKS

80.4	CARBONDALE		GRAY SHALE	0.6	297.1	
79.8	CARBONDALE		SANDSTONE	2.0	297.7	
77.8	CARBONDALE		SHALE	0.1	299.7	
77.7	CARBONDALE		SANDSTONE	4.8	299.8	
72.9	CARBONDALE		SANDSTONE	2.6	304.6	BLACK STREAKS
70.4	CARBONDALE		SANDSTONE	1.0	307.1	
69.4	CARBONDALE		GRAY SHALE	1.9	308.1	
67.5	CARBONDALE		SANDSTONE	4.7	310.0	SHALE STREAKS
62.8	CARBONDALE		SHALY SANDSTONE	9.2	314.7	
53.6	CARBONDALE		GRAY SHALE	1.1	323.9	
52.6	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	0.7	324.9	
51.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	325.6	
48.4	CARBONDALE		DARK SHALE	1.7	329.1	
46.7	CARBONDALE	SPRINGFIELD	COAL	5.2	330.8	
41.5	CARBONDALE		BLACK SHALE	0.1	336.0	
41.5	CARBONDALE		GRAY SHALE	1.3	336.0	
40.2	CARBONDALE		SANDY SHALE	2.7	337.3	
37.5	CARBONDALE		SANDSTONE	2.3	340.0	

MAPID: 16526539000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.378715 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.812165 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.2 **LOGGED (FT.):** 198.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY P3-MW-03 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNKNOWN	29.0		
346.2	PATOKA	TRIVOLI	SANDSTONE	2.0	29.0	
344.2	PATOKA	TRIVOLI	SHALY SANDSTONE	8.0	31.0	
336.2	PATOKA	TRIVOLI	SANDSTONE	21.0	39.0	SHALE STREAKS
315.2	SHELBURN		SANDY SHALE	8.0	60.0	
307.2	SHELBURN		GRAY SHALE	12.0	68.0	
295.2	SHELBURN		BLACK SHALE	2.0	80.0	
293.2	SHELBURN		COAL	1.0	82.0	
292.2	SHELBURN		GRAY SHALE	1.0	83.0	
291.2	SHELBURN		SANDY SHALE	13.0	84.0	
278.2	SHELBURN		GRAY SHALE	7.0	97.0	
271.2	SHELBURN		SANDY SHALE	9.0	104.0	
262.2	SHELBURN		COAL	2.0	113.0	
260.2	SHELBURN		SHALE	1.0	115.0	
259.2	SHELBURN		LIMESTONE	2.0	116.0	
257.2	SHELBURN		SANDY SHALE	4.0	118.0	
253.2	SHELBURN		BLACK SHALE	4.5	122.0	
248.7	SHELBURN		LIMESTONE	0.5	126.5	
248.2	SHELBURN		BLACK SHALE	3.0	127.0	
245.2	SHELBURN		GRAY SHALE	29.0	130.0	
216.2	SHELBURN	DANVILLE	COAL	0.5	159.0	
215.7	SHELBURN		GRAY SHALE	13.5	159.5	
202.2	SHELBURN	ALLENBY	COAL	1.0	173.0	
201.2	SHELBURN		GRAY SHALE	5.0	174.0	
196.2	SHELBURN	BANKSTON FORK	LIMESTONE	6.5	179.0	
189.7	SHELBURN		CALCAREOUS SHALE	2.0	185.5	
187.7	SHELBURN	ANVIL ROCK	SANDSTONE	10.5	187.5	

MAPID: 16526540000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.378706 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.812003 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.7 **LOGGED (FT.):** 320.8 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY P3-MW-04 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	3.0		
372.7	PLEISTOCENE		CLAY	7.0	3.0	BROWN
365.7	PLEISTOCENE		CLAY	19.0	10.0	GRAY
346.7	PATOKA	TRIVOLI	SANDSTONE/SHALE	9.0	29.0	
337.7	PATOKA	TRIVOLI	GRAY SHALE	4.0	38.0	
333.7	PATOKA	TRIVOLI	SANDSTONE	22.0	42.0	
311.7	SHELBURN		SANDY SHALE	4.0	64.0	
307.7	SHELBURN		GRAY SHALE	2.0	68.0	
305.7	SHELBURN		BLACK SHALE & COAL	1.0	70.0	
304.7	SHELBURN		GRAY SHALE	12.0	71.0	
292.7	SHELBURN		BLACK SHALE	2.0	83.0	
290.7	SHELBURN		COAL	1.0	85.0	
289.7	SHELBURN		SANDY SHALE	4.0	86.0	
285.7	SHELBURN		GRAY SHALE	2.0	90.0	
283.7	SHELBURN		SANDY SHALE	8.0	92.0	
275.7	SHELBURN		GRAY SHALE	13.0	100.0	
262.7	SHELBURN		COAL	2.0	113.0	
260.7	SHELBURN		SHALE	1.0	115.0	
259.7	SHELBURN		LIMESTONE	2.0	116.0	
257.7	SHELBURN		SANDY SHALE	4.0	118.0	
253.7	SHELBURN		BLACK SHALE	4.0	122.0	
249.7	SHELBURN		LIMESTONE	0.5	126.0	
249.2	SHELBURN		BLACK SHALE	3.5	126.5	
245.7	SHELBURN		GRAY SHALE	28.0	130.0	
217.7	SHELBURN	DANVILLE	COAL	0.5	158.0	
217.2	SHELBURN		GRAY SHALE	11.5	158.5	
205.7	SHELBURN	ALLENBY	COAL	1.0	170.0	
204.7	SHELBURN		SHALE	7.0	171.0	
197.7	SHELBURN	BANKSTON FORK	LIMESTONE	7.0	178.0	
190.7	SHELBURN		CALCAREOUS SHALE	2.0	185.0	
188.7	SHELBURN	ANVIL ROCK	SANDSTONE	11.0	187.0	
177.7	SHELBURN		SANDY SHALE	9.0	198.0	
168.7	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.0	207.0	
163.7	CARBONDALE	ANNA	BLACK SHALE	3.0	212.0	
160.7	CARBONDALE	HERRIN	COAL	4.0	215.0	
156.7	CARBONDALE		SHALE	2.0	219.0	
154.7	CARBONDALE		SANDY SHALE	7.5	221.0	
147.2	CARBONDALE		LIMESTONE	1.0	228.5	

146.2	CARBONDALE		SANDSTONE	12.5	229.5
133.7	CARBONDALE		SANDY SHALE	2.0	242.0
131.7	CARBONDALE		SANDSTONE	9.0	244.0
122.7	CARBONDALE		SANDSTONE/SHALE	15.0	253.0
107.7	CARBONDALE	BRIAR HILL	COAL	1.5	268.0
106.2	CARBONDALE		SHALE	2.5	269.5
103.7	CARBONDALE		SHALY SANDSTONE	8.0	272.0
95.7	CARBONDALE		SANDSTONE	31.0	280.0
64.7	CARBONDALE		SHALY SANDSTONE	2.0	311.0
62.7	CARBONDALE		SANDSTONE	4.0	313.0
58.7	CARBONDALE		SHALY SANDSTONE	3.8	317.0

MAPID: 16502371000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.379723 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.793436 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2516.0 **LOG TYPE:**

SOURCE: CALVERT, D. & AURORA GAS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
186.0	CARBONDALE	BRERETON	LIMESTONE	-	240.0	
-1354.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1780.0	
-1712.0			LIMESTONE	-	2138.0	
-2090.0		BASE BARLOW	LIMESTONE	-	2516.0	

MAPID: 16502371000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.379723 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.793436 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.0	MODESTO	PIASA	LIMESTONE & SHALE	4.0	150.0	
272.0	MODESTO		SHALE	37.5	154.0	
234.5	CARBONDALE	DANVILLE	COAL	2.5	191.5	
232.0	CARBONDALE		SHALE	18.0	194.0	
214.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	212.0	
206.0	CARBONDALE	LAWSON	SILTY SHALE	14.0	220.0	
192.0	CARBONDALE	CONANT	LIMESTONE & SHALE	5.0	234.0	
187.0	CARBONDALE		SHALE	2.0	239.0	
185.0	CARBONDALE	BRERETON	LIMESTONE	5.0	241.0	
180.0	CARBONDALE	ANNA	BLACK SHALE	3.0	246.0	
178.0	CARBONDALE	HERRIN	COAL	4.0	248.0	

MAPID: 16502371000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.379723 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793436 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 3081.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT, D. & AURORA GAS, MCDANIELS DALE **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-316.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	742.0	
-54.0	CARBONDALE	SURVANT	COAL	0.8	480.0	
-119.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-169.0	CARBONDALE	DEKOVEN	COAL	4.0	595.0	
-189.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	615.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	5.0	643.0	
-254.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	680.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-268.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	694.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502458000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384338 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.80257 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 1640.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-140.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	560.0	
-230.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1220.0	BASE OF PENN.		UNCLASSIFIED	-	1640.0	

MAPID: 16502458000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384338 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.80257 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:**
SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
170.0	CARBONDALE	BRERETON	LIMESTONE	-	250.0	
-1366.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1786.0	
-1734.0			LIMESTONE	-	2154.0	
-2109.0		BASE BARLOW	LIMESTONE	-	2529.0	

MAPID: 16502458000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384338 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80257 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 3053.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, ETIENNE-PEABODY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-70.0	CARBONDALE	SURVANT	COAL	0.8	490.0	
-139.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-185.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-208.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	628.0	
-231.0	CARBONDALE	DAVIS	COAL	4.0	651.0	
-260.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	680.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-270.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	690.0	

MAPID: 16503442000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.388874 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791557 **DATE COLLECTED:** 12 / 0 / 1962
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 3051.0 **LOG TYPE:** Electric Log
SOURCE: BEELER, MIKE OIL CO., WHITE FLORA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-13.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	442.0	
-50.0	CARBONDALE	SURVANT	COAL	0.6	479.0	
-116.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-161.0	CARBONDALE	DEKOVEN	COAL	2.8	590.0	
-181.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	610.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-206.0	CARBONDALE	DAVIS	COAL	3.5	635.0	
-249.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	678.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-261.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503442000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.388874 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791557 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2530.0 **LOG TYPE:**
SOURCE: BEELER, MIKE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	BRERETON	LIMESTONE	-	239.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1792.0	
-1699.0			LIMESTONE	-	2128.0	
-2101.0		BASE BARLOW	LIMESTONE	-	2530.0	

MAPID: 16503675000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379714 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.800747 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2156.0 **LOG TYPE:**
SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1371.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1752.0			LIMESTONE	-	2156.0	

MAPID: 16526541000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.383112 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.801593 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 416.8 **LOGGED (FT.):** 370.2 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 104EC **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNKNOWN	17.0		
399.8	PATOKA		SANDSTONE	4.0	17.0	
395.8	PATOKA		SHALE	30.5	21.0	
365.3	PATOKA		LIMESTONE	3.0	51.5	
362.3	PATOKA		SHALE	18.0	54.5	
344.3	PATOKA		SANDSTONE	12.0	72.5	TRIVOLI?
332.3	SHELBURN		SHALE	70.0	84.5	
262.3	SHELBURN	PIASA	LIMESTONE	1.5	154.5	
260.8	SHELBURN		SHALE	31.0	156.0	
229.8	SHELBURN	DANVILLE	COAL	2.0	187.0	
227.8	SHELBURN		SHALE	20.5	189.0	
207.3	SHELBURN	BANKSTON FORK	LIMESTONE	9.0	209.5	
198.3	SHELBURN		SHALE	2.0	218.5	
196.3	SHELBURN		SANDSTONE	12.5	220.5	
183.8	SHELBURN		SHALE	6.6	233.0	
177.2	SHELBURN	BRERETON	LIMESTONE	4.6	239.6	
172.6	CARBONDALE	ANNA	SHALE	1.8	244.2	
170.8	CARBONDALE	HERRIN	COAL	4.7	246.0	
166.1	CARBONDALE		SHALE	4.0	250.7	
162.1	CARBONDALE		SANDSTONE	27.4	254.7	
134.8	CARBONDALE		SHALE	30.0	282.0	
104.8	CARBONDALE		SANDSTONE	18.0	312.0	
86.8	CARBONDALE		SHALE	29.3	330.0	
57.5	CARBONDALE	ST. DAVID	LIMESTONE	1.2	359.3	
56.3	CARBONDALE	TURNER MINE	SHALE	2.9	360.5	
53.4	CARBONDALE	SPRINGFIELD	COAL	4.9	363.4	
48.6	CARBONDALE		SHALE	2.0	368.2	

MAPID: 16500169000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' N line, 1320' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.39702 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.801674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 368.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
239.0	CARBONDALE	DANVILLE	COAL	1.8	186.0	
219.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	206.0	
204.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	11.0	221.0	
180.0	CARBONDALE	HERRIN	COAL	4.7	245.0	
172.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	32.0	253.0	
121.0	CARBONDALE	BRIAR HILL	COAL	1.8	304.0	
68.0	CARBONDALE	SPRINGFIELD	COAL	4.6	357.0	

MAPID: 16500169000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' N line, 1320' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.39702 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.801674 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 249.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
274.8	MODESTO	PIASA	LIMESTONE	1.0	150.2	
273.8	MODESTO		GRAY SHALE	35.2	151.2	
238.7	CARBONDALE	DANVILLE	COAL	1.8	186.3	
236.8	CARBONDALE		GRAY SHALE	8.3	188.2	
228.6	CARBONDALE	ALLENBY	COAL WITH SHALE PARTINGS	4.8	196.4	
223.7	CARBONDALE		GRAY SHALE	5.4	201.3	
218.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	206.7	
211.8	CARBONDALE	LAWSON	GRAY SHALE	8.0	213.2	
203.8	CARBONDALE	LAWSON	SANDSTONE	11.0	221.2	
192.8	CARBONDALE	LAWSON	GRAY SHALE	5.5	232.2	
187.3	CARBONDALE	BRERETON	LIMESTONE	4.8	237.7	
182.5	CARBONDALE	ANNA	BLACK SHALE	2.5	242.5	
180.0	CARBONDALE	HERRIN	COAL	4.7	245.0	

MAPID: 16500169000C **VERSION:** 3 **PROJECT:** NCRDS91

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1320' N line, 1320' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.39702 **GEOLOGIST:** FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.801674 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 368.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	21.0	0.0	
404.0	MODESTO		SHALE	31.5	21.0	
372.5	MODESTO		LIMESTONE	2.5	52.5	
370.0	MODESTO		SANDY SHALE	9.0	55.0	
361.0	MODESTO		SHALE	7.0	64.0	
354.0	MODESTO		SANDSTONE	13.0	71.0	
341.0	MODESTO		SANDY SHALE	6.0	84.0	GRAY
335.0	MODESTO		SANDY SHALE	3.0	90.0	
332.0	MODESTO		SHALE	15.0	93.0	
317.0	MODESTO		BLACK SHALE	2.5	108.0	
314.5	MODESTO		COAL	0.8	110.5	
313.7	MODESTO		UNDERCLAY	1.8	111.3	
312.0	MODESTO		SHALE	14.0	113.0	
298.0	MODESTO		SHALE	5.0	127.0	
293.0	MODESTO		SANDY SHALE	7.0	132.0	
286.0	MODESTO		SHALE	11.0	139.0	
275.0	MODESTO	PIASA	LIMESTONE	1.0	150.0	
274.0	MODESTO		SHALE	6.0	151.0	
268.0	MODESTO		BLACK SHALE	5.0	157.0	
263.0	MODESTO		SHALE	24.2	162.0	
238.8	CARBONDALE	DANVILLE	COAL	1.8	186.2	
237.0	CARBONDALE		UNDERCLAY	0.3	188.0	
236.7	CARBONDALE		SHALE	7.9	188.3	
228.7	CARBONDALE	"Allenby rider"	COAL	0.5	196.3	
228.2	CARBONDALE		SHALE	3.7	196.8	
224.6	CARBONDALE	ALLENBY	COAL	0.7	200.4	
223.9	CARBONDALE		SHALE	5.4	201.1	
218.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	206.5	
212.0	CARBONDALE		SHALE	8.0	213.0	
204.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	221.0	
193.0	CARBONDALE	ANVIL ROCK	SHALE	5.5	232.0	
187.5	CARBONDALE	BRERETON	LIMESTONE	4.8	237.5	
182.7	CARBONDALE	ANNA	BLACK SHALE	2.5	242.3	
180.2	CARBONDALE	HERRIN	COAL	4.7	244.8	
175.5	CARBONDALE		UNDERCLAY	3.5	249.5	
172.0	CARBONDALE		SHALY SANDSTONE	11.0	253.0	
161.0	CARBONDALE		SANDSTONE	14.0	264.0	
147.0	CARBONDALE		SHALY SANDSTONE	7.0	278.0	
140.0	CARBONDALE		SANDY SHALE	8.0	285.0	

132.0	CARBONDALE		SHALE	11.3	293.0	
120.7	CARBONDALE	BRIAR HILL	COAL	1.8	304.3	COULD BE SPLIT OF SPRINGFIELD COAL
119.0	CARBONDALE	DYKERSBURG	SANDY SHALE	41.0	306.0	
78.0	CARBONDALE	DYKERSBURG	SHALE	7.0	347.0	
71.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.8	354.0	
67.2	CARBONDALE	SPRINGFIELD	COAL	4.6	357.8	
62.6	CARBONDALE		SHALE	3.6	362.4	
59.0	CARBONDALE		SANDY SHALE	2.0	366.0	GRAY

MAPID: 16501539000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 430' N line, 330' E line of SW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.407307 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.800414 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:**

SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1381.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1784.0	
-1739.0			LIMESTONE	-	2142.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2536.0	

MAPID: 16501539000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 430' N line, 330' E line of SW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.407307 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.800414 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3018.0 **LOG TYPE:** Electric Log

SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
185.0	CARBONDALE	DANVILLE	COAL	-	218.0	
167.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	236.0	
157.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	10.0	246.0	
126.0	CARBONDALE	HERRIN	COAL	4.0	277.0	
83.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	14.0	320.0	
63.0	CARBONDALE	BRIAR HILL	COAL	-	340.0	
41.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.0	362.0	
1.0	CARBONDALE	SPRINGFIELD	COAL	8.0	402.0	
-29.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	31.0	432.0	
-61.0	CARBONDALE	HOUCHIN CREEK	COAL	-	464.0	

MAPID: 16501539000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 430' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407307 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.800414 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1630.0 **LOG TYPE:** Electric Log
SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-182.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	585.0	
-272.0	SPOON	DAVIS	UNCLASSIFIED	-	675.0	
-1227.0	BASE OF PENN.		UNCLASSIFIED	-	1630.0	

MAPID: 16501539000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 430' N line, 330' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.407307 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.800414 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3018.0 **LOG TYPE:** Electric Log
SOURCE: MIAMI OPERATING CO, INO ROBERT **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	459.0	
-106.0	CARBONDALE	SURVANT	COAL	0.5	509.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	583.0	
-225.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-245.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	648.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	5.0	672.0	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-318.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	721.0	
-355.0	TRADEWATER	MT. RORAH	COAL	1.2	758.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503096000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409564 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791485 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 3074.0 **LOG TYPE:** Electric Log
SOURCE: JACKSON & WRATHER CO, MAHONEY THOMAS EST **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-19.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-57.0	CARBONDALE	SURVANT	COAL	0.6	503.0	
-126.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-177.0	CARBONDALE	DEKOVEN	COAL	3.0	623.0	
-196.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	642.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-214.0	CARBONDALE	DAVIS	COAL	3.8	660.0	
-263.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	709.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-276.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	722.0	
-313.0	TRADEWATER	MT. RORAH	COAL	1.2	759.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503096000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.409564 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:**
SOURCE: JACKSON & WRATHER CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
163.0	CARBONDALE	BRERETON	LIMESTONE	-	283.0	
-1363.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1809.0	
-1728.0			LIMESTONE	-	2174.0	
-2106.0		BASE BARLOW	LIMESTONE	-	2552.0	

MAPID: 16503154000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402683 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.795183 **DATE COLLECTED:** 12 / 0 / 1957
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 3063.0 **LOG TYPE:** Electric Log
SOURCE: KING-STEVENSON DRLG, CARTER OIL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-51.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	472.0	
-94.0	CARBONDALE	SURVANT	COAL	2.0	515.0	
-155.0	CARBONDALE	COLCHESTER	COAL	0.5	576.0	
-203.0	CARBONDALE	DEKOVEN	COAL	3.0	624.0	
-203.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	624.0	
-225.0	CARBONDALE	DAVIS	COAL	5.0	646.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	705.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-298.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	719.0	

MAPID: 16503154000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.402683 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.795183 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 2533.0 **LOG TYPE:**
SOURCE: KING-STEVENSON DRLG **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
145.0	CARBONDALE	BRERETON	LIMESTONE	-	276.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1807.0	
-1752.0			LIMESTONE	-	2173.0	
-2112.0		BASE BARLOW	LIMESTONE	-	2533.0	

MAPID: 16500170000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.410737 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.797918 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 407.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
183.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	234.0	
174.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	20.0	243.0	
141.0	CARBONDALE	HERRIN	COAL	5.0	276.0	
134.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	22.0	283.0	
81.0	CARBONDALE	BRIAR HILL	COAL	2.0	336.0	
17.0	CARBONDALE	SPRINGFIELD	COAL	4.6	400.0	

MAPID: 16500170000C **VERSION:** 2 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.410737 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.797918 **DATE COLLECTED:** 12 / 20 / 1905

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 407.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION IMPRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	15.0	0.0	
402.0	MODESTO		SHALE	71.0	15.0	
331.0	MODESTO		LIMESTONE	4.0	86.0	
327.0	MODESTO		SHALE	24.0	90.0	
303.0	MODESTO		SANDSTONE	6.0	114.0	
297.0	MODESTO		SHALE	24.0	120.0	
273.0	MODESTO		SANDSTONE	6.0	144.0	
267.0	MODESTO		SHALE	31.0	150.0	
236.0	MODESTO		LIMESTONE	4.0	181.0	
232.0	MODESTO		SHALE	5.0	185.0	
227.0	MODESTO	PIASA	LIMESTONE	1.0	190.0	UNCERTAIN CORRELATION
226.0	CARBONDALE		SHALE	43.0	191.0	
183.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	234.0	
176.0	CARBONDALE		UNDERCLAY	2.0	241.0	
174.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	243.0	
154.0	CARBONDALE		SHALE	7.0	263.0	
147.0	CARBONDALE	BRERETON	LIMESTONE	3.0	270.0	
144.0	CARBONDALE	ANNA	BLACK SHALE	3.0	273.0	
141.0	CARBONDALE	HERRIN	COAL	5.0	276.0	
136.0	CARBONDALE		UNDERCLAY	2.0	281.0	
134.0	CARBONDALE		SANDSTONE	22.0	283.0	
112.0	CARBONDALE		SHALE	31.0	305.0	
81.0	CARBONDALE	BRIAR HILL	COAL	2.0	336.0	
79.0	CARBONDALE		UNDERCLAY	2.0	338.0	
77.0	CARBONDALE		SHALE	18.0	340.0	
59.0	CARBONDALE		LIMESTONE	2.0	358.0	
57.0	CARBONDALE		GRAY SHALE	27.0	360.0	
30.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	387.0	
28.0	CARBONDALE	TURNER MINE	BLACK SHALE	6.0	389.0	
22.0	CARBONDALE		SHALE	5.0	395.0	
17.0	CARBONDALE	SPRINGFIELD	COAL	4.0	400.0	
13.0	CARBONDALE		SANDSTONE	3.0	404.0	

MAPID: 16500170000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.410737 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.797918 **DATE COLLECTED:** 12 / 20 / 1905

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 407.1 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	15.0	0.0	
402.0	MODESTO		SANDY SHALE	10.0	15.0	
392.0	MODESTO		SHALE	61.0	25.0	
331.0	MODESTO		LIMESTONE	4.0	86.0	
327.0	MODESTO		SANDY SHALE	23.0	90.0	
304.0	MODESTO		SHALE	1.0	113.0	
303.0	MODESTO		SANDSTONE	6.0	114.0	
297.0	MODESTO		SHALE	24.0	120.0	
273.0	MODESTO		SANDSTONE	6.0	144.0	
267.0	MODESTO		SANDY SHALE	31.0	150.0	
236.0	MODESTO		LIMESTONE	4.0	181.0	
232.0	MODESTO		SHALE	5.0	185.0	
227.0	MODESTO	PIASA	LIMESTONE	1.0	190.0	
226.0			SHALE	6.0	191.0	
220.0			SHALE	37.0	197.0	
183.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	234.0	
176.0	CARBONDALE		CLAYSTONE	2.0	241.0	
174.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	243.0	
154.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	263.0	
147.0	CARBONDALE	BRERETON	LIMESTONE	3.0	270.0	
144.0	CARBONDALE	ANNA	SHALE	3.0	273.0	
141.0	CARBONDALE	HERRIN	COAL	5.0	276.0	
136.0	CARBONDALE		UNDERCLAY	2.0	281.0	
134.0	CARBONDALE		SANDSTONE	22.0	283.0	
112.0	CARBONDALE		SANDY SHALE	31.0	305.0	
81.0	CARBONDALE	BRIAR HILL	COAL	2.0	336.0	
79.0	CARBONDALE		UNDERCLAY	2.0	338.0	
77.0	CARBONDALE		SHALE	18.0	340.0	
59.0	CARBONDALE		LIMESTONE	2.0	358.0	
57.0	CARBONDALE		SHALE	27.0	360.0	
30.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	387.0	
28.0	CARBONDALE	TURNER MINE	BLACK SHALE	6.0	389.0	
22.0	CARBONDALE	DYKERSBURG	SHALE	5.0	395.0	
17.0	CARBONDALE	SPRINGFIELD	COAL	4.6	400.0	
12.4	CARBONDALE		SANDSTONE	2.5	404.6	

MAPID: 16502599000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418737 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798795 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 3030.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, WILLIS J A COMM 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-36.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	468.0	
-77.0	CARBONDALE	SURVANT	COAL	0.8	509.0	
-141.0	CARBONDALE	COLCHESTER	COAL	0.5	573.0	
-188.0	CARBONDALE	DEKOVEN	COAL	3.0	620.0	
-204.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	636.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-221.0	CARBONDALE	DAVIS	COAL	3.0	653.0	
-268.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	700.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-283.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	715.0	
-318.0	TRADEWATER	MT. RORAH	COAL	1.2	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502599000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418737 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798795 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2551.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
166.0	CARBONDALE	BRERETON	LIMESTONE	-	266.0	
-1359.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1718.0			LIMESTONE	-	2150.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2551.0	

MAPID: 16503058000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.411871 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.795152 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	BRERETON	LIMESTONE	-	272.0	
-1372.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	
-1740.0			LIMESTONE	-	2171.0	
-2119.0		BASE BARLOW	LIMESTONE	-	2550.0	

MAPID: 16503058000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.411871 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.795152 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.0	MODESTO	PIASA	LIMESTONE	4.0	186.0	
241.0	MODESTO		GRAY SHALE	30.0	190.0	
211.0	CARBONDALE	DANVILLE	COAL	2.0	220.0	
209.0	CARBONDALE		SHALE	17.0	222.0	
192.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	239.0	
188.0	CARBONDALE	LAWSON	SILTY SHALE	11.0	243.0	
177.0	CARBONDALE	LAWSON	SANDSTONE	10.0	254.0	
167.0	CARBONDALE	LAWSON	SILTY SHALE	2.0	264.0	
165.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	266.0	
159.0	CARBONDALE	BRERETON	LIMESTONE	6.0	272.0	
153.0	CARBONDALE	ANNA	BLACK SHALE	2.0	278.0	
151.0	CARBONDALE	HERRIN	COAL	4.0	280.0	

MAPID: 16503058000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.411871 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.795152 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 1640.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-159.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	590.0	
-239.0	SPOON	DAVIS	UNCLASSIFIED	-	670.0	
-1209.0	BASE OF PENN.		UNCLASSIFIED	-	1640.0	

MAPID: 16503058000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.411871 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.795152 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 3045.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, BERTINO ROBERT M **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-81.0	CARBONDALE	SURVANT	COAL	0.5	512.0	
-157.0	CARBONDALE	COLCHESTER	COAL	0.5	588.0	
-199.0	CARBONDALE	DEKOVEN	COAL	3.5	630.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	653.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-240.0	CARBONDALE	DAVIS	COAL	4.0	671.0	
-281.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	712.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-296.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	727.0	
-331.0	TRADEWATER	MT. RORAH	COAL	1.2	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503084000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416421 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.791476 **DATE COLLECTED:** 1 / 0 / 1957
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2993.0 **LOG TYPE:** Electric Log
SOURCE: MIAMI OPERATING CO, CARR SAM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-10.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	413.0	
-47.0	CARBONDALE	SURVANT	COAL	0.8	450.0	
-117.0	CARBONDALE	COLCHESTER	COAL	0.5	520.0	
-162.0	CARBONDALE	DEKOVEN	COAL	4.0	565.0	
-181.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	584.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-199.0	CARBONDALE	DAVIS	COAL	4.0	602.0	
-249.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	652.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-262.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	665.0	
-296.0	TRADEWATER	MT. RORAH	COAL	1.2	699.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503084000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416421 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:**
SOURCE: MIAMI OPERATING CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	BRERETON	LIMESTONE	-	213.0	
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1761.0	
-1693.0			LIMESTONE	-	2096.0	
-2106.0		BASE BARLOW	LIMESTONE	-	2509.0	

MAPID: 16503427000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.411882 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798821 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2547.0 **LOG TYPE:**
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
144.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1382.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1796.0	
-1731.0			LIMESTONE	-	2145.0	
-2133.0		BASE BARLOW	LIMESTONE	-	2547.0	

MAPID: 16503683000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 430' S line, 330' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418739 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.799071 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 2152.0 **LOG TYPE:**
SOURCE: JAGUAR OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1790.0	
-1720.0			LIMESTONE	-	2152.0	

MAPID: 16500172000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' S line, 0' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.447529 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.790342 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.0	CARBONDALE	DANVILLE	COAL	2.0	188.0	
179.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	11.0	191.0	
161.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	209.0	
153.0	CARBONDALE	ANVIL ROCK		6.0	217.0	
122.0	CARBONDALE	HERRIN	COAL	4.5	248.0	
116.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	40.0	254.0	
61.0	CARBONDALE	BRIAR HILL	COAL	1.0	309.0	
60.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	2.0	310.0	
-26.0	CARBONDALE	SPRINGFIELD	COAL	6.3	396.0	

MAPID: 16500172000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' S line, 0' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.447529 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.790342 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 253.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
181.5	CARBONDALE	DANVILLE	COAL	2.0	188.5	
179.5	CARBONDALE		SHALE & SANDSTONE	14.0	190.5	
165.5	CARBONDALE	ALLENBY	COAL	1.0	204.5	
164.5	CARBONDALE		CLAYSTONE & SHALE	4.0	205.5	
160.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	209.5	
154.5	CARBONDALE	LAWSON	CLAYSTONE	2.0	215.5	
152.5	CARBONDALE	LAWSON	SANDSTONE	6.0	217.5	
146.5	CARBONDALE	LAWSON	GRAY SHALE	15.0	223.5	
131.5	CARBONDALE	LAWSON	BLACK SHALE	4.0	238.5	
127.5	CARBONDALE	BRERETON	LIMESTONE	5.0	242.5	
122.5	CARBONDALE	ANNA	BLACK SHALE	1.5	247.5	
121.0	CARBONDALE	HERRIN	COAL	4.5	249.0	

MAPID: 16500172000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.447529 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.790342 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 402.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	40.0	0.0	
330.0	MODESTO		SANDY SHALE	23.0	40.0	
307.0	MODESTO		LIMESTONE	3.0	63.0	
304.0	MODESTO		SANDY SHALE	30.0	66.0	
274.0	MODESTO		COAL	1.0	96.0	
273.0	MODESTO		UNDERCLAY	1.0	97.0	
272.0	MODESTO		BLACK SHALE	24.0	98.0	
248.0	MODESTO		SHALE	12.0	122.0	
236.0	MODESTO		SANDSTONE	4.0	134.0	
232.0	MODESTO		SHALE	20.0	138.0	
212.0	MODESTO		BLACK SHALE	14.0	158.0	
198.0	MODESTO		SHALE	13.0	172.0	
185.0	MODESTO		SHALE	3.0	185.0	
182.0	CARBONDALE	DANVILLE	COAL	2.0	188.0	
180.0	CARBONDALE		UNDERCLAY	1.0	190.0	
179.0	CARBONDALE		SANDSTONE	11.0	191.0	
168.0	CARBONDALE		SHALE	2.0	202.0	
166.0	CARBONDALE	ALLENBY	COAL	1.0	204.0	
165.0	CARBONDALE		UNDERCLAY	1.0	205.0	
164.0	CARBONDALE		SHALE	3.0	206.0	
161.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	209.0	
155.0	CARBONDALE		CLAYSTONE	2.0	215.0	
153.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	217.0	
147.0	CARBONDALE	ANVIL ROCK	SHALE	15.0	223.0	
132.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	238.0	
128.0	CARBONDALE	BRERETON	LIMESTONE	5.0	242.0	
123.0	CARBONDALE	ANNA	SHALE	1.5	247.0	
121.5	CARBONDALE	HERRIN	COAL	4.5	248.5	
117.0	CARBONDALE		UNDERCLAY	1.0	253.0	
116.0	CARBONDALE		SANDSTONE	40.0	254.0	
76.0	CARBONDALE		SANDY SHALE	13.0	294.0	
63.0	CARBONDALE		SHALE	2.0	307.0	
61.0	CARBONDALE		COAL	1.0	309.0	
60.0	CARBONDALE		SANDSTONE	2.0	310.0	
58.0	CARBONDALE		SANDY SHALE	22.0	312.0	
36.0	CARBONDALE		BLACK SHALE	8.0	334.0	
28.0	CARBONDALE	BRIAR HILL	BONE COAL	2.0	342.0	
26.0	CARBONDALE	DYKERSBURG	SHALE	52.0	344.0	
-26.0	CARBONDALE	SPRINGFIELD	COAL	6.3	396.0	

MAPID: 16500845000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1929' S line, 1099' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.443742 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.795707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: POTTER LAWRENCE ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-2152.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502576000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441784 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1645.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-209.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	595.0	
-284.0	SPOON	DAVIS	UNCLASSIFIED	-	670.0	
-1259.0	BASE OF PENN.		UNCLASSIFIED	-	1645.0	

MAPID: 16502576000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441784 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2531.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1413.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1803.0	
-1763.0			LIMESTONE	-	2153.0	
-2141.0		BASE BARLOW	LIMESTONE	-	2531.0	

MAPID: 16502576000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.441784 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796848 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2919.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., SUTTON FRANK H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	473.0	
-134.0	CARBONDALE	SURVANT	COAL	0.7	520.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-248.0	CARBONDALE	DEKOVEN	COAL	3.3	634.0	
-270.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	656.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-285.0	CARBONDALE	DAVIS	COAL	4.5	671.0	
-334.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	720.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-344.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	730.0	
-369.0	TRADEWATER	MT. RORAH	COAL	2.5	755.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502372000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462471 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802173 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:** Electric Log
SOURCE: SHURE OIL CORP., GATES LOIS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	SURVANT	COAL	0.8	512.0	
-208.0	CARBONDALE	COLCHESTER	COAL	0.5	591.0	
-242.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	652.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-279.0	CARBONDALE	DAVIS	COAL	3.8	662.0	
-328.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	711.0	
-337.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	720.0	
-372.0	TRADEWATER	MT. RORAH	COAL	1.2	755.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502372000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.462471 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802173 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:**
SOURCE: SHURE OIL CORP. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1390.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1773.0	
-1751.0			LIMESTONE	-	2134.0	
-2146.0		BASE BARLOW	LIMESTONE	-	2529.0	

MAPID: 16502373000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448753 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802313 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2393.0 **LOG TYPE:** Electric Log
SOURCE: SMITH, HENRY P., GIBSON-MABRY COMM **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-169.0	CARBONDALE	SURVANT	COAL	0.6	540.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	623.0	
-291.0	CARBONDALE	DEKOVEN	COAL	2.5	662.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	675.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-319.0	CARBONDALE	DAVIS	COAL	4.0	690.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	740.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	754.0	
-418.0	TRADEWATER	MT. RORAH	COAL	1.2	789.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502373000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.448753 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2164.0 **LOG TYPE:**
SOURCE: SMITH, HENRY P. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1431.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1802.0	
-1793.0			LIMESTONE	-	2164.0	

MAPID: 16502374000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 345' S line, 330' W line of NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455601 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.802284 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1645.0 **LOG TYPE:** Electric Log

SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-227.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	612.0	
-291.0	SPOON	DAVIS	UNCLASSIFIED	-	676.0	
-1260.0	BASE OF PENN.		UNCLASSIFIED	-	1645.0	

MAPID: 16502374000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 345' S line, 330' W line of NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.455601 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.802284 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:**

SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1403.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1788.0	
-1765.0			LIMESTONE	-	2150.0	
-2159.0		BASE BARLOW	LIMESTONE	-	2544.0	

MAPID: 16502374000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 345' S line, 330' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.455601 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802284 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2905.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., HIRST-DEVILLE ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	489.0	
-150.0	CARBONDALE	SURVANT	COAL	0.5	535.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-255.0	CARBONDALE	DEKOVEN	COAL	3.0	640.0	
-280.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	665.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	673.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	729.0	
-357.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	742.0	
-390.0	TRADEWATER	MT. RORAH	COAL	1.2	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502375000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457906 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.804089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1770.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1376.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1770.0	

MAPID: 16502439000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.460132 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.791128 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2569.0 **LOG TYPE:**
SOURCE: DAVIS & MENHALL DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
117.0	CARBONDALE	BRERETON	LIMESTONE	-	279.0	
-1427.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1823.0	
-1780.0			LIMESTONE	-	2176.0	
-2173.0		BASE BARLOW	LIMESTONE	-	2569.0	

MAPID: 16502439000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.460132 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.791128 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 290.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	190.0	
198.0	MODESTO		SHALE	24.0	195.0	
174.0	CARBONDALE	DANVILLE	COAL	1.0	219.0	
173.0	CARBONDALE		SHALE	15.0	220.0	
158.0	CARBONDALE	GALUM	LIMESTONE	4.0	235.0	
154.0	CARBONDALE	ALLENBY	COAL	0.5	239.0	
153.5	CARBONDALE		CLAYSTONE	8.5	239.5	
145.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	248.0	
140.0	CARBONDALE	LAWSON	CLAYSTONE	2.0	253.0	
138.0	CARBONDALE	LAWSON	LIMESTONE & SHALE	3.0	255.0	
135.0	CARBONDALE	LAWSON	SILTY SHALE	14.0	258.0	
121.0	CARBONDALE	LAWSON	DARK GRAY SHALE	8.0	272.0	
113.0	CARBONDALE	BRERETON	LIMESTONE	4.0	280.0	
109.0	CARBONDALE	ANNA	BLACK SHALE	2.0	284.0	
107.0	CARBONDALE	HERRIN	COAL	4.0	286.0	

MAPID: 16502439000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.460132 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791128 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2937.0 **LOG TYPE:** Electric Log

SOURCE: DAVIS & MENHALL DRLG., BARTON-BEAN P M **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-92.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	485.0	
-139.0	CARBONDALE	SURVANT	COAL	0.5	532.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-252.0	CARBONDALE	DEKOVEN	COAL	3.0	645.0	
-272.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	665.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-291.0	CARBONDALE	DAVIS	COAL	4.0	684.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	722.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-342.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	735.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.2	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502487000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457878 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.798528 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3005.0 **LOG TYPE:** Electric Log
SOURCE: MCKELVY & SIPOHA DRLG., BARTON R C **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-143.0	CARBONDALE	SURVANT	COAL	0.6	525.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-253.0	CARBONDALE	DEKOVEN	COAL	3.0	635.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	653.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	4.0	665.0	
-333.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	715.0	
-346.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	728.0	
-378.0	TRADEWATER	MT. RORAH	COAL	1.2	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502487000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.457878 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.798528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2557.0 **LOG TYPE:**
SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1418.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1800.0	
-1770.0			LIMESTONE	-	2152.0	
-2175.0		BASE BARLOW	LIMESTONE	-	2557.0	

MAPID: 16503407000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 530' N line, 430' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.459831 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.803515 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
119.0	CARBONDALE	BRERETON	LIMESTONE	-	270.0	
-1386.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1775.0	
-1745.0			LIMESTONE	-	2134.0	

MAPID: 16502440000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469456 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794724 **DATE COLLECTED:** 3 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2954.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., W O-FULKERSON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-107.0	CARBONDALE	SURVANT	COAL	0.7	480.0	
-183.0	CARBONDALE	COLCHESTER	COAL	0.5	556.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.0	589.0	
-237.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	4.0	623.0	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	675.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-317.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	690.0	
-356.0	TRADEWATER	MT. RORAH	COAL	1.2	729.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502440000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.469456 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.794724 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2504.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1387.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1740.0			LIMESTONE	-	2113.0	
-2131.0		BASE BARLOW	LIMESTONE	-	2504.0	

MAPID: 16502485000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.4742 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.8002 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2990.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, BRAMLET W H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-102.0	CARBONDALE	SURVANT	COAL	0.5	480.0	
-176.0	CARBONDALE	COLCHESTER	COAL	0.5	554.0	
-200.0	CARBONDALE	DEKOVEN	COAL	2.5	578.0	
-222.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	600.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-232.0	CARBONDALE	DAVIS	COAL	4.0	610.0	
-282.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	660.0	
-292.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	670.0	
-327.0	TRADEWATER	MT. RORAH	COAL	1.2	705.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502485000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.4742 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.8002 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1353.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1731.0	
-1706.0			LIMESTONE	-	2084.0	
-2108.0		BASE BARLOW	LIMESTONE	-	2486.0	

MAPID: 16503011000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468924 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.803957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2514.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
149.0	CARBONDALE	BRERETON	LIMESTONE	-	243.0	
-1361.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1753.0	
-1719.0			LIMESTONE	-	2111.0	
-2122.0		BASE BARLOW	LIMESTONE	-	2514.0	

MAPID: 16503011000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468924 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.803957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.0	MODESTO	PIASA	LIMESTONE & SHALE	5.0	157.0	
230.0	MODESTO		SHALE	21.0	162.0	
209.0	CARBONDALE	DANVILLE	COAL	2.0	183.0	
207.0	CARBONDALE		SHALE & SANDSTONE	18.0	185.0	
189.0	CARBONDALE	ALLENBY	COAL	0.5	203.0	
188.5	CARBONDALE		CLAYSTONE	6.5	203.5	
182.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	210.0	
178.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	214.0	
158.0	CARBONDALE	LAWSON	DARK GRAY SHALE	10.0	234.0	
148.0	CARBONDALE	BRERETON	LIMESTONE	5.5	244.0	
142.5	CARBONDALE	ANNA	BLACK SHALE	1.5	249.5	
141.0	CARBONDALE	HERRIN	COAL	4.0	251.0	

MAPID: 16503011000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468924 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.803957 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-198.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	590.0	
-258.0	SPOON	DAVIS	UNCLASSIFIED	-	650.0	
-1198.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	

MAPID: 16503011000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 490' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.468924 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.803957 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2982.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD, BRAMLET W H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-63.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-103.0	CARBONDALE	SURVANT	COAL	0.5	495.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	591.0	
-231.0	CARBONDALE	DEKOVEN	COAL	3.0	623.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	643.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-260.0	CARBONDALE	DAVIS	COAL	4.0	652.0	
-307.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	699.0	
-316.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	708.0	
-348.0	TRADEWATER	MT. RORAH	COAL	1.2	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503372000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 720' N line, 920' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.481611 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.802676 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2475.0 **LOG TYPE:**
SOURCE: KAPP, LOUIS H., JR. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
146.0	CARBONDALE	BRERETON	LIMESTONE	-	252.0	
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1733.0	
-1701.0			LIMESTONE	-	2099.0	
-2077.0		BASE BARLOW	LIMESTONE	-	2475.0	

MAPID: 16500173000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1460' N line, 250' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.483947 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.78598 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1572.0 **LOG TYPE:** Drillers Log
SOURCE: LAWRENCEVILLE OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-207.0	SPOON	DAVIS	UNCLASSIFIED	-	582.0	
-1197.0	BASE OF PENN.		UNCLASSIFIED	-	1572.0	

MAPID: 16500174000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 0' N line, 0' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.484806 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.790005 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 348.0 **LOG TYPE:** Drillers Log
SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
186.0	CARBONDALE	HERRIN	COAL	4.0	204.0	
131.0	CARBONDALE	BRIAR HILL	COAL	1.0	259.0	
53.0	CARBONDALE	SPRINGFIELD	COAL	5.5	337.0	

MAPID: 16500174000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.484806 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.790005 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 208.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.0	CARBONDALE		SHALE & SANDSTONE	24.0	140.0	
226.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	164.0	
221.0	CARBONDALE	LAWSON	SHALE	27.0	169.0	
194.0	CARBONDALE	BRERETON	LIMESTONE	3.0	196.0	
191.0	CARBONDALE	ANNA	BLACK SHALE	4.0	199.0	
187.0	CARBONDALE	ENERGY	GRAY SHALE	1.0	203.0	
186.0	CARBONDALE	HERRIN	COAL	4.0	204.0	

MAPID: 16500174000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.484806 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.790005 **DATE COLLECTED:** 5 / 12 / 1906

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 348.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	20.0	0.0	
370.0	MODESTO		SANDSTONE	2.0	20.0	
368.0	MODESTO		SHALE	50.0	22.0	
318.0	MODESTO		BLACK SHALE	3.0	72.0	
315.0	MODESTO		COAL	0.5	75.0	
314.5	MODESTO		UNDERCLAY	1.0	75.5	
313.5	MODESTO		SANDY SHALE	9.5	76.5	
304.0	MODESTO		SANDSTONE	10.0	86.0	
294.0	MODESTO		SHALE	14.0	96.0	
280.0	MODESTO		SHALE	2.0	110.0	W/ COAL
278.0	MODESTO		UNDERCLAY	1.0	112.0	
277.0	MODESTO		SANDSTONE	4.0	113.0	
273.0	MODESTO		SHALE	1.0	117.0	
272.0	MODESTO		SANDSTONE	2.0	118.0	
270.0	MODESTO		SHALE	19.0	120.0	
251.0	MODESTO		CLAYSTONE	1.0	139.0	
250.0	MODESTO		SANDSTONE	4.0	140.0	
246.0	CARBONDALE		SANDY SHALE	20.0	144.0	#7 COAL ERODED DEPTH - 144
226.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	164.0	
221.0	CARBONDALE	ANVIL ROCK	SHALE	27.0	169.0	
194.0	CARBONDALE	BRERETON	LIMESTONE	3.0	196.0	
191.0	CARBONDALE	ANNA	BLACK SHALE	4.0	199.0	
187.0	CARBONDALE	ANNA	SHALE	1.0	203.0	
186.0	CARBONDALE	HERRIN	COAL	4.0	204.0	
182.0	CARBONDALE		UNDERCLAY	3.0	208.0	
179.0	CARBONDALE		SANDSTONE	7.0	211.0	
172.0	CARBONDALE		SANDSTONE	7.0	218.0	
165.0	CARBONDALE		SANDSTONE	3.0	225.0	
162.0	CARBONDALE		SANDY SHALE	30.0	228.0	
132.0	CARBONDALE		SHALE	1.0	258.0	
131.0	CARBONDALE	BRIAR HILL	COAL	1.0	259.0	
130.0	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	260.0	
118.0	CARBONDALE	DYKERSBURG	SHALE	3.0	272.0	
115.0	CARBONDALE	DYKERSBURG	LIMESTONE	0.5	275.0	
114.5	CARBONDALE	DYKERSBURG	SHALE	1.5	275.5	
113.0	CARBONDALE	DYKERSBURG	CALCAREOUS SHALE	6.0	277.0	
107.0	CARBONDALE	DYKERSBURG	SANDY SHALE	38.0	283.0	
69.0	CARBONDALE	DYKERSBURG	CLAYSTONE	16.8	321.0	
52.2	CARBONDALE	SPRINGFIELD	COAL	5.5	337.8	

46.7	CARBONDALE	UNDERCLAY	4.5	343.3

MAPID: 16500175000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.482441 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788198 **DATE COLLECTED:** 3 / 0 / 1906

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 348.7 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	22.0	0.0	
356.0	MODESTO		SHALE	31.0	22.0	
325.0	MODESTO		BLACK SHALE	2.0	53.0	
323.0	MODESTO		COAL	0.5	55.0	
322.5	MODESTO		UNDERCLAY	0.5	55.5	
322.0	MODESTO		SHALE	10.0	56.0	
312.0	MODESTO		SANDY SHALE	20.0	66.0	
292.0	MODESTO		SHALE	12.0	86.0	
280.0	MODESTO		CALCAREOUS SHALE	15.0	98.0	
265.0	MODESTO		LIMESTONE	4.0	113.0	
261.0	MODESTO		BLACK SHALE	2.0	117.0	
259.0	MODESTO		COAL	2.0	119.0	
257.0	MODESTO		UNDERCLAY	1.0	121.0	
256.0	MODESTO		SHALE	6.0	122.0	
250.0	MODESTO		SANDSTONE	20.0	128.0	
230.0	MODESTO		SHALE	8.0	148.0	
222.0	MODESTO		BLACK SHALE	1.0	156.0	
221.0	CARBONDALE	DANVILLE	COAL	2.0	157.0	
219.0	CARBONDALE		UNDERCLAY	1.0	159.0	
218.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	160.0	
214.0	CARBONDALE		SHALE	2.0	164.0	
212.0	CARBONDALE	ANVIL ROCK	SANDSTONE	42.0	166.0	
170.0	CARBONDALE		SHALE	2.0	208.0	
168.0	CARBONDALE		SHALE	5.0	210.0	
163.0	CARBONDALE		SHALE	2.0	215.0	
161.0	CARBONDALE		SANDSTONE	6.0	217.0	COAL #6 ERODED DEPTH = 217
155.0	CARBONDALE		SHALE	20.0	223.0	
135.0	CARBONDALE		BLACK SHALE	4.0	243.0	
131.0	CARBONDALE		SHALE	18.0	247.0	
113.0	CARBONDALE	BRIAR HILL	BLACK SHALE	2.0	265.0	W/ COAL
111.0	CARBONDALE		SHALE	3.0	267.0	
108.0	CARBONDALE		LIMESTONE	1.0	270.0	
107.0	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	271.0	
90.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	288.0	
86.0	CARBONDALE	DYKERSBURG	SANDY SHALE	46.0	292.0	
40.0	CARBONDALE	DYKERSBURG	SHALE	5.0	338.0	
35.0	CARBONDALE	SPRINGFIELD	COAL	5.7	343.0	

MAPID: 16500175000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.482441 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.788198 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 349.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG COAL MING **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
221.0	CARBONDALE	DANVILLE	COAL	2.0	157.0	
218.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	160.0	
212.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	42.0	166.0	
161.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	6.0	217.0	
113.0	CARBONDALE	BRIAR HILL	COAL	2.0	265.0	
90.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	4.0	288.0	
35.0	CARBONDALE	SPRINGFIELD	COAL	5.7	343.0	

MAPID: 16500176000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.456774 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.782964 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 355.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
222.0	CARBONDALE	DANVILLE	COAL	2.0	148.0	
220.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	9.0	150.0	
198.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	172.0	
163.0	CARBONDALE	HERRIN	COAL	5.0	207.0	
145.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	25.0	225.0	
99.0	CARBONDALE	BRIAR HILL	COAL	1.0	271.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	6.0	349.0	

MAPID: 16500176000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456774 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.782964 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 212.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.0	MODESTO	PIASA	LIMESTONE	5.0	123.0	
242.0	MODESTO		GRAY SHALE	23.0	128.0	
219.0	CARBONDALE	DANVILLE	COAL	2.0	151.0	
217.0	CARBONDALE		SHALE & SANDSTONE	21.0	153.0	
196.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	174.0	
189.0	CARBONDALE	LAWSON	CLAYSTONE	3.0	181.0	
186.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	184.0	
174.0	CARBONDALE	LAWSON	BLACK SHALE	6.0	196.0	
168.0	CARBONDALE	BRERETON	LIMESTONE	4.0	202.0	
164.0	CARBONDALE	ANNA	BLACK SHALE	1.0	206.0	
163.0	CARBONDALE	HERRIN	COAL	5.0	207.0	

MAPID: 16500176000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456774 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.782964 **DATE COLLECTED:** 11 / 7 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 355.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	53.0	0.0	
317.0	MODESTO		SANDSTONE	7.0	53.0	
310.0	MODESTO		SANDY SHALE	16.0	60.0	
294.0	MODESTO		COAL	1.0	76.0	
293.0	MODESTO		UNDERCLAY	1.0	77.0	
292.0	MODESTO		SANDY SHALE	13.0	78.0	
279.0	MODESTO		SANDSTONE	9.0	91.0	
270.0	MODESTO		SANDY SHALE	16.0	100.0	
254.0	MODESTO		SHALE	1.0	116.0	
253.0	MODESTO		COAL	0.5	117.0	
252.5	MODESTO		UNDERCLAY	2.5	117.5	
250.0	MODESTO		LIMESTONE	5.0	120.0	
245.0	MODESTO		SHALE	5.0	125.0	
240.0	MODESTO	PIASA	LIMESTONE	1.0	130.0	
239.0	MODESTO		SHALE	16.0	131.0	
223.0	MODESTO		SHALE	1.0	147.0	
222.0	CARBONDALE	DANVILLE	COAL	2.0	148.0	
220.0	CARBONDALE		SANDSTONE	9.0	150.0	
211.0	CARBONDALE		SHALE	13.0	159.0	
198.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	172.0	
191.0	CARBONDALE		UNDERCLAY	3.0	179.0	
188.0	CARBONDALE	ANVIL ROCK	SHALE	12.0	182.0	
176.0	CARBONDALE	ANVIL ROCK	BLACK SHALE	8.0	194.0	
168.0	CARBONDALE	BRERETON	LIMESTONE	4.0	202.0	
164.0	CARBONDALE	ANNA	SHALE	1.0	206.0	
163.0	CARBONDALE	HERRIN	COAL	5.0	207.0	
158.0	CARBONDALE		UNDERCLAY	2.0	212.0	
156.0	CARBONDALE		SHALE	11.0	214.0	
145.0	CARBONDALE		SANDSTONE	25.0	225.0	
120.0	CARBONDALE		SANDY SHALE	19.0	250.0	
101.0	CARBONDALE		SHALE	2.0	269.0	
99.0	CARBONDALE	BRIAR HILL	COAL	1.0	271.0	
98.0	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	272.0	
76.0	CARBONDALE	DYKERSBURG	LIMESTONE	1.5	294.0	
74.5	CARBONDALE	DYKERSBURG	BLACK SHALE	6.5	295.5	
68.0	CARBONDALE	DYKERSBURG	SHALE	47.0	302.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	6.0	349.0	

MAPID: 16526165000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463564 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.788346 **DATE COLLECTED:** 3 / 14 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 386.8 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY E-101 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0	CLAY
-	PLEISTOCENE		SANDY SHALE	7.0	27.0	
-	PLEISTOCENE		SANDSTONE	11.0	34.0	WITH SHALE
-	PLEISTOCENE		SANDY SHALE	45.0	45.0	GRAY
-	PLEISTOCENE		LIMESTONE	2.0	90.0	
-	PLEISTOCENE		SANDY SHALE	52.0	92.0	GRAY
-	PLEISTOCENE		BLACK SHALE	2.0	144.0	
-	CARBONDALE	DANVILLE	COAL	1.0	146.0	
-	CARBONDALE		GRAY SHALE	3.0	147.0	
-	CARBONDALE		GRAY SHALE	11.0	150.0	ROCKY
-	CARBONDALE		GRAY SHALE	21.0	161.0	SANDSTONE BANDS
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	182.0	GRAY-WHITE
-	CARBONDALE		SANDY SHALE	3.0	185.5	GRAY
-	CARBONDALE		LIMESTONE	1.0	188.5	GRAY
-	CARBONDALE		BLACK SHALE	2.5	189.5	
-	CARBONDALE		SANDY SHALE	16.0	192.0	GRAY
-	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	208.0	WHITE
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	216.0	GRAY BLUE
-	CARBONDALE		GRAY SHALE	6.0	232.0	
-	CARBONDALE	BRERETON	LIMESTONE	3.0	238.0	BLUE
-	CARBONDALE	ANNA	BLACK SHALE	2.8	241.0	
-	CARBONDALE	HERRIN	COAL	4.4	243.8	
-	CARBONDALE		UNDERCLAY	3.8	248.2	
-	CARBONDALE		SANDSTONE	23.0	252.0	WHITE
-	CARBONDALE		SANDY SHALE	23.0	275.0	GRAY
-	CARBONDALE	BRIAR HILL	COAL	1.0	298.0	
-	CARBONDALE		SANDY SHALE	3.0	299.0	
-	CARBONDALE		SANDSTONE	14.0	302.0	GRAY
-	CARBONDALE		BLACK SHALE	2.0	316.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	61.3	318.0	GRAY
-	CARBONDALE	SPRINGFIELD	COAL	6.7	379.3	
-	CARBONDALE		UNDERCLAY	0.6	386.0	

MAPID: 16500177000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.435928 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788628 **DATE COLLECTED:** 6 / 0 / 1905

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 336.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	18.0	0.0	
353.0	MODESTO		SHALE	64.0	18.0	
289.0	MODESTO		SANDSTONE	12.0	82.0	
277.0	MODESTO		SHALE	9.0	94.0	
268.0	MODESTO		COAL	0.5	103.0	
267.5	MODESTO		UNDERCLAY	0.5	103.5	
267.0	MODESTO		SANDSTONE	8.0	104.0	
259.0	MODESTO		SHALE	30.0	112.0	
229.0	CARBONDALE	DANVILLE	COAL	2.3	142.0	
226.7	CARBONDALE	ANVIL ROCK	SANDSTONE	23.0	144.3	
203.7	CARBONDALE	HERRIN	COAL	4.2	167.3	
199.5	CARBONDALE		UNDERCLAY	1.0	171.5	
198.5	CARBONDALE		SANDSTONE	15.0	172.5	
183.5	CARBONDALE		LIMESTONE	4.0	187.5	
179.5	CARBONDALE		BLACK SHALE	3.0	191.5	
176.5	CARBONDALE		CLAYSTONE	4.1	194.5	
172.4	CARBONDALE		SANDSTONE	3.5	198.6	
168.9	CARBONDALE		SANDY SHALE	23.0	202.1	
129.9	CARBONDALE	BRIAR HILL	COAL	2.3	241.1	
119.7	CARBONDALE	DYKERSBURG	SHALE	16.0	251.3	
103.7	CARBONDALE	DYKERSBURG	SANDSTONE	27.0	267.3	
76.7	CARBONDALE	DYKERSBURG	SANDY SHALE	21.0	294.3	
55.7	CARBONDALE	DYKERSBURG	SHALE	15.3	315.3	
40.4	CARBONDALE	SPRINGFIELD	COAL	5.7	330.6	

MAPID: 16500177000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.435928 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.788628 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 336.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
229.0	CARBONDALE	DANVILLE	COAL	2.3	142.0	
227.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	23.0	144.0	
204.0	CARBONDALE	HERRIN	COAL	4.2	167.0	
199.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	15.0	172.0	
122.0	CARBONDALE	BRIAR HILL	COAL	2.3	249.0	
40.0	CARBONDALE	SPRINGFIELD	COAL	5.7	331.0	

MAPID: 16503543000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.444052 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.789462 **DATE COLLECTED:** 3 / 23 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 375.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 102E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	8.0	0.0	
-	MODESTO		SANDY SHALE	10.0	8.0	
-	MODESTO		SANDY SHALE	42.0	18.0	
-	MODESTO		LIMESTONE	3.0	60.0	
-	MODESTO		SANDSTONE	4.0	63.0	
-	MODESTO		SANDY SHALE	47.0	67.0	
-	MODESTO		BLACK SHALE	0.5	114.0	
-	MODESTO		COAL	1.0	114.5	
-	MODESTO		SANDY SHALE	7.5	115.5	
-	MODESTO		LIMESTONE	3.0	123.0	
-	MODESTO		SHALE	1.0	126.0	
-	MODESTO		SANDSTONE	17.0	127.0	
-	MODESTO		SANDY SHALE	8.0	144.0	
-	MODESTO		LIMESTONE	3.5	152.0	
-	MODESTO		SHALE	2.5	155.5	WITH LIME
-	MODESTO		GRAY SHALE	3.0	158.0	
-	MODESTO		LIMESTONE	0.7	161.0	
-	MODESTO		BLACK SHALE	3.0	161.7	
-	MODESTO		GRAY SHALE	19.3	164.7	WITH LIME BANDS
-	CARBONDALE	DANVILLE	COAL	2.5	184.0	
-	CARBONDALE		GRAY SHALE	5.0	186.5	
-	CARBONDALE		SANDSTONE	11.5	191.5	WITH SHALE BANDS
-	CARBONDALE	ALLENBY	COAL	1.0	203.0	
-	CARBONDALE		LIGHT SHALE	4.0	204.0	
-	CARBONDALE		LIMESTONE	1.0	208.0	
-	CARBONDALE		LIGHT SHALE	7.0	209.0	WITH LIMESTONE BANDS
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	216.0	
-	CARBONDALE		GRAY SHALE	8.0	221.0	
-	CARBONDALE	BRERETON	BLUE LIMESTONE	5.7	229.0	
-	CARBONDALE		GRAY SHALE	0.3	234.7	
-	CARBONDALE		BLACK SHALE	0.5	235.0	
-	CARBONDALE	HERRIN	COAL	4.7	235.5	
-	CARBONDALE		UNDERCLAY	4.8	240.2	
-	CARBONDALE		SANDSTONE	39.0	245.0	
-	CARBONDALE		GRAY SANDSTONE	18.0	284.0	
-	CARBONDALE		SANDY SHALE	33.0	302.0	
-	CARBONDALE		LIMESTONE	0.5	335.0	
-	CARBONDALE		BLACK SHALE	3.5	335.5	
-	CARBONDALE		SANDY SHALE	23.0	339.0	

-	CARBONDALE		GRAY SHALE	6.6	362.0	STARTED CORING
-	CARBONDALE	SPRINGFIELD	COAL	6.2	368.6	
-	CARBONDALE		UNDERCLAY	0.6	374.8	

MAPID: 16503543000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.444052 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.789462 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 240.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.5	MODESTO	PIASA	LIMESTONE	3.5	152.5	
231.0	MODESTO		LIMESTONE W/ SHALE	28.5	156.0	
202.5	CARBONDALE	DANVILLE	COAL	2.5	184.5	
200.0	CARBONDALE		GRAY SHALE	5.0	187.0	
195.0	CARBONDALE		SHALE & SANDSTONE	11.5	192.0	
183.5	CARBONDALE	ALLENBY	COAL	1.0	203.5	
182.5	CARBONDALE		GRAY SHALE	4.0	204.5	
178.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	208.5	
177.5	CARBONDALE	LAWSON	GRAY SHALE	7.0	209.5	
170.5	CARBONDALE	CONANT	LIMESTONE	5.0	216.5	
165.5	CARBONDALE		GRAY SHALE	8.0	221.5	
157.5	CARBONDALE	BRERETON	LIMESTONE	5.7	229.5	
151.8	CARBONDALE	ANNA	BLACK SHALE	0.8	235.2	
151.0	CARBONDALE	HERRIN	COAL	4.7	236.0	

MAPID: 16526909000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.437108 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.785855 **DATE COLLECTED:** 4 / 22 / 1968

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 316.8 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 104E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			CLAY	21.0	0.0	
352.0	SHELBURN		GRAY SHALE	35.0	21.0	
317.0	SHELBURN		BLACK SHALE	2.0	56.0	
315.0	SHELBURN		GRAY SHALE	12.0	58.0	
303.0	SHELBURN		SANDSTONE	12.0	70.0	
291.0	SHELBURN		SANDY SHALE	18.0	82.0	
273.0	SHELBURN		SANDSTONE	4.6	100.0	
268.4	SHELBURN		GRAY SHALE	4.4	104.6	
264.0	SHELBURN		BLACK SHALE	2.5	109.0	
261.5	SHELBURN		GRAY SHALE	18.5	111.5	
243.0	SHELBURN		LIMESTONE	4.0	130.0	
239.0	SHELBURN	DANVILLE	COAL	0.5	134.0	
238.5	SHELBURN		GRAY SHALE & SANDSTONE	19.5	134.5	INTERBEDDED
219.0	SHELBURN		COAL	1.0	154.0	
218.0	SHELBURN		SANDY SHALE	5.0	155.0	
213.0	SHELBURN		SANDSTONE	3.0	160.0	
210.0	SHELBURN		SANDY SHALE	14.0	163.0	
196.0	SHELBURN		LIMESTONE	1.0	177.0	
195.0	SHELBURN		DARK SHALE	1.0	178.0	
194.0	SHELBURN	BRERETON	LIMESTONE	5.0	179.0	
189.0	CARBONDALE	ANNA	BLACK SHALE	1.9	184.0	
187.1	CARBONDALE	HERRIN	COAL	5.0	185.9	
182.1	CARBONDALE		CLAYSTONE	4.1	190.9	
178.0	CARBONDALE		SANDSTONE	12.0	195.0	
166.0	CARBONDALE		SHALE/SANDSTONE/LIMESTONE	18.0	207.0	
148.0	CARBONDALE		SANDY SHALE	20.0	225.0	
128.0	CARBONDALE	BRIAR HILL	COAL	1.0	245.0	
127.0	CARBONDALE		GRAY SHALE	16.0	246.0	
111.0	CARBONDALE		SANDSTONE	25.0	262.0	
86.0	CARBONDALE		SANDY SHALE	2.0	287.0	
84.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	289.0	
83.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	289.5	
81.0	CARBONDALE	DYKERSBURG	GRAY SHALE	17.8	292.0	
63.2	CARBONDALE	SPRINGFIELD	COAL	6.0	309.8	
57.2	CARBONDALE		CLAYSTONE	1.0	315.8	

MAPID: 16500178000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422109 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.788714 **DATE COLLECTED:** 12 / 4 / 1905

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 310.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	15.0	0.0	
370.0	MODESTO		SANDY SHALE	27.0	15.0	
343.0	MODESTO		SHALE	4.0	42.0	
339.0	MODESTO		COAL	1.0	46.0	
338.0	MODESTO		UNDERCLAY	1.0	47.0	
337.0	MODESTO		SANDY SHALE	6.0	48.0	
331.0	MODESTO		SANDSTONE	3.0	54.0	
328.0	MODESTO		SANDY SHALE	19.0	57.0	
309.0	MODESTO		SHALE	10.0	76.0	
299.0	MODESTO		SANDSTONE	4.0	86.0	
295.0	MODESTO		SHALE	24.0	90.0	
271.0	MODESTO		SHALE	3.0	114.0	
268.0	MODESTO		COAL	1.0	117.0	
267.0	MODESTO		SANDSTONE	8.0	118.0	
259.0	CARBONDALE	DANVILLE	COAL	3.0	126.0	
256.0	CARBONDALE		SANDSTONE	10.0	129.0	
246.0	CARBONDALE		SHALE	2.0	139.0	
244.0	CARBONDALE	ALLENBY	COAL	1.0	141.0	
243.0	CARBONDALE		UNDERCLAY	1.0	142.0	
242.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	143.0	
235.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	150.0	
229.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	156.0	
221.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	164.0	
207.0	CARBONDALE	BRERETON	LIMESTONE	3.0	178.0	
204.0	CARBONDALE	ANNA	SHALE	2.0	181.0	
202.0	CARBONDALE	HERRIN	COAL	6.0	183.0	
196.0	CARBONDALE		UNDERCLAY	1.0	189.0	
195.0	CARBONDALE		SANDSTONE	24.0	190.0	
171.0	CARBONDALE		SHALE	33.0	214.0	
138.0	CARBONDALE		SHALE	3.0	247.0	
135.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	250.0	
123.0	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	262.0	
115.0	CARBONDALE	DYKERSBURG	LIMESTONE	2.0	270.0	
113.0	CARBONDALE	DYKERSBURG	SHALE	27.0	272.0	
86.0	CARBONDALE	SPRINGFIELD	BONE COAL	3.0	299.0	
83.0	CARBONDALE	SPRINGFIELD	SHALE	0.5	302.0	
82.5	CARBONDALE	SPRINGFIELD	COAL	5.0	302.5	
77.5	CARBONDALE		UNDERCLAY	3.0	307.5	

MAPID: 16500713000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2640' N line, 0' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410648 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.783282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 338.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
264.0	CARBONDALE	DANVILLE	COAL	1.0	141.0	
240.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	165.0	
225.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	16.0	180.0	
195.0	CARBONDALE	HERRIN	COAL	3.5	210.0	
67.0	CARBONDALE	SPRINGFIELD	COAL	-	338.0	

MAPID: 16500713000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2640' N line, 0' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410648 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.783282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 214.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.5	MODESTO	PIASA	LIMESTONE	4.0	111.5	
289.5	MODESTO		GRAY SHALE	26.0	115.5	
263.5	CARBONDALE	DANVILLE	COAL	1.0	141.5	
262.5	CARBONDALE		GRAY SHALE	23.0	142.5	
239.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	165.5	
234.8	CARBONDALE	LAWSON	CLAYSTONE	10.5	170.2	
224.3	CARBONDALE	LAWSON	SANDSTONE	15.8	180.7	
208.5	CARBONDALE	LAWSON	SHALE	9.0	196.5	
199.5	CARBONDALE	BRERETON	LIMESTONE	4.0	205.5	
195.5	CARBONDALE	ANNA	BLACK SHALE	1.5	209.5	
194.0	CARBONDALE	HERRIN	COAL	3.5	211.0	

MAPID: 16500713000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2640' N line, 0' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.410648 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.783282 **DATE COLLECTED:** 11 / 0 / 1917

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 338.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	16.0	0.0	
389.0	MODESTO		SANDSTONE	6.0	16.0	
383.0	MODESTO		SHALE	16.0	22.0	
367.0	MODESTO		LIMESTONE	2.5	38.0	
364.5	MODESTO		SHALE	27.0	40.5	
337.5	MODESTO		COAL	1.5	67.5	
336.0	MODESTO		SHALE	6.0	69.0	
330.0	MODESTO		CALCAREOUS SHALE	26.0	75.0	
304.0	MODESTO		SHALE	10.0	101.0	
294.0	MODESTO	PIASA	LIMESTONE	4.0	111.0	
290.0	MODESTO		SHALE	17.0	115.0	
273.0	MODESTO		BLACK SHALE	4.0	132.0	
269.0	MODESTO		SHALE	5.0	136.0	
264.0	CARBONDALE	DANVILLE	COAL	1.0	141.0	
263.0	CARBONDALE		SHALE	23.0	142.0	
240.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	165.0	
235.3	CARBONDALE		CLAYSTONE	10.5	169.7	
224.8	CARBONDALE	ANVIL ROCK	SANDSTONE	15.8	180.2	
209.0	CARBONDALE	ANVIL ROCK	SHALE	9.0	196.0	
200.0	CARBONDALE	BRERETON	LIMESTONE	4.0	205.0	
196.0	CARBONDALE	ANNA	BLACK SHALE	1.5	209.0	
194.5	CARBONDALE	HERRIN	COAL	3.5	210.5	
191.0	CARBONDALE		UNDERCLAY	1.0	214.0	
190.0	CARBONDALE		CALCAREOUS SHALE	26.0	215.0	
164.0	CARBONDALE	DYKERSBURG	SANDY SHALE	54.0	241.0	
110.0	CARBONDALE	DYKERSBURG	SHALE	37.0	295.0	
73.0	CARBONDALE	DYKERSBURG	LIMESTONE	2.0	332.0	
71.0	CARBONDALE	DYKERSBURG	BLACK SHALE	4.0	334.0	
67.0	CARBONDALE	SPRINGFIELD	COAL	0.0	338.0	T.D.

MAPID: 16502560000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.427841 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.784069 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2955.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, KAID ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
20.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	365.0	
-20.0	CARBONDALE	SURVANT	COAL	0.5	405.0	
-93.0	CARBONDALE	COLCHESTER	COAL	0.5	478.0	
-148.0	CARBONDALE	DEKOVEN	COAL	3.5	533.0	
-148.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	533.0	
-174.0	CARBONDALE	DAVIS	COAL	4.5	559.0	
-223.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	608.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-235.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	620.0	
-268.0	TRADEWATER	MT. RORAH	COAL	1.0	653.0	

MAPID: 16502560000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.427841 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.784069 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.0	CARBONDALE	BRERETON	LIMESTONE	-	165.0	
-1344.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1729.0	
-1706.0			LIMESTONE	-	2091.0	
-2097.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16503097000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416414 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.789654 **DATE COLLECTED:** 1 / 0 / 1967
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log
SOURCE: MT. CARMEL DRLG. CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-103.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	500.0	
-183.0	SPOON	DAVIS	UNCLASSIFIED	-	580.0	
-1193.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	

MAPID: 16503097000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416414 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.789654 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2498.0 **LOG TYPE:**
SOURCE: MT. CARMEL DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
197.0	CARBONDALE	BRERETON	LIMESTONE	-	200.0	
-1352.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1749.0	
-1720.0			LIMESTONE	-	2117.0	
-2101.0		BASE BARLOW	LIMESTONE	-	2498.0	

MAPID: 16503097000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416414 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.789654 **DATE COLLECTED:** 1 / 0 / 1967
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3024.0 **LOG TYPE:** Electric Log
SOURCE: MT. CARMEL DRLG. CO., BARTOK JOE ETAL CO **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
5.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	392.0	
-32.0	CARBONDALE	SURVANT	COAL	0.8	429.0	
-102.0	CARBONDALE	COLCHESTER	COAL	0.5	499.0	
-148.0	CARBONDALE	DEKOVEN	COAL	3.5	545.0	
-166.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	563.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-183.0	CARBONDALE	DAVIS	COAL	4.0	580.0	
-233.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	630.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-248.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	645.0	
-278.0	TRADEWATER	MT. RORAH	COAL	1.2	675.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503127000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 250' N line, 500' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.413509 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.786197 **DATE COLLECTED:** 8 / 0 / 1957
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 3052.0 **LOG TYPE:** Electric Log
SOURCE: RICHARDS, E. & HAYS, H., PEABODY COAL CO **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
9.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	398.0	
-31.0	CARBONDALE	SURVANT	COAL	1.8	438.0	
-103.0	CARBONDALE	COLCHESTER	COAL	0.5	510.0	
-163.0	CARBONDALE	DEKOVEN	COAL	3.0	570.0	
-168.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	575.0	
-186.0	CARBONDALE	DAVIS	COAL	3.8	593.0	
-235.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	642.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-248.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	655.0	
-281.0	TRADEWATER	MT. RORAH	COAL	1.2	688.0	

MAPID: 16503127000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 250' N line, 500' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.413509 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.786197 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:**
SOURCE: RICHARDS, E. & HAYS, H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
206.0	CARBONDALE	BRERETON	LIMESTONE	-	204.0	
-1350.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1760.0	
-1701.0			LIMESTONE	-	2111.0	
-2102.0		BASE BARLOW	LIMESTONE	-	2512.0	

MAPID: 16503157000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.420971 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.787781 **DATE COLLECTED:** 2 / 0 / 1958
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3026.0 **LOG TYPE:** Electric Log
SOURCE: DELWOOD OIL CO, WISE 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	382.0	
-23.0	CARBONDALE	SURVANT	COAL	0.6	420.0	
-91.0	CARBONDALE	COLCHESTER	COAL	0.5	488.0	
-135.0	CARBONDALE	DEKOVEN	COAL	3.0	532.0	
-152.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	549.0	
-173.0	CARBONDALE	DAVIS	COAL	2.5	570.0	
-224.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	621.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-235.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	632.0	
-262.0	TRADEWATER	MT. RORAH	COAL	1.8	659.0	

MAPID: 16503157000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.420971 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.787781 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2494.0 **LOG TYPE:**

SOURCE: DELWOOD OIL CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
224.0	CARBONDALE	BRERETON	LIMESTONE	-	188.0	
-1332.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1707.0			LIMESTONE	-	2119.0	
-2082.0		BASE BARLOW	LIMESTONE	-	2494.0	

MAPID: 16526908000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.427819 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.78778 **DATE COLLECTED:** 3 / 27 / 1968

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 315.9 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 103E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			CLAY	25.0	0.0	
360.0	SHELBURN		GRAY SHALE	3.5	25.0	
356.5	SHELBURN		COAL	0.5	28.5	
356.0	SHELBURN		GRAY SHALE	2.0	29.0	
354.0	SHELBURN		SANDSTONE	2.0	31.0	
352.0	SHELBURN		SANDY SHALE	15.0	33.0	
337.0	SHELBURN		BLACK SHALE	3.0	48.0	
334.0	SHELBURN		COAL	1.0	51.0	
333.0	SHELBURN		GRAY SHALE	18.0	52.0	
315.0	SHELBURN		SANDSTONE	5.0	70.0	
310.0	SHELBURN		SANDY SHALE	10.0	75.0	
300.0	SHELBURN		COAL	0.5	85.0	
299.5	SHELBURN		SANDY SHALE	4.5	85.5	
295.0	SHELBURN		LIMESTONE	4.0	90.0	
291.0	SHELBURN		SANDY SHALE	6.0	94.0	
285.0	SHELBURN		LIMESTONE	1.0	100.0	
284.0	SHELBURN		BLACK SHALE	3.0	101.0	
281.0	SHELBURN		GRAY SHALE	20.0	104.0	
261.0	SHELBURN		COAL	0.5	124.0	
260.5	SHELBURN		GRAY SHALE	7.5	124.5	
253.0	SHELBURN		COAL	0.5	132.0	
252.5	SHELBURN		SANDY SHALE	6.5	132.5	
246.0	SHELBURN		SANDSTONE	2.5	139.0	
243.5	SHELBURN		SANDY SHALE	2.5	141.5	
241.0	SHELBURN		COAL	0.5	144.0	
240.5	SHELBURN		GRAY SHALE	2.5	144.5	
238.0	SHELBURN	BANKSTON FORK	LIMESTONE	7.0	147.0	
231.0	SHELBURN		SANDY SHALE	2.0	154.0	
229.0	SHELBURN	ANVIL ROCK	SANDSTONE	5.0	156.0	
224.0	SHELBURN	ANVIL ROCK	SANDSTONE/SHALE	19.0	161.0	
205.0	CARBONDALE	ANNA	BLACK SHALE	2.0	180.0	
203.0	CARBONDALE	ENERGY	GRAY SHALE	2.5	182.0	
200.5	CARBONDALE	HERRIN	COAL	4.8	184.5	
195.7	CARBONDALE		CLAYSTONE	3.7	189.3	
192.0	CARBONDALE		LIMESTONE	1.0	193.0	
191.0	CARBONDALE		SANDSTONE	28.0	194.0	
163.0	CARBONDALE		GRAY SHALE	34.0	222.0	
129.0	CARBONDALE		SANDSTONE	33.0	256.0	
96.0	CARBONDALE		BLACK SHALE	2.0	289.0	

94.0	CARBONDALE		DARK SHALE	10.0	291.0
84.0	CARBONDALE		BLACK SHALE	3.0	301.0
81.0	CARBONDALE	DYKERSBURG	GRAY SHALE	7.0	304.0
74.0	CARBONDALE	SPRINGFIELD	COAL	4.6	311.0
69.4	CARBONDALE		CLAYSTONE	0.3	315.6

MAPID: 16500179000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.399121 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.785102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.1 **LOGGED (FT.):** 367.3 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
60.1	CARBONDALE	SPRINGFIELD	COAL	4.3	363.0	

MAPID: 16502658000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 300' N line, 400' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395435 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.786124 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 1650.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-121.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	550.0	
-206.0	SPOON	DAVIS	UNCLASSIFIED	-	635.0	
-1221.0	BASE OF PENN.		UNCLASSIFIED	-	1650.0	

MAPID: 16502658000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 300' N line, 400' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395435 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.786124 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2512.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1358.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1791.0	
-1697.0			LIMESTONE	-	2130.0	
-2079.0		BASE BARLOW	LIMESTONE	-	2512.0	

MAPID: 16502658000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 35 **QUARTERS/FOOTAGES:** 300' N line, 400' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.395435 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.786124 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 3087.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., PEABODY COAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-19.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	448.0	
-56.0	CARBONDALE	SURVANT	COAL	0.8	485.0	
-121.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-169.0	CARBONDALE	DEKOVEN	COAL	3.0	598.0	
-186.0	CARBONDALE	LOWER DEKOVEN	COAL	0.9	615.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-208.0	CARBONDALE	DAVIS	COAL	4.0	637.0	
-256.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	685.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-268.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	697.0	
-306.0	TRADEWATER	MT. RORAH	COAL	1.3	735.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500181000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.376233 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.777886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 388.1 **LOG TYPE:** Drillers Log
SOURCE: SOUTHERN GEM COAL CORP. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-3.0	CARBONDALE	SPRINGFIELD	COAL	4.1	384.0	

MAPID: 16500668000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 500' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.383186 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.789293 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 340.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	25.0	137.0	
260.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	162.0	
216.0	CARBONDALE	HERRIN	COAL	4.7	206.0	
209.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	42.0	213.0	
167.0	CARBONDALE	BRIAR HILL	COAL	0.5	255.0	
166.0	CARBONDALE	CANTON		4.0	256.0	
88.0	CARBONDALE	SPRINGFIELD	COAL	5.5	334.0	

MAPID: 16500668000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 500' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.383186 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.789293 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 211.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.5	CARBONDALE		SHALE & SANDSTONE	50.0	112.5	
259.5	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	162.5	
251.5	CARBONDALE	LAWSON	SHALE	28.0	170.5	
223.5	CARBONDALE	BRERETON	LIMESTONE	7.0	198.5	
216.5	CARBONDALE	ANNA	BLACK SHALE	1.5	205.5	
215.0	CARBONDALE	HERRIN	COAL	4.7	207.0	

MAPID: 16500668000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 500' N line, 2640' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.383186 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.789293 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 339.5 **LOG TYPE:** Drillers Log
SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	20.0	0.0	
402.0	MODESTO		SHALE	8.0	20.0	
394.0	MODESTO		ARGILACEOUS SHALE	35.0	28.0	
359.0	MODESTO		SHALE	2.0	63.0	
357.0	MODESTO		COAL	2.0	65.0	
355.0	MODESTO		UNDERCLAY	3.0	67.0	
352.0	MODESTO		SHALE	13.0	70.0	
339.0	MODESTO		SANDSTONE	12.0	83.0	
327.0	MODESTO		ARGILACEOUS SHALE	15.0	95.0	
312.0	MODESTO		SANDSTONE	2.0	110.0	
310.0	MODESTO		SHALE	25.0	112.0	
285.0	MODESTO		SANDSTONE	25.0	137.0	
260.0	CARBONDALE	DANVILLE	COAL	0.0	162.0	ERODED
260.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	162.0	
252.0	CARBONDALE	ANVIL ROCK	SHALE	28.0	170.0	
224.0	CARBONDALE	BRERETON	LIMESTONE	7.0	198.0	
217.0	CARBONDALE	ANNA	SHALE	1.5	205.0	
215.5	CARBONDALE	HERRIN	COAL	4.7	206.5	
210.8	CARBONDALE		UNDERCLAY	1.8	211.2	
209.0	CARBONDALE		SANDSTONE	15.0	213.0	
194.0	CARBONDALE		ARGILACEOUS SHALE	7.0	228.0	
187.0	CARBONDALE		SANDSTONE	20.0	235.0	
167.0	CARBONDALE	BRIAR HILL	COAL	0.5	255.0	
166.5	CARBONDALE		UNDERCLAY	0.5	255.5	
166.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	256.0	
162.0	CARBONDALE	DYKERSBURG	SHALE	15.0	260.0	
147.0	CARBONDALE	DYKERSBURG	SHALE	59.0	275.0	
88.0	CARBONDALE	SPRINGFIELD	COAL	5.5	334.0	

MAPID: 16503654000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.381956 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.786106 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2482.0 **LOG TYPE:**

SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1340.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1744.0	
-1698.0			LIMESTONE	-	2102.0	
-2078.0		BASE BARLOW	LIMESTONE	-	2482.0	

MAPID: 16526542000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 8S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.383211 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.78358 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.5 **LOGGED (FT.):** 338.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 36-CG-U5 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNKNOWN	16.0		
385.5	PATOKA		SANDSTONE/SHALE	4.0	16.0	
381.5	PATOKA		SANDY SHALE	10.0	20.0	
371.5	PATOKA		GRAY SANDSTONE	4.0	30.0	
367.5	PATOKA		LIMESTONE	4.0	34.0	
363.5	SHELBURN		SANDY SHALE	18.0	38.0	
345.5	SHELBURN		BLACK SHALE	1.0	56.0	
344.5	SHELBURN		SANDY SHALE	10.0	57.0	
334.5	SHELBURN		DARK SHALE	1.0	67.0	
333.5	SHELBURN		BLACK SHALE	1.0	68.0	
332.5	SHELBURN		COAL	0.6	69.0	
331.9	SHELBURN		SANDY SHALE	11.4	69.6	
320.5	SHELBURN		SHALY LIMESTONE	3.0	81.0	
317.5	SHELBURN		SANDY SHALE	20.0	84.0	
297.5	SHELBURN		DARK SHALE	4.0	104.0	
293.5	SHELBURN		SANDY SHALE	3.0	108.0	
290.5	SHELBURN	PIASA	LIMESTONE	3.0	111.0	
287.5	SHELBURN		SANDY SHALE	7.0	114.0	
280.5	SHELBURN		BLACK SHALE	6.0	121.0	
274.5	SHELBURN		SANDY SHALE	21.0	127.0	
253.5	SHELBURN		DARK SHALE	1.0	148.0	
252.5	SHELBURN	DANVILLE	COAL	2.1	149.0	
250.4	SHELBURN		SANDY SHALE	6.9	151.1	
243.5	SHELBURN	ALLENBY	COAL	0.3	158.0	
243.2	SHELBURN	ALLENBY	SANDY SHALE	3.7	158.3	
239.5	SHELBURN	ALLENBY	COAL	0.4	162.0	
239.1	SHELBURN		SANDY SHALE	6.6	162.4	
232.5	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	169.0	
226.5	SHELBURN		SANDY SHALE	23.0	175.0	
203.5	CARBONDALE	ANNA	BLACK SHALE	2.0	198.0	
201.5	CARBONDALE		SANDY SHALE	4.0	200.0	
197.5	CARBONDALE	HERRIN	COAL	2.8	204.0	
194.7	CARBONDALE	HERRIN	SHALE	0.1	206.8	
194.6	CARBONDALE	HERRIN	COAL	0.5	206.9	
194.1	CARBONDALE	HERRIN	PYRITE	0.1	207.4	
194.0	CARBONDALE	HERRIN	COAL	0.7	207.5	
193.3	CARBONDALE		UNDERCLAY	3.2	208.2	
190.1	CARBONDALE		SANDY SHALE	3.4	211.4	
186.7	CARBONDALE		SANDSTONE	0.8	214.8	

185.9	CARBONDALE		SANDY SHALE	4.4	215.6	
181.5	CARBONDALE		SANDSTONE	2.0	220.0	BLACK
179.5	CARBONDALE		GRAY SANDSTONE	5.0	222.0	
174.5	CARBONDALE		SANDY SHALE	6.0	227.0	
168.5	CARBONDALE		GRAY SANDSTONE	6.0	233.0	
162.5	CARBONDALE		SANDY SHALE	28.0	239.0	
134.5	CARBONDALE	BRIAR HILL	COAL	0.9	267.0	
133.6	CARBONDALE	BRIAR HILL	SHALE	0.1	267.9	
133.5	CARBONDALE	BRIAR HILL	COAL	0.4	268.0	
133.1	CARBONDALE		SANDY SHALE	20.6	268.4	
112.5	CARBONDALE		SANDSTONE	5.0	289.0	
107.5	CARBONDALE		SANDY SHALE	4.0	294.0	
103.5	CARBONDALE		SANDSTONE/SHALE	7.0	298.0	
96.5	CARBONDALE		SANDY SHALE	12.5	305.0	
84.0	CARBONDALE		DARK SHALE	0.5	317.5	
83.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	318.0	
81.5	CARBONDALE		SANDY SHALE	1.3	320.0	
80.2	CARBONDALE	SPRINGFIELD	COAL	4.8	321.3	
75.4	CARBONDALE		UNDERCLAY	2.9	326.1	
72.5	CARBONDALE		SANDY SHALE	5.7	329.0	
66.8	CARBONDALE		SANDSTONE	3.3	334.7	

MAPID: 16590592000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.628963 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.76548 **DATE COLLECTED:** 5 / 1 / 1979

SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test

COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16590599000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.61914 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.763975 **DATE COLLECTED:** 5 / 1 / 1979

SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test

COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.9		

MAPID: 16590600000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615576 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766239 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	10.0		

MAPID: 16590601000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.623369 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775403 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.3		

MAPID: 16590604000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606556 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762511 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0		CHANNEL - COAL MISSING

MAPID: 16590742000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.597708 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772598 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	3.3		

MAPID: 16500336000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606066 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.768387 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 193.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.9			UNCONSOLIDATED	38.0	0.0	
339.9	MODESTO		SANDSTONE	14.0	38.0	
325.9	MODESTO		LIMESTONE	2.0	52.0	
323.9	MODESTO		SANDSTONE	11.0	54.0	
312.9	MODESTO		SANDSTONE	17.0	65.0	
295.9	MODESTO		COAL	0.5	82.0	
295.4	MODESTO		BLACK SHALE	2.5	82.5	
292.9	MODESTO		SHALE	6.0	85.0	
286.9	CARBONDALE	DANVILLE	COAL	2.3	91.0	
284.6	CARBONDALE		SANDY SHALE	10.0	93.3	
274.6	CARBONDALE		SANDSTONE	1.8	103.3	
272.9	CARBONDALE		ARGILACEOUS SHALE	8.0	105.0	
264.9	CARBONDALE	ALLENBY	COAL	1.8	113.0	
263.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	114.8	
255.9	CARBONDALE		ARGILACEOUS SHALE	3.0	122.0	
252.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.0	125.0	
229.9	CARBONDALE	JAMESTOWN	COAL	0.3	148.0	
229.6	CARBONDALE	BRERETON	LIMESTONE	9.0	148.3	
220.6	CARBONDALE	ANNA	BLACK SHALE	1.7	157.3	
218.9	CARBONDALE	HERRIN	COAL	5.0	159.0	
213.9	CARBONDALE		UNDERCLAY	1.0	164.0	
212.9	CARBONDALE		ARGILACEOUS SHALE	8.0	165.0	
204.9	CARBONDALE		SANDY SHALE	18.0	173.0	
186.9	CARBONDALE	BRIAR HILL	COAL	0.7	191.0	
186.2	CARBONDALE		UNDERCLAY	1.3	191.7	

MAPID: 16500336000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606066 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.768387 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 213.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	213.0	

MAPID: 16500337000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597988 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.772995 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 241.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
256.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	143.0	
158.0	CARBONDALE	SPRINGFIELD	COAL	-	241.0	

MAPID: 16500337000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597988 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.772995 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 536.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
317.0	CARBONDALE	DANVILLE	COAL	2.1	82.0	
316.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.3	83.0	
286.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.5	113.0	
256.0	CARBONDALE	HERRIN	COAL	6.0	143.0	
220.0	CARBONDALE	BRIAR HILL	COAL	1.6	179.0	
212.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	24.0	187.0	
158.0	CARBONDALE	SPRINGFIELD	COAL	3.3	241.0	
130.0	CARBONDALE	HOUCHIN CREEK	COAL	3.4	269.0	

MAPID: 16500337000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.597988 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.772995 **DATE COLLECTED:** 5 / 0 / 1905

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 536.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FORM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.0			UNCONSOLIDATED	23.0	0.0	
376.0	MODESTO		ARGILACEOUS SHALE	7.5	23.0	
368.5	MODESTO		CLAYSTONE	9.0	30.5	
359.5	MODESTO		ARGILACEOUS SHALE	5.1	39.5	
354.4	MODESTO		SANDSTONE	23.1	44.6	
331.3	MODESTO		SHALE	3.8	67.7	
327.6	MODESTO		ARGILACEOUS SHALE	1.2	71.4	
326.4	MODESTO		BLACK SHALE	2.0	72.6	
324.4	MODESTO		SHALE	0.6	74.6	
323.8	MODESTO		BLACK SHALE	0.2	75.2	
323.7	MODESTO		SHALE	5.8	75.3	
317.9	MODESTO		SHALE	1.3	81.1	
316.7	CARBONDALE	DANVILLE	COAL	2.2	82.3	
314.5	CARBONDALE		UNDERCLAY	1.1	84.5	
313.4	CARBONDALE		SHALE	3.6	85.6	
309.8	CARBONDALE		SANDSTONE	5.8	89.2	
304.1	CARBONDALE		SHALE	2.1	94.9	
302.0	CARBONDALE	"Allenby rider"	COAL	0.3	97.0	
301.7	CARBONDALE		SHALE	3.5	97.3	
298.2	CARBONDALE		BLACK SHALE	0.2	100.8	
298.1	CARBONDALE	ALLENBY	COAL	1.6	100.9	
296.5	CARBONDALE		BLACK SHALE	0.7	102.5	
295.8	CARBONDALE		SHALE	7.0	103.2	
286.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	113.0	
283.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	116.0	W/ SH
279.5	CARBONDALE	ANVIL ROCK	SHALE	15.0	119.5	
264.5	CARBONDALE	ANVIL ROCK	SHALE	6.0	134.5	
258.5	CARBONDALE	ANVIL ROCK	BLACK SHALE	2.4	140.5	
256.1	CARBONDALE	BRERETON	LIMESTONE	0.4	142.9	
255.7	CARBONDALE	HERRIN	COAL	6.0	143.3	
249.7	CARBONDALE		UNDERCLAY	3.0	149.3	
246.7	CARBONDALE		SHALE	8.8	152.3	
237.9	CARBONDALE		SHALE	10.3	161.1	W/ LS
220.6	CARBONDALE		LIMESTONE	1.0	178.4	
219.7	CARBONDALE	BRIAR HILL	COAL	1.6	179.3	W/ UC
218.1	CARBONDALE		SHALE	4.7	180.9	
213.4	CARBONDALE		LIMESTONE	1.0	185.6	
212.4	CARBONDALE	DYKERSBURG	SANDSTONE	23.6	186.6	
188.8	CARBONDALE	DYKERSBURG	SHALE	31.1	210.2	

157.7	CARBONDALE	SPRINGFIELD	COAL	3.4	241.3	
154.3	CARBONDALE		UNDERCLAY	0.4	244.7	
153.9	CARBONDALE		SHALE	2.0	245.1	
151.8	CARBONDALE		COAL	0.1	247.2	
151.7	CARBONDALE		SHALE	21.7	247.3	
130.0	CARBONDALE	KERTON CREEK	COAL	4.0	269.0	
126.0	CARBONDALE		BLACK SHALE	0.1	273.0	
125.9	CARBONDALE		SHALE	10.0	273.1	
115.9	CARBONDALE		SHALE	33.8	283.1	W/ SS
82.0	CARBONDALE		SANDSTONE	1.8	317.0	
80.2			SANDY SHALE	25.0	318.8	
55.2			SANDSTONE	4.5	343.8	
50.7			SANDSTONE	16.5	348.3	
34.2			COAL	0.2	364.8	
34.1			SANDSTONE	2.7	364.9	
31.4			COAL	0.0	367.6	
31.4			SANDSTONE	9.7	367.6	
21.7			COAL	1.1	377.3	
20.6			ARGILACEOUS SHALE	2.3	378.4	
18.4			SHALE	0.9	380.6	
17.5			SHALE	10.6	381.5	
6.9			COAL	1.0	392.1	
5.9			UNDERCLAY	0.5	393.1	
5.4			SHALE	3.5	393.6	W/ SS
1.9			SANDSTONE	7.1	397.1	W/ SH
-5.2			SHALE	7.4	404.2	
-12.6			SHALE	5.0	411.6	
-17.6			SHALE	12.0	416.6	W/ LS
-29.6			SHALE	21.2	428.6	W/ SULPHUR
-50.8			BLACK SHALE	2.0	449.8	
-52.8			COAL	0.4	451.8	
-53.2			SHALE	0.2	452.2	
-53.4			SHALE	3.4	452.4	
-56.8			SANDSTONE	3.5	455.8	
-60.3			SANDSTONE	8.3	459.3	
-68.5			SANDSTONE	2.5	467.5	W/ SH
-71.0			SHALE	11.0	470.0	W/ SS
-82.0			SANDSTONE	6.3	481.0	W/ SH
-88.3			SANDSTONE	14.6	487.3	
-102.9			SHALE	0.2	501.9	
-103.1			SANDSTONE	15.6	502.1	
-118.7			SHALE	1.4	517.7	
-120.1			COAL	1.9	519.1	
-122.0			BLACK SHALE	0.1	521.0	
344.9			SHALE	3.3	54.1	
-125.3			BLACK SHALE	5.0	524.3	
-130.3			COAL	4.1	529.3	
-134.4			SANDSTONE	2.8	533.4	

MAPID: 16500337000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.597988 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.772995 **DATE COLLECTED:** 5 / 0 / 1905
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 536.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST, JOHNSON G N **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
21.8	CARBONDALE	HOUCHIN CREEK	COAL	1.1	377.2	
7.0	CARBONDALE	SURVANT	COAL	1.0	392.0	
-53.0	CARBONDALE	COLCHESTER	COAL	0.3	452.0	
-120.0	CARBONDALE	DEKOVEN	COAL	2.0	519.0	
-120.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	519.0	
-130.2	CARBONDALE	DAVIS	COAL	4.1	529.2	

MAPID: 16500338000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.601443 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.772078 **DATE COLLECTED:** 7 / 0 / 1906
SURFACE ELEVATION (FT.): 377.1 **LOGGED (FT.):** 197.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.1			UNCONSOLIDATED	43.5	0.0	
333.6	CARBONDALE		SHALE	23.5	43.5	
310.1	CARBONDALE		SHALE	15.5	67.0	
294.6	CARBONDALE	HERRIN	COAL	3.0	82.5	
291.6	CARBONDALE		SHALE	34.5	85.5	
257.1	CARBONDALE	DYKERSBURG	SHALE	73.0	120.0	
184.1	CARBONDALE	SPRINGFIELD	COAL	3.0	193.0	
181.1	CARBONDALE		UNDERCLAY	1.0	196.0	

MAPID: 16500338000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.601443 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.772078 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 193.0 **LOG TYPE:**
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
295.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	82.0	
184.0	CARBONDALE	SPRINGFIELD	COAL	-	193.0	

MAPID: 16500339000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 660' S line, 0' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606093 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.762811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 85.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	85.0	
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500339000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 660' S line, 0' E line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.606093 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.762811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 85.2 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.4	CARBONDALE		SANDSTONE	3.2	25.6	
347.2	CARBONDALE	ALLENBY	BONE COAL	1.2	28.8	
346.0	CARBONDALE	LAWSON	CLAYSTONE	2.0	30.0	
344.0	CARBONDALE	LAWSON	GRAY SHALE	8.5	32.0	
335.5	CARBONDALE	LAWSON	SANDSTONE	19.8	40.5	
315.8	CARBONDALE	LAWSON	GRAY SHALE	8.8	60.2	
307.0	CARBONDALE	CONANT	LIMESTONE & SHALE	0.6	69.0	
306.5	CARBONDALE		GRAY SHALE	3.2	69.5	
303.3	CARBONDALE	BRERETON	LIMESTONE	8.2	72.7	
295.1	CARBONDALE	ANNA	BLACK SHALE	0.1	80.9	
295.0	CARBONDALE	HERRIN	COAL	4.2	81.0	

MAPID: 16500339000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 660' S line, 0' E line of SE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.606093 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.762811 **DATE COLLECTED:** 7 / 0 / 1905

SURFACE ELEVATION (FT.): 376.5 **LOGGED (FT.):** 322.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.5			UNCONSOLIDATED	25.7	0.0	
350.8			SANDSTONE	3.2	25.7	
347.6			COAL	1.0	28.9	
346.6			COAL	0.2	29.9	
346.5			ARGILACEOUS SHALE	2.0	30.0	
344.5			SHALE	5.8	32.0	
338.6			SHALE	2.7	37.9	
336.0			SANDSTONE	19.8	40.5	
316.2			SHALE	0.8	60.3	
315.5			SHALE	8.0	61.0	
307.5			SHALE	0.6	69.0	W/ LS
306.6			COAL	0.1	69.9	W/ SH
306.8			SHALE	5.2	69.7	
303.6			LIMESTONE	8.2	72.9	
295.5			BLACK SHALE	0.1	81.0	
295.3			COAL	5.0	81.2	
290.3			SHALE	32.3	86.2	
258.1			UNDERCLAY	0.4	118.4	
257.7			COAL	1.4	118.8	
256.3			SHALE	5.3	120.2	
251.0			SHALE	89.0	125.5	
162.0			SHALE	15.8	214.5	
146.1			SANDSTONE	0.2	230.4	
146.0			SHALE	2.8	230.5	
143.2			SHALE	2.3	233.3	W/ SS
140.9			SANDSTONE	1.7	235.6	
139.2			SHALE	0.8	237.3	
138.5			SANDSTONE	0.8	238.0	
137.7			SHALE	1.1	238.8	
136.6	CARBONDALE		SANDSTONE	4.7	239.9	
132.0	CARBONDALE		SANDSTONE	51.9	244.5	
79.9	CARBONDALE	EXCELLO	BLACK SHALE	1.2	296.6	
78.7	CARBONDALE	HOUCHIN CREEK	COAL	1.8	297.8	
76.9	CARBONDALE		UNDERCLAY	3.0	299.6	
73.9	CARBONDALE		SHALE	1.8	302.6	
72.2	CARBONDALE		SANDSTONE	9.4	304.3	
62.8	CARBONDALE		SANDSTONE	8.5	313.7	W/ SH

MAPID: 16502833000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604886 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.774871 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2995.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, RIEGEL WILLIAM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	HOUCHIN CREEK	COAL	4.0	350.0	
-37.0	CARBONDALE	SURVANT	COAL	0.5	470.0	
-137.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-155.0	CARBONDALE	DEKOVEN	COAL	2.5	588.0	
-155.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	588.0	
-162.0	CARBONDALE	DAVIS	COAL	4.0	595.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	690.0	
-276.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	709.0	
-317.0	TRADEWATER	MT. RORAH	COAL	1.2	750.0	

MAPID: 16502833000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604886 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.774871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT: WELL MAY BE FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
219.0	CARBONDALE	BRERETON	LIMESTONE	-	214.0	
113.0	CARBONDALE	SPRINGFIELD	COAL	-	320.0	
-131.0	CARBONDALE	COLCHESTER	COAL	-	564.0	
-1243.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1676.0	
-1664.0			LIMESTONE	-	2097.0	
-2053.0		BASE BARLOW	LIMESTONE	-	2486.0	

MAPID: 16502833000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.604886 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 324.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
211.0	CARBONDALE	HERRIN	COAL	6.5	222.0	
173.0	CARBONDALE	BRIAR HILL	COAL	-	260.0	
115.0	CARBONDALE	SPRINGFIELD	COAL	6.0	318.0	

MAPID: 16502834000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 350' S line, 340' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609483 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.769355 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1285.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	300.0	
13.0	SPOON	DAVIS	UNCLASSIFIED	-	365.0	
-907.0	BASE OF PENN.		UNCLASSIFIED	-	1285.0	

MAPID: 16502834000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 350' S line, 340' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609483 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.769355 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2355.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT: WELL MAY BE FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
137.0	CARBONDALE	SPRINGFIELD	COAL	-	241.0	
-1038.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1416.0	
-1977.0		BASE BARLOW	LIMESTONE	-	2355.0	

MAPID: 16502834000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 350' S line, 340' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609483 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.769355 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2876.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, JOHNSON J W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	175.0	
153.0	CARBONDALE	SURVANT	COAL	1.0	225.0	
79.0	CARBONDALE	COLCHESTER	COAL	0.5	299.0	
20.0	CARBONDALE	DEKOVEN	COAL	2.5	358.0	
14.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	364.0	
-7.0	CARBONDALE	DAVIS	COAL	4.0	385.0	
-70.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	448.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-85.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	463.0	

MAPID: 16503059000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602595 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.771168 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 2177.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP, JOHNSON J W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	302.0	
63.0	CARBONDALE	SURVANT	COAL	0.8	362.0	
-14.0	CARBONDALE	COLCHESTER	COAL	0.5	439.0	
-67.0	CARBONDALE	DEKOVEN	COAL	2.8	492.0	
-75.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	500.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-85.0	CARBONDALE	DAVIS	COAL	3.5	510.0	
-183.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	608.0	
-190.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	615.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16503059000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602595 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.771168 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 1964.0 **LOG TYPE:**
SOURCE: PACO PETROLEUM CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.0	CARBONDALE	BRERETON	LIMESTONE	-	118.0	
300.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	125.0	
184.0	CARBONDALE	SPRINGFIELD	COAL	-	241.0	
-12.0	CARBONDALE	COLCHESTER	COAL	-	437.0	
-1144.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1569.0	
-1539.0			LIMESTONE	-	1964.0	

MAPID: 16503059000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.602595 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771168 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Electric Log
SOURCE: PACO PETROLEUM CORP 1-B **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.0	CARBONDALE	HERRIN	COAL	6.5	118.0	
183.0	CARBONDALE	SPRINGFIELD	COAL	8.0	242.0	

MAPID: 16526166000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.615289 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.764682 **DATE COLLECTED:** 9 / 24 / 1974
SURFACE ELEVATION (FT.): 378.6 **LOGGED (FT.):** 93.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P459 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.6	PLEISTOCENE		SILT	2.0	0.0	
376.6	PLEISTOCENE		CLAY	8.0	2.0	
368.6	PLEISTOCENE		UNCONSOLIDATED	41.0	10.0	SANDY
327.6	CARBONDALE		GRAY SHALE	27.0	51.0	
300.6	CARBONDALE	BRERETON	LIMESTONE	5.0	78.0	
295.6	CARBONDALE	ANNA	BLACK SHALE	2.0	83.0	
293.6	CARBONDALE	HERRIN	COAL	5.8	85.0	
287.8	CARBONDALE		UNDERCLAY	2.2	90.8	

MAPID: 16526167000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 660' N line, 1' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.61528 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.766568 **DATE COLLECTED:** 9 / 25 / 1974
SURFACE ELEVATION (FT.): 377.2 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P484 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.2	PLEISTOCENE		SILT	1.0	0.0	
376.2	PLEISTOCENE		CLAY	13.0	1.0	
363.2	PLEISTOCENE		SANDY CLAY	33.0	14.0	
330.2	PLEISTOCENE		UNCONSOLIDATED	6.0	47.0	
324.2	CARBONDALE		SANDSTONE	1.0	53.0	
323.2	CARBONDALE		SANDY SHALE	4.0	54.0	
319.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	58.0	
316.7	CARBONDALE		SANDY SHALE	10.0	60.5	GRAY
306.7	CARBONDALE		SHALE	16.5	70.5	DARK
290.2	CARBONDALE	BRERETON	LIMESTONE	3.0	87.0	
287.2	CARBONDALE	HERRIN	COAL	5.6	90.0	
281.6	CARBONDALE		UNDERCLAY	1.4	95.6	

MAPID: 16526168000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.601442 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.772989 **DATE COLLECTED:** 10 / 4 / 1974

SURFACE ELEVATION (FT.): 402.7 **LOGGED (FT.):** 154.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE P565C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.7	PLEISTOCENE		SILT	2.0	0.0	
400.7	PLEISTOCENE		CLAY	14.5	2.0	
386.2	MODESTO		SANDY SHALE	33.5	16.5	CORING BEGAN
352.7	MODESTO		SANDSTONE	27.5	50.0	
325.2	MODESTO		BLACK SHALE	2.5	77.5	
322.7	MODESTO		GRAY SHALE	5.9	80.0	
316.8	CARBONDALE	DANVILLE	COAL	1.9	85.9	
314.9	CARBONDALE		UNDERCLAY	2.2	87.8	
312.7	CARBONDALE		SANDY SHALE	10.0	90.0	
302.7	CARBONDALE		GRAY SHALE	6.5	100.0	DARK
296.2	CARBONDALE	ALLENBY	COAL	0.8	106.5	
295.4	CARBONDALE		UNDERCLAY	2.3	107.3	
293.1	CARBONDALE	BANKSTON FORK	LIMESTONE	10.1	109.6	
283.0	CARBONDALE		SANDY SHALE	27.7	119.7	
255.3	CARBONDALE		COAL	0.3	147.4	
255.0	CARBONDALE	BRERETON	LIMESTONE	0.6	147.7	
254.4	CARBONDALE	HERRIN	COAL	5.3	148.3	
249.1	CARBONDALE		UNDERCLAY	0.4	153.6	

MAPID: 16526169000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 300' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.609595 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.774883 **DATE COLLECTED:** 10 / 2 / 1974
SURFACE ELEVATION (FT.): 388.4 **LOGGED (FT.):** 147.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P586A **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.4	PLEISTOCENE		CLAY	14.0	0.0	
374.4	PLEISTOCENE		SANDY CLAY	16.0	14.0	
358.4	MODESTO		SANDSTONE	37.6	30.0	CORING BEGAN
320.8	MODESTO		BLACK SHALE	0.6	67.6	
320.2	MODESTO	PIASA	LIMESTONE	3.2	68.2	
317.0	MODESTO		GRAY SHALE	4.1	71.4	
312.9	MODESTO		BLACK SHALE	5.0	75.5	
307.9	CARBONDALE	DANVILLE	COAL	1.7	80.5	
306.2	CARBONDALE		GRAY SHALE	17.8	82.2	DARK
288.4	CARBONDALE	ALLENBY	COAL	1.0	100.0	
287.4	CARBONDALE		GRAY SHALE	4.0	101.0	
283.4	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	105.0	
273.4	CARBONDALE		SANDY SHALE	21.0	115.0	
252.4	CARBONDALE		GRAY SHALE	4.0	136.0	DARK
248.4	CARBONDALE	HERRIN	COAL	5.7	140.0	
242.7	CARBONDALE		UNDERCLAY	1.3	145.7	

MAPID: 16526268000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.615271 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.768392 **DATE COLLECTED:** 10 / 15 / 1973
SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 168.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P509 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.5	PLEISTOCENE		SILT	5.0	0.0	
370.5	PLEISTOCENE		CLAY	11.0	5.0	
359.5	PLEISTOCENE		UNCONSOLIDATED	46.0	16.0	
313.5			GRAY SHALE	24.0	62.0	
289.5			COAL	1.0	86.0	SOFT
288.5			SANDY SHALE	67.0	87.0	GRAY
221.5			GRAY SHALE	14.0	154.0	

MAPID: 16590138000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606003 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775967 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.4 **LOGGED (FT.):** 180.0 **LOG TYPE:** Company map
SOURCE: AMAX P-613 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
262.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	180.0	

MAPID: 16590139000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608388 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774084 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.6 **LOGGED (FT.):** 144.2 **LOG TYPE:** Company map
SOURCE: AMAX P-587 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
251.6	CARBONDALE	HERRIN	COAL	5.2	139.0	

MAPID: 16590140000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.603745 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774078 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.8 **LOGGED (FT.):** 182.3 **LOG TYPE:** Company map
SOURCE: AMAX P-589 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.8	CARBONDALE	HERRIN	COAL	5.3	177.0	

MAPID: 16590141000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608445 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772262 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.6 **LOGGED (FT.):** 85.0 **LOG TYPE:** Company map
SOURCE: AMAX P-562 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
330.6	CARBONDALE	HERRIN	COAL	5.0	80.0	

MAPID: 16590142000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606115 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772286 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.6 **LOGGED (FT.):** 115.8 **LOG TYPE:** Company map
SOURCE: AMAX P-563 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.6	CARBONDALE	HERRIN	COAL	5.8	110.0	

MAPID: 16590143000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.601468 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772266 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 135.9 **LOG TYPE:** Company map
SOURCE: AMAX P-565 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
270.0	CARBONDALE	HERRIN	COAL	4.9	131.0	

MAPID: 16590145000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608452 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768602 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 149.0 **LOG TYPE:** Company map
SOURCE: AMAX P-512 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
207.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	168.0	
228.4	CARBONDALE	BRIAR HILL	COAL	2.0	147.0	

MAPID: 16590146000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608579 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76677 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 148.0 **LOG TYPE:** Company map
SOURCE: AMAX P-487 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
226.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	148.0	

MAPID: 16590147000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.60627 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 149.2 **LOG TYPE:** Company map
SOURCE: AMAX P-488 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
264.4	CARBONDALE	DANVILLE	COAL	2.0	109.0	
226.4	CARBONDALE	ALLENBY	COAL	2.2	147.0	

MAPID: 16590148000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608623 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764931 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 81.8 **LOG TYPE:** Company map
SOURCE: AMAX P-462 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.4	CARBONDALE	HERRIN	COAL	4.8	77.0	

MAPID: 16590149000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.6063 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764946 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.8 **LOGGED (FT.):** 75.4 **LOG TYPE:** Company map
SOURCE: AMAX P-463 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
304.8	CARBONDALE	HERRIN	COAL	5.4	70.0	

MAPID: 16590161000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610265 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775821 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.2 **LOGGED (FT.):** 180.4 **LOG TYPE:** Company map
SOURCE: AMAX P-611 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
223.2	CARBONDALE	HERRIN	COAL	5.4	175.0	

MAPID: 16590162000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614916 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775827 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 165.3 **LOG TYPE:** Company map
SOURCE: AMAX P-609 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
217.9	CARBONDALE	HERRIN	COAL	5.3	160.0	

MAPID: 16590168000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614883 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773972 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 129.8 **LOG TYPE:** Company map
SOURCE: AMAX P-584 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.4	CARBONDALE	HERRIN	COAL	4.8	125.0	

MAPID: 16590169000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.612543 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773893 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.6 **LOGGED (FT.):** 127.4 **LOG TYPE:** Company map
SOURCE: AMAX P-585 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
256.6	CARBONDALE	HERRIN	COAL	5.4	122.0	

MAPID: 16590170000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610313 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773942 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.6 **LOGGED (FT.):** 132.3 **LOG TYPE:** Company map
SOURCE: AMAX P-586 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.6	CARBONDALE	HERRIN	COAL	5.3	127.0	

MAPID: 16590171000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610363 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.8 **LOGGED (FT.):** 77.5 **LOG TYPE:** Company map
SOURCE: AMAX P-561 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.8	CARBONDALE	HERRIN	COAL	5.5	72.0	

MAPID: 16590172000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.612659 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772113 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 71.2 **LOG TYPE:** Company map
SOURCE: AMAX P-560 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.5	CARBONDALE	HERRIN	COAL	5.2	66.0	

MAPID: 16590173000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.614972 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772092 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Company map
SOURCE: AMAX P-559 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
280.0	CARBONDALE	BRIAR HILL	COAL	1.0	99.0	

MAPID: 16590174000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610445 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770296 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX P-536 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.0	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590175000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.612692 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.770277 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.8 **LOGGED (FT.):** 145.2 **LOG TYPE:** Company map
SOURCE: AMAX P-535 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
206.8	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	168.0	
231.8	CARBONDALE	BRIAR HILL	COAL	2.2	143.0	

MAPID: 16590176000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610471 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 164.0 **LOG TYPE:** Company map
SOURCE: AMAX P-511 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
211.4	CARBONDALE	BRIAR HILL	COAL	1.0	163.0	

MAPID: 16590177000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615055 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768413 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 87.0 **LOG TYPE:** Company map
SOURCE: AMAX P-509 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.5	CARBONDALE	BRIAR HILL	COAL	1.0	86.0	

MAPID: 16590187000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610535 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76665 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.6 **LOGGED (FT.):** 148.0 **LOG TYPE:** Company map
SOURCE: AMAX P-486 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
226.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	148.0	

MAPID: 16590188000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610589 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764817 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 79.0 **LOG TYPE:** Company map
SOURCE: AMAX P-461 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
301.4	CARBONDALE	HERRIN	COAL	5.0	74.0	

MAPID: 16500340000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622364 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.773941 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 284.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
212.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	170.0	
98.0	CARBONDALE	SPRINGFIELD	COAL	-	284.0	

MAPID: 16500340000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622364 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.773941 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	DANVILLE	COAL	9.0	99.0	
258.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.5	125.0	
249.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	5.0	134.0	
213.0	CARBONDALE	HERRIN	COAL	5.4	170.0	
174.0	CARBONDALE	BRIAR HILL	COAL	1.8	209.0	
99.0	CARBONDALE	SPRINGFIELD	COAL	5.3	284.0	

MAPID: 16500340000C **VERSION:** 3 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.622364 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.773941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.6 **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.6			UNCONSOLIDATED	58.2	0.0	
324.4	MODESTO		SANDSTONE	38.0	58.2	
286.4	MODESTO		BLACK SHALE	2.8	96.2	
283.7	CARBONDALE	DANVILLE	COAL	0.8	98.9	
282.8	CARBONDALE		UNDERCLAY	1.3	99.8	
281.6	CARBONDALE		SHALE	22.5	101.0	
259.1	CARBONDALE	ALLENBY	COAL	0.5	123.5	
258.6	CARBONDALE		UNDERCLAY	1.0	124.0	
257.6	CARBONDALE	BANKSTON FORK	LIMESTONE	9.5	125.0	
248.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	134.5	
243.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.5	139.5	
231.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	151.0	
227.6	CARBONDALE		SHALE	10.3	155.0	
217.3	CARBONDALE	BRERETON	CALCAREOUS SHALE	4.2	165.3	
213.2	CARBONDALE	ANNA	BLACK SHALE	1.0	169.4	
212.2	CARBONDALE	HERRIN	COAL	5.4	170.4	
206.7	CARBONDALE		UNDERCLAY	2.0	175.9	
204.7	CARBONDALE		SHALE	24.2	177.9	
180.6	CARBONDALE		SHALE	7.0	202.0	
173.6	CARBONDALE	BRIAR HILL	COAL	1.8	209.0	
171.8	CARBONDALE	DYKERSBURG	SANDY SHALE	73.7	210.8	
98.1	CARBONDALE	SPRINGFIELD	COAL	6.3	284.5	
91.8	CARBONDALE		UNDERCLAY	2.3	290.8	

MAPID: 16500341000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617662 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.766514 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.6 **LOGGED (FT.):** 243.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.6			UNCONSOLIDATED	28.5	0.0	
349.1	MODESTO		SANDSTONE	4.5	28.5	
344.6	MODESTO		SHALE	8.0	33.0	
336.6	CARBONDALE	DANVILLE	COAL	0.5	41.0	
336.1	CARBONDALE		UNDERCLAY	1.0	41.5	
335.1	CARBONDALE		SANDY SHALE	10.0	42.5	
325.1	CARBONDALE	"Allenby rider"	COAL	0.2	52.5	
324.9	CARBONDALE		SANDSTONE	4.3	52.7	
320.6	CARBONDALE		BLACK SHALE	7.0	57.0	
313.6	CARBONDALE	ALLENBY	COAL	1.0	64.0	
312.6	CARBONDALE		UNDERCLAY	1.0	65.0	
311.6	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	66.0	
303.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.5	74.5	
279.6	CARBONDALE	BRERETON	LIMESTONE	7.0	98.0	
272.6	CARBONDALE	ANNA	BLACK SHALE	1.3	105.0	
271.3	CARBONDALE	HERRIN	COAL	5.6	106.3	
265.8	CARBONDALE		UNDERCLAY	2.2	111.8	
263.6	CARBONDALE		SHALE	25.0	114.0	
238.6	CARBONDALE		DARK SHALE	7.0	139.0	
231.6	CARBONDALE	BRIAR HILL	COAL	1.8	146.0	
229.8	CARBONDALE		UNDERCLAY	0.5	147.8	
229.3	CARBONDALE	DYKERSBURG	SANDY SHALE	30.7	148.3	
198.6	CARBONDALE	DYKERSBURG	SANDY SHALE	53.5	179.0	
145.1	CARBONDALE	SPRINGFIELD	COAL	10.0	232.5	W/ DARK SANDY SHALE
135.1	CARBONDALE		UNDERCLAY	0.8	242.5	

MAPID: 16500341000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617662 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.766514 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 232.0 **LOG TYPE:**

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
272.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	106.0	
146.0	CARBONDALE	SPRINGFIELD	COAL	-	232.0	

MAPID: 16500342000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** N2 SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.627209 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.763623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.5 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.5			UNCONSOLIDATED	37.7	0.0	
346.8	MODESTO		SANDSTONE	4.5	37.7	
342.3	CARBONDALE	DANVILLE	COAL	2.0	42.2	
340.3	CARBONDALE		UNDERCLAY	3.8	44.2	
336.5	CARBONDALE		SANDSTONE	2.6	48.0	
333.9	CARBONDALE		SHALE	7.1	50.6	
326.8	CARBONDALE		BLACK SHALE	0.4	57.7	
326.5	CARBONDALE	"Allenby rider"	COAL	0.2	58.0	
326.3	CARBONDALE		UNDERCLAY	2.6	58.2	
323.7	CARBONDALE	ALLENBY	COAL	0.7	60.8	
323.0	CARBONDALE		SHALE	0.2	61.5	
322.8	CARBONDALE		UNDERCLAY	3.8	61.7	
319.0	CARBONDALE		SHALE	6.7	65.5	
312.3	CARBONDALE	ANVIL ROCK	SANDSTONE	5.8	72.2	
306.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.8	78.0	
293.7	CARBONDALE	ANVIL ROCK	SANDSTONE	13.3	90.8	W/ SH
280.3	CARBONDALE	ANVIL ROCK	SHALE	6.3	104.2	
274.0	CARBONDALE	BRERETON	LIMESTONE	0.3	110.5	
273.7	CARBONDALE	ANNA	BLACK SHALE	1.7	110.8	
272.0	CARBONDALE		SHALE	4.7	112.5	
267.3	CARBONDALE	HERRIN	COAL	5.4	117.2	
261.9	CARBONDALE		UNDERCLAY	4.1	122.6	
257.8	CARBONDALE		SHALE	29.4	126.7	
228.4	CARBONDALE	BRIAR HILL	COAL	1.7	156.1	
226.7	CARBONDALE	DYKERSBURG	SHALE	25.1	157.8	
201.6	CARBONDALE	SPRINGFIELD	COAL	5.5	182.9	
196.1	CARBONDALE		SHALE	51.5	188.4	
144.7	CARBONDALE		SHALE	14.4	239.8	

MAPID: 16500342000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** N2 SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.627209 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.763623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 182.0 **LOG TYPE:**

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	117.0	
203.0	CARBONDALE	SPRINGFIELD	COAL	-	182.0	

MAPID: 16500343000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617683 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.762799 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 246.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.2			UNCONSOLIDATED	19.8	0.0	
380.4	MODESTO		SHALE	1.2	19.8	
379.2	MODESTO		SHALE	13.8	21.0	
365.4	CARBONDALE	DANVILLE	COAL	1.9	34.8	
363.5	CARBONDALE		SHALE	12.6	36.7	W/ SS
350.9	CARBONDALE	"Allenby rider"	COAL	0.3	49.3	
350.7	CARBONDALE		UNDERCLAY	1.1	49.5	
349.5	CARBONDALE		SHALE	2.8	50.7	W/ LS
346.7	CARBONDALE	ALLENBY	COAL	0.7	53.5	
346.0	CARBONDALE		UNDERCLAY	3.5	54.2	
342.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	57.8	
337.4	CARBONDALE		SHALE	7.9	62.8	W/ SS
329.5	CARBONDALE	ANVIL ROCK	SANDSTONE	17.2	70.7	
312.4	CARBONDALE	ANVIL ROCK	SHALE	14.9	87.8	W/ LS
297.5	CARBONDALE	BRERETON	LIMESTONE	7.5	102.7	
290.0	CARBONDALE	ANNA	SHALE	1.1	110.2	
288.9	CARBONDALE	HERRIN	COAL	6.2	111.3	
282.7	CARBONDALE		SHALE	5.3	117.5	
277.4	CARBONDALE		SHALE	26.8	122.8	
250.7	CARBONDALE	BRIAR HILL	COAL	1.6	149.5	
249.1	CARBONDALE	DYKERSBURG	SHALE	32.9	151.1	
216.2	CARBONDALE	DYKERSBURG	SANDSTONE	17.8	184.0	
198.4	CARBONDALE	DYKERSBURG	SHALE	7.0	201.8	W/ SS
191.5	CARBONDALE	DYKERSBURG	SHALE	21.7	208.7	
169.8	CARBONDALE	SPRINGFIELD	COAL	5.1	230.4	
164.7	CARBONDALE		SHALE	5.1	235.5	
159.6	CARBONDALE		SHALE	1.2	240.6	
158.4	CARBONDALE		SANDSTONE	3.8	241.8	

MAPID: 16500343000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617683 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.762799 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 230.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	111.0	
149.0	CARBONDALE	SPRINGFIELD	COAL	-	230.0	

MAPID: 16502985000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618926 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.761834 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1495.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-13.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	410.0	
-73.0	SPOON	DAVIS	UNCLASSIFIED	-	470.0	
-1098.0	BASE OF PENN.		UNCLASSIFIED	-	1495.0	

MAPID: 16502985000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618926 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.761834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2346.0 **LOG TYPE:**
SOURCE: LINDSAY, THEODORE R. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.0	CARBONDALE	BRERETON	LIMESTONE	-	100.0	
292.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	105.0	
175.0	CARBONDALE	SPRINGFIELD	COAL	-	222.0	
-10.0	CARBONDALE	COLCHESTER	COAL	-	407.0	
-1157.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1554.0	
-1562.0			LIMESTONE	-	1959.0	
-1949.0		BASE BARLOW	LIMESTONE	-	2346.0	

MAPID: 16502985000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618926 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.761834 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2782.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R., MOORE OLA ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	290.0	
59.0	CARBONDALE	SURVANT	COAL	0.8	338.0	
-11.0	CARBONDALE	COLCHESTER	COAL	0.5	408.0	
-65.0	CARBONDALE	DEKOVEN	COAL	3.0	462.0	
-65.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	462.0	
-73.0	CARBONDALE	DAVIS	COAL	4.0	470.0	
-185.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	582.0	
-213.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	610.0	
-253.0	TRADEWATER	MT. RORAH	COAL	0.0	650.0	

MAPID: 16502985000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618926 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 289.0 **LOG TYPE:** Electric Log
SOURCE: LINDSAY, THEODORE R. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.0	CARBONDALE	HERRIN	COAL	6.0	106.0	
175.0	CARBONDALE	SPRINGFIELD	COAL	6.0	222.0	
108.0	CARBONDALE	HOUCHIN CREEK	COAL	-	289.0	

MAPID: 16503469000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.623632 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.769244 **DATE COLLECTED:** 11 / 0 / 1963
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2802.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS, EUGENE F., RIEGEL M J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
62.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	329.0	
11.0	CARBONDALE	SURVANT	COAL	0.8	380.0	
-64.0	CARBONDALE	COLCHESTER	COAL	0.5	455.0	
-115.0	CARBONDALE	DEKOVEN	COAL	3.0	506.0	
-115.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	506.0	
-127.0	CARBONDALE	DAVIS	COAL	4.0	518.0	
-224.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	615.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-239.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	630.0	

MAPID: 16503469000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.623632 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.769244 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2378.0 **LOG TYPE:**
SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
256.0	CARBONDALE	BRERETON	LIMESTONE	-	135.0	
246.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	145.0	
123.0	CARBONDALE	SPRINGFIELD	COAL	-	268.0	
-64.0	CARBONDALE	COLCHESTER	COAL	-	455.0	
-1211.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1602.0	
-1580.0			LIMESTONE	-	1971.0	
-1987.0		BASE BARLOW	LIMESTONE	-	2378.0	

MAPID: 16503469000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.623632 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769244 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 329.0 **LOG TYPE:** Electric Log
SOURCE: EUGENE F. MORRIS 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.0	CARBONDALE	HERRIN	COAL	-	144.0	
207.0	CARBONDALE	BRIAR HILL	COAL	-	184.0	
124.0	CARBONDALE	SPRINGFIELD	COAL	7.0	267.0	
62.0	CARBONDALE	HOUCHIN CREEK	COAL	-	329.0	

MAPID: 16503475000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.616397 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.773006 **DATE COLLECTED:** 1 / 0 / 1964
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2862.0 **LOG TYPE:** Electric Log
SOURCE: MORRIS, EUGENE F., RIEGEL CARRIE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
64.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	320.0	
14.0	CARBONDALE	SURVANT	COAL	0.5	370.0	
-65.0	CARBONDALE	COLCHESTER	COAL	2.0	449.0	
-111.0	CARBONDALE	DEKOVEN	COAL	3.0	495.0	
-111.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	495.0	
-121.0	CARBONDALE	DAVIS	COAL	4.0	505.0	
-216.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	600.0	
-231.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	615.0	

MAPID: 16503475000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.616397 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.773006 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2360.0 **LOG TYPE:**

SOURCE: MORRIS, EUGENE F. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	BRERETON	LIMESTONE	-	100.0	
279.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	105.0	
118.0	CARBONDALE	SPRINGFIELD	COAL	-	266.0	
-61.0	CARBONDALE	COLCHESTER	COAL	-	445.0	
-1581.0			LIMESTONE	-	1965.0	
-1976.0		BASE BARLOW	LIMESTONE	-	2360.0	

MAPID: 16503475000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.616397 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.773006 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 320.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS, EUGENE F. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
274.0	CARBONDALE	HERRIN	COAL	5.0	110.0	
240.0	CARBONDALE	BRIAR HILL	COAL	-	144.0	
154.0	CARBONDALE	SPRINGFIELD	SHALE & SANDSTONE	0.0	230.0	CHANNEL - COAL MISSING
64.0	CARBONDALE	HOUCHIN CREEK	COAL	-	320.0	

MAPID: 16503540000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.618881 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761853 **DATE COLLECTED:** 11 / 18 / 1967

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 242.7 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 67-10 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	8.5	0.0	
-	MODESTO		SANDY SHALE	5.5	8.5	
-	MODESTO		SANDSTONE	13.0	14.0	
-	MODESTO		WHITE SANDSTONE	11.0	27.0	
-	MODESTO		GRAY SHALE	4.0	38.0	
-	CARBONDALE	DANVILLE	COAL	1.0	42.0	
-	CARBONDALE		GRAY SHALE	12.0	43.0	
-	CARBONDALE		COAL	0.5	55.0	
-	CARBONDALE		GRAY SHALE	3.5	55.5	
-	CARBONDALE	ALLENBY	COAL	1.0	59.0	
-	CARBONDALE		GRAY SHALE	4.0	60.0	
-	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	7.7	64.0	
-	CARBONDALE		LIGHT SHALE	5.0	71.7	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	18.3	76.7	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	95.0	
-	CARBONDALE	JAMESTOWN	COAL	0.5	102.0	
-	CARBONDALE	BRERETON	BLUE LIMESTONE	5.5	102.5	
-	CARBONDALE	ANNA	BLACK SHALE	2.8	108.0	
-	CARBONDALE	HERRIN	COAL	5.3	110.8	
-	CARBONDALE		UNDERCLAY	4.0	116.2	
-	CARBONDALE		WHITE SANDSTONE	15.8	120.2	
-	CARBONDALE		SANDY SHALE	12.0	136.0	
-	CARBONDALE		LIMESTONE	0.5	148.0	
-	CARBONDALE		SANDY SHALE	1.5	148.5	
-	CARBONDALE	BRIAR HILL	COAL	1.5	150.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	16.5	151.5	
-	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	25.0	168.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	29.7	193.0	
-	CARBONDALE	DYKERSBURG	SANDSTONE	8.7	222.7	LOG SAYS 'START CORING'
-	CARBONDALE	DYKERSBURG	SHALE	1.5	231.3	
-	CARBONDALE	SPRINGFIELD	COAL	2.7	232.8	COAL & BONE (BONY CO)
-	CARBONDALE	SPRINGFIELD	COAL	4.4	235.5	LOG SAYS 'GOOD'
-	CARBONDALE	SPRINGFIELD	COAL	2.3	239.9	LOG SAYS 'GOOD'
-	CARBONDALE		UNDERCLAY	0.5	242.2	

MAPID: 16503541000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.618869 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.763713 **DATE COLLECTED:** 11 / 15 / 1967

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 236.4 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 67-14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDY CLAY	7.5	0.0	
-	MODESTO		SANDSTONE	8.5	7.5	W/ SDY SH
-	MODESTO		WHITE SANDSTONE	8.0	16.0	
-	MODESTO		DARK SHALE	2.0	24.0	
-	MODESTO		LIGHT SHALE	5.5	26.0	
-	CARBONDALE	DANVILLE	COAL	1.5	31.5	
-	CARBONDALE		GRAY SHALE	7.0	33.0	
-	CARBONDALE		SANDSTONE	5.5	40.0	
-	CARBONDALE		COAL	0.5	45.5	
-	CARBONDALE		LIGHT SHALE	0.5	46.0	
-	CARBONDALE		WHITE SANDSTONE	3.0	46.5	
-	CARBONDALE		GRAY SHALE	1.5	49.5	
-	CARBONDALE	ALLENBY	COAL	0.5	51.0	
-	CARBONDALE		GRAY SHALE	5.5	51.5	
-	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	8.5	57.0	
-	CARBONDALE		GRAY SHALE	1.5	65.5	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	67.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	83.0	
-	CARBONDALE	CONANT	BLUE LIMESTONE	1.0	92.0	
-	CARBONDALE		BLACK SHALE	3.5	93.0	
-	CARBONDALE	BRERETON	BLUE LIMESTONE	6.5	96.5	
-	CARBONDALE	ANNA	BLACK SHALE	1.0	103.0	
-	CARBONDALE	HERRIN	COAL	5.0	104.0	
-	CARBONDALE		UNDERCLAY	4.0	109.0	
-	CARBONDALE		WHITE SANDSTONE	17.0	113.0	
-	CARBONDALE		SANDY SHALE	14.0	130.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	144.0	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	4.5	145.5	
-	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	3.0	150.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	153.0	
-	CARBONDALE	DYKERSBURG	SANDSTONE	23.0	161.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	38.5	184.0	
-	CARBONDALE	DYKERSBURG	SHALE	1.7	222.5	STARTED CORING
-	CARBONDALE	SPRINGFIELD	COAL	3.2	224.2	COAL & BONE
-	CARBONDALE	SPRINGFIELD	SHALE	1.7	227.3	SHALE & COAL
-	CARBONDALE	SPRINGFIELD	COAL	2.7	229.0	LOG SAYS 'GOOD'
-	CARBONDALE	SPRINGFIELD	COAL	3.8	231.7	LOG SAYS 'GOOD'
-	CARBONDALE		UNDERCLAY	1.0	235.4	

MAPID: 16503541000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.618869 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.763713 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 109.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.6	CARBONDALE	DANVILLE	COAL	1.5	31.4	
347.1	CARBONDALE		SHALE & SANDSTONE	18.0	32.9	
329.1	CARBONDALE	ALLENBY	COAL	0.5	50.9	
328.6	CARBONDALE		GRAY SHALE	5.5	51.4	
323.1	CARBONDALE	BANKSTON FORK	LIMESTONE	8.6	56.9	
314.5	CARBONDALE	LAWSON	GRAY SHALE	1.5	65.5	
313.0	CARBONDALE	LAWSON	SANDSTONE	16.0	67.0	
297.0	CARBONDALE	LAWSON	SILTY SHALE	9.0	83.0	
288.0	CARBONDALE	CONANT	LIMESTONE	1.0	92.0	
287.0	CARBONDALE		BLACK SHALE	3.5	93.0	
283.5	CARBONDALE	BRERETON	LIMESTONE	6.5	96.5	
277.0	CARBONDALE	ANNA	BLACK SHALE	1.0	103.0	
276.0	CARBONDALE	HERRIN	COAL	5.0	104.0	

MAPID: 16503630000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 790' S line, 590' W line of SW
QUADRANGLE: HARCO **LONGITUDE:** -88.632312 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.762924 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2336.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	COLCHESTER	COAL	-	440.0	
-	KINKAID	BASE L KINKAID	UNCLASSIFIED	-		
-1533.0			LIMESTONE	-	1924.0	
-1945.0		BASE BARLOW	LIMESTONE	-	2336.0	

MAPID: 16503805000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 350' S line, 500' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.621788 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.765583 **DATE COLLECTED:** 6 / 0 / 1972
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2710.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., PUCKETT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	303.0	
36.0	CARBONDALE	SURVANT	COAL	0.6	350.0	
-39.0	CARBONDALE	COLCHESTER	COAL	0.5	425.0	
-86.0	CARBONDALE	DEKOVEN	COAL	3.0	472.0	
-86.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	472.0	
-100.0	CARBONDALE	DAVIS	COAL	3.5	486.0	
-189.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.3	575.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-230.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	616.0	
-279.0	TRADEWATER	MT. RORAH	COAL	2.0	665.0	

MAPID: 16503805000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 350' S line, 500' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.621788 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.765583 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 422.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	126.0	
128.0	CARBONDALE	SPRINGFIELD	COAL	-	258.0	
-36.0	CARBONDALE	COLCHESTER	COAL	-	422.0	

MAPID: 16503805000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 350' S line, 500' E line of NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.621788 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.765583 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 303.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	HERRIN	COAL	-	126.0	
223.0	CARBONDALE	BRIAR HILL	COAL	-	163.0	
131.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	255.0	CONTAINS A SHALE PARTING
83.0	CARBONDALE	HOUCHIN CREEK	COAL	-	303.0	

MAPID: 16524139000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 612' S line, 660' W line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617539 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.762693 **DATE COLLECTED:** 10 / 24 / 1979
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 125.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. P408DD **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.5	PLEISTOCENE		CLAY	17.0	0.0	
366.5	MODESTO		SANDSTONE	8.7	17.0	
357.8	MODESTO		GRAY SHALE	11.2	25.7	
346.6	CARBONDALE	DANVILLE	COAL	2.0	36.9	
344.6	CARBONDALE		SANDSTONE	9.0	38.9	
335.6	CARBONDALE		SANDY SHALE	8.3	47.9	
327.3	CARBONDALE	ALLENBY	COAL	0.8	56.2	
326.5	CARBONDALE		GRAY SHALE	5.3	57.0	
321.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.6	62.3	
312.6	CARBONDALE		SANDY SHALE	28.6	70.9	
284.0	CARBONDALE		BLACK SHALE	2.5	99.5	
281.5	CARBONDALE	ENERGY	GRAY SHALE	8.3	102.0	
273.2	CARBONDALE	HERRIN	COAL	5.1	110.3	
268.1	CARBONDALE		GRAY SHALE	5.4	115.4	
262.7	CARBONDALE		SANDY SHALE	4.2	120.8	

MAPID: 16526170000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 82' N line, 82' E line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.629513 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.764317 **DATE COLLECTED:** 6 / 24 / 1977

SURFACE ELEVATION (FT.): 384.7 **LOGGED (FT.):** 118.2 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. P427GA **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.7	PLEISTOCENE		SILT	4.5	0.0	
380.2	PLEISTOCENE		CLAY	6.5	4.5	
373.7	PLEISTOCENE		SANDY CLAY	5.0	11.0	
368.7	PLEISTOCENE		SILTY CLAYSTONE	16.0	16.0	
352.7	PLEISTOCENE		SANDSTONE	5.0	32.0	
347.7	PLEISTOCENE		SILTY CLAYSTONE	3.3	37.0	
344.4	CARBONDALE		SANDSTONE	9.4	40.3	
335.0	CARBONDALE		CLAYSTONE	8.3	49.7	
326.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	58.0	GRAY
320.6	CARBONDALE	ANVIL ROCK	SANDSTONE	19.4	64.1	
301.2	CARBONDALE		SILTSTONE	5.0	83.5	
296.2	CARBONDALE		GRAY SHALE	10.0	88.5	
286.2	CARBONDALE		BLACK SHALE	3.0	98.5	
283.2	CARBONDALE	BRERETON	LIMESTONE	7.1	101.5	
276.1	CARBONDALE	HERRIN	COAL	5.4	108.6	
270.7	CARBONDALE		GRAY SHALE	4.2	114.0	

MAPID: 16590164000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.633709 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.775703 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 448.8 **LOGGED (FT.):** 179.5 **LOG TYPE:** Company map

SOURCE: AMAX H-625 **WELL TYPE:** Coal Test

COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
270.8	CARBONDALE	HERRIN	COAL	1.5	178.0	

MAPID: 16590166000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624289 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772067 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.7 **LOGGED (FT.):** 137.5 **LOG TYPE:** Company map
SOURCE: AMAX P-555 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
249.7	CARBONDALE	DANVILLE	COAL	0.5	137.0	

MAPID: 16590178000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.619779 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.9 **LOGGED (FT.):** 146.3 **LOG TYPE:** Company map
SOURCE: AMAX P-507 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
251.9	CARBONDALE	HERRIN	COAL	5.3	141.0	

MAPID: 16590179000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624358 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.768413 **DATE COLLECTED:** 2 / 28 / 1973
SURFACE ELEVATION (FT.): 386.4 **LOGGED (FT.):** 148.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX P505 **WELL TYPE:** Coal Test
COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.4	PLEISTOCENE		SILT	4.0	0.0	
382.4	PLEISTOCENE		CLAY	6.0	4.0	
376.4	MODESTO		SANDSTONE	10.0	10.0	
366.4	MODESTO		SANDY SHALE	28.0	20.0	
338.4	MODESTO		SANDSTONE	18.0	48.0	
320.4	MODESTO		GRAY SHALE	1.0	66.0	
319.4	CARBONDALE	DANVILLE	COAL	1.5	67.0	
317.9	CARBONDALE		UNDERCLAY	0.5	68.5	
317.4	CARBONDALE		GRAY SHALE	3.0	69.0	
314.4	CARBONDALE		CALCAREOUS SHALE	10.0	72.0	
304.4	CARBONDALE		GRAY SHALE	6.0	82.0	
298.4	CARBONDALE	ALLENBY	COAL	0.7	88.0	
297.7	CARBONDALE		SHALE	3.3	88.7	
294.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	92.0	
287.9	CARBONDALE		SHALE	2.5	98.5	
285.4	CARBONDALE		DARK GRAY SHALE	8.0	101.0	
277.4	CARBONDALE		SANDSTONE	10.0	109.0	
267.4	CARBONDALE		GRAY SHALE	12.0	119.0	
255.4	CARBONDALE		BLACK SHALE	3.0	131.0	
252.4	CARBONDALE	BRERETON	LIMESTONE	6.5	134.0	
245.9	CARBONDALE	ANNA	BLACK SHALE	0.5	140.5	
245.4	CARBONDALE	HERRIN	COAL	5.3	141.0	
240.1	CARBONDALE		UNDERCLAY	1.7	146.3	

MAPID: 16590179000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624358 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768413 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.4 **LOGGED (FT.):** 146.3 **LOG TYPE:** Company map
SOURCE: AMAX P-505 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.4	CARBONDALE	HERRIN	COAL	5.3	141.0	

MAPID: 16590180000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629168 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768356 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.8 **LOGGED (FT.):** 149.8 **LOG TYPE:** Company map
SOURCE: AMAX P-503 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.8	CARBONDALE	HERRIN	COAL	4.8	145.0	

MAPID: 16590181000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.633971 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Company map
SOURCE: AMAX H-525 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.0	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	198.0	

MAPID: 16590184000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634008 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.5 **LOGGED (FT.):** 114.7 **LOG TYPE:** Company map
SOURCE: AMAX H-500 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.5	CARBONDALE	HERRIN	COAL	5.7	109.0	

MAPID: 16590189000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.619854 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764723 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.2 **LOGGED (FT.):** 118.1 **LOG TYPE:** Company map
SOURCE: AMAX P-457 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.2	CARBONDALE	HERRIN	COAL	5.1	113.0	

MAPID: 16590190000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624442 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764656 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.3 **LOGGED (FT.):** 232.1 **LOG TYPE:** Company map
SOURCE: AMAX N-13-11 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.3	CARBONDALE	HERRIN	COAL	5.2	117.0	
167.3	CARBONDALE	SPRINGFIELD	COAL	6.1	226.0	

MAPID: 16590191000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629297 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764621 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 110.3 **LOG TYPE:** Company map
SOURCE: AMAX P-453 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.5	CARBONDALE	HERRIN	COAL	5.3	105.0	

MAPID: 16590192000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.631826 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76458 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.7 **LOGGED (FT.):** 113.1 **LOG TYPE:** Company map
SOURCE: AMAX P-452 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.7	CARBONDALE	HERRIN	COAL	5.1	108.0	

MAPID: 16590193000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634061 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764602 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.6 **LOGGED (FT.):** 118.4 **LOG TYPE:** Company map
SOURCE: AMAX H-475 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.6	CARBONDALE	DANVILLE	COAL	2.0	44.0	
282.6	CARBONDALE	HERRIN	COAL	5.4	113.0	

MAPID: 16590200000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634122 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762728 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.2 **LOGGED (FT.):** 106.3 **LOG TYPE:** Company map
SOURCE: AMAX H-450 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.2	CARBONDALE	HERRIN	COAL	5.3	101.0	

MAPID: 16590201000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.63213 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762945 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.2 **LOGGED (FT.):** 106.3 **LOG TYPE:** Company map
SOURCE: AMAX P-427 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.2	CARBONDALE	HERRIN	COAL	6.3	100.0	

MAPID: 16590866000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** 80' S line, 100' E line of NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.619414 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768027 **DATE COLLECTED:** 7 / 19 / 1989

SURFACE ELEVATION (FT.): 391.9 **LOGGED (FT.):** 169.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX P482PH **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.9	PLEISTOCENE		UNCONSOLIDATED	12.5	0.0	
379.4	MODESTO		SANDSTONE	10.0	12.5	BROWN
369.4	MODESTO		SANDSTONE	3.4	22.5	BROWN-GRAY
366.0	MODESTO		SANDSTONE	34.2	25.9	GRAY
331.8	MODESTO		GRAY SHALE	5.4	60.1	
326.4	MODESTO		DARK GRAY SHALE	5.6	65.5	
320.8	MODESTO		BLACK SHALE	2.3	71.1	
318.5	CARBONDALE	DANVILLE	COAL	1.9	73.4	
316.6	CARBONDALE		SILTSTONE	1.7	75.3	
314.9	CARBONDALE		GRAY SHALE	0.7	77.0	
314.2	CARBONDALE		DARK GRAY SHALE	2.4	77.7	
311.8	CARBONDALE		SANDSTONE	2.0	80.1	GRAY
309.8	CARBONDALE		SILTSTONE	7.3	82.1	GRAY
302.5	CARBONDALE		GRAY SHALE	1.2	89.4	
301.3	CARBONDALE		COAL	0.4	90.6	
300.9	CARBONDALE		UNDERCLAY	0.9	91.0	
300.0	CARBONDALE		SANDSTONE	0.6	91.9	GRAY
299.4	CARBONDALE		SILTSTONE	0.7	92.5	GRAY
298.7	CARBONDALE		DARK GRAY SHALE	2.0	93.2	
296.7	CARBONDALE	ALLENBY	COAL	2.1	95.2	
294.6	CARBONDALE		UNDERCLAY	0.1	97.3	
294.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	97.4	GRAY
290.5	CARBONDALE		BLACK SHALE	0.1	101.4	
290.4	CARBONDALE		GRAY SHALE	0.5	101.5	
289.9	CARBONDALE		SILTSTONE	1.8	102.0	
288.1	CARBONDALE		GRAY SHALE	2.3	103.8	
285.8	CARBONDALE		SANDSTONE	6.0	106.1	GRAY
279.8	CARBONDALE		GRAY SHALE	17.1	112.1	
262.7	CARBONDALE	CONANT	LIMESTONE	0.5	129.2	GRAY
262.2	CARBONDALE	JAMESTOWN	COAL	0.4	129.7	
261.8	CARBONDALE		LIMESTONE	0.1	130.1	LIGHT GRAY
261.7	CARBONDALE		BLACK SHALE	2.2	130.2	
259.5	CARBONDALE	BRERETON	LIMESTONE	7.6	132.4	DARK GRAY
251.9	CARBONDALE	ANNA	BLACK SHALE	0.2	140.0	
251.7	CARBONDALE	HERRIN	COAL	5.3	140.2	
246.4	CARBONDALE		UNDERCLAY	4.2	145.5	
242.2	CARBONDALE		SILTSTONE	5.3	149.7	GRAY
236.9	CARBONDALE		GRAY SHALE	10.1	155.0	
226.8	CARBONDALE		BLACK SHALE	1.0	165.1	

225.8	CARBONDALE	GRAY SHALE	2.9	166.1

MAPID: 16500344000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.650104 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.773954 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 395.3 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.3			UNCONSOLIDATED	11.8	0.0	
383.5	MODESTO		SANDSTONE	25.2	11.8	
358.3	CARBONDALE	DANVILLE	COAL	0.8	37.0	
357.5	CARBONDALE		DARK SHALE	5.2	37.8	
352.3	CARBONDALE		SANDY SHALE	4.0	43.0	
348.3	CARBONDALE		SHALE	3.0	47.0	
345.3	CARBONDALE	"Allenby rider"	COAL	0.3	50.0	
345.0	CARBONDALE		SANDY SHALE	5.7	50.3	
339.3	CARBONDALE	ALLENBY	COAL	0.3	56.0	
339.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.7	56.3	
336.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	59.0	
320.3	CARBONDALE	ANVIL ROCK	SANDSTONE	27.0	75.0	
293.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.2	102.0	
287.1	CARBONDALE	JAMESTOWN	COAL	0.4	108.2	
286.7	CARBONDALE	JAMESTOWN	BLACK SHALE	2.4	108.6	
284.3	CARBONDALE	BRERETON	LIMESTONE	6.0	111.0	
278.3	CARBONDALE	ANNA	BLACK SHALE	2.8	117.0	
275.5	CARBONDALE	HERRIN	COAL	4.4	119.8	
271.1			UNDERCLAY	0.5	124.2	
270.6			SANDY SHALE	19.3	124.7	
251.3			GRAY SHALE	8.2	144.0	
243.1	CARBONDALE	BRIAR HILL	COAL	0.8	152.2	
242.4	CARBONDALE	BRIAR HILL	SHALE/COAL	1.1	152.9	
241.3	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	154.0	
219.3	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	176.0	
213.3	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	182.0	W/ SH
205.3	CARBONDALE	DYKERSBURG	SANDY SHALE	28.0	190.0	
177.3	CARBONDALE	DYKERSBURG	BLACK SHALE	21.0	218.0	
156.3	CARBONDALE	DYKERSBURG	GRAY SHALE	13.2	239.0	
143.1	CARBONDALE	SPRINGFIELD	COAL	6.1	252.2	
137.0			SHALE	6.7	258.3	
130.3			GRAY SHALE	33.0	265.0	
97.3	CARBONDALE		DARK SHALE	18.3	298.0	
79.0	CARBONDALE		COAL	1.8	316.3	
77.3	CARBONDALE		GRAY SHALE	3.0	318.0	

MAPID: 16500345000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.64103 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.773936 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.6 **LOGGED (FT.):** 375.8 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.6			UNCONSOLIDATED	9.4	0.0	
388.2	MODESTO		GRAY SHALE	10.0	9.4	
378.2	MODESTO		DARK SHALE	11.3	19.4	
366.9	MODESTO		GRAY SHALE	23.0	30.7	
343.9	MODESTO		SANDSTONE	35.5	53.7	
308.4	MODESTO		DARK SHALE	7.0	89.2	
301.4	MODESTO	PIASA	LIMESTONE	4.0	96.2	
297.4	MODESTO		GRAY SHALE	11.0	100.2	
286.4	MODESTO		DARK SHALE	5.0	111.2	
281.4	MODESTO		SANDY SHALE	6.3	116.2	
275.2	CARBONDALE	DANVILLE	COAL	1.1	122.4	
274.1			DARK SHALE	3.0	123.5	
271.1			SANDSTONE	10.0	126.5	
261.1			COAL	0.6	136.5	
260.5			SHALE	2.2	137.1	
258.3			LIMESTONE	7.0	139.3	
251.3			GRAY SHALE	1.0	146.3	
250.3			SANDSTONE	6.0	147.3	
244.3			DARK SHALE	4.0	153.3	
240.3			SANDSTONE	6.3	157.3	
234.0			SANDY DARK SHALE	4.0	163.6	
230.0			SANDY SHALE	10.0	167.6	
220.0			DARK SHALE	3.0	177.6	
217.0			GRAY SHALE	3.2	180.6	
213.8			LIMESTONE	9.0	183.8	
204.8			COAL	0.2	192.8	
204.7			UNDERCLAY	2.3	192.9	
202.3			CALCAREOUS SHALE	7.3	195.3	
195.0			SANDY SHALE	3.5	202.6	
191.5			DARK SHALE	16.0	206.1	
175.5			COAL	1.0	222.1	
174.5			DARK SHALE	2.0	223.1	
172.5	CARBONDALE		GRAY SHALE	8.2	225.1	
164.4	CARBONDALE		SANDY SHALE	66.1	233.2	
98.3	CARBONDALE		COAL	1.3	299.3	
96.9	CARBONDALE		UNDERCLAY	3.0	300.7	
93.9	CARBONDALE		CALCAREOUS SHALE	6.0	303.7	
87.9	CARBONDALE		DARK SHALE	50.1	309.7	
37.8	CARBONDALE		BLACK SHALE	6.3	359.8	

31.6	CARBONDALE	COAL	2.1	366.0
29.5	CARBONDALE	UNDERCLAY	3.0	368.1
26.5	CARBONDALE	SHALE	4.7	371.1

MAPID: 16500346000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.636558 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.770151 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.4 **LOGGED (FT.):** 279.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.4			UNCONSOLIDATED	15.0	0.0	
393.4	MODESTO		SANDSTONE	25.0	15.0	
368.4	MODESTO		ARGILACEOUS SHALE	10.0	40.0	
358.4	MODESTO		SANDSTONE	18.0	50.0	
340.4	MODESTO		ARGILACEOUS SHALE	31.0	68.0	
309.4	MODESTO		COAL	0.2	99.0	
309.2	MODESTO		ARGILACEOUS SHALE	30.8	99.2	
278.4	MODESTO		BLACK SHALE	3.0	130.0	
275.4	CARBONDALE	DANVILLE	COAL	1.7	133.0	
273.7	CARBONDALE		CALCAREOUS SHALE	2.3	134.7	
271.4	CARBONDALE		LIMESTONE	2.0	137.0	
269.4			SHALE	2.0	139.0	
267.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	141.0	
264.9	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	143.5	
258.4	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	10.0	150.0	
248.4	CARBONDALE	ANVIL ROCK	SHALE	13.0	160.0	
235.4	CARBONDALE	ANVIL ROCK	SHALE	12.0	173.0	W/ LS BANDS
223.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.0	185.0	W/ LS BANDS
206.4	CARBONDALE	HERRIN	COAL	2.0	202.0	
204.4			SANDSTONE	11.0	204.0	
193.4			SANDY SHALE	6.0	215.0	
187.4	CARBONDALE	BRIAR HILL	COAL	1.8	221.0	
185.6			SANDY SHALE	12.2	222.8	
173.4	CARBONDALE	ST. DAVID	LIMESTONE	4.4	235.0	
169.0	CARBONDALE	DYKERSBURG	SANDY SHALE	5.6	239.4	
163.4	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	245.0	
156.4	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	12.0	252.0	
144.4	CARBONDALE	DYKERSBURG	SANDSTONE & CONGLOMERATE	1.0	264.0	
143.4	CARBONDALE	DYKERSBURG	BLACK SHALE	2.5	265.0	
140.9	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	5.5	267.5	
135.4	CARBONDALE	SPRINGFIELD	COAL	5.5	273.0	
129.9			UNDERCLAY	1.3	278.5	

MAPID: 16500347000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.649212 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.767341 **DATE COLLECTED:** 8 / 23 / 1905

SURFACE ELEVATION (FT.): 436.6 **LOGGED (FT.):** 250.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.6			UNCONSOLIDATED	10.0	0.0	
426.6	MODESTO		SANDSTONE	20.0	10.0	
406.6	MODESTO		CLAYSTONE	1.0	30.0	
405.6	MODESTO	PIASA	LIMESTONE	3.0	31.0	
402.6	MODESTO		GRAY SHALE	12.0	34.0	
390.6	CARBONDALE	DANVILLE	COAL	1.0	46.0	
389.6	CARBONDALE		GRAY SHALE	11.0	47.0	
378.6	CARBONDALE	ALLENBY	COAL	1.0	58.0	
377.6	CARBONDALE		UNDERCLAY	2.5	59.0	
375.1	CARBONDALE		GRAY SHALE	4.5	61.5	
370.6	CARBONDALE	ANVIL ROCK	SANDSTONE	29.0	66.0	
341.6	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	95.0	
331.6	CARBONDALE	ANVIL ROCK	GRAY SHALE	14.5	105.0	
317.1	CARBONDALE	ANVIL ROCK	DARK SHALE	1.5	119.5	
315.6	CARBONDALE	BRERETON	LIMESTONE	1.0	121.0	
314.6	CARBONDALE	BRERETON	LIMESTONE	4.0	122.0	
310.6	CARBONDALE	ANNA	DARK SHALE	2.5	126.0	
308.1	CARBONDALE	HERRIN	COAL	5.1	128.5	
303.0	CARBONDALE		UNDERCLAY	2.4	133.6	
300.6	CARBONDALE		UNDERCLAY/SHALE	11.0	136.0	
289.6	CARBONDALE		GRAY SHALE	11.0	147.0	
278.6	CARBONDALE		SHALE	4.0	158.0	
274.6	CARBONDALE	BRIAR HILL	COAL	1.3	162.0	
273.3	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	163.3	
248.3	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	188.3	
239.3	CARBONDALE	DYKERSBURG	SANDSTONE	14.0	197.3	
225.3	CARBONDALE	DYKERSBURG	SANDY SHALE	16.0	211.3	
209.3	CARBONDALE	DYKERSBURG	SANDY DARK SHALE	16.7	227.3	
192.6	CARBONDALE	SPRINGFIELD	COAL	4.8	244.0	
187.8	CARBONDALE		UNDERCLAY	1.3	248.8	

MAPID: 16500347000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: HARCO **LONGITUDE:** -88.649212 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.767341 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.0	CARBONDALE	HERRIN	COAL	5.1	128.0	
275.0	CARBONDALE	BRIAR HILL	COAL	1.3	162.0	
193.0	CARBONDALE	SPRINGFIELD	COAL	4.8	244.0	

MAPID: 16500348000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.645919 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.762615 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 406.1 **LOGGED (FT.):** 217.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.1			UNCONSOLIDATED	24.0	0.0	
382.1	CARBONDALE		GRAY SHALE	17.0	24.0	
365.1	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	41.0	
357.1	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	49.0	W/ PARTINGS
340.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.8	66.0	
328.3	CARBONDALE		FOSSILIFEROUS SHALE	0.5	77.8	
327.8	CARBONDALE	JAMESTOWN	COAL	0.4	78.3	
327.4	CARBONDALE		DARK SHALE	1.5	78.7	
325.9	CARBONDALE	BRERETON	LIMESTONE	8.0	80.2	
317.9	CARBONDALE	ANNA	DARK SHALE	0.3	88.2	
317.6	CARBONDALE	HERRIN	COAL	5.3	88.5	
312.3	CARBONDALE		UNDERCLAY	2.2	93.8	
310.1	CARBONDALE		GRAY SHALE	21.0	96.0	
289.1	CARBONDALE	BRIAR HILL	BONE COAL	1.3	117.0	
287.8	CARBONDALE	DYKERSBURG	SANDSTONE	7.8	118.3	
280.1	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	126.0	
276.1	CARBONDALE	DYKERSBURG	SANDSTONE	55.0	130.0	
221.1	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	185.0	
209.1	CARBONDALE	DYKERSBURG	SHALE	14.0	197.0	
195.1	CARBONDALE	SPRINGFIELD	COAL	4.8	211.0	
190.3	CARBONDALE		UNDERCLAY	1.3	215.8	

MAPID: 16500974000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 250' N line, 100' E line of NE NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.634655 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.767572 **DATE COLLECTED:** 10 / 1 / 1946

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. HARCO SHAFT **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCLASSIFIED	60.0	0.0	UNIT ABSENT FROM LOG (SURFACE LAYERS)
320.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	60.0	
311.5	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.8	68.5	
310.7	CARBONDALE	ANVIL ROCK	SILTSTONE	0.8	69.3	WITH SHALE INTERLAMINATIONS
309.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.6	70.1	
308.3	CARBONDALE	ANVIL ROCK	SHALE	0.6	71.7	
307.7	CARBONDALE	ANVIL ROCK	SANDSTONE	1.6	72.3	
306.2	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	4.3	73.8	
301.8	CARBONDALE	ANVIL ROCK	SANDSTONE	4.4	78.2	
297.4	CARBONDALE	ANVIL ROCK	SHALE	0.8	82.6	
296.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.7	83.3	
293.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	7.2	87.0	+1'8" TO MATCH MARKER DEPTH
285.8	CARBONDALE		DARK GRAY SHALE	9.3	94.2	
276.6	CARBONDALE		GRAY SHALE	0.3	103.4	
276.3	CARBONDALE		DARK GRAY SHALE	1.4	103.7	
274.9	CARBONDALE	BRERETON	LIMESTONE	6.3	105.1	
268.7	CARBONDALE		DARK GRAY SHALE	0.9	111.3	
267.7	CARBONDALE	HERRIN	COAL	1.1	112.3	-1" TO MATCH LOG DEPTH
266.7	CARBONDALE	HERRIN	CLAYSTONE	0.0	113.3	
266.6	CARBONDALE	HERRIN	COAL	2.2	113.4	
264.5	CARBONDALE	HERRIN	DARK CLAYSTONE	0.0	115.5	WITH MASSIVE
264.4	CARBONDALE	HERRIN	COAL	1.0	115.6	
263.4	CARBONDALE	HERRIN	CLAYSTONE	0.1	116.6	
263.3	CARBONDALE	HERRIN	COAL	0.7	116.7	
262.7	CARBONDALE		DARK CLAYSTONE	1.7	117.3	
260.9	CARBONDALE		GRAY SHALE	0.5	119.1	+2" TO MATCH MARKER DEPTH
260.5	CARBONDALE		SHALE	0.2	119.5	WITH BLUE-GRAY LS NODULES
260.3	CARBONDALE		LIMESTONE	2.8	119.7	
257.5	CARBONDALE		GRAY SHALE	2.9	122.5	
254.6	CARBONDALE		GRAY SHALE	2.6	125.4	+2' ADDED TO MATCH MARKER DEPTH
252.0	CARBONDALE		GRAY SHALE	6.6	128.0	
245.4	CARBONDALE		GRAY SHALE	14.5	134.6	
230.9	CARBONDALE		DARK GRAY SHALE	0.3	149.1	
230.6	CARBONDALE	BRIAR HILL	COAL	1.4	149.4	
229.2	CARBONDALE		CLAYSTONE	0.2	150.8	UNDERCLAY
229.0	CARBONDALE		CLAYSTONE	0.3	151.0	
228.7	CARBONDALE		GRAY SILTSTONE	3.3	151.3	
225.3	CARBONDALE		SILTSTONE	0.4	154.7	

224.9	CARBONDALE	SHALE	3.1	155.1	SHALE AND SILTSTONE
221.8	CARBONDALE	DARK GRAY SHALE	5.0	158.2	
216.8	CARBONDALE	GRAY SHALE	2.4	163.2	
214.4	CARBONDALE	GRAY SILTSTONE	3.3	165.6	
211.2	CARBONDALE	DARK GRAY SHALE	2.5	168.8	
208.7	CARBONDALE	SANDSTONE	0.9	171.3	
207.7	CARBONDALE	GRAY SILTSTONE	0.5	172.3	
207.2	CARBONDALE	SANDSTONE	1.6	172.8	
205.7	CARBONDALE	GRAY SILTSTONE	0.8	174.3	
204.8	CARBONDALE	GRAY SILTSTONE	3.1	175.2	WITH SOME GY SHALE
201.7	CARBONDALE	GRAY SHALE	5.7	178.3	WITH LGY SILTSTONE
196.1	CARBONDALE	DARK GRAY SHALE	3.8	183.9	
192.2	CARBONDALE	SANDSTONE	0.6	187.8	
191.7	CARBONDALE	GRAY SHALE	0.8	188.3	
190.9	CARBONDALE	GRAY SANDSTONE	4.0	189.1	
186.9	CARBONDALE	GRAY SHALE	6.2	193.1	
180.7	CARBONDALE	GRAY SANDSTONE	0.5	199.3	
180.3	CARBONDALE	SHALE	1.9	199.7	
178.4	CARBONDALE	SANDSTONE	4.4	201.6	-7" TO MATCH MARKER DEPTH
174.0	CARBONDALE	GRAY SILTSTONE	22.0	206.0	

MAPID: 16500974000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 250' N line, 100' E line of NE NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.634655 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.767572 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 117.1 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.4	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	71.6	
299.9	CARBONDALE	LAWSON	SANDSTONE	7.4	80.1	
292.5	CARBONDALE	LAWSON	SILTSTONE	5.5	87.5	
287.0	CARBONDALE	LAWSON	GRAY SHALE	8.8	93.0	
278.2	CARBONDALE		CALCAREOUS SHALE	3.0	101.8	
275.2	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	6.3	104.8	
268.9	CARBONDALE	ANNA	BLACK SHALE	0.9	111.1	
268.0	CARBONDALE	HERRIN	COAL	5.1	112.0	

MAPID: 16502989000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 516' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646933 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.766858 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 1430.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-21.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	450.0	
-91.0	SPOON	DAVIS	UNCLASSIFIED	-	520.0	
-1001.0	BASE OF PENN.		UNCLASSIFIED	-	1430.0	

MAPID: 16502989000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 516' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646933 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.766858 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2390.0 **LOG TYPE:**
SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
319.0	CARBONDALE	BRERETON	LIMESTONE	-	110.0	
-1139.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1568.0	
-1575.0			LIMESTONE	-	2004.0	
-1961.0		BASE BARLOW	LIMESTONE	-	2390.0	

MAPID: 16502989000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 516' N line, 330' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.646933 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.766858 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 2879.0 **LOG TYPE:** Electric Log
SOURCE: EAKLE & HOLDER PETRO., RIEGEL UNIT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	323.0	
57.0	CARBONDALE	SURVANT	COAL	0.8	372.0	
-20.0	CARBONDALE	COLCHESTER	COAL	2.0	449.0	
-63.0	CARBONDALE	DEKOVEN	COAL	4.0	492.0	
-63.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	492.0	
-84.0	CARBONDALE	DAVIS	COAL	5.0	513.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	748.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-326.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	755.0	

MAPID: 16503656000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 100' S line, 800' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.637168 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.760995 **DATE COLLECTED:** 4 / 0 / 1971
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2389.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., RIEGEL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	283.0	
61.0	CARBONDALE	SURVANT	COAL	0.5	334.0	
-10.0	CARBONDALE	COLCHESTER	COAL	0.5	405.0	
-63.0	CARBONDALE	DEKOVEN	COAL	3.0	458.0	
-63.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	458.0	
-95.0	CARBONDALE	DAVIS	COAL	2.0	490.0	
-137.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	532.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-151.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	546.0	

MAPID: 16503656000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 100' S line, 800' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.637168 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.760995 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2344.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1537.0			LIMESTONE	-	1932.0	
-1949.0		BASE BARLOW	LIMESTONE	-	2344.0	

MAPID: 16526171000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 1' W line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.652889 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.761643 **DATE COLLECTED:** 10 / 4 / 1974

SURFACE ELEVATION (FT.): 438.1 **LOGGED (FT.):** 124.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE H417C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.1	PLEISTOCENE		SILT & CLAY	10.0	0.0	
428.1	MODESTO		SANDSTONE	16.5	10.0	SOFT; CORING BEGAN
411.6	MODESTO		GRAY SHALE	2.5	26.5	DARK
409.1	MODESTO	PIASA	LIMESTONE	3.2	29.0	
405.9	MODESTO		SHALE	8.0	32.2	DARK; SOFT
397.9	CARBONDALE	DANVILLE	COAL	2.0	40.2	
395.9	CARBONDALE		UNDERCLAY	1.8	42.2	
394.1	CARBONDALE		SANDSTONE	6.0	44.0	
388.1	CARBONDALE		GRAY SHALE	4.0	50.0	DARK
384.1	CARBONDALE		GRAY SHALE	2.0	54.0	
382.1	CARBONDALE	ALLENBY	COAL	1.0	56.0	
381.1	CARBONDALE		UNDERCLAY	1.0	57.0	
380.1	CARBONDALE		GRAY SHALE	1.0	58.0	
379.1	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	59.0	
371.1	CARBONDALE		GRAY SHALE	13.0	67.0	DARK
358.1	CARBONDALE	ANVIL ROCK	SANDSTONE	27.0	80.0	
331.1	CARBONDALE		BLACK SHALE	2.0	107.0	
329.1	CARBONDALE	BRERETON	LIMESTONE	8.0	109.0	
321.1	CARBONDALE	HERRIN	COAL	5.5	117.0	
315.6	CARBONDALE		UNDERCLAY	1.5	122.5	

MAPID: 16526172000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 495' S line, 300' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.644562 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.765868 **DATE COLLECTED:** 10 / 18 / 1974

SURFACE ELEVATION (FT.): 403.9 **LOGGED (FT.):** 115.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. H470F **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.9	PLEISTOCENE		CLAY	9.0	0.0	
394.9	MODESTO		SANDSTONE	25.7	9.0	CORING BEGAN
369.2	MODESTO		SHALE	3.7	34.7	DARK
365.5	CARBONDALE	DANVILLE	COAL	1.8	38.4	
363.7	CARBONDALE		UNDERCLAY	1.2	40.2	
362.5	CARBONDALE		SANDY SHALE	10.6	41.4	GRAY
351.9	CARBONDALE	ALLENBY	COAL	0.3	52.0	
351.6	CARBONDALE		UNDERCLAY	0.7	52.3	
350.9	CARBONDALE		GRAY SHALE	8.0	53.0	
342.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	61.0	
335.9	CARBONDALE		GRAY SHALE	12.0	68.0	
323.9	CARBONDALE		SANDY SHALE	18.4	80.0	GRAY
305.5	CARBONDALE		SHALE	3.0	98.4	DARK
302.5	CARBONDALE	BRERETON	LIMESTONE	5.0	101.4	
297.5	CARBONDALE	ANNA	BLACK SHALE	1.0	106.4	
296.5	CARBONDALE	HERRIN	COAL	5.9	107.4	
290.6	CARBONDALE		UNDERCLAY	1.7	113.3	

MAPID: 16526173000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.634337 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.765399 **DATE COLLECTED:** 10 / 8 / 1974

SURFACE ELEVATION (FT.): 390.3 **LOGGED (FT.):** 121.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE H475C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.3	PLEISTOCENE		SILT	2.0	0.0	
388.3	PLEISTOCENE		CLAY	7.0	2.0	
381.3	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	9.0	SOFT; CORING BEGAN
375.3	CARBONDALE		SANDY SHALE	77.0	15.0	
298.3	CARBONDALE		GRAY SHALE	13.0	92.0	
285.3	CARBONDALE	CONANT	LIMESTONE	0.5	105.0	
284.8	CARBONDALE	JAMESTOWN	COAL	0.5	105.5	
284.3	CARBONDALE		BLACK SHALE	2.0	106.0	
282.3	CARBONDALE	BRERETON	LIMESTONE	6.0	108.0	
276.3	CARBONDALE	HERRIN	COAL	5.7	114.0	
270.6	CARBONDALE		UNDERCLAY	1.3	119.7	

MAPID: 16590865000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 700' N line, 430' W line of NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.651091 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766373 **DATE COLLECTED:** 5 / 10 / 1988

SURFACE ELEVATION (FT.): 422.4 **LOGGED (FT.):** 129.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO H467FG **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.4	PLEISTOCENE		CLAY	4.0	0.0	
418.4	MODESTO		SANDSTONE	23.0	4.0	BROWN
395.4	MODESTO		DARK GRAY SHALE	2.0	27.0	
393.4	MODESTO		GRAY SHALE	5.0	29.0	
388.4	CARBONDALE	DANVILLE	COAL	2.0	34.0	
386.4	CARBONDALE		UNDERCLAY	1.0	36.0	
385.4	CARBONDALE		SANDY SHALE	3.0	37.0	
382.4	CARBONDALE		SANDSTONE	12.0	40.0	
370.4	CARBONDALE	ALLENBY	COAL	1.0	52.0	
369.4	CARBONDALE		UNDERCLAY	1.0	53.0	
368.4	CARBONDALE		GRAY SHALE	2.0	54.0	
366.4	CARBONDALE		CALCAREOUS SANDSTONE	5.0	56.0	
361.4	CARBONDALE		SANDY SHALE	9.0	61.0	
352.4	CARBONDALE		SANDSTONE	43.0	70.0	
309.4	CARBONDALE		SANDY SHALE	1.0	113.0	
308.4	CARBONDALE	BRERETON	LIMESTONE	2.0	114.0	
306.4	CARBONDALE	ANNA	BLACK SHALE	1.0	116.0	
305.4	CARBONDALE	HERRIN	COAL	5.0	117.0	
300.4	CARBONDALE		UNDERCLAY	3.0	122.0	
297.4	CARBONDALE		SANDY SHALE	4.0	125.0	

MAPID: 16590868000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 410' S line, 20' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.633851 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.767047 **DATE COLLECTED:** 7 / 6 / 1989

SURFACE ELEVATION (FT.): 388.5 **LOGGED (FT.):** 142.8 **LOG TYPE:** Drillers Log

SOURCE: AMAX H500CHI **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.5	PLEISTOCENE		CLAY	4.0	0.0	BROWN
384.5	PLEISTOCENE		UNCONSOLIDATED	20.0	4.0	BROWN
364.5	PLEISTOCENE		UNCONSOLIDATED	11.0	24.0	GRAY
353.5	CARBONDALE		BROWN SHALE	7.0	35.0	
346.5	CARBONDALE		SANDSTONE	2.0	42.0	GRAY
344.5	CARBONDALE		SILTSTONE	4.7	44.0	GRAY
339.8	CARBONDALE		SANDSTONE	0.5	48.7	GRAY
339.3	CARBONDALE		GRAY SHALE	1.9	49.2	
337.4	CARBONDALE		SANDSTONE	0.3	51.1	GRAY
337.1	CARBONDALE		GRAY SHALE	4.8	51.4	
332.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	56.2	LIGHT GRAY
325.6	CARBONDALE	BANKSTON FORK	GRAY SHALE	1.1	62.9	
324.5	CARBONDALE	BANKSTON FORK	LIMESTONE	0.7	64.0	LIGHT GRAY
323.8	CARBONDALE	BANKSTON FORK	GRAY SHALE	0.6	64.7	
323.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	65.3	LIGHT GRAY
317.6	CARBONDALE		GRAY SHALE	0.2	70.9	
317.4	CARBONDALE		SILTSTONE	1.7	71.1	GRAY
315.7	CARBONDALE		SANDSTONE	0.8	72.8	GRAY
314.9	CARBONDALE		SILTSTONE	0.8	73.6	GRAY
314.1	CARBONDALE		SILTSTONE	1.7	74.4	GRAY
312.4	CARBONDALE		SILTSTONE	1.9	76.1	GRAY
310.5	CARBONDALE		SANDSTONE	20.6	78.0	GRAY
289.9	CARBONDALE		SILTY SHALE	10.5	98.6	
279.4	CARBONDALE	CONANT	LIMESTONE	0.3	109.1	GRAY
279.1	CARBONDALE	JAMESTOWN	COAL	0.4	109.4	
278.7	CARBONDALE		LIMESTONE	0.3	109.8	GRAY
278.4	CARBONDALE		DARK GRAY SHALE	0.2	110.1	
278.2	CARBONDALE		BLACK SHALE	0.6	110.3	
277.6	CARBONDALE	BRERETON	LIMESTONE	4.5	110.9	DARK GRAY
273.1	CARBONDALE	ANNA	BLACK SHALE	1.3	115.4	
271.8	CARBONDALE	HERRIN	COAL	5.6	116.7	
266.2	CARBONDALE		UNDERCLAY	3.4	122.3	
262.8	CARBONDALE		UNKNOWN	17.1	125.7	

MAPID: 16590869000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 450' N line, 470' E line of SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.64145 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769404 **DATE COLLECTED:** 6 / 21 / 1989

SURFACE ELEVATION (FT.): 408.8 **LOGGED (FT.):** 83.6 **LOG TYPE:** Drillers Log

SOURCE: AMAX H521KJ **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.8	PLEISTOCENE		CLAY	3.0	0.0	BROWN
405.8	CARBONDALE		SANDSTONE	4.1	3.0	GRAY-BROWN
401.7	CARBONDALE		BROWN SHALE	1.2	7.1	
400.5	CARBONDALE	ALLENBY	COAL	0.4	8.3	
400.1	CARBONDALE		SHALE	5.5	8.7	
394.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	14.2	LIGHT GRAY
388.8	CARBONDALE		GRAY SHALE	0.7	20.0	
388.1	CARBONDALE		SILTSTONE	3.1	20.7	GRAY
385.0	CARBONDALE		SANDSTONE	0.7	23.8	GRAY
384.3	CARBONDALE		SILTSTONE	0.9	24.5	GRAY
383.4	CARBONDALE		SANDSTONE	1.7	25.4	GRAY
381.7	CARBONDALE		SILTSTONE	4.0	27.1	
377.7	CARBONDALE		SANDSTONE	14.2	31.1	GRAY
363.5	CARBONDALE		SILTSTONE	4.2	45.3	GRAY
359.3	CARBONDALE		GRAY SHALE	9.0	49.5	
350.3	CARBONDALE	CONANT	LIMESTONE	0.3	58.5	LIGHT GRAY
350.0	CARBONDALE	JAMESTOWN	COAL	0.3	58.8	
349.7	CARBONDALE		DARK GRAY SHALE	1.7	59.1	
348.0	CARBONDALE	BRERETON	LIMESTONE	4.7	60.8	DARK GRAY
343.3	CARBONDALE	ANNA	BLACK SHALE	1.3	65.5	
342.0	CARBONDALE	HERRIN	COAL	5.4	66.8	
336.6	CARBONDALE		CLAYSTONE	10.9	72.2	
325.7	CARBONDALE		SILTSTONE	0.5	83.1	GRAY

MAPID: 16590870000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** 70' S line, 635' E line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.636003 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768305 **DATE COLLECTED:** 1 / 11 / 1989

SURFACE ELEVATION (FT.): 393.2 **LOGGED (FT.):** 163.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX H499ZB **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.2	PLEISTOCENE		CLAY	18.0	0.0	
375.2	MODESTO		SANDSTONE	10.0	18.0	BROWN
365.2	MODESTO		GRAY SHALE	11.0	28.0	
354.2	MODESTO		SILTY SHALE	10.0	39.0	
344.2	MODESTO		SANDSTONE	19.0	49.0	GRAY
325.2	MODESTO		SILTY SHALE	5.3	68.0	
319.9	MODESTO	PIASA	LIMESTONE	1.1	73.3	BROWN
318.8	CARBONDALE		SANDSTONE	14.1	74.4	GRAY
304.7	CARBONDALE		SILTY SHALE	5.8	88.5	
298.9	CARBONDALE	BANKSTON FORK	LIMESTONE	17.7	94.3	BROWN-GRAY
281.2	CARBONDALE		GRAY SHALE	2.0	112.0	
279.2	CARBONDALE		SANDSTONE	5.0	114.0	GRAY
274.2	CARBONDALE		SANDSTONE	6.0	119.0	SHALE BANDS; GRAY
268.2	CARBONDALE		SANDSTONE	7.0	125.0	GRAY
261.2	CARBONDALE		SILTY SHALE	13.7	132.0	
247.5	CARBONDALE	JAMESTOWN	COAL	0.1	145.7	
247.4	CARBONDALE		SILTY SHALE	1.9	145.8	
245.5	CARBONDALE	BRERETON	LIMESTONE	4.7	147.7	DARK GRAY
240.8	CARBONDALE	ANNA	BLACK SHALE	1.1	152.4	
239.7	CARBONDALE	HERRIN	COAL	5.3	153.5	
234.4	CARBONDALE		UNDERCLAY	3.4	158.8	
231.0	CARBONDALE		SHALE	0.8	162.2	

MAPID: 16500349000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652298 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.775845 **DATE COLLECTED:** 6 / 20 / 1905

SURFACE ELEVATION (FT.): 395.9 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.9			UNCONSOLIDATED	16.0	0.0	
379.9	MODESTO		SANDSTONE	28.0	16.0	
351.9	CARBONDALE	DANVILLE	COAL	2.5	44.0	
349.4	CARBONDALE		ARGILACEOUS SHALE	3.5	46.5	
345.9	CARBONDALE		SANDY SHALE	7.0	50.0	
338.9	CARBONDALE	"Allenby rider"	COAL	0.2	57.0	
338.7	CARBONDALE		ARGILACEOUS SHALE	0.8	57.2	
337.9	CARBONDALE		SANDY SHALE	3.0	58.0	
334.9	CARBONDALE	ALLENBY	COAL	0.3	61.0	
334.6	CARBONDALE		SANDY SHALE	16.7	61.3	
317.9	CARBONDALE		DARK SHALE	2.0	78.0	
315.9	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	80.0	
297.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	34.0	98.0	
263.9	CARBONDALE	JAMESTOWN	COAL	0.5	132.0	
263.4	CARBONDALE		BLACK SHALE	0.7	132.5	
262.7	CARBONDALE	BRERETON	LIMESTONE	2.8	133.2	
259.9	CARBONDALE		COAL	0.7	136.0	
259.2	CARBONDALE	ANNA	BLACK SHALE	3.3	136.7	
255.9	CARBONDALE	HERRIN	COAL	5.2	140.0	
250.7	CARBONDALE		CALCAREOUS SHALE	9.8	145.2	
240.9	CARBONDALE	BRIAR HILL	COAL	1.0	155.0	
239.9	CARBONDALE	DYKERSBURG	SANDY SHALE	1.0	156.0	
238.9	CARBONDALE	DYKERSBURG	SANDSTONE	45.0	157.0	
193.9	CARBONDALE	DYKERSBURG	SANDY SHALE	64.0	202.0	
129.9	CARBONDALE	SPRINGFIELD	COAL	6.3	266.0	
123.6	CARBONDALE		SANDY SHALE	4.7	272.3	

MAPID: 16500350000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668541 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.773941 **DATE COLLECTED:** 6 / 0 / 1905

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 201.3 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	20.0	0.0	
390.0	CARBONDALE	DANVILLE	COAL	2.0	20.0	
388.0	CARBONDALE		ARGILACEOUS SHALE	8.0	22.0	
380.0	CARBONDALE		SANDSTONE	8.0	30.0	
372.0	CARBONDALE		LIMESTONE	2.0	38.0	
370.0	CARBONDALE		SHALE	10.0	40.0	
360.0	CARBONDALE	"Allenby rider"	COAL	1.0	50.0	
359.0	CARBONDALE		SANDSTONE	8.3	51.0	
350.7	CARBONDALE	ALLENBY	COAL	0.5	59.3	
350.2	CARBONDALE	ANVIL ROCK	SANDSTONE	21.5	59.8	
328.7	CARBONDALE	BRERETON	LIMESTONE	9.0	81.3	
319.7	CARBONDALE	HERRIN	COAL	5.5	90.3	
314.2	CARBONDALE		UNDERCLAY	0.5	95.8	
313.7	CARBONDALE	DYKERSBURG	SANDY SHALE	30.0	96.3	
283.7	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	126.3	
278.7	CARBONDALE	DYKERSBURG	BLACK SHALE	17.0	131.3	
261.7	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	148.3	
250.7	CARBONDALE	DYKERSBURG	SANDY SHALE	34.0	159.3	
216.7	CARBONDALE	SPRINGFIELD	COAL	5.0	193.3	
211.7	CARBONDALE		CALCAREOUS SHALE	3.0	198.3	

MAPID: 16500351000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.663994 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.770192 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.8 **LOGGED (FT.):** 229.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.8			UNCONSOLIDATED	13.3	0.0	
427.5	MODESTO		LIMESTONE	3.4	13.3	
424.1	MODESTO		CLAYSTONE	4.7	16.7	
419.5	CARBONDALE	DANVILLE	COAL	1.8	21.3	
417.6	CARBONDALE		UNDERCLAY	2.0	23.2	
415.6	CARBONDALE		UNDERCLAY	6.5	25.2	
409.1	CARBONDALE		SHALE	24.1	31.7	
385.0	CARBONDALE	ALLENBY	COAL	0.7	55.8	
384.4	CARBONDALE		ARGILACEOUS SHALE	1.2	56.4	
383.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.3	57.6	
380.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.2	59.9	
379.7	CARBONDALE	ANVIL ROCK	SHALE	8.0	61.1	
371.7	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	69.1	
368.0	CARBONDALE	ANVIL ROCK	SANDSTONE	28.1	72.8	
339.9	CARBONDALE		VARRIGATED SHALE	5.6	100.9	
334.3	CARBONDALE	JAMESTOWN	COAL	0.3	106.5	
334.0	CARBONDALE		BLACK SHALE	2.5	106.8	
331.5	CARBONDALE	BRERETON	LIMESTONE	6.2	109.3	
325.4	CARBONDALE	ANNA	SHALE	1.3	115.4	
324.1	CARBONDALE	HERRIN	COAL	4.3	116.7	
319.8	CARBONDALE		UNDERCLAY	1.3	121.0	
318.5	CARBONDALE		UNDERCLAY	13.4	122.3	
305.0	CARBONDALE		SHALE	6.0	135.8	
299.0	CARBONDALE		SHALE	7.0	141.8	
292.0	CARBONDALE	BRIAR HILL	COAL	0.8	148.8	
291.2	CARBONDALE	DYKERSBURG	SANDSTONE	4.8	149.6	
286.4	CARBONDALE	DYKERSBURG	SANDSTONE	29.0	154.4	
257.4	CARBONDALE	DYKERSBURG	SANDY SHALE	9.8	183.4	
247.5	CARBONDALE	DYKERSBURG	SANDY SHALE	29.3	193.3	
218.3	CARBONDALE	SPRINGFIELD	COAL	5.5	222.5	
212.8	CARBONDALE		UNDERCLAY	1.5	228.0	

MAPID: 16500351000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.663994 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.770192 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0	CARBONDALE	DANVILLE	COAL	1.8	21.0	
416.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.5	25.0	
384.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.2	57.0	
381.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	41.0	60.0	
324.0	CARBONDALE	HERRIN	COAL	4.3	117.0	
293.0	CARBONDALE	BRIAR HILL	COAL	0.8	148.0	
291.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	33.0	150.0	
219.0	CARBONDALE	SPRINGFIELD	COAL	5.5	222.0	

MAPID: 16500352000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.668653 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.762711 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 460.2 **LOGGED (FT.):** 248.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.2			UNCONSOLIDATED	16.0	0.0	
444.2	MODESTO		DARK SHALE	13.5	16.0	
430.7	MODESTO	PIASA	LIMESTONE	2.5	29.5	
428.2	MODESTO		SHALE	3.0	32.0	
425.2	MODESTO		DARK SHALE	5.0	35.0	
420.2	CARBONDALE	DANVILLE	COAL	2.0	40.0	
418.2	CARBONDALE		UNDERCLAY	1.0	42.0	
417.2	CARBONDALE		SANDSTONE	8.0	43.0	
409.2	CARBONDALE		GRAY SHALE	6.8	51.0	
402.4	CARBONDALE	ALLENBY	COAL	0.5	57.8	
401.9	CARBONDALE		GRAY SHALE	7.8	58.3	
394.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	66.0	
390.2	CARBONDALE	ANVIL ROCK	GRAY SHALE	5.0	70.0	
385.2	CARBONDALE	ANVIL ROCK	SHALE	25.0	75.0	W/ SS PARTINGS
360.2	CARBONDALE	ANVIL ROCK	SHALE	3.3	100.0	
356.9	CARBONDALE	ANVIL ROCK	SHALE	0.3	103.3	FOSSILIFEROUS
356.6	CARBONDALE	JAMESTOWN	COAL	0.4	103.6	
356.2	CARBONDALE	JAMESTOWN	COAL	0.2	104.0	
356.0	CARBONDALE		GRAY SHALE	0.3	104.2	
355.7	CARBONDALE		LIMESTONE	1.0	104.5	
354.7	CARBONDALE		BLACK SHALE	2.0	105.5	
352.7	CARBONDALE	BRERETON	LIMESTONE	9.5	107.5	
343.2	CARBONDALE	HERRIN	COAL	5.2	117.0	
338.0	CARBONDALE		UNDERCLAY	1.8	122.2	
336.2	CARBONDALE		GRAY SHALE	11.0	124.0	
325.2	CARBONDALE		SANDY SHALE	15.0	135.0	
310.2	CARBONDALE		SANDSTONE	0.4	150.0	
309.8	CARBONDALE	BRIAR HILL	COAL	0.8	150.4	
309.0	CARBONDALE	DYKERSBURG	DARK SHALE	3.5	151.2	
305.5	CARBONDALE	DYKERSBURG	SANDSTONE	42.3	154.7	
263.2	CARBONDALE	DYKERSBURG	SHALE	3.0	197.0	W/ SS
260.2	CARBONDALE	DYKERSBURG	DARK SHALE	3.0	200.0	W/ SS
257.2	CARBONDALE	DYKERSBURG	DARK SHALE	38.5	203.0	
218.7	CARBONDALE	SPRINGFIELD	COAL	5.2	241.5	
213.5	CARBONDALE		UNDERCLAY	1.3	246.7	

MAPID: 16501076000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 80' N line, 15' E line of SW NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.659575 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.766203 **DATE COLLECTED:** 12 / 21 / 1953

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 233.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-113 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			CLAY	6.0	0.0	
454.0	MODESTO		SANDSTONE	17.0	6.0	
437.0	MODESTO		DARK GRAY SHALE	16.0	23.0	
421.0	MODESTO	PIASA	LIMESTONE	5.0	39.0	
416.0	MODESTO		BLACK SHALE	0.5	44.0	
415.5	MODESTO		COAL	0.5	44.5	
415.0	MODESTO		GRAY SHALE	4.0	45.0	
411.0	MODESTO		DARK GRAY SHALE	2.0	49.0	
409.0	CARBONDALE	DANVILLE	COAL	1.5	51.0	
407.5	CARBONDALE		GRAY SHALE	7.0	52.5	
400.5	CARBONDALE		SILTY SHALE	5.5	59.5	
395.0	CARBONDALE		DARK GRAY SHALE	8.0	65.0	
387.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	73.0	
382.0	CARBONDALE		GRAY SHALE	5.0	78.0	
377.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	83.0	
365.0	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	8.0	95.0	
357.0	CARBONDALE	ANVIL ROCK	GRAY SHALE	5.0	103.0	ADJUSTMENT MADE TO MATCH LOG DEPTH
352.0	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	8.0	108.0	
344.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	4.1	116.0	
339.9	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	1.5	120.1	
338.4	CARBONDALE	ANVIL ROCK	SANDSTONE	1.1	121.6	
337.3	CARBONDALE	JAMESTOWN	COAL	0.1	122.7	
337.2	CARBONDALE		DARK GRAY SHALE	1.8	122.8	
335.5	CARBONDALE	BRERETON	LIMESTONE	0.5	124.5	
335.0	CARBONDALE	BRERETON	LIMESTONE	7.3	125.0	
327.7	CARBONDALE	HERRIN	COAL	0.1	132.3	
327.7	CARBONDALE	HERRIN	COAL	5.3	132.3	
322.4	CARBONDALE		UNDERCLAY	1.0	137.6	
321.4	CARBONDALE		DARK GRAY SHALE	30.0	138.6	
291.4	CARBONDALE		BLACK SHALE	7.4	168.6	
284.0	CARBONDALE		BLACK SHALE	10.9	176.0	
273.1	CARBONDALE		GRAY SANDSTONE	25.4	186.9	
247.7	CARBONDALE		GRAY SHALE	9.9	212.3	
237.7	CARBONDALE		SILTY SHALE	11.3	222.3	

MAPID: 16501086000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 38' N line, 37' W line of NW SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.656927 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.771965 **DATE COLLECTED:** 10 / 5 / 1951

SURFACE ELEVATION (FT.): 421.1 **LOGGED (FT.):** 202.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-66 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.1			CLAY	3.0	0.0	
418.1			CLAY	4.0	3.0	
414.1			SAND	5.0	7.0	
409.1	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	12.0	
407.1	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	12.8	14.0	
394.3	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.3	26.8	
392.1	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	5.3	29.0	
386.8	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	9.3	34.3	
377.6	CARBONDALE	BRERETON	LIMESTONE	2.3	43.5	
375.3	CARBONDALE	BRERETON	LIMESTONE	3.8	45.8	
371.5	CARBONDALE	HERRIN	COAL	3.8	49.6	
367.8	CARBONDALE	HERRIN	ROCK	0.3	53.3	BLUE BAND
367.5	CARBONDALE	HERRIN	COAL	1.4	53.6	
366.1	CARBONDALE		UNDERCLAY	2.8	55.0	
363.3	CARBONDALE		GRAY SHALE	5.5	57.8	WITH LS NODULES
357.8	CARBONDALE		GRAY SHALE	13.4	63.3	
344.4	CARBONDALE		CLAYSTONE	0.5	76.7	MUD BAND
343.9	CARBONDALE		SANDY SHALE	0.9	77.2	
343.0	CARBONDALE		LIMESTONE	0.7	78.1	
342.3	CARBONDALE		SANDY SHALE	0.3	78.8	
342.1	CARBONDALE		GRAY SANDSTONE	2.3	79.0	
339.8	CARBONDALE		GRAY SANDSTONE	2.3	81.3	
337.5	CARBONDALE		SANDSTONE	29.0	83.6	
308.5	CARBONDALE		GRAY SANDSTONE	19.6	112.6	
288.9	CARBONDALE		SANDSTONE	14.2	132.2	SS W/ COAL STREAKS
274.8	CARBONDALE		GRAY SHALE	15.9	146.3	
258.8	CARBONDALE		SANDY SHALE	31.0	162.3	
227.8	CARBONDALE		GRAY SHALE	2.3	193.3	
225.6	CARBONDALE	SPRINGFIELD	COAL	5.3	195.5	
220.3	CARBONDALE		UNDERCLAY	1.3	200.8	-3" TO MATCH LOG DEPTH

MAPID: 16501088000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 250' S line, 350' E line of SE NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.658498 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.765226 **DATE COLLECTED:** 7 / 1 / 1951

SURFACE ELEVATION (FT.): 439.4 **LOGGED (FT.):** 237.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-65 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.4			CLAY	8.0	0.0	CLAY, SAND, AND GRAVEL
431.4	MODESTO		SANDSTONE	3.0	8.0	
428.4	MODESTO		SHALE	4.1	11.0	
424.3	MODESTO	PIASA	LIMESTONE	3.1	15.1	
421.2	MODESTO		GRAY SHALE	11.1	18.2	
410.1	CARBONDALE	DANVILLE	COAL	2.1	29.3	
408.1	CARBONDALE		GRAY SHALE	13.8	31.3	
394.2	CARBONDALE	ALLENBY	COAL	0.5	45.2	
393.7	CARBONDALE		GRAY SHALE	1.3	45.7	
392.5	CARBONDALE		SANDSTONE	3.0	46.9	
389.5	CARBONDALE		GRAY SHALE	1.1	49.9	
388.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	51.0	
384.2	CARBONDALE		CALCAREOUS SHALE	3.7	55.2	
380.6	CARBONDALE		GRAY SHALE	15.4	58.8	
365.1	CARBONDALE		LIMESTONE	0.4	74.3	
364.7	CARBONDALE		GRAY SHALE	10.3	74.7	
354.4	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	85.0	SS W/ COAL STREAKS
341.4	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.5	98.0	
338.9	CARBONDALE	BRERETON	LIMESTONE	7.1	100.5	
331.8	CARBONDALE	HERRIN	COAL	5.5	107.6	
326.2	CARBONDALE		UNDERCLAY	0.9	113.2	
325.4	CARBONDALE		GRAY SHALE	25.3	114.0	
300.1	CARBONDALE		COAL	0.5	139.3	
299.6	CARBONDALE		GRAY SHALE	7.9	139.8	
291.7	CARBONDALE	BRIAR HILL	COAL	0.5	147.7	
291.2	CARBONDALE		GRAY SHALE	9.8	148.2	
281.4	CARBONDALE		SANDSTONE	8.0	158.0	
273.4	CARBONDALE		SANDSTONE	2.7	166.0	
270.7	CARBONDALE		GRAY SHALE	0.5	168.7	GRAY SHALE BAND
270.2	CARBONDALE		SANDSTONE	7.3	169.2	
262.9	CARBONDALE		SHALE	0.6	176.5	SHALE BAND
262.3	CARBONDALE		SANDSTONE	6.9	177.1	
255.4	CARBONDALE		SANDSTONE	15.8	184.0	
239.6	CARBONDALE		GRAY SHALE	17.3	199.8	
222.4	CARBONDALE		GRAY SHALE	14.2	217.0	
208.2	CARBONDALE	SPRINGFIELD	COAL	4.8	231.2	
203.4	CARBONDALE		UNDERCLAY	1.0	236.0	

MAPID: 16501114000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 767' N line, 83' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.670583 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.769953 **DATE COLLECTED:** 3 / 5 / 1953

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-82 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	7.0	0.0	SOIL AND CLAY
418.0	CARBONDALE		SANDSTONE	4.8	7.0	
413.2	CARBONDALE		GRAY SHALE	6.4	11.8	
406.7	CARBONDALE		SIDERITE	0.1	18.3	SIDERITE BAND
406.7	CARBONDALE		GRAY SHALE	2.5	18.3	
404.2	CARBONDALE	ALLENBY	COAL	0.7	20.8	
403.5	CARBONDALE		GRAY SHALE	5.2	21.5	
398.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	26.7	
393.0	CARBONDALE		CALCAREOUS SHALE	3.0	32.0	
390.0	CARBONDALE		GRAY SHALE	4.8	35.0	
385.2	CARBONDALE		COAL	0.7	39.8	
384.5	CARBONDALE		GRAY SHALE	6.5	40.5	
378.0	CARBONDALE		SANDSTONE	8.0	47.0	
370.0	CARBONDALE		SANDY SHALE	6.0	55.0	
364.0	CARBONDALE		GRAY SHALE	4.0	61.0	
360.0	CARBONDALE		SANDSTONE	3.8	65.0	
356.2	CARBONDALE		SANDSTONE	0.3	68.8	
355.9	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.6	69.1	
355.3	CARBONDALE	JAMESTOWN	BONE COAL	0.5	69.7	
354.8	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	2.8	70.2	
352.0	CARBONDALE	BRERETON	LIMESTONE	1.8	73.0	
350.2	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	0.1	74.8	
350.2	CARBONDALE	ANNA	BLACK SHALE	0.6	74.8	
349.6	CARBONDALE	ANNA	BLACK SHALE	0.6	75.4	
349.0	CARBONDALE	ANNA	BLACK SHALE	0.6	76.0	
348.4	CARBONDALE	ANNA	BLACK SHALE	1.6	76.6	
346.8	CARBONDALE	HERRIN	COAL	5.3	78.2	
341.5	CARBONDALE		UNDERCLAY	1.5	83.5	

MAPID: 16501114000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 767' N line, 83' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.670583 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.769953 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 83.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.1	CARBONDALE	CONANT	LIMESTONE/UNDERCLAY	0.7	68.9	
355.5	CARBONDALE	JAMESTOWN	BONE COAL	0.4	69.5	
355.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	4.7	70.0	
350.3	CARBONDALE	ANNA	BLACK SHALE	3.3	74.7	
347.0	CARBONDALE	HERRIN	COAL	5.3	78.0	

MAPID: 16501118000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 43' N line, 41' W line of NW NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.657041 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768181 **DATE COLLECTED:** 1 / 22 / 1954

SURFACE ELEVATION (FT.): 416.8 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-119 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-3011

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.8			CLAY	7.7	0.0	
409.1			CLAY	4.0	7.7	
405.1	CARBONDALE		GRAY SANDSTONE	9.6	11.7	
395.5	CARBONDALE		GRAY SANDSTONE	30.0	21.3	
365.5	CARBONDALE		SANDY SHALE	15.0	51.3	
350.5	CARBONDALE		DARK GRAY SHALE	16.6	66.3	
334.0	CARBONDALE		SANDSTONE	14.4	82.8	
319.5	CARBONDALE		DARK GRAY SHALE	36.4	97.3	-2' ADJUSTMENT TO MATCH LOG
283.1	CARBONDALE	SPRINGFIELD	COAL	5.5	133.7	
277.6	CARBONDALE		UNDERCLAY	2.0	139.2	
275.6	CARBONDALE		GRAY SHALE	14.8	141.2	+2' ADJUSTMENT TO MATCH LOG
260.8	CARBONDALE		GRAY SHALE	14.0	156.0	
246.8	CARBONDALE		GRAY SHALE	28.2	170.0	
218.6	CARBONDALE	EXCELLO	BLACK SHALE	1.0	198.2	
217.6	CARBONDALE	HOUCHIN CREEK	COAL	1.6	199.2	
216.0	CARBONDALE		UNDERCLAY	1.6	200.8	+4" ADJUSTMENT TO MATCH LOG
214.5	CARBONDALE		UNDERCLAY	2.0	202.3	
212.5	CARBONDALE		SANDSTONE	5.7	204.3	-2" ADJUSTMENT TO MATCH LOG
206.8	CARBONDALE		SANDY SHALE	10.9	210.0	
195.9	CARBONDALE		DARK GRAY SHALE	0.8	220.9	
195.0	CARBONDALE		DARK GRAY SHALE	0.3	221.8	
194.8	CARBONDALE		GRAY SHALE	33.2	222.0	
161.6	CARBONDALE	SURVANT	COAL	1.5	255.2	
160.1	CARBONDALE		SANDSTONE	1.5	256.7	+2" ADJUSTMENT TO MATCH LOG
158.6	CARBONDALE		GRAY SHALE	1.8	258.2	-2" TO MATCH LOG
156.8	CARBONDALE		GRAY SHALE	3.0	260.0	

MAPID: 16501347000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 147' N line, 51' W line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.670726 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764187 **DATE COLLECTED:** 3 / 11 / 1953

SURFACE ELEVATION (FT.): 478.4 **LOGGED (FT.):** 152.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-83 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
478.4			UNCONSOLIDATED	16.0	0.0	SOIL AND CLAY
462.4	MODESTO		SANDSTONE	3.0	16.0	
459.4	MODESTO		SANDSTONE	3.0	19.0	
456.4	MODESTO		GRAY SHALE	5.4	22.0	
451.0	MODESTO		SANDSTONE	11.3	27.4	
439.6	MODESTO		GRAY SHALE	16.3	38.8	
423.4	MODESTO		GRAY SHALE	6.3	55.0	
417.1	MODESTO		LIMESTONE	3.2	61.3	
414.0	MODESTO		GRAY SHALE	11.2	64.4	
402.8	CARBONDALE	DANVILLE	COAL	1.3	75.6	
401.5	CARBONDALE		GRAY SHALE	4.1	76.9	
397.4	CARBONDALE		SANDSTONE	5.4	81.0	
392.0	CARBONDALE		SANDY SHALE	5.6	86.4	
386.4	CARBONDALE		GRAY SHALE	3.3	92.0	
383.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	95.3	
379.5	CARBONDALE		SANDY SHALE	3.4	98.9	
376.1	CARBONDALE		GRAY SHALE	5.7	102.3	
370.4	CARBONDALE		COAL	0.7	108.0	
369.7	CARBONDALE		SANDSTONE	5.3	108.7	
364.4	CARBONDALE		GRAY SHALE	6.0	114.0	
358.4	CARBONDALE		GRAY SHALE	13.0	120.0	
345.4	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.4	133.0	
345.0	CARBONDALE		BLACK SHALE	0.2	133.4	
344.8	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.1	133.6	
344.7	CARBONDALE		BONE COAL	0.1	133.7	
344.6	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.0	133.8	
344.6	CARBONDALE	JAMESTOWN	BONE COAL	0.2	133.8	
344.4	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.6	134.0	
343.8	CARBONDALE		BLACK SHALE	0.2	134.6	
343.6	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.4	134.8	
343.2	CARBONDALE		BLACK SHALE	0.6	135.2	
342.6	CARBONDALE		BLACK SHALE	0.6	135.8	BK SH W/ FOS LS STREAKS
342.0	CARBONDALE	BRERETON	LIMESTONE	5.1	136.4	
336.9	CARBONDALE	BRERETON	LIMESTONE	2.7	141.5	
334.2	CARBONDALE	ANNA	BLACK SHALE	0.7	144.2	

333.5	CARBONDALE	HERRIN	COAL	5.4	144.9
328.1	CARBONDALE		UNDERCLAY	1.8	150.3

MAPID: 16502717000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.662824 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.771158 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 1385.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	390.0	
-41.0	SPOON	DAVIS	UNCLASSIFIED	-	490.0	
-936.0	BASE OF PENN.		UNCLASSIFIED	-	1385.0	

MAPID: 16502717000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.662824 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.771158 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2360.0 **LOG TYPE:**

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1095.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1544.0	
-1517.0			LIMESTONE	-	1966.0	
-1911.0		BASE BARLOW	LIMESTONE	-	2360.0	

MAPID: 16502717000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.662824 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.771158 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 2863.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., UNSELL-SMALL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
190.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	259.0	
129.0	CARBONDALE	SURVANT	COAL	0.7	320.0	
61.0	CARBONDALE	COLCHESTER	COAL	0.5	388.0	
3.0	CARBONDALE	DEKOVEN	COAL	3.0	446.0	
-2.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	451.0	
-40.0	CARBONDALE	DAVIS	COAL	5.0	489.0	
-51.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	500.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-69.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	518.0	

MAPID: 16503008000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.665264 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.761726 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2901.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., UNSELL-SMALL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
144.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	317.0	
96.0	CARBONDALE	SURVANT	COAL	0.8	365.0	
31.0	CARBONDALE	COLCHESTER	COAL	0.5	430.0	
-29.0	CARBONDALE	DEKOVEN	COAL	3.8	490.0	
-29.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	490.0	
-69.0	CARBONDALE	DAVIS	COAL	4.0	530.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503008000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.665264 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.761726 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 2382.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1143.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1604.0	
-1549.0			LIMESTONE	-	2010.0	
-1921.0		BASE BARLOW	LIMESTONE	-	2382.0	

MAPID: 16526174000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 1' W line of NE SW
QUADRANGLE: HARCO **LONGITUDE:** -88.666325 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.767409 **DATE COLLECTED:** 9 / 10 / 1974
SURFACE ELEVATION (FT.): 427.4 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE H486C **WELL TYPE:** Coal Test
COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.4	PLEISTOCENE		CLAY	5.0	0.0	
422.4	CARBONDALE		SANDSTONE	4.0	5.0	SOFT; CORING BEGAN
418.4	CARBONDALE		GRAY SHALE	5.0	9.0	SOFT
413.4	CARBONDALE		SANDSTONE	1.0	14.0	
412.4	CARBONDALE		GRAY SHALE	1.0	15.0	
411.4	CARBONDALE	ALLENBY	COAL	0.8	16.0	
410.6	CARBONDALE		GRAY SHALE	3.2	16.8	
407.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	20.0	
402.4	CARBONDALE		GRAY SHALE	9.0	25.0	DARK
393.4	CARBONDALE		SANDY SHALE	15.7	34.0	
377.7	CARBONDALE		SANDY SHALE	17.3	49.7	DARK GRAY
360.4	CARBONDALE		BLACK SHALE	3.1	67.0	
357.3	CARBONDALE	BRERETON	LIMESTONE	7.4	70.1	DARK
349.9	CARBONDALE	ANNA	BLACK SHALE	0.3	77.5	
349.6	CARBONDALE	SPRINGFIELD	COAL	5.6	77.8	
344.0	CARBONDALE		UNDERCLAY	1.6	83.4	

MAPID: 16526175000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 870' S line, 48' E line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.652738 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.769143 **DATE COLLECTED:** 5 / 2 / 1978

SURFACE ELEVATION (FT.): 450.8 **LOGGED (FT.):** 128.4 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. H516IM **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 "DRILLED TO TOP OF #6 COAL"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.8	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
446.8	PLEISTOCENE		CLAY	3.0	4.0	
443.8	MODESTO		SANDSTONE	36.0	7.0	
407.8	MODESTO		GRAY SHALE	1.0	43.0	DARK
406.8	MODESTO		GRAY SHALE	3.0	44.0	
403.8	MODESTO		GRAY SHALE	3.7	47.0	DARK
400.1	CARBONDALE	DANVILLE	COAL	1.5	50.7	
398.6	CARBONDALE		UNDERCLAY	2.3	52.2	
396.3	CARBONDALE		SANDSTONE	1.5	54.5	
394.8	CARBONDALE		SANDY SHALE	8.0	56.0	GRAY
386.8	CARBONDALE		SANDSTONE	3.0	64.0	
383.8	CARBONDALE		GRAY SHALE	6.0	67.0	
377.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	73.0	GRAY
372.3	CARBONDALE		SANDY SHALE	20.5	78.5	GRAY
351.8	CARBONDALE		SANDY SHALE	8.0	99.0	DARK GRAY
343.8	CARBONDALE		GRAY SHALE	8.0	107.0	DARK
335.8	CARBONDALE		SANDY SHALE	5.0	115.0	DARK GRAY
330.8	CARBONDALE	BRERETON	LIMESTONE	8.4	120.0	GRAY

MAPID: 16526176000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 990' S line, 1' W line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.657084 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.771033 **DATE COLLECTED:** 10 / 18 / 1974

SURFACE ELEVATION (FT.): 437.5 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. H540C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.5	PLEISTOCENE		SILT	2.0	0.0	
435.5	PLEISTOCENE		SANDY CLAY	18.0	2.0	
417.5	CARBONDALE		SANDSTONE	3.0	20.0	CORING BEGAN
414.5	CARBONDALE		GRAY SHALE	26.0	23.0	
388.5	CARBONDALE		SANDSTONE	11.0	49.0	
377.5	CARBONDALE		GRAY SHALE	1.0	60.0	
376.5	CARBONDALE		SANDSTONE	8.0	61.0	
368.5	CARBONDALE	ALLENBY	COAL	0.5	69.0	
368.0	CARBONDALE		UNDERCLAY	0.5	69.5	
367.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	70.0	
366.0	CARBONDALE		BLACK SHALE	0.5	71.5	
365.5	CARBONDALE	BRERETON	LIMESTONE	5.0	72.0	
360.5	CARBONDALE	ANNA	BLACK SHALE	2.0	77.0	
358.5	CARBONDALE	HERRIN	COAL	5.9	79.0	
352.6	CARBONDALE		UNDERCLAY	1.1	84.9	

MAPID: 16590864000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 480' N line, 430' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.655419 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766813 **DATE COLLECTED:** 5 / 6 / 1988

SURFACE ELEVATION (FT.): 460.3 **LOGGED (FT.):** 270.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX H490LP **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.3	PLEISTOCENE		CLAY	9.0	0.0	BROWN
451.3	MODESTO		SANDSTONE	15.0	9.0	BROWN
436.3	MODESTO		GRAY SHALE	13.7	24.0	
422.6	MODESTO	PIASA	LIMESTONE	4.0	37.7	
418.6	MODESTO		DARK GRAY SHALE	2.3	41.7	
416.3	MODESTO		GRAY SHALE	7.5	44.0	
408.8	CARBONDALE	DANVILLE	COAL	2.0	51.5	
406.8	CARBONDALE		UNDERCLAY	0.5	53.5	
406.3	CARBONDALE		GRAY SHALE	7.3	54.0	
399.0	CARBONDALE		SANDSTONE	3.2	61.3	
395.8	CARBONDALE	ALLENBY	COAL	0.8	64.5	
395.0	CARBONDALE		SANDY SHALE	1.3	65.3	
393.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.6	66.6	BROWN
392.1	CARBONDALE		SANDSTONE	9.8	68.2	
382.3	CARBONDALE		SANDY SHALE	16.0	78.0	
366.3	CARBONDALE	ANVIL ROCK	SANDSTONE	24.1	94.0	
342.2	CARBONDALE		SILTY SHALE	2.9	118.1	
339.3	CARBONDALE	JAMESTOWN	COAL	0.3	121.0	
339.0	CARBONDALE		DARK GRAY SHALE	2.5	121.3	
336.5	CARBONDALE	ANNA	BLACK SHALE	0.9	123.8	
335.6	CARBONDALE	HERRIN	COAL	6.2	124.7	
329.4	CARBONDALE		UNDERCLAY	2.9	130.9	
326.5	CARBONDALE		SILTY SHALE	4.8	133.8	
321.7	CARBONDALE		SHALE WITH LIMESTONE	2.4	138.6	
319.3	CARBONDALE		SANDY SHALE	11.0	141.0	
308.3	CARBONDALE	BRIAR HILL	COAL	1.0	152.0	
307.3	CARBONDALE		UNDERCLAY	1.0	153.0	
306.3	CARBONDALE		SANDY SHALE	2.0	154.0	
304.3	CARBONDALE		SANDSTONE	74.0	156.0	
230.3	CARBONDALE		SANDY SHALE	10.0	230.0	
220.3	CARBONDALE		DARK GRAY SHALE	20.5	240.0	
199.8	CARBONDALE	SPRINGFIELD	MINE OPENING	4.5	260.5	MINEDOUT
195.3	CARBONDALE		UNDERCLAY	5.0	265.0	

MAPID: 16590871000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 10' S line, 335' E line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.653774 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768319 **DATE COLLECTED:** 5 / 13 / 1977

SURFACE ELEVATION (FT.): 459.3 **LOGGED (FT.):** 156.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX H516B **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.3	PLEISTOCENE		CLAY	10.0	0.0	
449.3	MODESTO		SANDSTONE	35.0	10.0	
414.3	MODESTO		GRAY SHALE	2.1	45.0	
412.2	MODESTO	PIASA	LIMESTONE	3.3	47.1	GRAY
408.9	MODESTO		GRAY SHALE	1.3	50.4	
407.6	MODESTO		DARK GRAY SHALE	1.8	51.7	
405.8	MODESTO		GRAY SHALE	6.3	53.5	
399.5	CARBONDALE	DANVILLE	COAL	1.7	59.8	
397.8	CARBONDALE		SANDY SHALE	11.5	61.5	
386.3	CARBONDALE		SANDSTONE	3.0	73.0	
383.3	CARBONDALE		SANDY SHALE	4.5	76.0	
378.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	80.5	LIGHT GRAY
374.5	CARBONDALE		GRAY SHALE	1.2	84.8	
373.3	CARBONDALE		SANDY SHALE	32.5	86.0	
340.8	CARBONDALE		SANDSTONE	6.5	118.5	GRAY
334.3	CARBONDALE		SANDY SHALE	2.2	125.0	
332.1	CARBONDALE		BLACK SHALE	1.8	127.2	
330.3	CARBONDALE	BRERETON	LIMESTONE	6.9	129.0	DARK GRAY
323.4	CARBONDALE	ANNA	BLACK SHALE	0.9	135.9	
322.5	CARBONDALE	HERRIN	COAL	5.0	136.8	
317.5	CARBONDALE		UNDERCLAY	4.2	141.8	
313.3	CARBONDALE		SANDY SHALE	10.0	146.0	

MAPID: 16590872000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** 135' S line, 505' W line of SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.664539 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.761259 **DATE COLLECTED:** 2 / 22 / 1988

SURFACE ELEVATION (FT.): 478.1 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX H411PD **WELL TYPE:** Coal Test

COMMENT: PERMIT 246; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
478.1	PLEISTOCENE		CLAY	19.5	0.0	
458.6	MODESTO		SANDSTONE	36.5	19.5	BROWN
422.1	MODESTO		GRAY SHALE	2.4	56.0	
419.7	MODESTO	PIASA	LIMESTONE	3.4	58.4	
416.3	MODESTO		GRAY SHALE	7.3	61.8	
409.0	CARBONDALE	DANVILLE	COAL	2.2	69.1	
406.8	CARBONDALE		GRAY SHALE	2.7	71.3	
404.1	CARBONDALE		SANDSTONE	4.0	74.0	GRAY
400.1	CARBONDALE		GRAY SHALE	9.4	78.0	
390.7	CARBONDALE	BANKSTON FORK	LIMESTONE	3.9	87.4	
386.8	CARBONDALE		GRAY SHALE	40.7	91.3	
346.1	CARBONDALE		BLACK SHALE	1.5	132.0	
344.6	CARBONDALE	BRERETON	LIMESTONE	6.5	133.5	
338.1	CARBONDALE	HERRIN	COAL	5.2	140.0	
332.9	CARBONDALE		UNDERCLAY	0.8	145.2	
332.1	CARBONDALE		GRAY SHALE	7.6	146.0	
324.5	CARBONDALE		CALCAREOUS SHALE	2.4	153.6	
322.1	CARBONDALE		GRAY SHALE	21.0	156.0	
301.1	CARBONDALE		BLACK SHALE	4.0	177.0	
297.1	CARBONDALE		GRAY SHALE	2.0	181.0	
295.1	CARBONDALE		SANDSTONE	43.0	183.0	GRAY
252.1	CARBONDALE		GRAY SHALE	19.0	226.0	
233.1	CARBONDALE		UNKNOWN	12.0	245.0	

MAPID: 16500353000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.67778 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.770187 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 440.8 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.8			UNCONSOLIDATED	18.0	0.0	
422.8	MODESTO	PIASA	LIMESTONE	4.0	18.0	
418.8	MODESTO		GRAY SHALE	20.0	22.0	
398.8	MODESTO		DARK SHALE	9.3	42.0	
389.5	CARBONDALE	DANVILLE	COAL	0.2	51.3	
389.4	CARBONDALE		UNDERCLAY	0.6	51.4	
388.8	CARBONDALE		LIMESTONE	2.0	52.0	
386.8	CARBONDALE		GRAY SHALE	10.0	54.0	
376.8	CARBONDALE		SANDSTONE	9.0	64.0	
367.8	CARBONDALE		DARK SHALE	16.0	73.0	
351.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	89.0	
350.8	CARBONDALE		BLACK SHALE	1.0	90.0	
349.8	CARBONDALE	BRERETON	LIMESTONE	4.0	91.0	
345.8	CARBONDALE		DARK SHALE	5.0	95.0	
340.8	CARBONDALE	ANNA	BLACK SHALE	2.0	100.0	
338.8	CARBONDALE	HERRIN	COAL	5.3	102.0	
333.5	CARBONDALE		UNDERCLAY	0.7	107.3	
332.8	CARBONDALE	DYKERSBURG	GRAY SHALE	6.0	108.0	
326.8	CARBONDALE	DYKERSBURG	DARK SHALE	20.0	114.0	
306.8	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	134.0	
286.8	CARBONDALE	DYKERSBURG	GRAY SHALE	20.0	154.0	
266.8	CARBONDALE	DYKERSBURG	DARK SHALE	34.6	174.0	
232.2	CARBONDALE	SPRINGFIELD	COAL	4.2	208.6	
228.0	CARBONDALE		UNDERCLAY	0.5	212.8	
227.5	CARBONDALE		GRAY SHALE	1.8	213.3	

MAPID: 16500353000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.67778 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.770187 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBRG SALINE COL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
339.0	CARBONDALE	HERRIN	COAL	5.3	102.0	
233.0	CARBONDALE	SPRINGFIELD	COAL	4.2	208.0	

MAPID: 16500354000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.680086 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.768315 **DATE COLLECTED:** 8 / 14 / 1905

SURFACE ELEVATION (FT.): 438.8 **LOGGED (FT.):** 242.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.8			UNCONSOLIDATED	4.0	0.0	
434.8	MODESTO		SANDSTONE	26.0	4.0	
408.8	MODESTO		SHALE	12.0	30.0	
396.8	MODESTO		BONE COAL	0.2	42.0	
396.6	MODESTO		UNDERCLAY	0.8	42.2	
395.8	MODESTO	PIASA	LIMESTONE	4.0	43.0	
391.8	MODESTO		SHALE	3.0	47.0	
388.8	CARBONDALE	DANVILLE	COAL	1.5	50.0	
387.3	CARBONDALE		UNDERCLAY	2.5	51.5	
384.8	CARBONDALE		SANDY SHALE	23.0	54.0	
361.8	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	77.0	
353.8	CARBONDALE		CLAYSTONE	2.0	85.0	
351.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.0	87.0	
325.8	CARBONDALE	ANVIL ROCK	SHALE	11.0	113.0	
314.8	CARBONDALE		BLACK SHALE	2.3	124.0	
312.5	CARBONDALE	BRERETON	LIMESTONE	0.7	126.3	
311.8	CARBONDALE	HERRIN	COAL	5.5	127.0	
306.3	CARBONDALE		UNDERCLAY	2.5	132.5	
303.8	CARBONDALE		UNDERCLAY	11.0	135.0	
292.8	CARBONDALE	DYKERSBURG	SHALE	40.0	146.0	
252.8	CARBONDALE	DYKERSBURG	SHALE	27.0	186.0	
225.8	CARBONDALE	DYKERSBURG	SHALE	24.0	213.0	
201.8	CARBONDALE	SPRINGFIELD	COAL	4.5	237.0	
197.3	CARBONDALE		UNDERCLAY	0.5	241.5	

MAPID: 16500900000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 38' S line, 36' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.67537 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764692 **DATE COLLECTED:** 1 / 18 / 1947

SURFACE ELEVATION (FT.): 463.3 **LOGGED (FT.):** 242.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-1/43-1 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-3090

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
463.3			UNCONSOLIDATED	8.0	0.0	SOIL AND CLAY
455.3	MODESTO		SANDSTONE	8.5	8.0	
446.8	MODESTO		DARK SHALE	6.5	16.5	
440.3	MODESTO		DARK SHALE	7.5	23.0	
432.8	MODESTO		LIMESTONE	4.0	30.5	
428.8	MODESTO		CALCAREOUS SHALE	0.3	34.5	
428.5	MODESTO		BLACK SHALE	0.9	34.8	
427.5	MODESTO		DARK SHALE	1.0	35.8	
426.5	MODESTO		GRAY SHALE	1.8	36.8	
424.8	MODESTO		NO RECORD	0.5	38.5	NO RECORD - WASHED OUT
424.3	MODESTO		DARK SHALE	1.5	39.0	
422.8	MODESTO		LIMESTONE	0.5	40.5	
422.3	CARBONDALE	DANVILLE	COAL	2.0	41.0	
420.3	CARBONDALE		DARK GRAY SHALE	2.6	43.0	
417.7	CARBONDALE		SANDSTONE	4.0	45.6	
413.7	CARBONDALE		DARK SHALE	2.4	49.6	
411.3	CARBONDALE		COAL	0.2	52.0	
411.1	CARBONDALE		LIGHT SHALE	3.6	52.2	
407.5	CARBONDALE		SANDSTONE	2.9	55.8	
404.6	CARBONDALE	ALLENBY	COAL	0.8	58.7	
403.9	CARBONDALE		DARK SHALE	4.3	59.4	
399.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	63.7	
392.3	CARBONDALE		GRAY SHALE	4.2	71.0	
388.1	CARBONDALE		SHALE	1.2	75.2	
387.0	CARBONDALE		COAL	0.7	76.3	
386.3	CARBONDALE	ANVIL ROCK	SANDSTONE	17.5	77.0	
368.8	CARBONDALE		DARK SHALE	10.5	94.5	
358.3	CARBONDALE	BRERETON	LIMESTONE	5.4	105.0	
352.9	CARBONDALE		SHALE	5.2	110.4	
347.7	CARBONDALE	HERRIN	COAL	6.2	115.6	
341.5	CARBONDALE		DARK SHALE	17.3	121.8	
324.3	CARBONDALE		SANDSTONE	2.0	139.0	
322.3	CARBONDALE		GRAY SHALE	1.0	141.0	
321.3	CARBONDALE		SANDY SHALE	4.0	142.0	
317.3	CARBONDALE		SANDSTONE	28.5	146.0	
288.8	CARBONDALE		DARK SHALE	23.5	174.5	DK SH W/ SS STREAKS
265.3	CARBONDALE		GRAY SHALE	39.0	198.0	
226.3	CARBONDALE	SPRINGFIELD	COAL	5.0	237.0	
221.3	CARBONDALE		UNDERCLAY	0.5	242.0	

MAPID: 16500901000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 53' N line, 25' W line of NW SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.680001 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764436 **DATE COLLECTED:** 1 / 0 / 1947

SURFACE ELEVATION (FT.): 550.7 **LOGGED (FT.):** 331.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-2/43-2 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE#: C-3391, C-3392

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
550.7			CLAY	8.0	0.0	
542.7	MODESTO		SANDSTONE	12.0	8.0	
530.7	MODESTO		GRAY SHALE	10.0	20.0	
520.7	MODESTO		SHALE	6.0	30.0	
514.7	MODESTO		SANDSTONE	5.0	36.0	
509.7	MODESTO		SHALE	3.0	41.0	
506.7	MODESTO		NO RECORD	12.0	44.0	NO RECORD - WASHED OUT
494.7	MODESTO		BLACK SHALE	6.0	56.0	
488.7	MODESTO	POND CREEK	COAL	1.0	62.0	
487.7	MODESTO		UNDERCLAY	2.0	63.0	
485.7	MODESTO		CALCAREOUS SHALE	3.7	65.0	
482.0	MODESTO		DARK SHALE	1.3	68.7	
480.7	MODESTO		DARK GRAY SHALE	6.0	70.0	
474.7	MODESTO		SANDSTONE	24.0	76.0	
450.7	MODESTO		DARK SHALE	13.0	100.0	
437.7	MODESTO		GRAY SHALE	0.5	113.0	
437.2	MODESTO	PIASA	LIMESTONE	3.7	113.5	
433.5	MODESTO		CALCAREOUS SHALE	0.7	117.2	
432.9	MODESTO		BLACK SHALE	6.3	117.8	
426.5	CARBONDALE	DANVILLE	COAL	2.3	124.2	
424.3	CARBONDALE		SANDY SHALE	9.8	126.4	
414.5	CARBONDALE		SANDSTONE	2.8	136.2	
411.7	CARBONDALE		DARK SHALE	1.6	139.0	
410.1	CARBONDALE	ALLENBY	COAL	0.8	140.6	
409.3	CARBONDALE		UNDERCLAY	1.6	141.4	
407.7	CARBONDALE		GRAY SHALE	3.5	143.0	
404.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	146.5	
399.7	CARBONDALE		LIGHT SHALE	6.0	151.0	
393.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.7	157.0	
389.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	161.7	
377.5	CARBONDALE		DARK SHALE	3.8	173.2	
373.7	CARBONDALE		DARK GRAY SHALE	8.7	177.0	
365.0	CARBONDALE		LIMESTONE	0.5	185.7	
364.5	CARBONDALE		BLACK SHALE	0.3	186.2	
364.2	CARBONDALE		LIMESTONE	1.0	186.5	
363.2	CARBONDALE		BLACK SHALE	2.5	187.5	
360.7	CARBONDALE	BRERETON	LIMESTONE	5.5	190.0	
355.2	CARBONDALE	ANNA	BLACK SHALE	2.5	195.5	
352.7	CARBONDALE	HERRIN	COAL	5.3	198.0	

347.4	CARBONDALE		UNDERCLAY	2.3	203.3
345.1	CARBONDALE		CALCAREOUS SHALE	2.3	205.6
342.9	CARBONDALE		LIGHT SHALE	5.3	207.8
337.6	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.4	213.1
336.2	CARBONDALE		GRAY SHALE	9.5	214.5
326.7	CARBONDALE		SANDSTONE	60.0	224.0
266.7	CARBONDALE		DARK SHALE	40.2	284.0
226.5	CARBONDALE	SPRINGFIELD	COAL	4.7	324.2
221.9	CARBONDALE		UNDERCLAY	2.2	328.8

MAPID: 16500902000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 150' S line, 198' W line of SW NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.688588 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.764986 **DATE COLLECTED:** 2 / 10 / 1947

SURFACE ELEVATION (FT.): 528.8 **LOGGED (FT.):** 324.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-4/43-4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
528.8			CLAY	5.0	0.0	
523.8			SANDSTONE	10.0	5.0	
513.8			SHALE	1.5	15.0	
512.3			DARK SHALE	19.5	16.5	
492.8			SHALE	34.0	36.0	SH W/ LS STREAKS
458.8			LIMESTONE	4.5	70.0	
454.3			GRAY SHALE	21.5	74.5	
432.8			SHALE	20.0	96.0	
412.8			LIMESTONE	4.5	116.0	
408.3			GRAY SHALE	19.5	120.5	
388.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	140.0	
385.8	CARBONDALE	ANVIL ROCK	SANDSTONE	23.0	143.0	
362.8	CARBONDALE	ANVIL ROCK	SHALE	2.0	166.0	SH W/ SS STREAKS
360.8	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	168.0	
356.8	CARBONDALE		DARK GRAY SHALE	14.0	172.0	
342.8	CARBONDALE		BLACK SHALE	3.0	186.0	
339.8	CARBONDALE	BRERETON	LIMESTONE	2.0	189.0	
337.8	CARBONDALE		DARK SHALE	7.8	191.0	
330.0	CARBONDALE		BLACK SHALE	1.0	198.8	
329.0	CARBONDALE	HERRIN	COAL	5.5	199.8	
323.5	CARBONDALE		UNDERCLAY	3.3	205.3	
320.3	CARBONDALE		CALCAREOUS SHALE	8.5	208.5	
311.8	CARBONDALE		DARK SHALE	11.0	217.0	
300.8	CARBONDALE		SHALE	9.0	228.0	SH W/ SS STREAKS
291.8	CARBONDALE		SANDY SHALE	2.5	237.0	
289.3	CARBONDALE		SANDSTONE	9.8	239.5	
279.5	CARBONDALE		DARK SHALE	1.4	249.3	
278.0	CARBONDALE		SANDSTONE	48.8	250.8	
229.3	CARBONDALE		SANDSTONE	8.3	299.5	SS W/ SH STREAKS
221.0	CARBONDALE		DARK SHALE	9.2	307.8	
211.8	CARBONDALE	SPRINGFIELD	COAL	4.6	317.0	
207.2	CARBONDALE		UNDERCLAY	2.7	321.6	

MAPID: 16500904000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 611' N line, 73' E line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.684952 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.774084 **DATE COLLECTED:** 3 / 5 / 1947

SURFACE ELEVATION (FT.): 438.8 **LOGGED (FT.):** 223.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-6/43-6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.8			CLAY	8.0	0.0	
430.8			SANDSTONE	14.0	8.0	SS W/ CLY STREAKS
416.8			SHALE	18.0	22.0	
398.8			SHALE	2.0	40.0	
396.8			GRAY SHALE	20.0	42.0	
376.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	62.0	
371.3	CARBONDALE		SHALE	38.5	67.5	
332.8	CARBONDALE	BRERETON	LIMESTONE	4.3	106.0	
328.5	CARBONDALE		DARK SHALE	4.0	110.3	
324.5	CARBONDALE	HERRIN	COAL	6.3	114.3	
318.1	CARBONDALE		GRAY SHALE	16.3	120.7	
301.8	CARBONDALE		DARK SHALE	5.0	137.0	
296.8	CARBONDALE		SANDSTONE	2.4	142.0	
294.4	CARBONDALE		LIMESTONE	1.0	144.4	
293.4	CARBONDALE		DARK SHALE	17.0	145.4	DK SH W/ SS STREAKS
276.4	CARBONDALE		SANDSTONE	2.6	162.4	SS W/ SH STREAKS
273.8	CARBONDALE		SANDSTONE	2.2	165.0	
271.6	CARBONDALE		SANDSTONE	7.8	167.2	SS W/ SH STREAKS
263.9	CARBONDALE		DARK GRAY SHALE	1.0	174.9	
262.9	CARBONDALE		SHALE	4.6	175.9	SH W/ SS STREAKS
258.3	CARBONDALE		SHALE	36.5	180.5	
221.8	CARBONDALE	SPRINGFIELD	COAL	4.3	217.0	
217.5	CARBONDALE		UNDERCLAY	1.8	221.3	

MAPID: 16500906000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 215' S line, 125' W line of SW NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.675058 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.765181 **DATE COLLECTED:** 4 / 6 / 1947

SURFACE ELEVATION (FT.): 455.6 **LOGGED (FT.):** 276.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-11 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.6			CLAY	7.5	0.0	
448.1	MODESTO		SHALE	1.5	7.5	
446.6	MODESTO		SHALE	10.5	9.0	
436.1	MODESTO	PIASA	LIMESTONE	4.8	19.5	
431.3			SHALE	30.8	24.3	
400.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	55.0	
395.6	CARBONDALE		DARK SHALE	39.6	60.0	
356.0	CARBONDALE	BRERETON	LIMESTONE	2.0	99.6	
354.0	CARBONDALE	ANNA	BLACK SHALE	1.7	101.6	BK SH W/ SULPHUR STREAKS
352.3	CARBONDALE		DARK SHALE	6.2	103.3	DK SH W/ SULPHUR STREAKS
346.2	CARBONDALE	HERRIN	COAL	5.1	109.4	
341.1	CARBONDALE		UNDERCLAY	1.5	114.5	
339.6	CARBONDALE		DARK SHALE	20.0	116.0	DK SH W/ SAND STREAKS
319.6	CARBONDALE		SANDY SHALE	60.0	136.0	
259.6	CARBONDALE		SHALE	27.8	196.0	
231.8	CARBONDALE	SPRINGFIELD	COAL	4.7	223.8	
227.2	CARBONDALE		UNDERCLAY	8.0	228.4	
219.2	CARBONDALE		SANDSTONE	6.0	236.4	
213.2	CARBONDALE		SHALE	5.0	242.4	SH W/ SS STREAKS
208.2	CARBONDALE		DARK SHALE	9.0	247.4	
199.2	CARBONDALE		DARK SHALE	20.0	256.4	

MAPID: 16500913000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 90' N line, 190' W line of SW NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.67942 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.773669 **DATE COLLECTED:** 9 / 28 / 1948

SURFACE ELEVATION (FT.): 427.3 **LOGGED (FT.):** 250.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-13 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.3			CLAY	12.0	0.0	
415.3			CLAY	2.0	12.0	CLY WITH GRAVEL
413.3			SANDSTONE	8.0	14.0	
405.3			SHALE	14.0	22.0	
391.3			LIMESTONE	0.7	36.0	
390.6			SHALE	6.3	36.7	
384.3			LIMESTONE	4.5	43.0	
379.8			SHALE	30.5	47.5	
349.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	78.0	
342.8	CARBONDALE		SHALE	11.5	84.5	
331.3	CARBONDALE		LIMESTONE	0.8	96.0	
330.5	CARBONDALE		SHALE	12.2	96.8	
318.3	CARBONDALE	BRERETON	BLACK LIMESTONE	2.0	109.0	
316.3	CARBONDALE		BLACK SHALE	5.2	111.0	
311.1	CARBONDALE		SHALE	9.9	116.2	
301.2	CARBONDALE	HERRIN	COAL	6.2	126.1	
295.0	CARBONDALE		UNDERCLAY	1.0	132.3	
294.0	CARBONDALE		SHALE	76.8	133.3	
217.3	CARBONDALE		SHALE	34.8	210.0	
182.5	CARBONDALE	SPRINGFIELD	COAL	4.7	244.8	
177.9	CARBONDALE		UNDERCLAY	1.0	249.4	

MAPID: 16500914000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 300' S line, 100' W line of SW NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.679735 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.772879 **DATE COLLECTED:** 10 / 1 / 1948

SURFACE ELEVATION (FT.): 450.5 **LOGGED (FT.):** 254.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.5			CLAY	14.0	0.0	
436.5			SANDSTONE	8.0	14.0	
428.5			SHALE	19.0	22.0	
409.5			LIMESTONE	1.0	41.0	
408.5			SHALE	2.0	42.0	
406.5			LIMESTONE	2.0	44.0	
404.5			SHALE	14.0	46.0	
390.5			LIMESTONE	3.5	60.0	
387.0			SHALE	47.5	63.5	
339.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	111.0	
334.0	CARBONDALE		SHALE	12.0	116.5	
322.0	CARBONDALE	BRERETON	LIMESTONE	1.5	128.5	
320.5	CARBONDALE	ANNA	BLACK SHALE	4.0	130.0	
316.5	CARBONDALE		SHALE	6.9	134.0	
309.6	CARBONDALE	HERRIN	COAL	6.8	140.9	
302.8	CARBONDALE		UNDERCLAY	1.0	147.7	
301.8	CARBONDALE		SHALE	67.3	148.7	
234.5	CARBONDALE		SHALE	32.5	216.0	
202.0	CARBONDALE	SPRINGFIELD	COAL	4.8	248.5	
197.2	CARBONDALE		UNDERCLAY	1.0	253.3	

MAPID: 16500915000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 450' S line, 150' W line of SW NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.67956 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.773294 **DATE COLLECTED:** 10 / 5 / 1948

SURFACE ELEVATION (FT.): 437.2 **LOGGED (FT.):** 243.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-15 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.2			CLAY	12.0	0.0	
425.2			CLAY	10.0	12.0	
415.2			SANDSTONE	8.0	22.0	
407.2			SHALE	17.0	30.0	
390.2			LIMESTONE	2.5	47.0	
387.7			SHALE	35.5	49.5	
352.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	85.1	
346.2	CARBONDALE		SHALE	29.0	91.0	
317.2	CARBONDALE	BRERETON	LIMESTONE	5.0	120.0	
312.2	CARBONDALE	ANNA	BLACK SHALE	5.6	125.0	
306.6	CARBONDALE	HERRIN	COAL	6.4	130.6	
300.2	CARBONDALE		UNDERCLAY	1.0	137.0	
299.2	CARBONDALE		SHALE	92.0	138.0	
207.2	CARBONDALE		SHALE	8.1	230.0	
199.1	CARBONDALE	SPRINGFIELD	COAL	4.5	238.1	
194.6	CARBONDALE		UNDERCLAY	0.4	242.6	

MAPID: 16500916000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 15' N line, 60' E line of NE SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.675679 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.772019 **DATE COLLECTED:** 10 / 7 / 1948

SURFACE ELEVATION (FT.): 422.5 **LOGGED (FT.):** 208.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-16 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.5			CLAY	14.0	0.0	CLAY AND SAND
408.5			SANDSTONE	8.0	14.0	
400.5			SHALE	10.0	22.0	
390.5			LIMESTONE	1.5	32.0	
389.0			SHALE	9.5	33.5	
379.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	43.0	
374.5	CARBONDALE		SHALE	34.0	48.0	
340.5	CARBONDALE	BRERETON	LIMESTONE	1.0	82.0	
339.5	CARBONDALE		BLACK SHALE	5.3	83.0	
334.2	CARBONDALE		SHALE	10.0	88.3	
324.2	CARBONDALE	HERRIN	COAL	6.1	98.3	
318.1	CARBONDALE		SHALE	98.9	104.4	
219.2	CARBONDALE	SPRINGFIELD	COAL	4.4	203.3	
214.7	CARBONDALE		UNDERCLAY	1.0	207.8	

MAPID: 16500917000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 55' N line, 55' E line of SE NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.675659 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.773774 **DATE COLLECTED:** 10 / 11 / 1948

SURFACE ELEVATION (FT.): 427.4 **LOGGED (FT.):** 259.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-17 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.4			CLAY	12.0	0.0	
415.4			SANDSTONE	10.0	12.0	
405.4			SHALE	21.0	22.0	
384.4			LIMESTONE	3.0	43.0	
381.4			SHALE	47.0	46.0	
334.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	93.0	
327.4	CARBONDALE		SHALE	33.0	100.0	
294.4	CARBONDALE	BRERETON	LIMESTONE	5.0	133.0	
289.4	CARBONDALE	ANNA	BLACK SHALE	3.3	138.0	
286.1	CARBONDALE	HERRIN	COAL	6.5	141.3	
279.6	CARBONDALE		UNDERCLAY	1.0	147.8	
278.6	CARBONDALE		SHALE	67.2	148.8	
211.4	CARBONDALE		SHALE	38.8	216.0	
172.6	CARBONDALE	SPRINGFIELD	COAL	3.9	254.8	
168.7	CARBONDALE		UNDERCLAY	1.0	258.7	

MAPID: 16500918000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 250' S line, 40' E line of SE NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.675608 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.77275 **DATE COLLECTED:** 10 / 14 / 1948

SURFACE ELEVATION (FT.): 425.9 **LOGGED (FT.):** 222.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-18 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.9			CLAY	12.0	0.0	
413.9			SANDSTONE	10.0	12.0	
403.9			SHALE	2.0	22.0	
401.9			SHALE	36.0	24.0	
365.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	60.0	
358.9	CARBONDALE		SHALE	32.0	67.0	
326.9	CARBONDALE	BRERETON	LIMESTONE	5.5	99.0	
321.4	CARBONDALE	ANNA	BLACK SHALE	2.7	104.5	
318.7	CARBONDALE	HERRIN	COAL	6.3	107.2	
312.4	CARBONDALE		UNDERCLAY	1.0	113.5	
311.4	CARBONDALE		SHALE	55.5	114.5	
255.9	CARBONDALE		SHALE	47.4	170.0	
208.5	CARBONDALE	SPRINGFIELD	COAL	4.3	217.4	
204.2	CARBONDALE		UNDERCLAY	0.5	221.7	

MAPID: 16500919000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 25' N line, 480' W line of SW SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678422 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.762649 **DATE COLLECTED:** 10 / 15 / 1948

SURFACE ELEVATION (FT.): 498.4 **LOGGED (FT.):** 279.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
498.4			CLAY	4.0	0.0	
494.4			BLACK SHALE	2.0	4.0	
492.4			COAL	1.0	6.0	
491.4			SHALE	8.0	7.0	
483.4			SANDSTONE	8.0	15.0	
475.4			SHALE	37.0	23.0	
438.4			LIMESTONE	2.0	60.0	
436.4			SHALE	31.0	62.0	
405.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	93.0	
400.4	CARBONDALE		SHALE	38.0	98.0	
362.4	CARBONDALE	CONANT	LIMESTONE	3.0	136.0	
359.4	CARBONDALE		SHALE	4.0	139.0	
355.4	CARBONDALE	BRERETON	LIMESTONE	3.0	143.0	
352.4	CARBONDALE	ANNA	BLACK SHALE	1.8	146.0	
350.6	CARBONDALE	HERRIN	COAL	6.2	147.8	
344.4	CARBONDALE		UNDERCLAY	1.0	154.0	
343.4	CARBONDALE		SHALE	40.0	155.0	
303.4	CARBONDALE		SHALE	40.0	195.0	
263.4	CARBONDALE		SHALE	37.2	235.0	HARD SHALE
226.2	CARBONDALE	SPRINGFIELD	COAL	5.3	272.2	
220.9	CARBONDALE		UNDERCLAY	0.7	277.5	
220.2	CARBONDALE		SHALE	0.8	278.2	

MAPID: 16500922000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 165' S line, 860' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.678496 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761305 **DATE COLLECTED:** 10 / 27 / 1948

SURFACE ELEVATION (FT.): 494.1 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-22 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
494.1			CLAY	6.0	0.0	
488.1			CLAY	4.0	6.0	
484.1			SHALE	2.0	10.0	
482.1			LIMESTONE	0.7	12.0	
481.4			SHALE	37.3	12.7	
444.1			LIMESTONE	5.1	50.0	
439.0			SHALE	28.9	55.1	
410.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	84.0	
404.3	CARBONDALE		SHALE	39.3	89.8	
365.1	CARBONDALE	BRERETON	LIMESTONE	5.8	129.0	
359.3	CARBONDALE		SHALE	0.8	134.8	
358.6	CARBONDALE	HERRIN	COAL	6.5	135.5	
352.1	CARBONDALE		UNDERCLAY	0.7	142.0	
351.4	CARBONDALE		SHALE	52.3	142.7	
299.1	CARBONDALE		SHALE	10.0	195.0	
289.1	CARBONDALE		SHALE	46.1	205.0	
243.0	CARBONDALE	SPRINGFIELD	COAL	4.2	251.1	
238.8	CARBONDALE		SHALE	1.7	255.3	SH W/ UCLY STREAKS

MAPID: 16500932000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 290' N line, 990' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.685874 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.774968 **DATE COLLECTED:** 5 / 5 / 1949

SURFACE ELEVATION (FT.): 436.8 **LOGGED (FT.):** 222.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-32 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.8			CLAY	12.0	0.0	YELLOW
424.8			CLAY	13.0	12.0	BLUE
411.8			SANDSTONE	10.0	25.0	
401.8			SHALE	23.0	35.0	
378.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	58.0	
373.3	CARBONDALE		SHALE	17.5	63.5	
355.8	CARBONDALE		LIMESTONE	0.7	81.0	
355.1	CARBONDALE		SHALE	17.3	81.7	
337.8	CARBONDALE	BRERETON	LIMESTONE	3.7	99.0	
334.1	CARBONDALE		BLACK SHALE	5.5	102.7	
328.6	CARBONDALE		GRAY SHALE	3.6	108.2	
325.0	CARBONDALE		BLACK SHALE	1.3	111.8	
323.7	CARBONDALE	HERRIN	COAL	5.8	113.1	
317.9	CARBONDALE		UNDERCLAY	1.1	118.9	
316.8	CARBONDALE		DARK SHALE	2.5	120.0	
314.3	CARBONDALE		CALCAREOUS SHALE	3.5	122.5	
310.8	CARBONDALE		GRAY SHALE	4.0	126.0	
306.8	CARBONDALE		SANDY SHALE	4.0	130.0	
302.8	CARBONDALE		BLACK SHALE	0.2	134.0	
302.6	CARBONDALE	BRIAR HILL	COAL	0.3	134.2	
302.3	CARBONDALE		UNDERCLAY	0.3	134.5	
302.0	CARBONDALE		SANDY SHALE	4.0	134.8	
298.0	CARBONDALE		BLACK SHALE	0.7	138.8	
297.3	CARBONDALE		DARK GRAY SHALE	2.0	139.5	
295.3	CARBONDALE		SHALE	14.8	141.5	SH W/ SS STREAKS
280.5	CARBONDALE		SANDSTONE	8.0	156.3	
272.5	CARBONDALE		DARK GRAY SHALE	1.0	164.3	
271.5	CARBONDALE		SANDSTONE	0.7	165.3	
270.9	CARBONDALE		SHALE	10.1	165.9	SH W/ LGY SH STREAKS
260.8	CARBONDALE		DARK SHALE	1.0	176.0	
259.8	CARBONDALE		SHALE	6.0	177.0	SH W/ LGY SH STREAKS
253.8	CARBONDALE		SANDSTONE	1.0	183.0	
252.8	CARBONDALE		DARK GRAY SHALE	29.4	184.0	
223.4	CARBONDALE		SHALE	0.1	213.4	
223.3	CARBONDALE		SHALE	0.5	213.5	
222.8	CARBONDALE		DARK GRAY SHALE	4.3	214.0	
218.5	CARBONDALE	SPRINGFIELD	COAL	3.4	218.3	
215.1	CARBONDALE		UNDERCLAY	1.0	221.7	

MAPID: 16500942000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 459' S line, 264' W line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.688346 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.76211 **DATE COLLECTED:** 12 / 17 / 1949

SURFACE ELEVATION (FT.): 493.1 **LOGGED (FT.):** 270.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-42 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
493.1			UNCONSOLIDATED	16.5	0.0	CLAY AND SAND
476.6	MODESTO		SANDSTONE	4.0	16.5	
472.6	MODESTO		SANDSTONE	7.0	20.5	
465.6	MODESTO		LIMESTONE	2.5	27.5	
463.1	MODESTO		SHALE	28.0	30.0	
435.1	MODESTO	PIASA	LIMESTONE	5.0	58.0	
430.1	MODESTO		SHALE	1.0	63.0	
429.1	CARBONDALE	DANVILLE	COAL	1.0	64.0	
428.1	CARBONDALE		SHALE	29.5	65.0	
398.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	94.5	
392.1	CARBONDALE		SHALE	35.0	101.0	
357.1	CARBONDALE		SHALE	1.0	136.0	
356.1	CARBONDALE	BRERETON	LIMESTONE	8.5	137.0	
347.6	CARBONDALE	ANNA	BLACK SHALE	3.6	145.5	
344.0	CARBONDALE	HERRIN	COAL	5.1	149.1	
338.9	CARBONDALE		UNDERCLAY	1.5	154.2	
337.4	CARBONDALE		SHALE	0.3	155.7	
337.1	CARBONDALE		GRAY SHALE	8.0	156.0	
329.1	CARBONDALE		DARK GRAY SHALE	4.3	164.0	DGY SH W/ CHERT STREAKS
324.8	CARBONDALE		UNCLASSIFIED	0.5	168.3	CHERT
324.3	CARBONDALE		DARK SHALE	0.2	168.8	
324.1	CARBONDALE		UNCLASSIFIED	0.2	169.0	CHERT
323.9	CARBONDALE		DARK SHALE	1.3	169.2	
322.7	CARBONDALE		SHALE	5.6	170.4	
317.1	CARBONDALE		DARK SHALE	6.0	176.0	
311.1	CARBONDALE	BRIAR HILL	COAL	1.0	182.0	
310.1	CARBONDALE		DARK SHALE	4.0	183.0	
306.1	CARBONDALE		SANDSTONE	51.5	187.0	
254.6	CARBONDALE		DARK SHALE	4.5	238.5	
250.1	CARBONDALE		SHALE	0.5	243.0	
249.6	CARBONDALE		DARK SHALE	4.6	243.5	
245.0	CARBONDALE		SHALE	0.4	248.1	
244.6	CARBONDALE		DARK SHALE	1.5	248.5	
243.1	CARBONDALE		SHALE	0.5	250.0	
242.6	CARBONDALE		DARK SHALE	5.0	250.5	
237.6	CARBONDALE		DARK SHALE	6.0	255.5	
231.6	CARBONDALE		SHALE	0.5	261.5	
231.1	CARBONDALE		DARK SHALE	2.0	262.0	
229.1	CARBONDALE		SHALE	1.2	264.0	

227.9	CARBONDALE	SPRINGFIELD	COAL	4.6	265.2
223.3	CARBONDALE		UNDERCLAY	1.0	269.8

MAPID: 16500945000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 253' S line, 3' W line of SW NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.684672 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.765275 **DATE COLLECTED:** 2 / 0 / 1947

SURFACE ELEVATION (FT.): 545.5 **LOGGED (FT.):** 375.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-3/43-3 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE#: C-3088, C-3089

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
545.5			CLAY	7.5	0.0	
538.0	MODESTO		SANDSTONE	11.5	7.5	
526.5	MODESTO		SHALE	1.5	19.0	
525.0	MODESTO		SHALE	23.5	20.5	
501.5	MODESTO		SANDY SHALE	9.0	44.0	
492.5	MODESTO		DARK GRAY SHALE	24.5	53.0	
468.0	MODESTO		COAL	1.0	77.5	
467.0	MODESTO		UNDERCLAY	10.5	78.5	
456.5	MODESTO		CALCAREOUS SHALE	9.0	89.0	
447.5	MODESTO		SANDSTONE	13.0	98.0	
434.5	MODESTO		SHALE	11.5	111.0	SH W/ CHERT STREAKS
423.0	MODESTO	PIASA	LIMESTONE	4.0	122.5	
419.0	MODESTO		DARK GRAY SHALE	8.8	126.5	
410.2	CARBONDALE	DANVILLE	COAL	2.0	135.3	
408.2	CARBONDALE		UNDERCLAY	0.5	137.3	
407.7	CARBONDALE		SANDY SHALE	6.3	137.8	
401.5	CARBONDALE		DARK SHALE	1.3	144.0	
400.2	CARBONDALE		SANDSTONE	6.3	145.3	
394.0	CARBONDALE		BLACK SHALE	1.2	151.5	
392.8	CARBONDALE	ALLENBY	COAL	0.8	152.7	
392.1	CARBONDALE		UNDERCLAY	1.8	153.4	
390.3	CARBONDALE		GRAY SHALE	2.2	155.2	GY SH W/ CALC STREAKS
388.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	157.3	
386.2	CARBONDALE		LIMESTONE	2.9	159.3	
383.2	CARBONDALE	BANKSTON FORK	GRAY SHALE	4.5	162.3	
378.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	0.3	166.8	
378.4	CARBONDALE	ANVIL ROCK	SANDSTONE	11.9	167.1	
366.5	CARBONDALE		DARK SHALE	17.8	179.0	
348.7	CARBONDALE	BRERETON	LIMESTONE	1.1	196.8	
347.6	CARBONDALE	ANNA	BLACK SHALE	1.4	197.9	
346.2	CARBONDALE	ENERGY	GRAY SHALE	10.2	199.3	
336.0	CARBONDALE	ENERGY	BLACK SHALE	0.3	209.5	
335.7	CARBONDALE	HERRIN	COAL	5.7	209.8	
330.0	CARBONDALE		UNDERCLAY	1.5	215.5	
328.5	CARBONDALE		CALCAREOUS SHALE	7.0	217.0	
321.5	CARBONDALE		GRAY SHALE	10.7	224.0	
310.8	CARBONDALE	BRIAR HILL	COAL	0.5	234.7	
310.3	CARBONDALE		SHALE	1.8	235.2	
308.5	CARBONDALE		DARK SHALE	11.0	237.0	

297.5	CARBONDALE		SHALE	46.0	248.0	SH W/ SS STREAKS
251.5	CARBONDALE		SHALE	30.5	294.0	
221.0	CARBONDALE	SPRINGFIELD	COAL	4.5	324.5	
216.5	CARBONDALE		UNDERCLAY	1.9	329.0	
214.6	CARBONDALE		CALCAREOUS SHALE	3.1	330.9	
211.5	CARBONDALE		LIMESTONE	1.0	334.0	
210.5	CARBONDALE		SHALE	3.0	335.0	SH W/ SS STREAKS
207.5	CARBONDALE		CALCAREOUS SHALE	2.0	338.0	
205.5	CARBONDALE		SANDSTONE	3.3	340.0	
202.2	CARBONDALE		SHALE	9.2	343.3	
193.0	CARBONDALE		SANDSTONE	2.5	352.5	
190.5	CARBONDALE		DARK SHALE	20.0	355.0	

MAPID: 16500947000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.674345 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.765524 **DATE COLLECTED:** 3 / 20 / 1947

SURFACE ELEVATION (FT.): 465.9 **LOGGED (FT.):** 238.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-10 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-3391, C-3392

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
465.9			CLAY	7.5	0.0	
458.4	MODESTO		SANDSTONE	8.0	7.5	
450.4	MODESTO		SHALE	6.5	15.5	
443.9	MODESTO		NO RECORD	4.0	22.0	NO RECORD - WASH OUT
439.9	MODESTO		BLACK SHALE	5.0	26.0	
434.9	MODESTO		GRAY SHALE	0.7	31.0	
434.2	MODESTO	PIASA	LIMESTONE	3.8	31.7	
430.4	MODESTO		CALCAREOUS SHALE	0.3	35.5	
430.1	MODESTO		BLACK SHALE	1.2	35.8	
428.9	MODESTO		GRAY SHALE	2.6	37.0	
426.3	MODESTO		BLACK SHALE	2.0	39.6	
424.3	CARBONDALE	DANVILLE	COAL	2.2	41.6	
422.1	CARBONDALE		SANDSTONE	8.3	43.8	
413.9	CARBONDALE		BLACK SHALE	2.0	52.0	
411.9	CARBONDALE		GRAY SHALE	6.3	54.0	
405.6	CARBONDALE		SANDSTONE	0.5	60.3	
405.1	CARBONDALE		BLACK SHALE	0.7	60.8	
404.4	CARBONDALE	ALLENBY	COAL	0.6	61.5	
403.8	CARBONDALE		UNDERCLAY	5.9	62.1	
397.9	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	68.0	
394.2	CARBONDALE		CALCAREOUS SHALE	2.0	71.7	
392.2	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	73.7	
386.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.3	79.7	
380.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.3	85.9	
376.6	CARBONDALE		SANDY SHALE	4.8	89.3	
371.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	94.0	
368.9	CARBONDALE		DARK GRAY SHALE	10.6	97.0	
358.3	CARBONDALE		CALCAREOUS SHALE	1.6	107.6	
356.7	CARBONDALE		BLACK SHALE	4.8	109.2	
351.9	CARBONDALE		DARK GRAY SHALE	4.7	114.0	
347.2	CARBONDALE		SHALE	0.3	118.7	DRAW SLATE
346.9	CARBONDALE	HERRIN	COAL	6.1	119.0	
340.8	CARBONDALE		UNDERCLAY	1.1	125.1	
339.7	CARBONDALE		GRAY SHALE	13.4	126.2	
326.3	CARBONDALE		SANDSTONE	5.0	139.6	
321.3	CARBONDALE		DARK SHALE	6.4	144.6	DK SH W/ SAND STREAKS
314.9	CARBONDALE		SANDSTONE	5.0	151.0	
309.9	CARBONDALE		DARK SHALE	1.0	156.0	
308.9	CARBONDALE		LIMESTONE	0.5	157.0	

308.4	CARBONDALE		DARK SHALE	32.5	157.5	DK SH W/ SANDY STREAKS
275.9	CARBONDALE		SHALE	13.0	190.0	SH W/ SS STREAKS
262.9	CARBONDALE		DARK SHALE	28.0	203.0	
234.9	CARBONDALE	SPRINGFIELD	COAL	5.0	231.0	
229.9	CARBONDALE		UNDERCLAY	2.8	236.0	

MAPID: 16501068000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 600' S line, 185' E line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.671537 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.766249 **DATE COLLECTED:** 2 / 27 / 1953

SURFACE ELEVATION (FT.): 462.5 **LOGGED (FT.):** 127.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-81 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.5			UNCONSOLIDATED	7.0	0.0	SOIL AND CLAY
455.5	MODESTO		SANDSTONE	3.5	7.0	
452.0	MODESTO		GRAY SHALE	14.5	10.5	
437.5	MODESTO		DARK GRAY SHALE	8.0	25.0	
429.5	MODESTO		BLACK SHALE	2.6	33.0	
426.9	MODESTO		COAL	0.4	35.6	
426.5	MODESTO		GRAY SHALE	2.0	36.0	
424.5	MODESTO	PIASA	LIMESTONE	0.3	38.0	
424.2	MODESTO	PIASA	LIMESTONE	3.3	38.3	
420.9	MODESTO		GRAY SHALE	9.4	41.6	
411.5	CARBONDALE	DANVILLE	COAL	0.7	51.0	
410.8	CARBONDALE		GRAY SHALE	7.3	51.7	
403.5	CARBONDALE		LIMESTONE	2.0	59.0	
401.5	CARBONDALE		GRAY SHALE	7.4	61.0	
394.1	CARBONDALE		COAL	0.6	68.4	
393.5	CARBONDALE		GRAY SHALE	2.0	69.0	
391.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	71.0	
386.5	CARBONDALE		CALCAREOUS SHALE	1.0	76.0	
385.5	CARBONDALE		GRAY SHALE	5.3	77.0	
380.2	CARBONDALE		COAL	0.8	82.3	
379.4	CARBONDALE		GRAY SHALE	11.9	83.1	
367.5	CARBONDALE		SANDSTONE	1.6	95.0	SS W/ CARB STREAKS
365.9	CARBONDALE		SANDY SHALE	2.2	96.6	
363.7	CARBONDALE		GRAY SHALE	10.8	98.8	
353.0	CARBONDALE		SANDY SHALE	4.2	109.5	
348.8	CARBONDALE		CALCAREOUS SHALE	0.1	113.7	
348.7	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.6	113.8	
348.1	CARBONDALE		BLACK SHALE	0.0	114.4	
348.1	CARBONDALE		COAL	0.1	114.4	
348.0	CARBONDALE		LIMESTONE	0.1	114.5	
347.9	CARBONDALE		BONE COAL	0.1	114.6	
347.8	CARBONDALE		COAL	0.2	114.7	
347.7	CARBONDALE		LIMESTONE	1.8	114.8	
345.9	CARBONDALE		BLACK SHALE	0.8	116.6	
345.2	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.5	117.3	
344.7	CARBONDALE		LIMESTONE	1.3	117.8	
343.4	CARBONDALE		BLACK SHALE	0.8	119.1	

342.6	CARBONDALE		LIMESTONE	0.2	119.9	LS W/ SOME BK SH STREAKS
342.4	CARBONDALE	HERRIN	COAL	5.9	120.1	
336.5	CARBONDALE		UNDERCLAY	1.3	126.0	

MAPID: 16501090000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 59' S line, 44' W line of SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.689106 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761006 **DATE COLLECTED:** 7 / 6 / 1953

SURFACE ELEVATION (FT.): 499.4 **LOGGED (FT.):** 380.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-85 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
499.4			CLAY	9.0	0.0	
490.4	MODESTO		SANDSTONE	13.0	9.0	
477.4	MODESTO		SANDSTONE	20.0	22.0	
457.4	MODESTO		SANDSTONE	10.0	42.0	
447.4	MODESTO		GRAY SHALE	25.0	52.0	
422.4	MODESTO		COAL	1.2	77.0	
421.2	MODESTO		DARK GRAY SHALE	12.8	78.2	
408.4	MODESTO		LIMESTONE	4.0	91.0	
404.4	MODESTO		GRAY SHALE	3.0	95.0	LGY SH W/ LS STREAKS
401.4	MODESTO		GRAY SHALE	7.0	98.0	
394.4	MODESTO		LIMESTONE	2.5	105.0	
391.9	MODESTO		GRAY SHALE	26.5	107.5	
365.4	MODESTO	PIASA	LIMESTONE	5.0	134.0	
360.4			GRAY SHALE	41.5	139.0	
318.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	180.5	
314.4	CARBONDALE		DARK GRAY SHALE	15.0	185.0	
299.4	CARBONDALE		SANDSTONE	3.5	200.0	
295.9	CARBONDALE		DARK GRAY SHALE	0.7	203.5	
295.2	CARBONDALE		DARK GRAY SHALE	12.8	204.2	
282.4	CARBONDALE		DARK GRAY SHALE	5.3	217.0	
277.1	CARBONDALE	BRERETON	LIMESTONE	3.8	222.3	
273.4	CARBONDALE	BRERETON	LIMESTONE	5.6	226.0	
267.8	CARBONDALE	ANNA	BLACK SHALE	2.4	231.6	
265.4	CARBONDALE	ANNA	BLACK SHALE	0.5	234.0	
264.9	CARBONDALE	HERRIN	COAL	4.0	234.5	
260.9	CARBONDALE		UNDERCLAY	1.5	238.5	
259.4	CARBONDALE		GRAY SHALE	4.0	240.0	
255.4	CARBONDALE		DARK GRAY SHALE	2.7	244.0	
252.7	CARBONDALE		GRAY SHALE	3.5	246.7	
249.2	CARBONDALE		CALCAREOUS SHALE	4.0	250.2	
245.2	CARBONDALE		DARK GRAY SHALE	5.3	254.2	
239.9	CARBONDALE		DARK GRAY SHALE	3.0	259.5	
236.9	CARBONDALE		SANDSTONE	13.5	262.5	SS W/ DGY SH STREAKS
223.4	CARBONDALE		SANDSTONE	11.5	276.0	
211.9	CARBONDALE		SANDSTONE	25.5	287.5	
186.4	CARBONDALE		DARK GRAY SHALE	14.0	313.0	
172.4	CARBONDALE		DARK GRAY SHALE	8.0	327.0	
164.4	CARBONDALE		DARK GRAY SHALE	8.0	335.0	
156.4	CARBONDALE		DARK GRAY SHALE	5.2	343.0	

151.2	CARBONDALE	SPRINGFIELD	COAL	0.8	348.2	
150.4	CARBONDALE		UNDERCLAY	1.0	349.0	
149.4	CARBONDALE		LIMESTONE	0.3	350.0	
149.1	CARBONDALE		GRAY SHALE	6.7	350.3	
142.4	CARBONDALE		GRAY SHALE	1.0	357.0	
141.4	CARBONDALE		GRAY SHALE	0.3	358.0	LGY SH W/ LS STREAKS
141.1	CARBONDALE		GRAY SHALE	3.1	358.3	LGY SH W/ SS STREAKS
138.0	CARBONDALE		LIMESTONE	2.1	361.4	
135.9	CARBONDALE		SANDSTONE	5.3	363.5	
130.6	CARBONDALE		DARK GRAY SHALE	3.3	368.8	DGY SH W/ LGY SH STREAKS
127.3	CARBONDALE		DARK GRAY SHALE	0.7	372.1	
126.6	CARBONDALE		DARK GRAY SHALE	3.3	372.8	
123.3	CARBONDALE		DARK GRAY SHALE	4.0	376.1	

MAPID: 16501091000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 221' S line, 46' W line of SW SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.689101 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761453 **DATE COLLECTED:** 6 / 7 / 1953

SURFACE ELEVATION (FT.): 490.4 **LOGGED (FT.):** 299.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-86 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.4			SANDY CLAY	12.0	0.0	
478.4	MODESTO		SANDSTONE	5.0	12.0	
473.4	MODESTO		SANDSTONE	12.0	17.0	
461.4	MODESTO		GRAY SHALE	53.0	29.0	
408.4	MODESTO		DARK GRAY SHALE	10.0	82.0	
398.4	MODESTO	PIASA	LIMESTONE	3.0	92.0	
395.4	MODESTO	PIASA	LIMESTONE	1.0	95.0	
394.4	MODESTO		GRAY SHALE	7.0	96.0	
387.4	MODESTO		LIMESTONE	0.5	103.0	
386.9	CARBONDALE	DANVILLE	COAL	1.5	103.5	
385.4	CARBONDALE		GRAY SHALE	18.0	105.0	
367.4	CARBONDALE		LIMESTONE	1.5	123.0	
365.9	CARBONDALE		GRAY SHALE	12.0	124.5	
353.9	CARBONDALE		SANDSTONE	13.5	136.5	
340.4	CARBONDALE		GRAY SHALE	13.0	150.0	
327.4	CARBONDALE	BRERETON	LIMESTONE	1.5	163.0	
325.9	CARBONDALE	BRERETON	LIMESTONE	0.6	164.5	
325.3	CARBONDALE	BRERETON	LIGHT SHALE	0.3	165.1	
325.1	CARBONDALE	BRERETON	LIMESTONE	1.8	165.3	
323.3	CARBONDALE	BRERETON	LIMESTONE	0.3	167.1	
323.1	CARBONDALE	BRERETON	LIMESTONE	2.0	167.3	
321.1	CARBONDALE	BRERETON	LIMESTONE	1.7	169.3	
319.4	CARBONDALE	BRERETON	LIMESTONE	0.8	171.0	
318.6	CARBONDALE		DARK GRAY SHALE	4.0	171.8	
314.6	CARBONDALE	HERRIN	COAL	3.6	175.8	
311.0	CARBONDALE		UNDERCLAY	1.0	179.4	
310.0	CARBONDALE		DARK GRAY SHALE	20.0	180.4	
290.0	CARBONDALE		SANDSTONE	30.0	200.4	
260.0	CARBONDALE		GRAY SHALE	5.9	230.4	
254.1	CARBONDALE		GRAY SHALE	9.2	236.3	
244.9	CARBONDALE		DARK GRAY SHALE	10.0	245.5	
234.9	CARBONDALE		DARK GRAY SHALE	6.5	255.5	
228.4	CARBONDALE		GRAY SHALE	1.5	262.0	
226.9	CARBONDALE		GRAY SHALE	14.7	263.5	
212.2	CARBONDALE		GRAY SHALE	3.8	278.2	
208.4	CARBONDALE		DARK GRAY SHALE	3.3	282.0	
205.1	CARBONDALE		GRAY SHALE	1.6	285.3	
203.5	CARBONDALE		DARK GRAY SHALE	4.3	286.9	DGY SH W/ BK SH STREAKS
199.1	CARBONDALE		BLACK SHALE	2.0	291.3	

197.1	CARBONDALE	SPRINGFIELD	COAL	3.3	293.3
193.9	CARBONDALE		UNDERCLAY	2.5	296.5

MAPID: 16501092000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 137' S line, 46' W line of SW SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.6891 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761221 **DATE COLLECTED:** 7 / 15 / 1953

SURFACE ELEVATION (FT.): 497.8 **LOGGED (FT.):** 330.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-87 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
497.8			UNCONSOLIDATED	8.5	0.0	SOIL AND CLAY
489.3	MODESTO		SANDSTONE	16.0	8.5	
473.3	MODESTO		GRAY SHALE	7.5	24.5	
465.8	MODESTO		DARK GRAY SHALE	2.4	32.0	
463.4	MODESTO		COAL	0.3	34.4	
463.1	MODESTO		DARK GRAY SHALE	1.3	34.7	
461.8	MODESTO		GRAY SHALE	3.8	36.0	
458.0	MODESTO		DARK GRAY SHALE	5.3	39.8	
452.8	MODESTO		SANDSTONE	19.0	45.0	
433.8	MODESTO		DARK SHALE	1.0	64.0	
432.8	MODESTO		BLACK SHALE	3.3	65.0	
429.5	MODESTO		COAL	0.3	68.3	
429.3	MODESTO		DARK GRAY SHALE	1.7	68.5	
427.6	MODESTO		GRAY SHALE	1.3	70.2	
426.3	MODESTO		DARK GRAY SHALE	5.5	71.5	
420.8	MODESTO		DARK GRAY SHALE	8.0	77.0	
412.8	MODESTO		DARK GRAY SHALE	1.0	85.0	DGY SH W/ LGY SH STREAKS
411.8	MODESTO		DARK GRAY SHALE	2.0	86.0	
409.8	MODESTO		SANDSTONE	7.5	88.0	
402.3	MODESTO		CALCAREOUS SHALE	3.9	95.5	
398.4	MODESTO		DARK GRAY SHALE	2.6	99.4	
395.8	MODESTO		DARK GRAY SHALE	8.6	102.0	
387.2	MODESTO		BLACK SHALE	0.7	110.6	
386.5	MODESTO	PIASA	LIMESTONE	4.3	111.3	
382.3	MODESTO		DARK GRAY SHALE	1.2	115.5	
381.1	MODESTO		BLACK SHALE	1.5	116.7	
379.6	CARBONDALE	DANVILLE	COAL	0.5	118.2	
379.1	CARBONDALE		DARK GRAY SHALE	7.3	118.7	
371.8	CARBONDALE		DARK GRAY SHALE	11.5	126.0	
360.3	CARBONDALE		SANDSTONE	9.0	137.5	
351.3	CARBONDALE		DARK GRAY SHALE	2.3	146.5	
349.0	CARBONDALE	ALLENBY	COAL	0.3	148.8	
348.7	CARBONDALE		DARK GRAY SHALE	2.2	149.1	
346.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.2	151.3	
344.4	CARBONDALE		DARK GRAY SHALE	3.1	153.4	
341.3	CARBONDALE		SANDSTONE	7.0	156.5	
334.3	CARBONDALE		DARK GRAY SHALE	9.1	163.5	
325.2	CARBONDALE		CALCAREOUS SHALE	17.8	172.6	
307.5	CARBONDALE		COAL	0.1	190.3	

307.4	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	5.2	190.4	
302.2	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	3.2	195.6	
299.0	CARBONDALE	ANNA	BLACK SHALE	1.1	198.8	
298.0	CARBONDALE	ANNA	FOSSILIFEROUS LIMESTONE	0.3	199.8	
297.7	CARBONDALE	ANNA	BLACK SHALE	1.6	200.1	
296.1	CARBONDALE	HERRIN	COAL	4.3	201.7	
291.8	CARBONDALE		UNDERCLAY	1.5	206.0	
290.3	CARBONDALE		GRAY SHALE	0.2	207.5	
290.1	CARBONDALE		GRAY SHALE	2.8	207.7	
287.3	CARBONDALE		LIMESTONE	1.0	210.5	
286.3	CARBONDALE		GRAY SHALE	9.5	211.5	
276.8	CARBONDALE	BRIAR HILL	COAL	0.3	221.0	
276.5	CARBONDALE		DARK GRAY SHALE	16.2	221.3	
260.3	CARBONDALE		SANDSTONE	30.0	237.5	
230.3	CARBONDALE		GRAY SHALE	9.5	267.5	
220.8	CARBONDALE		SANDSTONE	5.5	277.0	
215.3	CARBONDALE		BLACK SHALE	0.7	282.5	
214.6	CARBONDALE		SANDSTONE	4.0	283.2	
210.6	CARBONDALE		DARK GRAY SHALE	15.0	287.2	
195.6	CARBONDALE		DARK GRAY SHALE	16.5	302.2	DGY SH W/ LGY STREAKS
179.1	CARBONDALE		DARK GRAY SHALE	4.7	318.7	
174.5	CARBONDALE	SPRINGFIELD	COAL	4.8	323.3	
169.7	CARBONDALE		UNDERCLAY	2.4	328.1	

MAPID: 16501093000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 40' S line, 50' W line of SW SW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.689085 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760953 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 498.7 **LOGGED (FT.):** 378.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-88 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
498.7			CLAY	12.0	0.0	
486.7			SANDSTONE	8.0	12.0	
478.7			SANDSTONE	40.0	20.0	
438.7			GRAY SHALE	16.0	60.0	
422.7			GRAY SHALE	23.0	76.0	
399.7			LIMESTONE	2.5	99.0	
397.2			GRAY SHALE	8.0	101.5	
389.2			GRAY SHALE	2.5	109.5	LGY SH W/ SOME COAL
386.7	CARBONDALE		DARK GRAY SHALE	4.0	112.0	
382.7	CARBONDALE		SANDSTONE	19.0	116.0	
363.7	CARBONDALE		NO RECORD	85.0	135.0	NO RECORD GIVEN FOR INTERVAL IN LOG
278.7	CARBONDALE		GRAY SHALE	16.0	220.0	
262.7	CARBONDALE		LIMESTONE	3.0	236.0	
259.7	CARBONDALE		CALCAREOUS SHALE	1.0	239.0	
258.7	CARBONDALE		DARK GRAY SHALE	2.5	240.0	
256.2	CARBONDALE		DARK GRAY SHALE	18.5	242.5	
237.7	CARBONDALE		SILTSTONE	14.5	261.0	
223.2	CARBONDALE		BLACK SHALE	0.2	275.5	
223.0	CARBONDALE	BRIAR HILL	COAL	0.2	275.7	
222.9	CARBONDALE		DARK GRAY SHALE	1.7	275.8	
221.2	CARBONDALE		SILTSTONE	16.9	277.5	
204.3	CARBONDALE		SANDSTONE	0.6	294.4	
203.7	CARBONDALE		SANDSTONE	9.2	295.0	
194.5	CARBONDALE		SANDSTONE	0.8	304.2	
193.8	CARBONDALE		SANDSTONE	9.1	304.9	
184.7	CARBONDALE		SANDSTONE	6.5	314.0	
178.2	CARBONDALE		SANDSTONE	6.0	320.5	
172.2	CARBONDALE		DARK GRAY SHALE	15.2	326.5	
157.0	CARBONDALE		SANDY SHALE	4.8	341.7	
152.2	CARBONDALE		DARK GRAY SHALE	1.7	346.5	
150.6	CARBONDALE		BLACK SHALE	0.1	348.1	
150.4	CARBONDALE		DARK GRAY SHALE	0.2	348.3	
150.3	CARBONDALE		UNDERCLAY	0.8	348.4	
149.5	CARBONDALE		SANDY SHALE	3.5	349.2	
146.0	CARBONDALE		GRAY SHALE	9.8	352.7	LGY SH W/ LS NODS
136.2	CARBONDALE		GRAY SHALE	7.3	362.5	
128.9	CARBONDALE		SIDERITE	0.2	369.8	SIDERITE BAND
128.8	CARBONDALE		DARK GRAY SHALE	2.3	369.9	
126.5	CARBONDALE		GRAY SHALE	1.3	372.2	

125.3	CARBONDALE		SANDSTONE	2.0	373.4
123.3	CARBONDALE		DARK GRAY SHALE	0.6	375.4
122.7	CARBONDALE		DARK GRAY SHALE	2.4	376.0

MAPID: 16501129000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.680086 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768315 **DATE COLLECTED:** 3 / 4 / 1950

SURFACE ELEVATION (FT.): 444.4 **LOGGED (FT.):** 227.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-49 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.4			CLAY	5.0	0.0	
439.4	MODESTO		SANDSTONE	4.0	5.0	
435.4	MODESTO		SHALE	7.0	9.0	
428.4	MODESTO	PIASA	LIMESTONE	3.5	16.0	
424.9			SHALE	29.5	19.5	
395.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	49.0	
391.4	CARBONDALE		SHALE	32.0	53.0	
359.4	CARBONDALE		SHALE	8.0	85.0	
351.4	CARBONDALE		LIMESTONE	1.0	93.0	
350.4	CARBONDALE		BLACK SHALE	2.5	94.0	
347.9	CARBONDALE	BRERETON	LIMESTONE	6.0	96.5	
341.9	CARBONDALE	ANNA	BLACK SHALE	0.6	102.5	
341.3	CARBONDALE	HERRIN	COAL	6.4	103.1	
334.9	CARBONDALE		UNDERCLAY	3.0	109.5	
331.9	CARBONDALE		GRAY SHALE	17.0	112.5	
314.9	CARBONDALE		GRAY SHALE	13.0	129.5	
301.9	CARBONDALE		COAL	0.3	142.5	
301.6	CARBONDALE		DARK SHALE	10.0	142.8	
291.6	CARBONDALE		SANDSTONE	26.2	152.8	
265.4	CARBONDALE		SHALE	5.0	179.0	SH W/ SS STREAKS
260.4	CARBONDALE		DARK SHALE	3.5	184.0	DK SH W/ LT SH STREAKS
256.9	CARBONDALE		SANDSTONE	0.3	187.5	
256.6	CARBONDALE		SHALE	4.0	187.8	SH W/ LT SH STREAKS
252.6	CARBONDALE		DARK SHALE	4.2	191.8	
248.4	CARBONDALE		SANDSTONE	0.1	196.0	
248.3	CARBONDALE		DARK SHALE	7.9	196.1	
240.4	CARBONDALE		SHALE	17.7	204.0	
222.7	CARBONDALE	SPRINGFIELD	COAL	4.8	221.7	
218.0	CARBONDALE		UNDERCLAY	1.1	226.4	

MAPID: 16526177000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 610' S line, 32' E line of NW SE
QUADRANGLE: HARCO **LONGITUDE:** -88.675547 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.766264 **DATE COLLECTED:** 4 / 28 / 1978
SURFACE ELEVATION (FT.): 481.0 **LOGGED (FT.):** 59.5 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. H456GG **WELL TYPE:** Water Well
COMMENT: PERMIT 208 "DRILLED TO TOP OF #7 COAL"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
481.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
476.0	PLEISTOCENE		CLAY	6.0	5.0	
470.0	MODESTO		SANDSTONE	13.0	11.0	BROWN
457.0	MODESTO		SANDY SHALE	5.0	24.0	GRAY
452.0	MODESTO		SANDSTONE	4.0	29.0	GRAY
448.0	MODESTO		GRAY SHALE	14.5	33.0	DARK
433.5	MODESTO	PIASA	LIMESTONE	3.4	47.5	GRAY
430.1	MODESTO		GRAY SHALE	1.1	50.9	
429.0	MODESTO		GRAY SHALE	1.0	52.0	DARK
428.0	MODESTO		LIMESTONE	0.8	53.0	DARK GRAY
427.2	MODESTO		GRAY SHALE	3.2	53.8	
424.0	MODESTO		GRAY SHALE	2.5	57.0	DARK

MAPID: 16526178000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 840' N line, 5' W line of SE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.675496 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.7734 **DATE COLLECTED:** 5 / 26 / 1983
SURFACE ELEVATION (FT.): 440.6 **LOGGED (FT.):** 115.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. H557D **WELL TYPE:** Water Well
COMMENT: PERMIT 208; OBSERVATION WELL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.6	PLEISTOCENE		UNCONSOLIDATED	110.0	0.0	SPOILS
330.6			GRAY SHALE	5.0	110.0	

MAPID: 16500355000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.700528 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.77392 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 510.0 **LOGGED (FT.):** 225.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
510.0			UNCONSOLIDATED	2.0	0.0	
508.0	MODESTO		SANDSTONE	44.0	2.0	
464.0	MODESTO		SANDSTONE	30.0	46.0	
434.0	MODESTO		COAL	0.8	76.0	
433.2	MODESTO		UNDERCLAY	4.5	76.8	
428.7	MODESTO		ARGILACEOUS SHALE	48.0	81.3	
380.7	MODESTO		ARGILACEOUS SHALE	4.3	129.3	
376.5	MODESTO	PIASA	LIMESTONE	4.0	133.5	
372.5	MODESTO		ARGILACEOUS SHALE	7.0	137.5	
365.5	CARBONDALE	DANVILLE	COAL	1.9	144.5	
363.6	CARBONDALE		UNDERCLAY	3.0	146.4	
360.6	CARBONDALE		ARGILACEOUS SHALE	2.0	149.4	
358.6	CARBONDALE	ALLENBY	COAL	0.9	151.4	
357.7	CARBONDALE		SHALE	2.0	152.3	
355.7	CARBONDALE		LIMESTONE	1.5	154.3	
354.2	CARBONDALE		BLACK SHALE	4.0	155.8	
350.2	CARBONDALE		UNDERCLAY	4.0	159.8	
346.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.4	163.8	
337.7	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	24.0	172.3	
313.7	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	4.0	196.3	
309.7	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	11.0	200.3	
298.7	CARBONDALE	BRERETON	LIMESTONE	3.0	211.3	
295.7	CARBONDALE	HERRIN	COAL	6.1	214.3	
289.7	CARBONDALE		UNDERCLAY	1.4	220.3	

MAPID: 16500356000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.691524 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.766431 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 395.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	32.0	0.0	
408.0	MODESTO		SHALE	28.0	32.0	
380.0	MODESTO		SHALE	32.0	60.0	
348.0	MODESTO		SANDY SHALE	4.0	92.0	
344.0	MODESTO		SANDSTONE	58.0	96.0	
286.0	MODESTO		SANDSTONE	5.0	154.0	
281.0	MODESTO		SANDY SHALE	3.0	159.0	
278.0	MODESTO		SANDSTONE	8.7	162.0	
269.3	MODESTO		SHALE	4.2	170.7	
265.2	CARBONDALE	DANVILLE	COAL	1.1	174.8	
264.1	CARBONDALE		UNDERCLAY	3.2	175.9	
260.9	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	179.1	
260.4	CARBONDALE		UNDERCLAY	1.0	179.6	
259.4	CARBONDALE	ANVIL ROCK	SANDSTONE	5.4	180.6	
254.0	CARBONDALE	ANVIL ROCK	SHALE	19.5	186.0	
234.5	CARBONDALE		BLACK SHALE	4.0	205.5	
230.5	CARBONDALE		CLAYSTONE	0.7	209.5	
229.8	CARBONDALE	HERRIN	COAL	5.4	210.2	
224.4	CARBONDALE		UNDERCLAY	4.0	215.6	
220.4	CARBONDALE		SANDSTONE	14.1	219.6	
206.3	CARBONDALE		SANDY SHALE	27.3	233.7	
179.0	CARBONDALE		SANDSTONE	0.7	261.0	
178.3	CARBONDALE		SANDSTONE	1.0	261.7	
177.3	CARBONDALE		CLAYSTONE	1.0	262.7	
176.3	CARBONDALE		BLACK SHALE	1.0	263.7	
175.3	CARBONDALE		CLAYSTONE	3.0	264.7	
172.3	CARBONDALE		BLACK SHALE	2.0	267.7	
170.3	CARBONDALE		COAL	1.7	269.7	
168.7	CARBONDALE		SANDY SHALE	10.3	271.3	
158.4	CARBONDALE		COAL	0.1	281.6	
158.3	CARBONDALE		UNDERCLAY	0.5	281.7	
157.8	CARBONDALE		SANDSTONE	4.0	282.2	
153.8	CARBONDALE		SANDY SHALE	1.8	286.2	
152.0	CARBONDALE		COAL	1.3	288.0	
150.7	CARBONDALE		UNDERCLAY	2.4	289.3	
148.3	CARBONDALE		LIMESTONE	2.0	291.7	
146.3	CARBONDALE		LIMESTONE	5.3	293.7	
141.0	CARBONDALE		SANDY SHALE	2.0	299.0	
139.0	CARBONDALE		SANDSTONE	4.7	301.0	

134.3	CARBONDALE	BLACK SHALE	0.3	305.7
134.0	CARBONDALE	COAL	0.2	306.0
133.8	CARBONDALE	SANDY SHALE	3.5	306.2
130.3	CARBONDALE	SANDSTONE	4.0	309.7
126.3	CARBONDALE	SANDY SHALE	5.0	313.7
121.3	CARBONDALE	BLACK SHALE	0.2	318.7
121.2	CARBONDALE	CLAYSTONE	3.0	318.8
118.2	CARBONDALE	CLAYSTONE	7.0	321.8
111.2	CARBONDALE	SANDY SHALE	1.2	328.8
110.0	CARBONDALE	SANDSTONE	4.0	330.0
106.0	CARBONDALE	SANDY SHALE	53.6	334.0
52.4	CARBONDALE	COAL	6.3	387.6
46.2	CARBONDALE	UNDERCLAY	2.0	393.8

MAPID: 16500357000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699391 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.769228 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 487.2 **LOGGED (FT.):** 325.8 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
487.2			UNCONSOLIDATED	8.5	0.0	
478.7	MODESTO		SANDSTONE	17.5	8.5	
461.2	MODESTO		SHALE	30.0	26.0	
431.2	MODESTO		SANDY SHALE	7.3	56.0	
423.9	MODESTO		COAL	0.5	63.3	
423.4	MODESTO		SANDY SHALE	50.2	63.8	
373.2	MODESTO		SHALE	7.5	114.0	
365.7	MODESTO		COAL	0.5	121.5	
365.2	MODESTO		SANDY SHALE	9.1	122.0	
356.1	CARBONDALE	DANVILLE	COAL	1.6	131.1	
354.5	CARBONDALE		SANDY SHALE	10.9	132.7	
343.6	CARBONDALE	"Allenby rider"	COAL	0.2	143.6	
343.4	CARBONDALE		SANDY SHALE	4.6	143.8	
338.9	CARBONDALE		DARK SHALE	19.9	148.3	
318.9	CARBONDALE	ALLENBY	COAL	0.3	168.3	
318.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.5	168.5	
300.2	CARBONDALE	ANVIL ROCK	SHALE	3.3	187.0	
296.9	CARBONDALE	JAMESTOWN	COAL	0.3	190.3	
296.7	CARBONDALE	BRERETON	LIMESTONE	8.5	190.5	
288.2	CARBONDALE	ANNA	SHALE	5.6	199.0	
282.6	CARBONDALE	HERRIN	COAL	5.2	204.6	
277.4	CARBONDALE	DYKERSBURG	SHALE	12.3	209.8	
265.2	CARBONDALE	DYKERSBURG	SANDY SHALE	49.0	222.0	
216.2	CARBONDALE	DYKERSBURG	DARK SHALE	48.5	271.0	
167.7	CARBONDALE	SPRINGFIELD	COAL	4.5	319.5	
163.2	CARBONDALE		DARK SHALE	1.8	324.0	

MAPID: 16500357000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699391 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.769228 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 487.0 **LOGGED (FT.):** 326.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBRG SALINE COL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.0	CARBONDALE	HERRIN	COAL	5.2	204.0	
168.0	CARBONDALE	SPRINGFIELD	COAL	4.5	319.0	

MAPID: 16500358000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.696 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.762675 **DATE COLLECTED:** 9 / 1 / 1905

SURFACE ELEVATION (FT.): 497.0 **LOGGED (FT.):** 303.4 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
497.0			UNCONSOLIDATED	4.0	0.0	
493.0			SANDSTONE	22.0	4.0	
471.0			SANDSTONE	24.0	26.0	
447.0			BLACK SHALE	4.0	50.0	
443.0			CLAYSTONE	6.0	54.0	
437.0			SANDSTONE	7.0	60.0	
430.0			LIMESTONE	5.0	67.0	
425.0			SANDSTONE	7.0	72.0	
418.0			ARGILACEOUS SHALE	24.0	79.0	
394.0			LIMESTONE	3.0	103.0	
391.0			ARGILACEOUS SHALE	12.0	106.0	
379.0	CARBONDALE		SHALE	19.0	118.0	
360.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	137.0	
354.0	CARBONDALE		CLAYSTONE	2.0	143.0	
352.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	145.0	
340.0	CARBONDALE	ANVIL ROCK	SHALE	22.0	157.0	
318.0	CARBONDALE		LIMESTONE	4.5	179.0	
313.5	CARBONDALE		BLACK SHALE	5.0	183.5	
308.5	CARBONDALE		CLAYSTONE	1.0	188.5	
307.5	CARBONDALE		ARGILACEOUS SHALE	5.5	189.5	
302.0	CARBONDALE	ANNA	BLACK SHALE	2.0	195.0	
300.0	CARBONDALE	HERRIN	COAL WITH SHALE	3.0	197.0	
297.0	CARBONDALE		UNDERCLAY	2.0	200.0	
295.0	CARBONDALE	DYKERSBURG	SANDSTONE	33.0	202.0	
262.0	CARBONDALE	DYKERSBURG	SHALE	25.0	235.0	
237.0	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	260.0	
228.0	CARBONDALE	DYKERSBURG	SHALE	28.5	269.0	
199.5	CARBONDALE	SPRINGFIELD	COAL	5.7	297.5	
193.8	CARBONDALE		UNDERCLAY	0.3	303.2	

MAPID: 16500359000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.689264 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.760844 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 231.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
465.0			UNCONSOLIDATED	5.0	0.0	
460.0			SANDSTONE	11.0	5.0	
449.0			SANDSTONE	14.0	16.0	
435.0			SHALE	6.0	30.0	
429.0			SHALE	2.0	36.0	
427.0			SHALE	7.0	38.0	
420.0			COAL	0.2	45.0	
419.8			UNDERCLAY	9.0	45.2	
410.8			SANDSTONE	2.0	54.2	
408.8			SANDY SHALE	25.0	56.2	
383.8			BLACK SHALE	16.0	81.2	
367.8			SHALE	6.0	97.2	
361.8			VARRIGATED SHALE	1.0	103.2	
360.8			SANDSTONE	5.0	104.2	
355.8			SANDY SHALE	0.8	109.2	
355.1			SANDSTONE	22.0	109.9	
333.1			BLACK SHALE	3.0	131.9	
330.1			COAL	0.3	134.9	
329.8			SHALE	1.0	135.2	
328.8			LIMESTONE	4.0	136.2	
324.8			BLACK SHALE	0.8	140.2	
324.1			SHALE	3.2	140.9	
320.9			COAL	1.7	144.1	
319.2			SHALE	1.5	145.8	
317.7			SANDY SHALE	6.0	147.3	
311.7			SHALE	3.0	153.3	
308.7			SANDY SHALE	1.6	156.3	
307.2			SANDSTONE	3.8	157.8	
303.3			SHALE	0.3	161.7	
303.1			SANDSTONE	2.0	161.9	
301.1			CLAYSTONE	0.3	163.9	
300.7			COAL	0.3	164.3	
300.5	CARBONDALE		UNDERCLAY	0.3	164.5	
300.2	CARBONDALE		CLAYSTONE	2.4	164.8	
297.7	CARBONDALE		LIMESTONE	1.8	167.3	
295.9	CARBONDALE		CLAYSTONE	3.5	169.1	
292.4	CARBONDALE		SHALE	3.0	172.6	
289.4	CARBONDALE		SHALE	2.5	175.6	
286.9	CARBONDALE	BRIAR HILL	COAL	0.5	178.1	W/ UC

286.4	CARBONDALE		UNDERCLAY	1.5	178.6	
284.9	CARBONDALE		SANDSTONE	6.6	180.1	
278.3	CARBONDALE		SHALE	10.0	186.7	
268.3	CARBONDALE		SANDY SHALE	5.0	196.7	
263.3	CARBONDALE		COAL	0.1	201.7	
263.2	CARBONDALE	ST. DAVID	LIMESTONE	1.3	201.8	
261.9	CARBONDALE		COAL	5.5	203.1	W/ SH
256.4	CARBONDALE	DYKERSBURG	SANDY SHALE	10.2	208.6	
246.2	CARBONDALE	SPRINGFIELD	COAL	2.8	218.8	
243.4	CARBONDALE		SHALE	5.0	221.6	
238.4	CARBONDALE		UNDERCLAY	4.9	226.6	

MAPID: 16500903000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 745' N line, 82' E line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689596 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.773703 **DATE COLLECTED:** 2 / 23 / 1947

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 337.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-5/43-5 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE#: C-3093

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			CLAY	2.0	0.0	
423.0			SANDY CLAY	3.0	2.0	
420.0			SAND	6.0	5.0	
414.0	MODESTO		SHALE	5.0	11.0	
409.0	MODESTO		DARK SHALE	20.0	16.0	
389.0	MODESTO		SHALE	10.0	36.0	SH W/ SS STREAKS
379.0	MODESTO		SANDY SHALE	5.0	46.0	
374.0	MODESTO		NO RECORD	15.0	51.0	NO RECORD - WASHOUT
359.0	MODESTO		SANDSTONE	1.5	66.0	
357.5	MODESTO		NO RECORD	15.5	67.5	NO RECORD - WASHOUT
342.0	MODESTO		DARK SHALE	1.8	83.0	DK SH W/ SS STREAKS
340.2	MODESTO		SANDSTONE	6.9	84.8	SS W/ SH STREAKS
333.3	MODESTO		SANDSTONE	8.3	91.7	
325.0	MODESTO		SHALE	2.0	100.0	SH W/ SS STREAKS
323.0	MODESTO		SANDSTONE	1.0	102.0	
322.0	MODESTO		SANDSTONE	14.0	103.0	
308.0	MODESTO		NO RECORD	5.0	117.0	NO RECORD - WASHOUT
303.0	MODESTO		SANDSTONE	13.0	122.0	
290.0	MODESTO		NO RECORD	3.0	135.0	NO RECORD - WASHOUT
287.0	MODESTO		SANDSTONE	13.0	138.0	
274.0	MODESTO		NO RECORD	6.0	151.0	NO RECORD - WASHOUT
268.0	MODESTO		SANDSTONE	0.5	157.0	
267.5	MODESTO		DARK GRAY SHALE	7.0	157.5	
260.5	MODESTO		COAL	0.3	164.5	
260.2	MODESTO		SHALE	1.7	164.8	
258.5	MODESTO	PIASA	LIMESTONE	3.5	166.5	
255.0	MODESTO		SANDSTONE	6.3	170.0	
248.7	MODESTO		DARK SHALE	17.8	176.3	
230.9	MODESTO		BLACK SHALE	5.5	194.1	
225.4	CARBONDALE	DANVILLE	COAL	0.6	199.6	
224.8	CARBONDALE		UNDERCLAY	8.0	200.2	
216.8	CARBONDALE		GRAY SHALE	10.5	208.2	
206.3	CARBONDALE		SANDSTONE	1.6	218.7	
204.7	CARBONDALE		DARK SHALE	13.0	220.3	
191.7	CARBONDALE		DARK SHALE	11.0	233.3	DK SH W/ CHERT STREAKS
180.7	CARBONDALE	BRERETON	LIMESTONE	4.3	244.3	
176.4	CARBONDALE	ANNA	BLACK SHALE	8.4	248.6	
168.0	CARBONDALE	ANNA	LIMESTONE	0.5	257.0	

167.5	CARBONDALE	HERRIN	COAL	2.0	257.5	
165.5	CARBONDALE		UNDERCLAY	0.5	259.5	
165.0	CARBONDALE		CALCAREOUS SHALE	0.3	260.0	
164.7	CARBONDALE		LIMESTONE	1.3	260.3	
163.4	CARBONDALE		DARK SHALE	2.0	261.6	
161.4	CARBONDALE		SANDY SHALE	4.0	263.6	
157.4	CARBONDALE		DARK SHALE	3.0	267.6	DK SH W/ CHERT STREAKS
154.4	CARBONDALE		CALCAREOUS SHALE	2.5	270.6	
151.9	CARBONDALE	BRIAR HILL	COAL	0.8	273.1	
151.1	CARBONDALE		UNDERCLAY	5.0	273.9	
146.1	CARBONDALE		LIMESTONE	6.3	278.9	
139.7	CARBONDALE		DARK SHALE	2.6	285.3	
137.2	CARBONDALE		SANDY SHALE	2.4	287.8	
134.7	CARBONDALE		SHALE	0.3	290.3	
134.5	CARBONDALE		SANDY SHALE	3.3	290.5	
131.2	CARBONDALE		SANDSTONE	9.2	293.8	
122.1	CARBONDALE		DARK SHALE	15.2	302.9	
106.9	CARBONDALE	ST. DAVID	LIMESTONE	2.2	318.1	
104.7	CARBONDALE	ST. DAVID	LIMESTONE	3.3	320.3	
101.4	CARBONDALE		BLACK SHALE	3.3	323.6	
98.1	CARBONDALE		DARK SHALE	2.7	326.9	
95.4	CARBONDALE		BLACK SHALE	2.2	329.6	
93.2	CARBONDALE	SPRINGFIELD	COAL	4.5	331.8	
88.7	CARBONDALE		UNDERCLAY	1.7	336.3	

MAPID: 16500924000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 53' S line, 21' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.693689 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764701 **DATE COLLECTED:** 1 / 20 / 1949

SURFACE ELEVATION (FT.): 508.5 **LOGGED (FT.):** 307.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-24 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
508.5			CLAY	10.0	0.0	
498.5			SANDSTONE	2.0	10.0	
496.5			SANDSTONE	8.0	12.0	
488.5			SHALE	56.0	20.0	
432.5			LIMESTONE	3.5	76.0	
429.0			SHALE	15.5	79.5	
413.5			LIMESTONE	6.5	95.0	
407.0	CARBONDALE	DANVILLE	COAL	2.0	101.5	
405.0	CARBONDALE		SHALE	61.5	103.5	
343.5	CARBONDALE		LIMESTONE	4.0	165.0	
339.5	CARBONDALE		DARK SHALE	6.0	169.0	
333.5	CARBONDALE		BLACK SHALE	2.8	175.0	
330.7	CARBONDALE	HERRIN	COAL	5.9	177.8	
324.7	CARBONDALE		UNDERCLAY	2.0	183.8	
322.7	CARBONDALE		SANDY SHALE	49.3	185.8	
273.5	CARBONDALE		SHALE	40.0	235.0	
233.5	CARBONDALE		SHALE	26.0	275.0	
207.5	CARBONDALE	SPRINGFIELD	COAL	4.5	301.0	
203.0	CARBONDALE		UNDERCLAY	2.0	305.5	

MAPID: 16500925000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 43' S line, 590' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.691711 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764682 **DATE COLLECTED:** 1 / 26 / 1949

SURFACE ELEVATION (FT.): 517.6 **LOGGED (FT.):** 319.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
517.6			CLAY	12.0	0.0	
505.6			SANDSTONE	4.0	12.0	
501.6			SANDSTONE	8.0	16.0	
493.6			SHALE	41.0	24.0	
452.6			LIMESTONE	2.7	65.0	
449.9			SHALE	38.3	67.7	
411.6			LIMESTONE	4.0	106.0	
407.6			COAL	2.0	110.0	
405.6			SHALE	18.0	112.0	
387.6			LIMESTONE	4.5	130.0	
383.1			SHALE	1.0	134.5	
382.1			COAL	2.0	135.5	
380.1			UNDERCLAY	1.5	137.5	
378.6			LIMESTONE	3.5	139.0	
375.1			SHALE	30.5	142.5	
344.6			LIMESTONE	2.0	173.0	
342.6			SHALE	4.0	175.0	
338.6			SHALE	2.0	179.0	
336.6			DARK SHALE	12.0	181.0	
324.6			BLACK SHALE	1.0	193.0	
323.6	CARBONDALE	HERRIN	COAL	5.3	194.0	
318.3	CARBONDALE		UNDERCLAY	0.8	199.3	
317.6	CARBONDALE		SHALE	97.7	200.0	
219.9	CARBONDALE		SHALE	0.3	297.7	
219.6	CARBONDALE		SHALE	2.0	298.0	
217.6	CARBONDALE		SHALE	13.3	300.0	
204.3	CARBONDALE	SPRINGFIELD	COAL	5.3	313.3	
199.1	CARBONDALE		UNDERCLAY	0.5	318.5	

MAPID: 16500926000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 186' S line, 7' W line of SE NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.700473 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.765044 **DATE COLLECTED:** 2 / 0 / 1949

SURFACE ELEVATION (FT.): 495.7 **LOGGED (FT.):** 321.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-26 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
495.7			CLAY	12.0	0.0	
483.7	MODESTO		SANDSTONE	4.0	12.0	
479.7	MODESTO		SANDSTONE	6.0	16.0	
473.7	MODESTO		SANDSTONE	2.0	22.0	
471.7	MODESTO		SHALE	32.0	24.0	
439.7	MODESTO		LIMESTONE	1.5	56.0	
438.2	MODESTO		SHALE	26.5	57.5	
411.7	MODESTO		LIMESTONE	1.5	84.0	
410.2	MODESTO		SHALE	36.0	85.5	
374.2	MODESTO		LIMESTONE	3.5	121.5	
370.7	MODESTO		SHALE	28.0	125.0	
342.7	MODESTO	PIASA	LIMESTONE	5.3	153.0	
337.4	CARBONDALE		SHALE	16.7	158.3	
320.7	CARBONDALE		SANDSTONE	0.8	175.0	
319.9	CARBONDALE		SANDY SHALE	8.0	175.8	
311.9	CARBONDALE		GRAY SHALE	7.0	183.8	
304.9	CARBONDALE		BLACK SHALE	0.1	190.8	
304.9	CARBONDALE		LIMESTONE	4.0	190.8	
300.9	CARBONDALE		BLACK SHALE	5.2	194.8	
295.7	CARBONDALE		SHALE	6.8	200.0	
288.9	CARBONDALE	ANNA	BLACK SHALE	1.3	206.8	
287.7	CARBONDALE	HERRIN	COAL	5.3	208.0	
282.4	CARBONDALE		UNDERCLAY	1.9	213.3	
280.4	CARBONDALE		SHALE	74.0	215.3	
206.4	CARBONDALE		SHALE	26.6	289.3	
179.9	CARBONDALE	SPRINGFIELD	COAL	4.3	315.8	
175.5	CARBONDALE		UNDERCLAY	0.5	320.2	
175.0	CARBONDALE		SHALE	1.0	320.7	

MAPID: 16500927000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1128' S line, 39' E line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689437 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.771413 **DATE COLLECTED:** 2 / 11 / 1949

SURFACE ELEVATION (FT.): 436.6 **LOGGED (FT.):** 313.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-27 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.6			UNCONSOLIDATED	14.5	0.0	SOIL, CLAY, AND SAND
422.1			SANDSTONE	10.0	14.5	
412.1			SHALE	17.0	24.5	
395.1			LIMESTONE	0.5	41.5	
394.6			SANDSTONE	105.0	42.0	
289.6			DARK SHALE	14.0	147.0	
275.6			COAL	0.7	161.0	
274.9			SHALE	3.0	161.7	
271.9			SHALE	0.3	164.7	
271.6			COAL	0.3	165.0	
271.3			GRAY SHALE	6.7	165.3	
264.6			LIMESTONE	1.0	172.0	
263.6			SANDSTONE	3.0	173.0	
260.6			LIMESTONE	3.0	176.0	
257.6			GRAY SHALE	36.0	179.0	
221.6			LIMESTONE	2.5	215.0	
219.1			DARK SHALE	2.5	217.5	
216.6			SANDSTONE	3.0	220.0	
213.6			GRAY SHALE	32.0	223.0	
181.6			SHALE	0.5	255.0	
181.1			LIMESTONE	4.5	255.5	
176.6			SANDSTONE	6.0	260.0	
170.6			GRAY SHALE	2.0	266.0	
168.6			LIMESTONE	1.5	268.0	
167.1			DARK GRAY SHALE	14.5	269.5	
152.6	CARBONDALE	ST. DAVID	LIMESTONE	4.3	284.0	
148.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	288.3	
144.6	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	7.8	292.0	
136.8	CARBONDALE	SPRINGFIELD	COAL	4.6	299.8	
132.3	CARBONDALE		UNDERCLAY	6.5	304.3	
125.8	CARBONDALE		LIMESTONE	0.3	310.8	
125.4	CARBONDALE		SANDY SHALE	1.8	311.2	

MAPID: 16500928000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 760' S line, 63' E line of SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689518 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.770398 **DATE COLLECTED:** 2 / 0 / 1949

SURFACE ELEVATION (FT.): 479.7 **LOGGED (FT.):** 314.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-28 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.7			UNCONSOLIDATED	10.0	0.0	SOIL, CLAY, AND SAND
469.7			SANDSTONE	2.0	10.0	
467.7			SANDSTONE	9.0	12.0	
458.7			SANDSTONE	12.0	21.0	
446.7			SHALE	28.0	33.0	
418.7			LIMESTONE	2.7	61.0	
416.0			SHALE	71.3	63.7	
344.7			SHALE	11.0	135.0	
333.7			SHALE	1.5	146.0	
332.2			SHALE	3.5	147.5	
328.7			LIMESTONE	1.0	151.0	
327.7			SHALE	2.0	152.0	
325.7			LIMESTONE	4.5	154.0	
321.2			SANDSTONE	16.5	158.5	
304.7			DARK SHALE	2.3	175.0	
302.4			NO RECORD	0.6	177.3	NO RECORD - WASHOUT
301.8			DARK SHALE	19.5	177.9	
282.3			COAL	0.3	197.4	
282.0			BLACK SHALE	1.3	197.7	
280.7			CALCAREOUS SHALE	4.5	199.0	
276.2			BLACK SHALE	1.5	203.5	
274.7			DARK SHALE	5.5	205.0	
269.2	CARBONDALE	HERRIN	COAL	2.2	210.5	
267.0	CARBONDALE		UNDERCLAY	0.2	212.7	
266.9	CARBONDALE		LIMESTONE	1.0	212.8	
265.9	CARBONDALE		SHALE	18.0	213.8	
247.9	CARBONDALE		LIMESTONE	2.0	231.8	
245.9	CARBONDALE		SHALE	56.2	233.8	
189.7	CARBONDALE		SHALE	10.0	290.0	
179.7	CARBONDALE		SHALE	10.0	300.0	
169.7	CARBONDALE		SHALE	0.8	310.0	
168.9	CARBONDALE	SPRINGFIELD	COAL	3.0	310.8	
165.9	CARBONDALE		UNDERCLAY	1.0	313.8	

MAPID: 16500929000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 18' S line, 246' E line of NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.69016 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.772081 **DATE COLLECTED:** 2 / 28 / 1949

SURFACE ELEVATION (FT.): 432.8 **LOGGED (FT.):** 262.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-29 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.8			UNCONSOLIDATED	13.0	0.0	SOIL, SAND, AND CLAY
419.8	MODESTO		SANDSTONE	6.0	13.0	
413.8	MODESTO		SHALE	5.0	19.0	
408.8	MODESTO		LIMESTONE	6.5	24.0	
402.3	MODESTO		SHALE	4.5	30.5	
397.8	MODESTO		SHALE	24.0	35.0	
373.8	MODESTO		LIMESTONE	3.4	59.0	
370.4	CARBONDALE	DANVILLE	COAL	1.0	62.4	
369.4	CARBONDALE		SHALE	11.6	63.4	
357.8	CARBONDALE		DARK SHALE	20.0	75.0	
337.8	CARBONDALE		LIMESTONE	4.3	95.0	
333.5	CARBONDALE		SHALE	36.8	99.3	
296.8	CARBONDALE		SHALE	11.5	136.0	
285.3	CARBONDALE		DARK SHALE	2.0	147.5	
283.3	CARBONDALE	HERRIN	COAL	4.4	149.5	
278.9	CARBONDALE		UNDERCLAY	1.0	153.9	
277.9	CARBONDALE		SHALE	20.0	154.9	
257.9	CARBONDALE		GRAY SHALE	20.1	174.9	
237.8	CARBONDALE		SHALE	10.0	195.0	
227.8	CARBONDALE		LIMESTONE	1.3	205.0	
226.5	CARBONDALE		SHALE	20.0	206.3	
206.5	CARBONDALE		SHALE	31.3	226.3	
175.3	CARBONDALE	SPRINGFIELD	COAL	4.4	257.5	
170.9	CARBONDALE		UNDERCLAY	1.0	261.9	

MAPID: 16500930000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 828' N line, 151' E line of NE

QUADRANGLE: HARCO **LONGITUDE:** -88.689835 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.773475 **DATE COLLECTED:** 3 / 0 / 1949

SURFACE ELEVATION (FT.): 425.3 **LOGGED (FT.):** 349.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-30 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.3			UNCONSOLIDATED	10.0	0.0	SOIL, SAND, AND CLAY
415.3	MODESTO		SHALE	5.0	10.0	
410.3	MODESTO		GRAY SHALE	10.0	15.0	
400.3	MODESTO		DARK GRAY SHALE	15.0	25.0	
385.3	MODESTO		SANDY SHALE	11.0	40.0	
374.3	MODESTO		SANDSTONE	14.0	51.0	
360.3	MODESTO		SHALE	17.0	65.0	
343.3	MODESTO		DARK SHALE	18.0	82.0	
325.3	MODESTO		SANDSTONE	20.9	100.0	
304.4	MODESTO		NO RECORD	3.4	120.9	NO RECORD - WASHOUT
301.0	MODESTO		SANDSTONE	9.7	124.3	
291.3	MODESTO		NO RECORD	1.0	134.0	NO RECORD - WASHOUT
290.3	MODESTO		SANDSTONE	20.0	135.0	
270.3	MODESTO		SANDSTONE	22.0	155.0	SS W/ SH STREAKS
248.3	MODESTO		BLACK SHALE	0.5	177.0	
247.8	CARBONDALE	DANVILLE	COAL	0.5	177.5	
247.3	CARBONDALE		UNDERCLAY	1.8	178.0	
245.5	CARBONDALE		SANDY SHALE	4.3	179.8	
241.3	CARBONDALE		SANDSTONE	1.0	184.0	
240.3	CARBONDALE		SANDSTONE	3.5	185.0	SS W/ SH STREAKS
236.8	CARBONDALE		SHALE	4.0	188.5	SH W/ SS STREAKS
232.8	CARBONDALE		GRAY SHALE	2.5	192.5	
230.3	CARBONDALE		DARK SHALE	10.0	195.0	
220.3	CARBONDALE		BLACK SHALE	8.5	205.0	
211.8	CARBONDALE	ALLENBY	COAL	0.7	213.5	
211.1	CARBONDALE		UNDERCLAY	0.8	214.2	
210.3	CARBONDALE		GRAY SHALE	4.5	215.0	
205.8	CARBONDALE	BANKSTON FORK	LIMESTONE	2.8	219.5	
203.0	CARBONDALE		COAL	0.2	222.3	
202.8	CARBONDALE		CALCAREOUS SHALE	4.4	222.5	
198.4	CARBONDALE		SANDY SHALE	0.7	226.9	
197.7	CARBONDALE		CALCAREOUS SHALE	0.4	227.6	
197.3	CARBONDALE		SHALE	7.0	228.0	SH W/ SS STREAKS
190.3	CARBONDALE		SANDY SHALE	2.0	235.0	
188.3	CARBONDALE		DARK GRAY SHALE	15.0	237.0	
173.3	CARBONDALE		DARK SHALE	6.2	252.0	
167.1	CARBONDALE	JAMESTOWN	COAL	0.2	258.2	
167.0	CARBONDALE		UNDERCLAY	1.0	258.3	

166.0	CARBONDALE	BRERETON	LIMESTONE	3.7	259.3	
162.3	CARBONDALE	ANNA	BLACK SHALE	7.0	263.0	
155.3	CARBONDALE	HERRIN	COAL	2.5	270.0	
152.8	CARBONDALE		GRAY SHALE	0.5	272.5	
152.3	CARBONDALE		LIMESTONE	2.0	273.0	
150.3	CARBONDALE		BLACK SHALE	1.5	275.0	
148.8	CARBONDALE		LIMESTONE	0.5	276.5	
148.3	CARBONDALE		SANDSTONE	5.3	277.0	SS W/ SH STREAKS
143.0	CARBONDALE		DARK GRAY SHALE	3.6	282.3	
139.5	CARBONDALE		BLACK SHALE	1.5	285.8	
138.0	CARBONDALE	BRIAR HILL	COAL	1.3	287.3	
136.7	CARBONDALE		UNDERCLAY	1.0	288.6	
135.7	CARBONDALE		CALCAREOUS SHALE	1.4	289.6	
134.3	CARBONDALE		LIMESTONE	6.8	291.0	
127.5	CARBONDALE		DARK GRAY SHALE	2.0	297.8	
125.5	CARBONDALE		LIMESTONE	0.3	299.8	
125.3	CARBONDALE		SANDSTONE	3.0	300.0	
122.3	CARBONDALE		BLACK SHALE	0.2	303.0	
122.1	CARBONDALE		DARK SHALE	3.5	303.2	
118.6	CARBONDALE		SANDSTONE	10.5	306.7	
108.1	CARBONDALE		DARK SHALE	0.9	317.2	
107.2	CARBONDALE		LIMESTONE	0.7	318.1	
106.5	CARBONDALE		DARK SHALE	0.3	318.8	
106.3	CARBONDALE		DARK GRAY SHALE	10.8	319.0	
95.5	CARBONDALE		LIMESTONE	0.3	329.8	
95.3	CARBONDALE		COAL	0.2	330.0	
95.1	CARBONDALE		LIMESTONE	5.0	330.2	
90.1	CARBONDALE		BLACK SHALE	1.8	335.2	
88.3	CARBONDALE		BLACK SHALE	0.3	337.0	
88.0	CARBONDALE		BLACK SHALE	2.1	337.3	
86.0	CARBONDALE		DARK SHALE	3.6	339.3	
82.4	CARBONDALE		BLACK SHALE	1.5	342.9	
80.9	CARBONDALE	SPRINGFIELD	COAL	4.3	344.4	
76.5	CARBONDALE		UNDERCLAY	0.6	348.8	

MAPID: 16500933000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 45' S line, 804' E line of NW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.696558 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764669 **DATE COLLECTED:** 8 / 3 / 1949

SURFACE ELEVATION (FT.): 499.7 **LOGGED (FT.):** 285.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-33 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
499.7			CLAY	12.0	0.0	
487.7			SANDSTONE	12.0	12.0	
475.7			SHALE	59.0	24.0	
416.7			LIMESTONE	1.0	83.0	
415.7			SHALE	32.0	84.0	
383.7			SHALE	34.0	116.0	
349.7			LIMESTONE	4.0	150.0	
345.7			LIMESTONE	6.5	154.0	
339.2			BLACK SHALE	5.7	160.5	
333.5			DARK GRAY SHALE	2.8	166.2	
330.7	CARBONDALE	HERRIN	COAL	6.1	169.0	
324.6	CARBONDALE		UNDERCLAY	5.3	175.1	
319.4	CARBONDALE		LIMESTONE	0.8	180.3	
318.5	CARBONDALE		SHALE	3.0	181.2	SH W/ LS STREAKS
315.5	CARBONDALE		DARK GRAY SHALE	4.0	184.2	
311.5	CARBONDALE		SHALE	1.3	188.2	SH W/ LS NODULES
310.2	CARBONDALE		DARK SHALE	4.5	189.5	
305.7	CARBONDALE	BRIAR HILL	COAL	0.8	194.0	
304.9	CARBONDALE		DARK GRAY SHALE	6.3	194.8	
298.7	CARBONDALE		GRAY SHALE	4.0	201.0	
294.7	CARBONDALE		SANDSTONE	15.0	205.0	
279.7	CARBONDALE		SHALE	20.0	220.0	
259.7	CARBONDALE		SHALE	10.0	240.0	SH W/ CHERT & SAND
249.7	CARBONDALE		SANDSTONE	2.0	250.0	
247.7	CARBONDALE		SHALE	7.0	252.0	
240.7	CARBONDALE		SHALE	20.9	259.0	
219.8	CARBONDALE	SPRINGFIELD	COAL	4.5	279.9	
215.3	CARBONDALE		UNDERCLAY	1.0	284.4	

MAPID: 16500944000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 279' S line, 71' E line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.689509 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.76161 **DATE COLLECTED:** 1 / 11 / 1950

SURFACE ELEVATION (FT.): 479.8 **LOGGED (FT.):** 279.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-44 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.8			SANDY CLAY	14.0	0.0	
465.8	MODESTO		SANDSTONE	3.0	14.0	
462.8	MODESTO		SANDSTONE	2.0	17.0	
460.8	MODESTO		SANDSTONE	10.0	19.0	
450.8	MODESTO		SHALE	51.0	29.0	
399.8	MODESTO	PIASA	LIMESTONE	3.0	80.0	
396.8	MODESTO		SHALE	6.0	83.0	
390.8	MODESTO		LIMESTONE	0.5	89.0	
390.3	CARBONDALE	DANVILLE	COAL	2.0	89.5	
388.3	CARBONDALE		SHALE	20.5	91.5	
367.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.7	112.0	
366.1	CARBONDALE		LIGHT SHALE	9.0	113.7	
357.1	CARBONDALE		SHALE	3.0	122.7	
354.1	CARBONDALE		GRAY SHALE	1.5	125.7	GY SH W/ SS STREAKS
352.6	CARBONDALE	ANVIL ROCK	SANDSTONE	14.8	127.2	
337.8	CARBONDALE		DARK GRAY SHALE	10.0	142.0	
327.8	CARBONDALE		GRAY SHALE	4.0	152.0	
323.8	CARBONDALE		SHALE	0.1	156.0	
323.7	CARBONDALE	BRERETON	LIMESTONE	3.5	156.1	
320.2	CARBONDALE	ANNA	BLACK SHALE	3.0	159.6	
317.2	CARBONDALE	ENERGY	SHALE	1.0	162.6	
316.2	CARBONDALE	ENERGY	GRAY SHALE	6.1	163.6	
310.1	CARBONDALE	HERRIN	COAL	4.7	169.7	
305.5	CARBONDALE		UNDERCLAY	1.0	174.3	
304.5	CARBONDALE		SHALE	7.0	175.3	
297.5	CARBONDALE		DARK SHALE	1.0	182.3	
296.5	CARBONDALE		GRAY SHALE	12.7	183.3	
283.8	CARBONDALE		SHALE	1.0	196.0	
282.8	CARBONDALE		SANDSTONE	45.0	197.0	SS W/ SH STREAKS
237.8	CARBONDALE		GRAY SHALE	19.1	242.0	
218.7	CARBONDALE		DARK SHALE	0.3	261.1	
218.4	CARBONDALE		SHALE	0.7	261.4	
217.7	CARBONDALE		SHALE	1.9	262.1	
215.8	CARBONDALE		DARK SHALE	8.7	264.0	
207.1	CARBONDALE	SPRINGFIELD	COAL	5.3	272.7	
201.9	CARBONDALE		UNDERCLAY	1.5	277.9	

MAPID: 16500948000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 751' N line, 44' W line

QUADRANGLE: HARCO **LONGITUDE:** -88.707107 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.773748 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 500.6 **LOGGED (FT.):** 388.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-45 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.6			CLAY	12.0	0.0	
488.6	MODESTO		SANDSTONE	4.0	12.0	
484.6	MODESTO		SANDSTONE	6.0	16.0	
478.6	MODESTO		SANDSTONE	14.0	22.0	
464.6	MODESTO		SHALE	28.0	36.0	
436.6	MODESTO		LIMESTONE	1.0	64.0	
435.6	MODESTO		SHALE	10.0	65.0	
425.6	MODESTO		LIMESTONE	7.0	75.0	
418.6	MODESTO		SHALE	14.0	82.0	
404.6	MODESTO		SHALE	48.0	96.0	
356.6	MODESTO		LIMESTONE	7.0	144.0	
349.6	MODESTO		SHALE	23.5	151.0	
326.1	MODESTO		LIMESTONE	1.5	174.5	
324.6	MODESTO		GRAY SHALE	7.7	176.0	
316.9	MODESTO		DARK SHALE	8.2	183.7	DK SH W/ CHERT STREAKS
308.8	MODESTO		COAL	0.2	191.8	
308.6	MODESTO		DARK SHALE	0.9	192.0	
307.7	MODESTO	PIASA	LIMESTONE	3.6	192.9	
304.1	MODESTO		DARK GRAY SHALE	6.4	196.5	
297.7	CARBONDALE	DANVILLE	COAL	2.2	202.9	
295.5	CARBONDALE		UNDERCLAY	0.3	205.1	
295.2	CARBONDALE		CALCAREOUS SHALE	1.7	205.4	
293.5	CARBONDALE		GRAY SHALE	8.3	207.1	GY SH W/ SS STREAKS
285.3	CARBONDALE		CALCAREOUS SHALE	0.7	215.3	
284.6	CARBONDALE		SANDSTONE	4.0	216.0	SS W/ SH STREAKS
280.6	CARBONDALE		DARK SHALE	1.1	220.0	
279.5	CARBONDALE		SHALE	6.9	221.1	
272.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	228.0	
268.6	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	232.0	
264.1	CARBONDALE		DARK SHALE	1.3	236.5	DK SH W/ LT SH STREAKS
262.8	CARBONDALE		DARK SHALE	3.2	237.8	DK SH W/ MUD SEAMS
259.6	CARBONDALE		DARK GRAY SHALE	8.5	241.0	
251.1	CARBONDALE	BRERETON	LIMESTONE	0.8	249.5	
250.3	CARBONDALE	BRERETON	LIMESTONE	1.3	250.3	
249.0	CARBONDALE	BRERETON	LIMESTONE	0.5	251.6	
248.5	CARBONDALE	BRERETON	BLACK SHALE	0.5	252.1	
248.0	CARBONDALE	BRERETON	LIMESTONE	6.3	252.6	
241.8	CARBONDALE	BRERETON	LIMESTONE	5.3	258.8	
236.4	CARBONDALE	ANNA	BLACK SHALE	2.9	264.2	

233.5	CARBONDALE	HERRIN	COAL	5.5	267.1	
228.0	CARBONDALE		UNDERCLAY	0.9	272.6	
227.1	CARBONDALE		DARK SHALE	2.2	273.5	
224.9	CARBONDALE		CALCAREOUS SHALE	4.0	275.7	
220.9	CARBONDALE		SHALE	2.9	279.7	SH W/ LS STREAKS
218.0	CARBONDALE		DARK GRAY SHALE	10.3	282.6	
207.7	CARBONDALE	BRIAR HILL	COAL	0.4	292.9	
207.3	CARBONDALE		SHALE	0.2	293.3	
207.1	CARBONDALE		SHALE	1.5	293.5	SH W/ SS STREAKS
205.6	CARBONDALE		SANDSTONE	38.5	295.0	SS W/ SH STREAKS
167.1	CARBONDALE		SANDSTONE	13.7	333.5	
153.4	CARBONDALE		DARK GRAY SHALE	24.0	347.2	
129.4	CARBONDALE		SHALE	12.3	371.2	
117.1	CARBONDALE		SHALE	0.1	383.5	
117.0	CARBONDALE		SHALE	0.1	383.6	
116.9	CARBONDALE	SPRINGFIELD	COAL	4.7	383.7	
112.3	CARBONDALE		UNDERCLAY	0.5	388.3	

MAPID: 16500949000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 340' N line, 51' W line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.698083 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.767352 **DATE COLLECTED:** 2 / 3 / 1950

SURFACE ELEVATION (FT.): 479.3 **LOGGED (FT.):** 253.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-46 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.3			UNCONSOLIDATED	7.5	0.0	CLAY AND SAND
471.8	MODESTO		SANDSTONE	4.0	7.5	
467.8	MODESTO		SANDSTONE	6.0	11.5	
461.8	MODESTO		SANDSTONE	12.5	17.5	
449.3	MODESTO		SHALE	11.0	30.0	
438.3	MODESTO		LIMESTONE	4.0	41.0	
434.3	MODESTO		SHALE	24.0	45.0	
410.3	MODESTO	PIASA	LIMESTONE	3.3	69.0	
407.0	CARBONDALE		SHALE	3.8	72.3	
403.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	76.0	
398.8	CARBONDALE		SHALE	37.0	80.5	
361.8	CARBONDALE	BRERETON	LIMESTONE	6.3	117.5	
355.5	CARBONDALE	ANNA	SHALE	7.2	123.8	
348.3	CARBONDALE	HERRIN	COAL	5.0	131.0	
343.3	CARBONDALE		SHALE	23.0	136.0	
320.3	CARBONDALE		SANDSTONE	32.0	159.0	
288.3	CARBONDALE		SANDSTONE	9.3	191.0	SS W/ COAL STREAKS
279.0	CARBONDALE		DARK GRAY SHALE	4.3	200.3	DGY SH W/ LGY SH STREAKS
274.6	CARBONDALE		SANDSTONE	2.3	204.7	
272.4	CARBONDALE		SHALE	40.3	206.9	
232.1	CARBONDALE	TURNER MINE	SHALE	0.1	247.2	
232.0	CARBONDALE	SPRINGFIELD	COAL	4.8	247.3	
227.3	CARBONDALE		UNDERCLAY	1.5	252.0	

MAPID: 16500950000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 547' N line, 60' W line of SE

QUADRANGLE: HARCO **LONGITUDE:** -88.698051 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.766781 **DATE COLLECTED:** 2 / 15 / 1950

SURFACE ELEVATION (FT.): 498.5 **LOGGED (FT.):** 385.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-47 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
498.5			CLAY	14.0	0.0	
484.5			SANDSTONE	7.0	14.0	
477.5			SANDSTONE	1.0	21.0	
476.5			SHALE	13.0	22.0	
463.5			LIMESTONE	2.5	35.0	
461.0			SHALE	45.5	37.5	
415.5			LIMESTONE	4.5	83.0	
411.0			SHALE	47.0	87.5	
364.0			LIMESTONE	1.5	134.5	
362.5			SHALE	25.0	136.0	
337.5			SHALE	31.0	161.0	
306.5			LIMESTONE	4.0	192.0	
302.5			LIMESTONE	3.0	196.0	
299.5	CARBONDALE		SHALE	38.0	199.0	
261.5	CARBONDALE	BRERETON	LIMESTONE	5.4	237.0	
256.1	CARBONDALE	ANNA	BLACK SHALE	3.0	242.4	
253.1	CARBONDALE	HERRIN	COAL	5.6	245.4	
247.5	CARBONDALE		UNDERCLAY	1.2	251.0	
246.3	CARBONDALE		SHALE	0.9	252.2	SH W/ LS NODULES
245.4	CARBONDALE		GRAY SHALE	1.0	253.1	
244.4	CARBONDALE		SHALE	7.3	254.1	
237.1	CARBONDALE		GRAY SHALE	0.4	261.4	
236.7	CARBONDALE		SHALE	2.0	261.8	
234.7	CARBONDALE		GRAY SHALE	5.0	263.8	
229.7	CARBONDALE		SANDSTONE	9.2	268.8	
220.5	CARBONDALE		SHALE	1.0	278.0	
219.5	CARBONDALE		SHALE	19.0	279.0	SH W/ LT SH
200.5	CARBONDALE		NO RECORD	9.7	298.0	NO RECORD - WASHOUT
190.8	CARBONDALE		DARK SHALE	7.0	307.7	DK SH W/ LT SH STREAKS
183.8	CARBONDALE		LIGHT SHALE	0.2	314.7	
183.7	CARBONDALE		UNCLASSIFIED	0.2	314.8	CHERT
183.5	CARBONDALE		SANDSTONE	0.5	315.0	
183.0	CARBONDALE		DARK GRAY SHALE	2.5	315.5	
180.5	CARBONDALE		DARK GRAY SHALE	2.7	318.0	DGY SH W/ CHERT STREAKS
177.8	CARBONDALE		LIMESTONE	0.3	320.7	
177.6	CARBONDALE		UNCLASSIFIED	0.3	320.9	CHERT
177.3	CARBONDALE		DARK SHALE	1.5	321.2	
175.8	CARBONDALE		BLACK SHALE	3.8	322.7	
172.1	CARBONDALE	BRIAR HILL	COAL	1.5	326.4	

170.6	CARBONDALE		DARK SHALE	1.8	327.9	
168.7	CARBONDALE		GRAY SHALE	1.8	329.8	GY SH W/ BK SH STREAKS
167.0	CARBONDALE		GRAY SHALE	6.5	331.5	
160.5	CARBONDALE		GRAY SHALE	15.0	338.0	GY SH W/ LT SH STREAKS
145.5	CARBONDALE		SANDSTONE	1.3	353.0	SS W/ SH STREAKS
144.2	CARBONDALE		SHALE	4.5	354.3	SH W/ SS STREAKS
139.7	CARBONDALE		SANDSTONE	15.2	358.8	SS W/ SH STREAKS
124.5	CARBONDALE		SHALE	1.0	374.0	SH W/ SS STREAKS
123.5	CARBONDALE	TURNER MINE	DARK SHALE	1.0	375.0	
122.5	CARBONDALE	TURNER MINE	DARK SHALE	1.4	376.0	
121.1	CARBONDALE	TURNER MINE	UNCLASSIFIED	0.1	377.4	CHERT
121.0	CARBONDALE	TURNER MINE	SHALE	0.5	377.5	
120.5	CARBONDALE	TURNER MINE	SHALE	0.6	378.0	
119.9	CARBONDALE	TURNER MINE	SHALE	0.7	378.6	
119.2	CARBONDALE	TURNER MINE	SHALE	0.6	379.3	
118.7	CARBONDALE	TURNER MINE	UNCLASSIFIED	0.1	379.8	CHERT
118.6	CARBONDALE	TURNER MINE	SHALE	0.3	379.9	
118.2	CARBONDALE	SPRINGFIELD	COAL	1.2	380.3	
117.1	CARBONDALE		UNDERCLAY	4.0	381.4	

MAPID: 16501063000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 25' N line, 340' E line of NE NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.694989 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.775709 **DATE COLLECTED:** 10 / 27 / 1953

SURFACE ELEVATION (FT.): 484.5 **LOGGED (FT.):** 369.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-100 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
484.5			CLAY	6.0	0.0	
478.5	MODESTO		SANDSTONE	15.0	6.0	
463.5	MODESTO		GRAY SANDSTONE	35.0	21.0	
428.5	MODESTO		GRAY SANDSTONE	7.0	56.0	
421.5	MODESTO		DARK GRAY SHALE	14.0	63.0	
407.5	MODESTO		COAL	0.2	77.0	
407.3	MODESTO		GRAY SHALE	1.8	77.2	
405.5	MODESTO		GRAY SANDSTONE	11.0	79.0	
394.5	MODESTO		DARK GRAY SHALE	14.3	90.0	
380.2	MODESTO		COAL	0.3	104.3	
379.8	MODESTO		BLACK SHALE	5.5	104.7	
374.3	MODESTO		COAL	0.3	110.2	
374.0	MODESTO		DARK GRAY SHALE	9.3	110.5	
364.7	MODESTO		UNCLASSIFIED	3.3	119.8	+3'3" TO CORRECT ERROR IN LOG DEPTH
361.4	MODESTO		LIMESTONE	0.3	123.1	
361.2	MODESTO		DARK GRAY SHALE	0.8	123.3	
360.4	MODESTO		GRAY SHALE	0.9	124.1	
359.5	MODESTO		SANDSTONE	10.8	125.0	
348.7	MODESTO		LIMESTONE	1.0	135.8	
347.7	MODESTO		GRAY SHALE	5.2	136.8	
342.5	MODESTO		DARK GRAY SHALE	21.3	142.0	
321.2	MODESTO	PIASA	LIMESTONE	1.8	163.3	
319.3	MODESTO		GRAY SHALE	1.8	165.2	
317.5			GRAY SHALE	22.0	167.0	
295.5			DARK GRAY SHALE	10.0	189.0	
285.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	199.0	
282.5	CARBONDALE		GRAY SHALE	34.0	202.0	
248.5	CARBONDALE		DARK GRAY SHALE	2.6	236.0	
245.9	CARBONDALE	BRERETON	LIMESTONE	4.4	238.6	
241.5	CARBONDALE	ANNA	BLACK SHALE	4.0	243.0	
237.5	CARBONDALE	ENERGY	GRAY SHALE	2.0	247.0	
235.5	CARBONDALE	ENERGY	DARK GRAY SHALE	1.8	249.0	
233.7	CARBONDALE	HERRIN	COAL	4.5	250.8	
229.2	CARBONDALE		UNDERCLAY	1.8	255.3	
227.5	CARBONDALE		GRAY SHALE	19.0	257.0	
208.5	CARBONDALE		GRAY SHALE	2.7	276.0	
205.8	CARBONDALE		BLACK SHALE	2.0	278.7	
203.8	CARBONDALE		GRAY SHALE	0.8	280.7	
203.0	CARBONDALE		GRAY SANDSTONE	11.0	281.5	

192.0	CARBONDALE	ST. DAVID	LIMESTONE	1.2	292.5
190.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	10.8	293.7
180.0	CARBONDALE	DYKERSBURG	DARK SANDSTONE	21.5	304.5
158.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	10.2	326.0
148.3	CARBONDALE	DYKERSBURG	SANDSTONE	3.6	336.2
144.7	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	6.4	339.8
138.3	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	10.0	346.2
128.3	CARBONDALE	DYKERSBURG	GRAY SHALE	6.7	356.2
121.7	CARBONDALE	SPRINGFIELD	COAL	4.2	362.8
117.5	CARBONDALE		UNDERCLAY	2.0	367.0

MAPID: 16501065000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 470' N line, 950' W line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.694943 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.763255 **DATE COLLECTED:** 10 / 14 / 1953

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 363.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-96 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0			CLAY	5.0	0.0	
475.0			SANDSTONE	4.0	5.0	
471.0			SANDSTONE	10.0	9.0	
461.0			SANDSTONE	37.0	19.0	
424.0			SHALE	40.0	56.0	
384.0			SANDSTONE	20.0	96.0	
364.0			SHALE	10.0	116.0	
354.0			SANDSTONE	44.0	126.0	
310.0			LIMESTONE	3.0	170.0	
307.0			LIMESTONE	3.0	173.0	
304.0			GRAY SHALE	4.0	176.0	
300.0			SHALE	24.8	180.0	
275.2			LIMESTONE	1.3	204.8	
274.0			DARK SHALE	3.0	206.0	
271.0			SANDSTONE	7.0	209.0	SS W/ SH STREAKS
264.0			SANDSTONE	12.0	216.0	
252.0			SHALE	2.0	228.0	
250.0			GRAY SHALE	9.3	230.0	
240.7	CARBONDALE	BRERETON	LIMESTONE	2.2	239.3	
238.5	CARBONDALE	ANNA	BLACK SHALE	3.0	241.5	
235.5	CARBONDALE	ANNA	BLACK SHALE	0.3	244.5	
235.2	CARBONDALE		GRAY SHALE	7.4	244.8	
227.8	CARBONDALE	HERRIN	COAL	4.3	252.2	
223.6	CARBONDALE		UNDERCLAY	1.0	256.4	
222.6	CARBONDALE		GRAY SHALE	14.5	257.4	
208.1	CARBONDALE		SANDSTONE	30.0	271.9	
178.1	CARBONDALE		SANDSTONE	23.0	301.9	
155.1	CARBONDALE		GRAY SHALE	10.0	324.9	
145.1	CARBONDALE		DARK GRAY SHALE	22.0	334.9	
123.1	CARBONDALE		DARK GRAY SHALE	1.1	356.9	
122.0	CARBONDALE	SPRINGFIELD	COAL	4.1	358.0	
117.9	CARBONDALE		UNDERCLAY	1.5	362.1	

MAPID: 16501067000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 143' S line, 19' E line of SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.689326 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.761236 **DATE COLLECTED:** 2 / 6 / 1953

SURFACE ELEVATION (FT.): 496.4 **LOGGED (FT.):** 347.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-79 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
496.4			CLAY	7.0	0.0	
489.4			CLAY	7.0	7.0	
482.4			SANDY CLAY	17.0	14.0	
465.4	MODESTO		SANDSTONE	3.7	31.0	
461.7	MODESTO		SANDSTONE	4.3	34.7	
457.4	MODESTO		GRAY SHALE	8.0	39.0	
449.4	MODESTO		LIMESTONE	2.5	47.0	
446.9	MODESTO		CALCAREOUS SHALE	5.5	49.5	
441.4	MODESTO		GRAY SHALE	17.0	55.0	
424.4	MODESTO		COAL	0.7	72.0	
423.7	MODESTO		GRAY SHALE	1.0	72.7	
422.7	MODESTO		COAL	0.5	73.7	
422.2	MODESTO		GRAY SHALE	0.8	74.2	
421.4	MODESTO		COAL	0.5	75.0	
420.9	MODESTO		GRAY SHALE	9.5	75.5	
411.4	MODESTO		GRAY SHALE	11.0	85.0	
400.4	MODESTO		CALCAREOUS SHALE	3.0	96.0	
397.4	MODESTO		LIMESTONE	2.6	99.0	
394.8	MODESTO		GRAY SHALE	25.8	101.6	
369.0	MODESTO	PIASA	LIMESTONE	2.4	127.4	
366.6	MODESTO		CALCAREOUS SHALE	0.6	129.8	
366.0	MODESTO		BLACK SHALE	1.6	130.4	
364.4	MODESTO		CALCAREOUS SHALE	0.3	132.0	
364.1	MODESTO		GRAY SHALE	1.7	132.3	
362.4	MODESTO		GRAY SHALE	4.8	134.0	
357.6	CARBONDALE	DANVILLE	COAL	1.6	138.8	
356.0	CARBONDALE		GRAY SHALE	14.6	140.4	
341.4	CARBONDALE		LIMESTONE	1.8	155.0	
339.6	CARBONDALE		GRAY SHALE	2.3	156.8	
337.4	CARBONDALE	ALLENBY	COAL	0.5	159.0	
336.9	CARBONDALE		GRAY SHALE	1.3	159.5	
335.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	160.8	
331.9	CARBONDALE	ANVIL ROCK	CONGLOMERATE & SHALE	3.5	164.5	
328.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	168.0	
321.4	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	175.0	
302.4	CARBONDALE		GRAY SHALE	9.9	194.0	
292.5	CARBONDALE	BRERETON	LIMESTONE	7.1	203.9	
285.4	CARBONDALE	BRERETON	LIMESTONE	2.6	211.0	
282.8	CARBONDALE	ANNA	BLACK SHALE	3.9	213.6	

278.9	CARBONDALE	HERRIN	COAL	4.8	217.5
274.1	CARBONDALE		UNDERCLAY	1.8	222.3
272.4	CARBONDALE		GRAY SHALE	4.0	224.0
268.4	CARBONDALE		LIMESTONE	1.3	228.0
267.1	CARBONDALE		GRAY SHALE	11.7	229.3
255.4	CARBONDALE	BRIAR HILL	COAL	0.6	241.0
254.8	CARBONDALE		GRAY SHALE	4.4	241.6
250.4	CARBONDALE		SANDY SHALE	5.0	246.0
245.4	CARBONDALE		SANDY SHALE	17.0	251.0
228.4	CARBONDALE		SANDSTONE	15.0	268.0
213.4	CARBONDALE		GRAY SHALE	12.0	283.0
201.4	CARBONDALE		CALCAREOUS SHALE	3.4	295.0
198.0	CARBONDALE		GRAY SHALE	8.6	298.4
189.4	CARBONDALE		GRAY SHALE	10.0	307.0
179.4	CARBONDALE		DARK GRAY SHALE	8.5	317.0
170.9	CARBONDALE		BLACK SHALE	1.8	325.5
169.1	CARBONDALE		BLACK SHALE	1.1	327.3
168.1	CARBONDALE		DARK GRAY SHALE	0.7	328.3
167.4	CARBONDALE		SANDY SHALE	1.8	329.0
165.6	CARBONDALE		SANDSTONE	1.7	330.8
163.9	CARBONDALE		GRAY SILTSTONE	14.5	332.5

MAPID: 16501074000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 11' S line, 570' W line of SW SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.696253 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760832 **DATE COLLECTED:** 12 / 10 / 1953

SURFACE ELEVATION (FT.): 442.6 **LOGGED (FT.):** 332.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-111 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.6			CLAY	14.3	0.0	
428.3	MODESTO		SANDSTONE	7.0	14.3	
421.3	MODESTO		SANDSTONE	1.3	21.3	
420.1	MODESTO		DARK GRAY SHALE	14.3	22.5	
405.8	MODESTO		COAL	0.2	36.8	
405.6	MODESTO		GRAY SHALE	6.0	37.0	
399.6	MODESTO		GRAY SANDSTONE	1.5	43.0	
398.1	MODESTO		DARK GRAY SHALE	17.5	44.5	
380.6	MODESTO		DARK GRAY SHALE	20.0	62.0	
360.6	MODESTO		GRAY SHALE	17.0	82.0	
343.6	MODESTO		LIMESTONE	4.0	99.0	BROKEN LS
339.6	MODESTO		DARK GRAY SHALE	22.0	103.0	
317.6	MODESTO	PIASA	LIMESTONE	4.0	125.0	
313.6			GRAY SHALE	33.0	129.0	
280.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	162.0	
276.8	CARBONDALE		CALCAREOUS SHALE	0.9	165.8	
275.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	21.6	166.7	GY SS W/ BK SHALE STREAKS
254.3	CARBONDALE	ANVIL ROCK	SILTY SHALE	10.4	188.3	
243.9	CARBONDALE		GRAY SHALE	2.3	198.7	
241.7	CARBONDALE	BRERETON	LIMESTONE	3.8	200.9	
237.9	CARBONDALE	ANNA	BLACK SHALE	4.5	204.7	
233.4	CARBONDALE	ENERGY	DARK GRAY SHALE	2.7	209.2	
230.8	CARBONDALE	ENERGY	GRAY SHALE	4.0	211.8	
226.8	CARBONDALE	ENERGY	BLACK SHALE	0.5	215.8	
226.3	CARBONDALE	HERRIN	COAL	3.6	216.3	
222.7	CARBONDALE	HERRIN	COAL	1.0	219.9	
221.7	CARBONDALE		UNDERCLAY	1.0	220.9	
220.7	CARBONDALE		GRAY SHALE	47.0	221.9	
173.7	CARBONDALE		SILTY SHALE	14.0	268.9	
159.7	CARBONDALE		SANDSTONE	13.0	282.9	
146.7	CARBONDALE		DARK GRAY SHALE	10.1	295.9	
136.6	CARBONDALE		DARK GRAY SHALE	0.2	306.0	
136.4	CARBONDALE		WHITE SANDSTONE	0.6	306.2	
135.8	CARBONDALE		DARK GRAY SHALE	19.8	306.8	
116.1	CARBONDALE	SPRINGFIELD	COAL	4.2	326.5	
111.9	CARBONDALE		UNDERCLAY	2.3	330.7	1'3" ADJUSTMENT TO MATCH DEPTH

MAPID: 16501079000C **VERSION:** 1 **PROJECT:** ISGS98

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 3' N line, 27' E line of SE NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.689406 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.773886 **DATE COLLECTED:** 10 / 30 / 1950
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 464.3 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 43-50 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.3	CARBONDALE	DANVILLE	COAL	2.1	244.7	
105.5	CARBONDALE	HERRIN	COAL	4.3	319.5	
1.3	CARBONDALE	SPRINGFIELD	COAL	2.1	423.7	

MAPID: 16501079000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 3' N line, 27' E line of SE NE NE
QUADRANGLE: HARCO **LONGITUDE:** -88.689406 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.773886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 324.3 **LOG TYPE:** Survey Core Study
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
186.7	MODESTO	PIASA	NODULAR LIMESTONE	3.5	238.3	
183.2	MODESTO		MOTTLED SHALE	5.9	241.8	
177.3	CARBONDALE	DANVILLE	COAL	2.1	247.7	
175.2	CARBONDALE		SHALE & SANDSTONE	15.6	249.8	
159.6	CARBONDALE	ALLENBY	COAL	0.7	265.4	
158.9	CARBONDALE		CLAYSTONE & SHALE	3.8	266.1	
155.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	269.9	
149.8	CARBONDALE	LAWSON	SHALE	7.4	275.2	
142.4	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.4	282.6	
142.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	1.0	283.0	
141.0	CARBONDALE	LAWSON	SANDSTONE	9.5	284.0	
131.5	CARBONDALE	LAWSON	GRAY SHALE	13.0	293.5	
118.5	CARBONDALE	CONANT	CALCAREOUS SHALE	0.5	306.5	
118.1	CARBONDALE	BRERETON	LIMESTONE	4.2	306.9	
113.9	CARBONDALE	ANNA	BLACK SHALE	8.9	311.1	
105.0	CARBONDALE	HERRIN	COAL	4.3	320.0	

MAPID: 16501080000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.697123 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.763608 **DATE COLLECTED:** 12 / 1 / 1950

SURFACE ELEVATION (FT.): 505.6 **LOGGED (FT.):** 364.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-51 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-2569

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
505.6			CLAY	4.0	0.0	
501.6			SAND	3.5	4.0	
498.1			GRAVEL	5.0	7.5	COARSE GRAVEL
493.1			GRAVEL	7.5	12.5	GRAVEL AND SAND
485.6			GRAY SHALE	3.0	20.0	
482.6			GRAY SHALE	18.0	23.0	
464.6			SANDY SHALE	4.0	41.0	
460.6			CALCAREOUS SHALE	3.6	45.0	
457.0			GRAY SANDSTONE	25.4	48.6	
431.6			GRAY SHALE	14.3	74.0	
417.3			COAL	0.2	88.3	
417.2			GRAY SHALE	0.6	88.4	
416.6			GRAY SHALE	12.0	89.0	
404.6			DARK GRAY SHALE	21.5	101.0	
383.1			COAL	0.9	122.5	
382.2			UNDERCLAY	0.6	123.4	
381.6			GRAY SHALE	1.0	124.0	
380.6			GRAY SHALE	5.0	125.0	
375.6			DARK GRAY SHALE	4.0	130.0	DGY SH -> GN SH W/ BLACK PARTICLES
371.6			CALCAREOUS SHALE	5.0	134.0	
366.6			SANDY SHALE	6.0	139.0	
360.6			GRAY SHALE	10.0	145.0	
350.6			SANDY SHALE	8.0	155.0	
342.6			GRAY SHALE	10.0	163.0	
332.6			DARK GRAY SHALE	1.1	173.0	
331.5			BLACK SHALE	0.4	174.1	
331.1			GRAY SHALE	0.7	174.5	
330.4			CALCAREOUS SHALE	0.7	175.2	
329.8	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	0.8	175.8	STAINED W/ OIL
328.9	CARBONDALE	BANKSTON FORK	LIMESTONE	2.3	176.7	LS W/ CALCITE STREAKS
326.6	CARBONDALE		GREEN SHALE	0.5	179.0	
326.1	CARBONDALE		BLACK SHALE	0.8	179.5	
325.3	CARBONDALE		GRAY SHALE	0.6	180.3	
324.8	CARBONDALE		GREEN SHALE	0.4	180.8	
324.3	CARBONDALE		GRAY SHALE	2.8	181.3	
321.6	CARBONDALE		GRAY SHALE	1.4	184.0	
320.2	CARBONDALE		BLACK SHALE	1.8	185.4	BK SH W/ COAL PARTICLES
318.3	CARBONDALE		GRAY SHALE	0.5	187.3	
317.8	CARBONDALE		DARK GRAY SHALE	1.5	187.8	

316.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.1	189.3	
315.3	CARBONDALE	ANVIL ROCK	GRAY SHALE	1.8	190.3	
313.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	0.8	192.2	
312.6	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.0	193.0	GY SS W/ SOFT GY SH
307.6	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.7	198.0	
306.9	CARBONDALE	ANVIL ROCK	GRAY SHALE	5.0	198.7	
301.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.3	203.7	
301.6	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	9.3	204.0	
292.3	CARBONDALE	ANVIL ROCK	SHALE	0.7	213.3	SHALE CONGLOMERATE (BK-GN-GY)
291.6	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.8	214.0	
287.8	CARBONDALE		DARK GRAY SHALE	7.3	217.8	
280.6	CARBONDALE		GRAY SHALE	8.0	225.0	
272.6	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	3.8	233.0	
268.8	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	0.3	236.8	
268.6	CARBONDALE	ANNA	BLACK SHALE	1.6	237.0	
267.0	CARBONDALE	ENERGY	DARK GRAY SHALE	1.7	238.6	
265.3	CARBONDALE	ENERGY	GRAY SHALE	4.8	240.3	
260.6	CARBONDALE	ENERGY	GRAY SHALE	4.5	245.0	
256.1	CARBONDALE	ENERGY	BLACK SHALE	0.5	249.5	
255.6	CARBONDALE	ENERGY	BLACK SHALE	0.8	250.0	
254.8	CARBONDALE	HERRIN	COAL	4.4	250.8	
250.3	CARBONDALE		UNDERCLAY	0.8	255.3	
249.6	CARBONDALE		GRAY SHALE	4.0	256.0	
245.6	CARBONDALE		GRAY SHALE	21.0	260.0	GY SH W/ SS STREAKS
224.6	CARBONDALE		GRAY SHALE	31.0	281.0	
193.6	CARBONDALE		GRAY SANDSTONE	8.0	312.0	
185.6	CARBONDALE		SANDY SHALE	7.0	320.0	
178.6	CARBONDALE		GRAY SHALE	5.0	327.0	
173.6	CARBONDALE		GRAY SHALE	11.0	332.0	
162.6	CARBONDALE		SANDY SHALE	11.0	343.0	
151.6	CARBONDALE		GRAY SHALE	0.8	354.0	
150.8	CARBONDALE		GRAY SHALE	1.6	354.8	
149.3	CARBONDALE		GRAY SHALE	0.2	356.3	GY SH W/ CO
149.1	CARBONDALE	SPRINGFIELD	COAL	0.0	356.5	COAL MISSING
149.1	CARBONDALE		UNDERCLAY	0.3	356.5	
148.8	CARBONDALE		GREEN SHALE	1.2	356.8	
147.7	CARBONDALE		SANDSTONE	0.8	357.9	
146.9	CARBONDALE		GRAY SHALE	0.5	358.7	
146.4	CARBONDALE		SANDSTONE	0.4	359.2	
146.0	CARBONDALE		GREEN SHALE	1.9	359.6	CONGLOMERATE SH W/ SS
144.1	CARBONDALE		SHALE	1.2	361.5	GY SH W/ SS NODS
142.9	CARBONDALE		GRAY SHALE	0.6	362.7	
142.3	CARBONDALE		SANDSTONE	0.8	363.3	

MAPID: 16501080000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.697123 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763608 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 506.0 **LOGGED (FT.):** 254.5 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
274.7	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	3.7	231.3	
271.0	CARBONDALE	ANNA	BLACK SHALE	6.3	235.0	
264.7	CARBONDALE	ENERGY	GRAY SHALE	8.7	241.3	
256.0	CARBONDALE	HERRIN	COAL	4.5	250.0	

MAPID: 16501081000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 49' S line, 12' E line of SE SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.69828 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760924 **DATE COLLECTED:** 1 / 19 / 1951

SURFACE ELEVATION (FT.): 453.8 **LOGGED (FT.):** 360.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-52 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
453.8			CLAY	7.0	0.0	CLAY, SAND, AND GRAVEL
446.8	MODESTO		SANDSTONE	5.0	7.0	
441.8	MODESTO		GRAY SANDSTONE	14.0	12.0	
427.8	MODESTO		SANDSTONE	23.0	26.0	
404.8	MODESTO		GRAY SHALE	16.0	49.0	
388.8	MODESTO		GRAY SHALE	7.8	65.0	
381.0	MODESTO		COAL	0.2	72.8	
380.8	MODESTO		UNDERCLAY	0.6	73.0	
380.2	MODESTO		SHALE	2.1	73.6	
378.1	MODESTO		LIMESTONE	3.8	75.7	
374.3	MODESTO		GRAY SHALE	21.5	79.5	
352.8	MODESTO		BLACK SHALE	4.0	101.0	
348.8	MODESTO		GRAY SHALE	0.7	105.0	
348.1	MODESTO		COAL	0.9	105.7	
347.3	MODESTO		UNDERCLAY	0.5	106.5	
346.8	MODESTO		GRAY SHALE	15.0	107.0	
331.8	MODESTO		SANDY SHALE	7.0	122.0	
324.8	MODESTO		SANDSTONE	14.0	129.0	
310.8	MODESTO		GRAY SHALE	13.9	143.0	
296.9	MODESTO		COAL	0.3	156.9	
296.5	MODESTO		GRAY SHALE	1.8	157.3	
294.8	MODESTO	PIASA	LIMESTONE	1.0	159.0	
293.8	MODESTO	PIASA	LIMESTONE	3.3	160.0	
290.5	MODESTO		GRAY SHALE	0.6	163.3	GY SH W/ LS PARTICLES
290.0	MODESTO		BLACK SHALE	0.3	163.8	
289.6	MODESTO		BLACK SHALE	1.5	164.2	
288.1	MODESTO		GRAY SHALE	2.9	165.7	
285.2	CARBONDALE	DANVILLE	COAL	1.9	168.6	
283.3	CARBONDALE		GRAY SANDSTONE	2.8	170.5	GY SS W/ COAL SPOTS
280.5	CARBONDALE		CARBONACEOUS SHALE	0.5	173.3	
280.0	CARBONDALE		LIMESTONE	0.1	173.8	
280.0	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.1	173.8	
279.9	CARBONDALE		SANDSTONE	3.1	173.9	
276.8	CARBONDALE		GRAY SHALE	6.6	177.0	
270.2	CARBONDALE	ALLENBY	COAL	0.3	183.6	
269.9	CARBONDALE		GRAY SHALE	1.1	183.9	
268.8	CARBONDALE		GRAY SHALE	0.3	185.0	
268.5	CARBONDALE		COAL	0.2	185.3	

268.3	CARBONDALE		GRAY SHALE	2.8	185.5	
265.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.8	188.3	
262.8	CARBONDALE		GRAY SHALE	3.8	191.0	GY SH & BK SH MIXED W/ LS PARTICLES
259.0	CARBONDALE		GRAY SANDSTONE	0.6	194.8	
258.4	CARBONDALE		COAL	0.0	195.4	COAL STREAK
258.4	CARBONDALE		GRAY SANDSTONE	7.5	195.4	
250.9	CARBONDALE		COAL	0.1	202.9	COAL STREAK
250.8	CARBONDALE		GRAY SHALE	0.4	203.0	
250.4	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	8.6	203.4	
241.8	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	212.0	
224.8	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	4.1	229.0	
220.7	CARBONDALE	ANNA	BLACK SHALE	3.9	233.1	
216.8	CARBONDALE	ENERGY	DARK GRAY SHALE	5.2	237.0	
211.6	CARBONDALE	ENERGY	GRAY SHALE	0.3	242.2	
211.3	CARBONDALE	ENERGY	DARK GRAY SHALE	1.0	242.5	
210.4	CARBONDALE	HERRIN	COAL	5.3	243.4	
205.1	CARBONDALE		UNDERCLAY	1.3	248.7	
203.8	CARBONDALE		GRAY SHALE	6.6	250.0	
197.2	CARBONDALE		LIMESTONE	3.8	256.6	
193.5	CARBONDALE	BRIAR HILL	COAL	0.9	260.3	
192.5	CARBONDALE		UNDERCLAY	0.5	261.3	
192.0	CARBONDALE	DYKERSBURG	GRAY SHALE	3.3	261.8	
188.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	45.0	265.0	
143.8	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	17.0	310.0	
126.8	CARBONDALE	DYKERSBURG	GRAY SHALE	18.0	327.0	
108.8	CARBONDALE	DYKERSBURG	GRAY SHALE	9.3	345.0	
99.5	CARBONDALE	DYKERSBURG	SANDY SHALE	0.3	354.3	
99.2	CARBONDALE	SPRINGFIELD	COAL	4.3	354.6	
94.9	CARBONDALE		UNDERCLAY	1.1	358.9	

MAPID: 16501082000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 145' S line, 576' W line of SW SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.696263 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768692 **DATE COLLECTED:** 6 / 12 / 1951

SURFACE ELEVATION (FT.): 476.2 **LOGGED (FT.):** 317.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-61 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-2572

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
476.2			CLAY	3.0	0.0	
473.2	MODESTO		SANDSTONE	19.0	3.0	
454.2	MODESTO		GRAY SHALE	4.0	22.0	
450.2	MODESTO		COAL	0.5	26.0	
449.7	MODESTO		GRAY SHALE	14.5	26.5	
435.2	MODESTO		SANDY SHALE	17.0	41.0	
418.2	MODESTO		GRAY SHALE	2.0	58.0	
416.2	MODESTO		COAL	0.7	60.0	
415.5	MODESTO		GRAY SHALE	12.3	60.7	
403.2	MODESTO		SANDY SHALE	12.0	73.0	
391.2	MODESTO		GRAY SHALE	5.0	85.0	
386.2	MODESTO		GRAY SHALE	15.0	90.0	
371.2	MODESTO		SANDY SHALE	6.0	105.0	
365.2	MODESTO		GRAY SHALE	4.0	111.0	
361.2	MODESTO	PIASA	LIMESTONE	2.7	115.0	
358.5	MODESTO		CALCAREOUS SHALE	0.3	117.7	
358.2	MODESTO		GRAY SHALE	0.3	118.0	
357.9	MODESTO		BLACK SHALE	1.2	118.3	
356.7	MODESTO		GRAY SHALE	1.5	119.5	
355.2	MODESTO		GRAY SHALE	4.3	121.0	
350.9	CARBONDALE	DANVILLE	COAL	1.9	125.3	
349.0	CARBONDALE		UNDERCLAY	1.8	127.2	
347.2	CARBONDALE		GRAY SHALE	13.4	129.0	
333.8	CARBONDALE	ALLENBY	COAL	0.5	142.4	
333.3	CARBONDALE		UNDERCLAY	1.1	142.9	
332.2	CARBONDALE		GRAY SHALE	2.7	144.0	
329.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	146.7	
323.4	CARBONDALE		GRAY SHALE	3.6	152.8	
319.8	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.6	156.4	
319.2	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.0	157.0	
305.2	CARBONDALE		GRAY SHALE	11.9	171.0	
293.3	CARBONDALE	BRERETON	LIMESTONE	0.3	182.9	
292.9	CARBONDALE	BRERETON	LIMESTONE	2.8	183.3	
290.1	CARBONDALE	ANNA	BLACK SHALE	3.9	186.1	
286.2	CARBONDALE	ENERGY	GRAY SHALE	1.0	190.0	
285.2	CARBONDALE	ENERGY	DARK GRAY SHALE	5.7	191.0	
279.5	CARBONDALE	ENERGY	GRAY SHALE	0.6	196.7	
278.9	CARBONDALE	ENERGY	BLACK SHALE	1.0	197.3	
277.9	CARBONDALE	ENERGY	SHALE	0.1	198.3	LOG SAYS 'CANNELOID SHALE'

277.8	CARBONDALE	ENERGY	ROCK	0.1	198.4	PYRITE BAND
277.7	CARBONDALE	HERRIN	COAL	5.3	198.5	
272.4	CARBONDALE		UNDERCLAY	1.2	203.8	
271.2	CARBONDALE		UNDERCLAY	1.3	205.0	
269.9	CARBONDALE		DARK GRAY SHALE	1.1	206.3	
268.8	CARBONDALE		GRAY SANDSTONE	14.3	207.4	GY SS W/ CALC STREAKS
254.4	CARBONDALE		GRAY SHALE	0.4	221.8	
254.0	CARBONDALE		COAL	0.2	222.2	
253.9	CARBONDALE		GRAY SHALE	1.3	222.3	
252.5	CARBONDALE		GRAY SHALE	0.5	223.7	
252.0	CARBONDALE		BLACK SHALE	0.0	224.2	
251.9	CARBONDALE		GRAY SHALE	2.3	224.3	
249.7	CARBONDALE		COAL	0.1	226.5	
249.6	CARBONDALE		DARK GRAY SHALE	0.2	226.6	
249.4	CARBONDALE		SANDSTONE	1.2	226.8	SS W/ COAL STREAKS
248.3	CARBONDALE		GRAY SHALE	2.8	227.9	
245.4	CARBONDALE		COAL	0.3	230.8	
245.2	CARBONDALE		GRAY SHALE	0.2	231.0	
245.0	CARBONDALE		GRAY SANDSTONE	2.3	231.2	
242.8	CARBONDALE		SANDSTONE	0.8	233.4	
242.0	CARBONDALE		GRAY SHALE	1.2	234.2	
240.8	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.6	235.4	
240.2	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.8	236.0	
239.4	CARBONDALE	DYKERSBURG	GRAY SHALE	6.8	236.8	
232.7	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	7.8	243.5	
224.9	CARBONDALE	DYKERSBURG	GRAY SHALE	7.1	251.3	
217.8	CARBONDALE	DYKERSBURG	GRAY SHALE	15.6	258.4	
202.2	CARBONDALE	DYKERSBURG	GRAY SHALE	26.4	274.0	
175.8	CARBONDALE	DYKERSBURG	GRAY SHALE	10.2	300.4	
165.6	CARBONDALE	SPRINGFIELD	COAL	4.8	310.6	
160.8	CARBONDALE		UNDERCLAY	1.6	315.4	

MAPID: 16501095000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 600' S line, 50' E line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.698444 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.769947 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 743.0 **LOGGED (FT.):** 336.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-90 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
743.0			CLAY	7.5	0.0	
735.5	MODESTO		SANDSTONE	12.5	7.5	
723.0	MODESTO		SANDSTONE	1.8	20.0	
721.2	MODESTO		SANDSTONE	1.8	21.8	
719.4	MODESTO		DARK GRAY SHALE	0.3	23.6	
719.2	MODESTO		SANDSTONE	1.9	23.8	
717.2	MODESTO		SANDSTONE	0.5	25.8	
716.7	MODESTO		SANDSTONE	0.8	26.3	
716.0	MODESTO		SANDSTONE	10.0	27.0	
706.0	MODESTO		DARK GRAY SHALE	1.1	37.0	
704.9	MODESTO		SANDSTONE	0.6	38.1	
704.3	MODESTO		SANDSTONE	0.3	38.7	
704.0	MODESTO		DARK GRAY SHALE	3.5	39.0	
700.5	MODESTO		GRAY SHALE	2.3	42.5	
698.2	MODESTO		DARK GRAY SHALE	7.3	44.8	
691.0	MODESTO		SANDSTONE	2.6	52.0	
688.4	MODESTO		COAL	0.3	54.6	
688.2	MODESTO		DARK GRAY SHALE	3.2	54.8	
685.0	MODESTO		DARK GRAY SHALE	3.0	58.0	
682.0	MODESTO		SANDSTONE	2.4	61.0	
679.6	MODESTO		DARK GRAY SHALE	21.6	63.4	
658.0	MODESTO		BLACK SHALE	3.3	85.0	
654.7	MODESTO		COAL	0.6	88.3	
654.1	MODESTO		GRAY SHALE	2.6	88.9	
651.5	MODESTO		SANDSTONE	2.9	91.5	
648.6	MODESTO		SANDSTONE	2.5	94.4	
646.1	MODESTO		GRAY SHALE	5.1	96.9	
641.0	MODESTO		GRAY SHALE	2.5	102.0	
638.5	MODESTO		SANDSTONE	2.5	104.5	
636.0	MODESTO		SANDSTONE	1.0	107.0	
635.0	MODESTO		SANDSTONE	17.0	108.0	
618.0	MODESTO		GRAY SHALE	18.0	125.0	
600.0	MODESTO		BLACK SHALE	0.3	143.0	
599.7	MODESTO		DARK GRAY SHALE	0.7	143.3	
599.0	MODESTO		GRAY SHALE	2.0	144.0	
597.0	MODESTO		LIMESTONE	3.3	146.0	
593.7	MODESTO		GRAY SHALE	2.6	149.3	
591.2	MODESTO		DARK SHALE	2.6	151.8	
588.6	MODESTO		GRAY SHALE	2.5	154.4	

586.1	MODESTO		SANDSTONE	2.6	156.9	
583.5	MODESTO		BLACK SHALE	0.5	159.5	
583.0	MODESTO		COAL	0.1	160.0	
582.9	MODESTO		GRAY SHALE	0.9	160.1	
582.0	MODESTO		SANDSTONE	7.7	161.0	
574.3	MODESTO		SILTSTONE	0.6	168.7	
573.7	MODESTO		SANDSTONE	0.8	169.3	SS W/ GY SH STREAKS
573.0	MODESTO		DARK GRAY SHALE	1.0	170.0	
572.0	CARBONDALE	DANVILLE	COAL	0.8	171.0	
571.2	CARBONDALE		GRAY SHALE	2.2	171.8	
569.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	1.0	174.0	
568.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	175.0	
567.5	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	175.5	
559.0	CARBONDALE		SANDSTONE	6.8	184.0	
552.2	CARBONDALE		BLACK SHALE	0.5	190.8	
551.7	CARBONDALE		GRAY SHALE	2.8	191.3	
549.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	194.0	
535.5	CARBONDALE		DARK GRAY SHALE	6.5	207.5	
529.0	CARBONDALE	BRERETON	LIMESTONE	0.2	214.0	
528.8	CARBONDALE	BRERETON	LIMESTONE	5.1	214.2	
523.7	CARBONDALE		BLACK SHALE	1.8	219.3	
522.0	CARBONDALE		BLACK SHALE	2.3	221.0	
519.7	CARBONDALE		GRAY SHALE	3.9	223.3	
515.7	CARBONDALE	ANNA	DARK GRAY SHALE	1.2	227.3	
514.6	CARBONDALE	HERRIN	COAL	4.6	228.4	
510.0	CARBONDALE		UNDERCLAY	0.1	233.0	
509.9	CARBONDALE		GRAY SHALE	2.7	233.1	
507.2	CARBONDALE		GRAY SHALE	0.8	235.8	
506.5	CARBONDALE		SANDSTONE	8.5	236.5	
498.0	CARBONDALE		GRAY SHALE	3.0	245.0	
495.0	CARBONDALE		SANDSTONE	4.5	248.0	
490.5	CARBONDALE		BLACK SHALE	1.0	252.5	
489.5	CARBONDALE		DARK GRAY SHALE	5.0	253.5	
484.5	CARBONDALE		SANDSTONE	3.1	258.5	
481.4	CARBONDALE		CALCAREOUS SHALE	1.0	261.6	
480.4	CARBONDALE		GRAY SHALE	11.6	262.6	GY SH W/ SS STREAKS
468.8	CARBONDALE		SANDSTONE	2.4	274.2	
466.4	CARBONDALE		SANDSTONE	4.4	276.6	SS W/ LS STREAKS
462.0	CARBONDALE		GRAY SHALE	4.6	281.0	
457.4	CARBONDALE		LIMESTONE	4.8	285.6	
452.7	CARBONDALE		SANDY SHALE	13.7	290.3	
439.0	CARBONDALE		SANDY SHALE	6.4	304.0	
432.6	CARBONDALE		DARK GRAY SHALE	4.2	310.4	
428.4	CARBONDALE		SILTY SHALE	10.0	314.6	
418.4	CARBONDALE	TURNER MINE	GRAY SHALE	5.4	324.6	
413.0	CARBONDALE	SPRINGFIELD	COAL	4.5	330.0	
408.5	CARBONDALE		UNDERCLAY	0.3	334.5	

408.2	CARBONDALE		GRAY SHALE	2.0	334.8

MAPID: 16501096000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 240' S line, 325' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.699383 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.7652 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 472.9 **LOGGED (FT.):** 260.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-91 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.9			CLAY	2.5	0.0	
470.4			SANDSTONE	4.0	2.5	
466.4			BLACK SHALE	7.5	6.5	
458.9			SANDSTONE	7.0	14.0	
451.9			GRAY SHALE	42.0	21.0	
409.9			LIMESTONE	3.5	63.0	
406.4			COAL	2.0	66.5	
404.4			GRAY SHALE	13.5	68.5	
390.9			GRAY SHALE	1.0	82.0	
389.9			LIMESTONE	7.5	83.0	
382.4			GRAY SHALE	3.5	90.5	
378.9			SANDSTONE	6.5	94.0	
372.4			GRAY SHALE	22.0	100.5	
350.4			LIMESTONE	0.5	122.5	
349.9			LIMESTONE	4.4	123.0	
345.5			BLACK SHALE	4.6	127.4	
340.9			DARK GRAY SHALE	5.0	132.0	
335.9			DARK GRAY SHALE	1.3	137.0	
334.6			BLACK SHALE	0.8	138.3	
333.8			COAL	5.1	139.1	
328.7			UNDERCLAY	1.1	144.2	
327.6			UNDERCLAY	10.0	145.3	
317.6			DARK GRAY SHALE	9.0	155.3	
308.6			GRAY SHALE	18.0	164.3	
290.6			GRAY SHALE	20.0	182.3	
270.6			SANDSTONE	13.7	202.3	
256.9			DARK GRAY SHALE	11.0	216.0	
245.9			DARK GRAY SHALE	7.0	227.0	
238.9			DARK GRAY SHALE	13.0	234.0	
225.9			DARK GRAY SHALE	7.7	247.0	DGY SH W/ SDY SEAMS
218.2	CARBONDALE	HERRIN	COAL	4.7	254.7	
213.6	CARBONDALE		UNDERCLAY	0.5	259.3	

MAPID: 16501097000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 270' N line, 330' E line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699423 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.771296 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 472.1 **LOGGED (FT.):** 231.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-93 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.1			UNCONSOLIDATED	35.0	0.0	SOIL, SAND, AND CLAY
437.1			LIMESTONE	5.5	35.0	
431.6			GRAY SHALE	20.5	40.5	
411.1			LIMESTONE	3.0	61.0	
408.1			LIMESTONE	2.0	64.0	
406.1			GRAY SHALE	30.0	66.0	
376.1			LIMESTONE	3.3	96.0	
372.8			LIMESTONE	2.1	99.3	
370.6			BLACK SHALE	3.0	101.5	
367.6			BLACK SHALE	1.8	104.5	
365.8			DARK GRAY SHALE	5.7	106.3	
360.1			BLACK SHALE	1.3	112.0	
358.8			COAL	5.5	113.3	
353.3			UNDERCLAY	1.0	118.8	
352.3			GRAY SHALE	36.3	119.8	
316.1			GRAY SHALE	19.5	156.0	
296.6			SANDSTONE	20.0	175.5	
276.6			SANDSTONE	2.1	195.5	
274.5			SANDSTONE	1.3	197.6	SS W/ THIN CO AND LGY SH STREAKS
273.2			GRAY SHALE	16.4	198.9	
256.8	CARBONDALE	ANNA	DARK GRAY SHALE	11.0	215.3	
245.8	CARBONDALE	HERRIN	COAL	4.5	226.3	
241.3	CARBONDALE		UNDERCLAY	1.0	230.8	

MAPID: 16501098000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 170' N line, 330' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.694906 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764083 **DATE COLLECTED:** 10 / 1 / 1953

SURFACE ELEVATION (FT.): 478.8 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-95 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
478.8			CLAY	4.0	0.0	
474.8			SANDSTONE	17.0	4.0	
457.8			SANDSTONE	11.0	21.0	
446.8			DARK GRAY SHALE	22.0	32.0	
424.8			GRAY SHALE	62.2	54.0	
362.6	CARBONDALE	BRERETON	LIMESTONE	1.3	116.2	
361.3	CARBONDALE	BRERETON	LIMESTONE	2.4	117.5	
358.9	CARBONDALE		BLACK SHALE	3.6	119.9	
355.4	CARBONDALE		DARK GRAY SHALE	5.7	123.4	
349.6	CARBONDALE		BLACK SHALE	0.8	129.2	
348.9	CARBONDALE	HERRIN	COAL	4.5	129.9	
344.4	CARBONDALE		UNDERCLAY	1.0	134.4	
343.4	CARBONDALE		GRAY SHALE	22.0	135.4	
321.4	CARBONDALE		SANDSTONE	40.6	157.4	
280.8	CARBONDALE		BLACK SHALE	8.0	198.0	
272.8	CARBONDALE		DARK GRAY SHALE	16.0	206.0	
256.8	CARBONDALE		DARK GRAY SHALE	17.5	222.0	
239.3	CARBONDALE		DARK GRAY SHALE	7.5	239.5	
231.8	CARBONDALE	SPRINGFIELD	COAL	4.7	247.0	
227.1	CARBONDALE		UNDERCLAY	2.3	251.7	

MAPID: 16501099000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 650' N line, 380' E line of NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699609 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.774 **DATE COLLECTED:** 10 / 12 / 1953

SURFACE ELEVATION (FT.): 461.5 **LOGGED (FT.):** 384.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-97 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.5			CLAY	5.7	0.0	
455.8	MODESTO		SANDSTONE	14.4	5.7	
441.4	MODESTO		SANDSTONE	65.2	20.1	
376.2	MODESTO		GRAY SHALE	16.8	85.3	
359.5	MODESTO		GRAY SHALE	1.5	102.0	
358.0	MODESTO		GRAY SHALE	11.5	103.5	
346.5	MODESTO		DARK GRAY SHALE	8.0	115.0	
338.5	MODESTO		BLACK SHALE	4.0	123.0	
334.5	MODESTO		GRAY SHALE	0.8	127.0	
333.7	MODESTO		GRAY SHALE	2.2	127.8	
331.5	MODESTO		GRAY SHALE	3.0	130.0	
328.5	MODESTO		LIMESTONE	0.6	133.0	
327.9	MODESTO		CALCAREOUS SHALE	8.4	133.6	
319.5	MODESTO		SANDSTONE	16.5	142.0	
303.0	MODESTO		CALCAREOUS SHALE	23.1	158.5	
279.9	MODESTO		COAL	0.1	181.6	
279.8	MODESTO		GRAY SHALE	1.2	181.7	
278.7	MODESTO		LIMESTONE	3.4	182.8	
275.2	MODESTO		GRAY SHALE	0.9	186.3	
274.3	MODESTO		BLACK SHALE	0.8	187.2	
273.6	MODESTO		GRAY SHALE	7.1	187.9	
266.5	MODESTO		COAL	0.5	195.0	
266.0	MODESTO		GRAY SHALE	8.3	195.5	
257.7	MODESTO		BLACK SHALE	0.3	203.8	
257.5	MODESTO		GRAY SHALE	4.4	204.0	
253.1	MODESTO		GRAY SHALE	0.6	208.4	
252.5	MODESTO	PIASA	LIMESTONE	0.8	209.0	
251.7	MODESTO		GRAY SHALE	1.0	209.8	
250.7	CARBONDALE	DANVILLE	COAL	1.0	210.8	
249.7	CARBONDALE		GRAY SHALE	4.0	211.8	
245.7	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	0.7	215.8	
245.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.8	216.5	
244.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	217.3	
238.0	CARBONDALE		GRAY SHALE	1.8	223.5	
236.2	CARBONDALE		GRAY SHALE	0.8	225.3	
235.5	CARBONDALE		SANDSTONE	3.8	226.0	
231.7	CARBONDALE		BLACK SHALE	0.7	229.8	
231.1	CARBONDALE		COAL	0.3	230.4	
230.8	CARBONDALE		DARK GRAY SHALE	7.8	230.7	

223.0	CARBONDALE		SANDSTONE	1.5	238.5
221.5	CARBONDALE		GRAY SILTSTONE	12.5	240.0
209.0	CARBONDALE		GRAY SHALE	1.5	252.5
207.5	CARBONDALE		COAL	0.1	254.0
207.4	CARBONDALE		GRAY SHALE	1.9	254.1
205.5	CARBONDALE	BRERETON	LIMESTONE	0.7	256.0
204.8	CARBONDALE	BRERETON	LIMESTONE	4.7	256.7
200.2	CARBONDALE		BLACK SHALE	4.5	261.3
195.7	CARBONDALE		GRAY SHALE	1.4	265.8
194.2	CARBONDALE	ANNA	DARK GRAY SHALE	1.3	267.3
192.9	CARBONDALE	HERRIN	COAL	4.2	268.6
188.7	CARBONDALE		UNDERCLAY	2.8	272.8
186.0	CARBONDALE		GRAY SHALE	3.3	275.5
182.7	CARBONDALE		GRAY SILTSTONE	13.1	278.8
169.6	CARBONDALE		GRAY SHALE	4.1	291.9
165.5	CARBONDALE		GRAY SILTSTONE	2.3	296.0
163.2	CARBONDALE		LIMESTONE	2.3	298.3
160.9	CARBONDALE		SANDSTONE	0.5	300.6
160.4	CARBONDALE		LIMESTONE	1.8	301.1
158.7	CARBONDALE		GRAY SILTSTONE	13.7	302.8
145.0	CARBONDALE		LIMESTONE	1.9	316.5
143.1	CARBONDALE		GRAY SILTSTONE	24.6	318.4
118.5	CARBONDALE		DARK GRAY SHALE	20.0	343.0
98.5	CARBONDALE		DARK GRAY SHALE	10.0	363.0
88.5	CARBONDALE		DARK GRAY SHALE	4.8	373.0
83.7	CARBONDALE	SPRINGFIELD	COAL	4.8	377.8
78.9	CARBONDALE		UNDERCLAY	1.4	382.6

MAPID: 16501100000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 690' S line, 330' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.694901 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.762714 **DATE COLLECTED:** 10 / 19 / 1953

SURFACE ELEVATION (FT.): 483.8 **LOGGED (FT.):** 369.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-98 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
483.8			CLAY	9.0	0.0	
474.8	MODESTO		SANDSTONE	11.0	9.0	
463.8	MODESTO		SANDSTONE	1.3	20.0	
462.5	MODESTO		SANDSTONE	54.8	21.3	
407.8	MODESTO		CALCAREOUS SHALE	20.0	76.0	
387.8	MODESTO		SANDSTONE	6.0	96.0	
381.8	MODESTO		GRAY SHALE	40.0	102.0	
341.8	MODESTO		GRAY SHALE	2.6	142.0	
339.2	MODESTO		SANDSTONE	2.9	144.6	
336.3	MODESTO		GRAY SHALE	3.5	147.5	
332.8	MODESTO		DARK GRAY SHALE	15.7	151.0	
317.1	MODESTO		COAL	0.1	166.7	
317.0	MODESTO		GRAY SHALE	3.5	166.8	
313.5	MODESTO		LIMESTONE	0.3	170.3	
313.3	MODESTO		SANDSTONE	3.0	170.5	
310.3	MODESTO		SANDSTONE	1.0	173.5	
309.3	MODESTO		DARK GRAY SHALE	3.5	174.5	
305.8	MODESTO		GRAY SHALE	1.8	178.0	
304.0			BLACK SHALE	2.1	179.8	
302.0			SANDSTONE	6.7	181.8	
295.3			GRAY SHALE	4.0	188.5	
291.3			DARK GRAY SHALE	2.0	192.5	
289.3			SANDSTONE	3.3	194.5	
286.0			BLACK SHALE	0.5	197.8	
285.5			GRAY SHALE	3.4	198.3	
282.1	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	201.7	
277.2	CARBONDALE		GRAY SHALE	3.2	206.6	
274.0	CARBONDALE	ANVIL ROCK	SANDSTONE	16.3	209.8	
257.8	CARBONDALE	ANVIL ROCK	SANDSTONE	4.7	226.0	
253.1	CARBONDALE		CALCAREOUS SHALE	5.3	230.7	
247.8	CARBONDALE		GRAY SHALE	4.0	236.0	
243.8	CARBONDALE	BRERETON	LIMESTONE	0.5	240.0	
243.3	CARBONDALE	BRERETON	LIMESTONE	3.5	240.5	
239.8	CARBONDALE	ANNA	BLACK SHALE	5.0	244.0	
234.8	CARBONDALE	ENERGY	DARK GRAY SHALE	3.0	249.0	
231.8	CARBONDALE	ENERGY	GRAY SHALE	1.7	252.0	
230.1	CARBONDALE		GRAY SHALE	0.3	253.7	
229.9	CARBONDALE	ENERGY	BLACK SHALE	0.6	253.9	
229.3	CARBONDALE	HERRIN	COAL	4.3	254.5	

225.0	CARBONDALE		UNDERCLAY	2.2	258.8
222.8	CARBONDALE		CALCAREOUS SHALE	20.0	261.0
202.8	CARBONDALE		DARK GRAY SHALE	5.0	281.0
197.8	CARBONDALE		SANDSTONE	35.0	286.0
162.8	CARBONDALE		DARK GRAY SHALE	15.0	321.0
147.8	CARBONDALE		SANDSTONE	3.3	336.0
144.5	CARBONDALE		SANDSTONE	0.7	339.3
143.8	CARBONDALE		GRAY SHALE	15.3	340.0
128.5	CARBONDALE		GRAY SHALE	7.8	355.3
120.6	CARBONDALE	SPRINGFIELD	COAL	3.8	363.2
116.9	CARBONDALE		UNDERCLAY	2.8	366.9

MAPID: 16501101000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 480' S line, 340' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.694935 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.762135 **DATE COLLECTED:** 10 / 21 / 1953

SURFACE ELEVATION (FT.): 471.3 **LOGGED (FT.):** 352.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-99 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
471.3			CLAY	5.0	0.0	
466.3	MODESTO		SANDSTONE	4.0	5.0	
462.3	MODESTO		SANDSTONE	5.0	9.0	
457.3	MODESTO		SANDSTONE	37.0	14.0	
420.3	MODESTO		SANDSTONE	25.0	51.0	
395.3	MODESTO		SANDSTONE	15.0	76.0	
380.3	MODESTO		GRAY SHALE	10.0	91.0	
370.3	MODESTO		DARK GRAY SHALE	5.0	101.0	
365.3	MODESTO		SANDSTONE	30.0	106.0	
335.3	MODESTO		GRAY SHALE	19.0	136.0	
316.3	MODESTO	PIASA	LIMESTONE	3.0	155.0	
313.3			GRAY SHALE	18.0	158.0	
295.3	CARBONDALE		SHALE	8.0	176.0	
287.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	184.0	
281.3	CARBONDALE		SHALE	37.0	190.0	
244.3	CARBONDALE	BRERETON	LIMESTONE	0.5	227.0	
243.8	CARBONDALE	BRERETON	LIMESTONE	4.8	227.5	
239.0	CARBONDALE	ANNA	BLACK SHALE	1.7	232.3	
237.3	CARBONDALE	ANNA	BLACK SHALE	0.3	234.0	
237.0	CARBONDALE	ANNA	BLACK SHALE	2.2	234.3	
234.8	CARBONDALE	ENERGY	DARK GRAY SHALE	1.5	236.5	
233.3	CARBONDALE	ENERGY	DARK SHALE	0.6	238.0	
232.7	CARBONDALE	HERRIN	COAL	4.2	238.6	
228.5	CARBONDALE		UNDERCLAY	1.3	242.8	
227.3	CARBONDALE		SHALE	17.0	244.0	
210.3	CARBONDALE		LIMESTONE	3.0	261.0	
207.3	CARBONDALE		SHALE	12.0	264.0	
195.3	CARBONDALE		SANDSTONE	45.0	276.0	
150.3	CARBONDALE		DARK GRAY SHALE	16.0	321.0	
134.3	CARBONDALE		DARK SHALE	10.2	337.0	
124.1	CARBONDALE		COAL	3.8	347.2	
120.3	CARBONDALE		UNDERCLAY	1.0	351.0	

MAPID: 16501115000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 10' S line, 380' E line of SE SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699585 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768315 **DATE COLLECTED:** 5 / 1 / 1951

SURFACE ELEVATION (FT.): 509.9 **LOGGED (FT.):** 356.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-60 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
509.9			CLAY	11.0	0.0	CLY, SAND, AND GRAVEL
498.9	MODESTO		SANDSTONE	20.0	11.0	
478.9	MODESTO		GRAY SHALE	11.0	31.0	
467.9	MODESTO		SANDY SHALE	5.0	42.0	
462.9	MODESTO		GRAY SHALE	11.4	47.0	
451.5	MODESTO		COAL	0.3	58.4	
451.1	MODESTO		UNDERCLAY	1.3	58.8	
449.9	MODESTO		GRAY SHALE	14.0	60.0	
435.9	MODESTO		SANDY SHALE	12.0	74.0	
423.9	MODESTO		GRAY SHALE	3.0	86.0	
420.9	MODESTO		COAL	0.5	89.0	
420.4	MODESTO		UNDERCLAY	1.5	89.5	
418.9	MODESTO		GRAY SHALE	3.0	91.0	
415.9	MODESTO		GRAY SHALE	9.0	94.0	
406.9	MODESTO		SANDY SHALE	4.0	103.0	
402.9	MODESTO		GRAY SHALE	4.0	107.0	
398.9	MODESTO		COAL	0.7	111.0	
398.2	MODESTO		UNDERCLAY	1.3	111.7	
396.9	MODESTO		GRAY SHALE	22.0	113.0	
374.9	MODESTO		SANDY SHALE	12.0	135.0	
362.9	MODESTO		GRAY SHALE	3.9	147.0	
359.0	MODESTO	PIASA	LIMESTONE	2.8	150.9	
356.2	MODESTO		CALCAREOUS SHALE	0.7	153.7	1
355.6	MODESTO		BLACK SHALE	1.3	154.3	
354.2	MODESTO		GRAY SHALE	0.8	155.7	
353.4	MODESTO		GRAY SHALE	5.5	156.5	
347.9	CARBONDALE	DANVILLE	COAL	1.8	162.0	
346.1	CARBONDALE		UNDERCLAY	1.2	163.8	
344.9	CARBONDALE		GRAY SHALE	9.0	165.0	
335.9	CARBONDALE		GRAY SHALE	5.4	174.0	
330.5	CARBONDALE	ALLENBY	COAL	1.2	179.4	
329.3	CARBONDALE		UNDERCLAY	1.4	180.6	
327.9	CARBONDALE		GRAY SHALE	2.7	182.0	
325.2	CARBONDALE	BANKSTON FORK	LIMESTONE	0.3	184.7	
324.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	185.0	
319.2	CARBONDALE		CALCAREOUS SHALE	1.0	190.7	
318.2	CARBONDALE		SANDSTONE	4.8	191.7	
313.4	CARBONDALE		SANDSTONE	3.5	196.5	
309.9	CARBONDALE		GRAY SHALE	2.4	200.0	

307.5	CARBONDALE		COAL	0.9	202.4	
306.6	CARBONDALE		UNDERCLAY	1.7	203.3	
304.9	CARBONDALE		GRAY SHALE	9.0	205.0	
295.9	CARBONDALE		SANDSTONE	6.0	214.0	
289.9	CARBONDALE		GRAY SHALE	3.0	220.0	
286.9	CARBONDALE	BRERETON	LIMESTONE	4.4	223.0	
282.5	CARBONDALE	ANNA	BLACK SHALE	2.3	227.4	
280.2	CARBONDALE	ENERGY	SANDSTONE	0.6	229.7	
279.6	CARBONDALE	ENERGY	BLACK SHALE	0.9	230.3	
278.7	CARBONDALE	ENERGY	SANDSTONE	0.1	231.2	
278.6	CARBONDALE	ENERGY	BLACK SHALE	1.5	231.3	
277.1	CARBONDALE	ENERGY	GRAY SHALE	3.2	232.8	
274.0	CARBONDALE		SHALE	1.0	235.9	LOG SAYS 'CANNELOID SHALE'
273.0	CARBONDALE	HERRIN	COAL	5.2	236.9	
267.9	CARBONDALE		UNDERCLAY	1.1	242.0	
266.7	CARBONDALE		UNDERCLAY	1.8	243.2	
264.9	CARBONDALE		SILTSTONE	10.2	245.0	
254.7	CARBONDALE		SANDSTONE	4.7	255.2	
250.1	CARBONDALE		SANDSTONE	0.2	259.8	
249.9	CARBONDALE		GRAY SHALE	6.8	260.0	
243.1	CARBONDALE		GRAY SHALE	0.3	266.8	GY SH W/ COAL STREAKS
242.9	CARBONDALE		GRAY SHALE	1.4	267.0	
241.5	CARBONDALE		GRAY SHALE	0.2	268.4	GY SH W/ COAL STREAKS
241.3	CARBONDALE		SANDSTONE	3.3	268.6	SS W/ COAL LENSES
238.1	CARBONDALE		GRAY SHALE	0.2	271.8	
237.9	CARBONDALE		GRAY SHALE	0.9	272.0	
237.0	CARBONDALE		DARK GRAY SHALE	0.2	272.9	
236.8	CARBONDALE	ST. DAVID	LIMESTONE	1.5	273.1	
235.3	CARBONDALE	DYKERSBURG	GRAY SHALE	29.4	274.6	
205.9	CARBONDALE	DYKERSBURG	SANDY SHALE	46.7	304.0	
159.2	CARBONDALE	SPRINGFIELD	COAL	4.3	350.7	
155.0	CARBONDALE		UNDERCLAY	1.1	354.9	

MAPID: 16501117000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 580' N line, 260' E line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.699176 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.770441 **DATE COLLECTED:** 10 / 1 / 1953

SURFACE ELEVATION (FT.): 488.3 **LOGGED (FT.):** 353.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-94 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
488.3			SANDY CLAY	14.6	0.0	
473.7			SANDSTONE	5.9	14.6	
467.8			SANDSTONE	24.4	20.5	
443.4			GRAY SHALE	4.7	44.9	GY SH W/ SOME SS STREAKS
438.7			SANDSTONE	12.8	49.6	
425.9			SANDY SHALE	19.2	62.4	
406.7			GRAY SHALE	5.2	81.6	
401.5			GRAY SHALE	5.2	86.8	
396.4			DARK GRAY SHALE	8.1	91.9	
388.3			BLACK SHALE	6.2	100.0	
382.1			SANDSTONE	17.9	106.2	
364.2			SANDSTONE	6.9	124.1	
357.3			SANDSTONE	21.6	131.0	
335.7			SANDSTONE	3.4	152.6	
332.3			GRAY SHALE	6.7	156.0	
325.6			COAL	0.2	162.7	
325.5			GRAY SHALE	2.4	162.8	
323.0			LIMESTONE	1.9	165.3	
321.1			LIMESTONE	1.3	167.2	
319.8			GRAY SHALE	0.4	168.5	
319.4			BLACK SHALE	0.5	168.9	
318.9			DARK GRAY SHALE	0.8	169.4	
318.0			GRAY SHALE	1.0	170.3	
317.0			GRAY SHALE	6.7	171.3	
310.4			COAL	2.3	177.9	
308.1			DARK GRAY SHALE	1.0	180.2	
307.1			GRAY SHALE	1.8	181.2	
305.4			SANDSTONE	2.4	182.9	
303.0			GRAY SHALE	1.3	185.3	
301.6			COAL	0.2	186.7	
301.5			GRAY SHALE	3.3	186.8	
298.2			SANDSTONE	1.4	190.1	
296.8			GRAY SHALE	0.6	191.5	
296.2	CARBONDALE	DANVILLE	COAL	0.2	192.1	
296.0	CARBONDALE		GRAY SHALE	4.9	192.3	
291.1	CARBONDALE		LIMESTONE	1.7	197.2	
289.5	CARBONDALE		LIMESTONE	3.6	198.8	
285.9	CARBONDALE		LIMESTONE	2.8	202.4	
283.1	CARBONDALE		SANDY SHALE	2.3	205.2	

280.9	CARBONDALE		SANDY SHALE	3.7	207.4	
277.2	CARBONDALE		BLACK SHALE	0.9	211.1	
276.3	CARBONDALE		SANDSTONE	16.9	212.0	
259.4	CARBONDALE		DARK GRAY SHALE	6.3	228.9	
253.0	CARBONDALE	BRERETON	LIMESTONE	1.0	235.3	
252.0	CARBONDALE	BRERETON	LIMESTONE	3.8	236.3	
248.3	CARBONDALE	BRERETON	LIMESTONE	1.0	240.0	
247.3	CARBONDALE	ANNA	BLACK SHALE	0.8	241.0	
246.5	CARBONDALE	ANNA	BLACK SHALE	2.5	241.8	
244.9	CARBONDALE	ANNA	GRAY SHALE	0.6	243.4	ERROR IN LOG THICKNESS AND DEPTH
244.3	CARBONDALE	HERRIN	UNDERCLAY	0.3	244.0	
244.0	CARBONDALE		GRAY SHALE	2.8	244.3	
241.3	CARBONDALE		GRAY SHALE	0.8	247.0	
240.5	CARBONDALE		DARK GRAY SHALE	0.1	247.8	
240.5	CARBONDALE		SANDSTONE	0.3	247.8	
240.2	CARBONDALE		GRAY SHALE	0.2	248.1	
240.0	CARBONDALE		SANDSTONE	1.8	248.3	
238.2	CARBONDALE		SANDSTONE	6.2	250.1	
232.0	CARBONDALE		SANDY SHALE	2.5	256.3	
229.5	CARBONDALE		GRAY SHALE	4.4	258.8	
225.1	CARBONDALE		GRAY SHALE	3.8	263.2	
221.3	CARBONDALE		LIMESTONE	3.7	267.0	
217.6	CARBONDALE		BLACK SHALE	1.5	270.7	
216.1	CARBONDALE		GRAY SHALE	0.5	272.2	
215.6	CARBONDALE		BLACK SHALE	0.3	272.7	
215.3	CARBONDALE		GRAY SHALE	0.5	273.0	
214.8	CARBONDALE		BLACK SHALE	1.0	273.5	
213.8	CARBONDALE		GRAY SILTSTONE	7.5	274.5	
206.3	CARBONDALE		BLACK SHALE	0.3	282.0	
206.0	CARBONDALE		GRAY SHALE	1.2	282.3	
204.9	CARBONDALE		COAL	3.7	283.4	
201.2	CARBONDALE		GRAY SHALE	2.9	287.1	
198.3	CARBONDALE		SILTSTONE	5.1	290.0	
193.2	CARBONDALE		LIMESTONE	0.3	295.1	
192.9	CARBONDALE		GRAY SHALE	1.6	295.4	
191.3	CARBONDALE		GRAY SILTSTONE	5.0	297.0	
186.3	CARBONDALE		LIMESTONE	2.0	302.0	
184.3	CARBONDALE		SILTSTONE	7.0	304.0	
177.3	CARBONDALE		SILTSTONE	0.8	311.0	
176.5	CARBONDALE		BLACK SHALE	0.2	311.8	
176.3	CARBONDALE		GRAY SHALE	2.0	312.0	
174.3	CARBONDALE		CALCAREOUS SHALE	2.0	314.0	
172.3	CARBONDALE		LIMESTONE	0.8	316.0	
171.5	CARBONDALE		GRAY SHALE	4.3	316.8	
167.2	CARBONDALE		GRAY SILTSTONE	0.5	321.1	
166.7	CARBONDALE		GRAY SHALE	4.3	321.6	
162.4	CARBONDALE		SANDY SHALE	5.6	325.9	GY SDY SH W/ SS STREAKS

156.8	CARBONDALE	GRAY SILTSTONE	10.3	331.5	GY ST W/ SS STREAKS
146.5	CARBONDALE	SANDY SHALE	11.2	341.8	

MAPID: 16501123000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 580' N line, 348' E line of SW SE

QUADRANGLE: HARCO **LONGITUDE:** -88.694968 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.762952 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 479.8 **LOGGED (FT.):** 371.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-75 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.8			CLAY	15.0	0.0	
464.8	MODESTO		SANDY SHALE	39.0	15.0	
425.8	MODESTO		SANDSTONE	19.0	54.0	
406.8	MODESTO		GRAY SHALE	3.0	73.0	
403.8	MODESTO		CALCAREOUS SHALE	0.5	76.0	
403.3	MODESTO		GRAY SHALE	13.0	76.5	
390.3	MODESTO		COAL	0.2	89.5	
390.1	MODESTO		UNDERCLAY	3.0	89.7	
387.1	MODESTO		SANDY SHALE	7.3	92.7	
379.8	MODESTO		SANDY SHALE	1.0	100.0	
378.8	MODESTO		DARK GRAY SHALE	18.0	101.0	
360.8	MODESTO		CALCAREOUS SHALE	17.1	119.0	
343.7	MODESTO		LIMESTONE	1.2	136.1	
342.5	MODESTO		GRAY SHALE	0.8	137.3	
341.8	MODESTO		SANDSTONE	9.0	138.0	
332.8	MODESTO		GRAY SHALE	14.0	147.0	
318.8	MODESTO		GRAY SHALE	11.5	161.0	
307.3	MODESTO		COAL	0.1	172.5	
307.2	MODESTO		GRAY SHALE	0.5	172.6	
306.7	MODESTO	PIASA	LIMESTONE	3.7	173.1	
303.0	MODESTO		CALCAREOUS SHALE	0.5	176.8	
302.5	MODESTO		BLACK SHALE	2.8	177.3	
299.8	MODESTO		GRAY SHALE	3.5	180.0	
296.3	CARBONDALE	DANVILLE	COAL	2.0	183.5	
294.3	CARBONDALE		SANDY SHALE	7.0	185.5	
287.3	CARBONDALE		GRAY SHALE	3.2	192.5	
284.1	CARBONDALE		COAL	0.2	195.7	
284.0	CARBONDALE		GRAY SHALE	1.0	195.8	
283.0	CARBONDALE		CALCAREOUS SHALE	0.3	196.8	
282.6	CARBONDALE		GRAY SHALE	3.0	197.2	
279.6	CARBONDALE		COAL	0.8	200.2	
278.8	CARBONDALE		GRAY SHALE	1.6	201.0	
277.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	202.6	
272.5	CARBONDALE		GRAY SHALE	3.3	207.3	
269.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.3	210.6	SS W/ SH STREAKS
263.9	CARBONDALE	ANVIL ROCK	GRAY SHALE	0.8	215.9	
263.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	216.8	
258.8	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	221.0	
251.8	CARBONDALE		GRAY SHALE	13.0	228.0	

238.8	CARBONDALE		BLACK SHALE	4.5	241.0	
234.3	CARBONDALE		GRAY SHALE	2.0	245.5	
232.3	CARBONDALE	BRERETON	LIMESTONE	2.5	247.5	
229.8	CARBONDALE		GRAY SHALE	6.7	250.0	
223.1	CARBONDALE		BLACK SHALE	1.5	256.7	
221.6	CARBONDALE	HERRIN	COAL	5.0	258.2	
216.6	CARBONDALE		BLACK SHALE	1.1	263.2	
215.5	CARBONDALE		UNDERCLAY	2.7	264.3	
212.9	CARBONDALE		GRAY SHALE	1.1	266.9	
211.8	CARBONDALE		GRAY SHALE	5.0	268.0	
206.8	CARBONDALE		CALCAREOUS SHALE	1.0	273.0	
205.8	CARBONDALE		GRAY SHALE	2.0	274.0	
203.8	CARBONDALE		GRAY SHALE	7.0	276.0	
196.8	CARBONDALE		GRAY SHALE	4.0	283.0	
192.8	CARBONDALE		SANDSTONE	33.0	287.0	SS W/ SH STREAKS
159.8	CARBONDALE		SANDSTONE	17.5	320.0	SS W/ SH STREAKS
142.3	CARBONDALE		GRAY SHALE	27.7	337.5	
114.6	CARBONDALE	SPRINGFIELD	COAL	4.3	365.2	
110.4	CARBONDALE		GRAY SHALE	1.6	369.4	

MAPID: 16501124000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 780' N line, 396' E line of SW

QUADRANGLE: HARCO **LONGITUDE:** -88.699634 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.766135 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 469.8 **LOGGED (FT.):** 355.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-76 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
469.8			CLAY	15.0	0.0	
454.8			SANDSTONE	42.0	15.0	
412.8			GRAY SHALE	5.0	57.0	
407.8			GRAY SHALE	6.0	62.0	
401.8			UNDERCLAY	5.0	68.0	
396.8			SANDY SHALE	10.5	73.0	
386.3			GRAY SHALE	11.5	83.5	
374.8			UNDERCLAY	3.0	95.0	
371.8			DARK GRAY SHALE	4.0	98.0	
367.8			COAL	0.4	102.0	
367.4			UNDERCLAY	1.6	102.4	
365.8			UNDERCLAY	7.0	104.0	
358.8			LIMESTONE	1.5	111.0	
357.3			GRAY SHALE	2.5	112.5	
354.8			SANDSTONE	14.5	115.0	
340.3			SANDY SHALE	19.5	129.5	
320.8			GRAY SHALE	7.0	149.0	
313.8			LIMESTONE	3.3	156.0	
310.5			CALCAREOUS SHALE	0.5	159.3	
310.0			DARK GRAY SHALE	6.7	159.8	
303.4			COAL	1.8	166.4	
301.5			SANDY SHALE	2.0	168.3	
299.5			DARK GRAY SHALE	1.8	170.3	
297.8			SANDY SHALE	4.0	172.0	
293.8			GRAY SHALE	3.0	176.0	
290.8			COAL	0.2	179.0	
290.6			GRAY SHALE	3.0	179.2	
287.6			SANDSTONE	1.8	182.2	
285.9	CARBONDALE	DANVILLE	COAL	0.8	183.9	
285.1	CARBONDALE		BLACK SHALE	0.5	184.7	
284.6	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	1.5	185.2	
283.1	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	0.7	186.7	
282.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	187.3	
278.9	CARBONDALE		GRAY SHALE	1.1	190.9	
277.8	CARBONDALE		GRAY SHALE	2.5	192.0	
275.3	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	194.5	
268.8	CARBONDALE	ANVIL ROCK	GRAY SHALE	0.5	201.0	
268.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.3	201.5	
258.0	CARBONDALE		GRAY SHALE	13.4	211.8	

244.6	CARBONDALE		BLACK SHALE	0.3	225.2
244.4	CARBONDALE	BRERETON	LIMESTONE	3.0	225.4
241.4	CARBONDALE	ANNA	DARK SHALE	11.8	228.4
229.6	CARBONDALE	HERRIN	COAL	5.2	240.2
224.5	CARBONDALE		GRAY SHALE	0.7	245.3
223.8	CARBONDALE		GRAY SHALE	8.0	246.0
215.8	CARBONDALE		LIMESTONE	0.9	254.0
214.9	CARBONDALE		GRAY SHALE	12.1	254.9
202.8	CARBONDALE		SANDSTONE	39.0	267.0
163.8	CARBONDALE		SANDSTONE	31.3	306.0
132.5	CARBONDALE		GRAY SHALE	11.8	337.3
120.6	CARBONDALE	SPRINGFIELD	COAL	4.3	349.2
116.3	CARBONDALE		GRAY SHALE	1.5	353.5

MAPID: 16501125000C **VERSION:** 1 **PROJECT:** NCRDS93

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 646' S line, 293' E line of SE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.699263 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.762568 **DATE COLLECTED:** 1 / 9 / 1953

SURFACE ELEVATION (FT.): 458.6 **LOGGED (FT.):** 370.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-77 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.6			CLAY	4.0	0.0	
454.6			CLAY	3.0	4.0	
451.6	MODESTO		SANDSTONE	26.0	7.0	
425.6	MODESTO		SILTSTONE	24.0	33.0	
401.6	MODESTO		GRAY SHALE	19.0	57.0	
382.6	MODESTO		DARK GRAY SHALE	6.5	76.0	
376.1	MODESTO		COAL	0.3	82.5	
375.8	MODESTO		GRAY SHALE	2.3	82.8	
373.6	MODESTO		CALCAREOUS SHALE	9.0	85.0	
364.6	MODESTO		DARK GRAY SHALE	19.5	94.0	
345.1	MODESTO		BLACK SHALE	2.0	113.5	
343.1	MODESTO		COAL	0.3	115.5	
342.8	MODESTO		GRAY SHALE	2.3	115.8	
340.6	MODESTO		CALCAREOUS SHALE	3.0	118.0	
337.6	MODESTO		DARK GRAY SHALE	5.0	121.0	
332.6	MODESTO		CALCAREOUS SHALE	3.0	126.0	
329.6	MODESTO		SANDSTONE	5.5	129.0	
324.1	MODESTO		GRAY SHALE	0.5	134.5	
323.6	MODESTO		DARK GRAY SHALE	2.0	135.0	
321.6	MODESTO		SANDSTONE	2.0	137.0	
319.6	MODESTO		DARK GRAY SHALE	14.0	139.0	
305.6	MODESTO		CALCAREOUS SHALE	16.0	153.0	
289.6	MODESTO		LIMESTONE	2.5	169.0	
287.1	MODESTO		BLACK SHALE	2.5	171.5	
284.6	MODESTO		DARK GRAY SHALE	1.0	174.0	
283.6	MODESTO		CALCAREOUS SHALE	3.0	175.0	
280.6	MODESTO		SANDSTONE	8.0	178.0	
272.6	MODESTO		GRAY SHALE	3.0	186.0	
269.6	MODESTO	PIASA	LIMESTONE	3.0	189.0	
266.6	MODESTO		GRAY SHALE	4.0	192.0	
262.6	MODESTO		SANDSTONE	7.0	196.0	
255.6	CARBONDALE	DANVILLE	COAL	0.3	203.0	
255.3	CARBONDALE	ANVIL ROCK	SANDSTONE	20.8	203.3	
234.6	CARBONDALE		GRAY SHALE	1.5	224.0	
233.1	CARBONDALE		SANDSTONE	6.5	225.5	
226.6	CARBONDALE		GRAY SHALE	4.5	232.0	
222.1	CARBONDALE		GRAY SHALE	4.8	236.5	
217.3	CARBONDALE	BRERETON	LIMESTONE	5.6	241.3	
211.7	CARBONDALE	ANNA	BLACK SHALE	2.1	246.9	

209.6	CARBONDALE	ANNA	BLACK SHALE	2.0	249.0
207.6	CARBONDALE		GRAY SHALE	3.7	251.0
203.9	CARBONDALE		CALCAREOUS SHALE	1.1	254.7
202.8	CARBONDALE	HERRIN	COAL	4.7	255.8
198.2	CARBONDALE		UNDERCLAY	1.6	260.4
196.6	CARBONDALE		GRAY SHALE	14.0	262.0
182.6	CARBONDALE		CALCAREOUS SHALE	5.0	276.0
177.6	CARBONDALE		GRAY SHALE	8.0	281.0
169.6	CARBONDALE		LIMESTONE	3.0	289.0
166.6	CARBONDALE		GRAY SHALE	20.0	292.0
146.6	CARBONDALE		SHALE	2.0	312.0
144.6	CARBONDALE		COAL	0.7	314.0
143.9	CARBONDALE		GRAY SHALE	30.8	314.7
113.1	CARBONDALE		SANDY SHALE	7.5	345.5
105.6	CARBONDALE		SANDY SHALE	10.0	353.0
95.6	CARBONDALE		SANDY SHALE	1.0	363.0
94.6	CARBONDALE	SPRINGFIELD	COAL	4.2	364.0
90.4	CARBONDALE		UNDERCLAY	1.8	368.2

MAPID: 16501128000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** 97' N line, 58' E line of NE SE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.689475 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764302 **DATE COLLECTED:** 2 / 25 / 1950

SURFACE ELEVATION (FT.): 526.0 **LOGGED (FT.):** 317.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-48 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
526.0			CLAY	7.0	0.0	
519.0			SANDSTONE	10.0	7.0	
509.0			SHALE	2.0	17.0	
507.0			DARK SHALE	19.0	19.0	
488.0			SHALE	30.0	38.0	
458.0			SHALE	10.0	68.0	
448.0			SHALE	38.0	78.0	
410.0			LIMESTONE	4.5	116.0	
405.5			SHALE	15.5	120.5	
390.0			SHALE	11.0	136.0	
379.0			LIMESTONE	5.5	147.0	
373.5			SHALE	40.5	152.5	
333.0			LIMESTONE	3.5	193.0	
329.5	CARBONDALE		SHALE	1.5	196.5	
328.0	CARBONDALE		LIMESTONE	1.0	198.0	
327.0	CARBONDALE		SHALE	3.5	199.0	
323.5	CARBONDALE	HERRIN	COAL	5.5	202.5	
318.0	CARBONDALE		SHALE	48.0	208.0	
270.0	CARBONDALE		SANDSTONE	25.0	256.0	
245.0	CARBONDALE		SHALE	29.0	281.0	
216.0	CARBONDALE		SHALE	5.0	310.0	
211.0	CARBONDALE	SPRINGFIELD	COAL	2.0	315.0	

MAPID: 16590055000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.585967 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.77587 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.6 **LOGGED (FT.):** 179.3 **LOG TYPE:** Company map

SOURCE: AMAX P-621 **WELL TYPE:** Coal Test

COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.6	CARBONDALE	HERRIN	COAL	5.3	174.0	

MAPID: 16500360000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** W2 NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.701602 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.758932 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 431.2 **LOGGED (FT.):** 361.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.2			UNCONSOLIDATED	35.0	0.0	
396.2	MODESTO		SANDSTONE	8.0	35.0	
388.2	MODESTO		SANDY SHALE	22.0	43.0	
366.2	MODESTO		SHALE	0.3	65.0	
365.9	MODESTO		COAL	0.3	65.3	
365.5	MODESTO		UNDERCLAY	2.3	65.7	
363.2	MODESTO		SANDY SHALE	10.0	68.0	
353.2	MODESTO		SHALE	20.3	78.0	
332.9	MODESTO		COAL	0.3	98.3	
332.6	MODESTO		UNDERCLAY	6.4	98.6	
326.2	MODESTO		SANDY SHALE	25.0	105.0	
301.2	MODESTO		SHALE	21.8	130.0	
279.4	MODESTO		COAL	0.4	151.8	
278.9	MODESTO		UNDERCLAY	1.8	152.3	
277.2	MODESTO	PIASA	LIMESTONE	4.7	154.0	
272.5	MODESTO		COAL	0.8	158.7	
271.7	MODESTO		BLACK SHALE	2.8	159.5	
268.9	CARBONDALE	DANVILLE	COAL	1.8	162.3	
267.0	CARBONDALE		SANDY SHALE	15.0	164.2	
252.0	CARBONDALE	ALLENBY	COAL	0.5	179.2	
251.5	CARBONDALE		UNDERCLAY	1.3	179.7	
250.2	CARBONDALE		SHALE	8.0	181.0	
242.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	189.0	
235.2	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	196.0	
215.2	CARBONDALE	ANVIL ROCK	GRAY SHALE	7.0	216.0	
208.2	CARBONDALE	BRERETON	LIMESTONE	3.5	223.0	
204.7	CARBONDALE		DARK SHALE	2.5	226.5	
202.2	CARBONDALE		GRAY SHALE	10.7	229.0	
191.5	CARBONDALE	ANNA	DARK SHALE	0.7	239.7	
190.9	CARBONDALE	HERRIN	COAL	5.3	240.3	
185.6	CARBONDALE		UNDERCLAY	2.4	245.6	
183.2	CARBONDALE		DARK SHALE	17.2	248.0	
166.0	CARBONDALE		COAL	0.1	265.2	
165.9	CARBONDALE	TURNER MINE	DARK SHALE	5.8	265.3	
160.2	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	271.0	
135.2	CARBONDALE	DYKERSBURG	SANDSTONE	31.0	296.0	
104.2	CARBONDALE	DYKERSBURG	SHALE	14.0	327.0	
90.2	CARBONDALE	DYKERSBURG	DARK SHALE	14.3	341.0	
75.9	CARBONDALE	SPRINGFIELD	COAL	4.3	355.3	

71.7	CARBONDALE		UNDERCLAY	1.5	359.5

MAPID: 16500360000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** W2 NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.701602 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.758932 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 361.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBRG SALINE COL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	CARBONDALE	HERRIN	COAL	5.3	240.0	
166.0	CARBONDALE	BRIAR HILL	COAL	0.1	265.0	
76.0	CARBONDALE	SPRINGFIELD	COAL	4.3	355.0	

MAPID: 16500361000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.691489 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.755308 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 349.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	15.0	0.0	
460.0			SANDSTONE	16.0	15.0	
444.0			ARGILACEOUS SHALE	25.0	31.0	
419.0			BLACK SHALE	24.0	56.0	
395.0			COAL	1.0	80.0	
394.0	CARBONDALE		UNDERCLAY	5.0	81.0	
389.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	86.0	
377.0	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	21.0	98.0	
356.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	50.0	119.0	
306.0	CARBONDALE		SHALE	41.0	169.0	
265.0	CARBONDALE	BRERETON	LIMESTONE	6.5	210.0	
258.5	CARBONDALE	ANNA	BLACK SHALE	2.5	216.5	
256.0	CARBONDALE	HERRIN	COAL	6.4	219.0	
249.6	CARBONDALE		UNDERCLAY/SHALE	18.0	225.4	
231.6	CARBONDALE	DYKERSBURG	SANDSTONE	73.0	243.4	
158.6	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	28.0	316.4	
130.6	CARBONDALE	SPRINGFIELD	COAL	4.9	344.4	
125.7	CARBONDALE		UNDERCLAY	0.5	349.3	

MAPID: 16500362000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697654 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.749297 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 411.8 **LOGGED (FT.):** 333.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.8			UNCONSOLIDATED	14.5	0.0	
397.3	CARBONDALE		SHALE	1.5	14.5	
395.8	CARBONDALE		DARK SHALE	26.0	16.0	
369.8	CARBONDALE	ALLENBY	COAL	0.5	42.0	
369.3	CARBONDALE		SHALE	35.5	42.5	
333.8	CARBONDALE		DARK SHALE	10.0	78.0	
323.8	CARBONDALE		SANDY SHALE	44.0	88.0	
279.8	CARBONDALE		GRAY SHALE	6.0	132.0	
273.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	138.0	
270.8	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	141.0	
251.8	CARBONDALE	ANVIL ROCK	DARK SHALE	15.0	160.0	
236.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	175.0	
235.8	CARBONDALE	BRERETON	LIMESTONE	10.0	176.0	
225.8	CARBONDALE	ANNA	BLACK SHALE	3.0	186.0	
222.8	CARBONDALE	HERRIN	COAL	4.8	189.0	
218.0	CARBONDALE		UNDERCLAY	2.2	193.8	
215.8	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	196.0	
205.8	CARBONDALE	DYKERSBURG	SHALE	30.0	206.0	
175.8	CARBONDALE	DYKERSBURG	SANDSTONE	45.0	236.0	
130.8	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	281.0	
126.8	CARBONDALE	DYKERSBURG	GRAY SHALE	31.0	285.0	
95.8	CARBONDALE	DYKERSBURG	DARK SHALE	9.0	316.0	
86.8	CARBONDALE	SPRINGFIELD	COAL	5.3	325.0	
81.5	CARBONDALE		UNDERCLAY	2.8	330.3	

MAPID: 16500362000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697654 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.749297 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 333.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG-SALINE COLLIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	14.5	0.0	
397.5			ROCK	27.5	14.5	
370.0			COAL	0.5	42.0	
369.5			ROCK	121.5	42.5	
248.0			SHALE	12.0	164.0	
236.0			LIMESTONE	10.0	176.0	
226.0			BLACK SHALE	3.0	186.0	
223.0	CARBONDALE	HERRIN	COAL	4.8	189.0	
218.2	CARBONDALE		UNDERCLAY	2.2	193.8	
216.0	CARBONDALE		ROCK	89.0	196.0	
127.0	CARBONDALE		SHALE	40.0	285.0	
87.0	CARBONDALE	SPRINGFIELD	COAL	5.3	325.0	
81.7	CARBONDALE		UNDERCLAY	0.0	330.3	

MAPID: 16500366000C **VERSION:** 1 **PROJECT:** NCRDS89

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.691489 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.755308 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 466.5 **LOGGED (FT.):** 190.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
466.5			UNCONSOLIDATED	14.0	0.0	
452.5	CARBONDALE		ARGILACEOUS SHALE	14.0	14.0	
438.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	28.0	
425.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.3	41.0	W/ SS BANDS
406.2	CARBONDALE	JAMESTOWN	BONE COAL	0.5	60.3	
405.7	CARBONDALE		BLACK SHALE	1.7	60.8	
404.0	CARBONDALE	BRERETON	LIMESTONE	7.9	62.5	
396.1	CARBONDALE	ANNA	BLACK SHALE	0.2	70.4	
395.9	CARBONDALE	HERRIN	COAL	5.2	70.6	
390.7	CARBONDALE		UNDERCLAY	2.3	75.8	
388.5	CARBONDALE		GRAY SHALE	28.0	78.0	
360.5	CARBONDALE	DYKERSBURG	SANDSTONE	42.0	106.0	
318.5	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	148.0	
296.5	CARBONDALE	DYKERSBURG	SHALE	14.5	170.0	
282.0	CARBONDALE	SPRINGFIELD	COAL	4.1	184.5	
277.8	CARBONDALE		UNDERCLAY	1.3	188.7	

MAPID: 16501012000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 175' S line, 35' W line of SW NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.698108 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757596 **DATE COLLECTED:** 2 / 1 / 1951

SURFACE ELEVATION (FT.): 427.7 **LOGGED (FT.):** 341.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-53 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.7			CLAY	5.0	0.0	
422.7			SAND	16.0	5.0	
406.7			UNCONSOLIDATED	28.0	21.0	GLACIAL DRIFT
378.7	MODESTO		SHALE	3.0	49.0	
375.7	MODESTO		GRAY SANDSTONE	5.0	52.0	
370.7	MODESTO		GRAY SHALE	4.3	57.0	GY SH W/ SS BANDS
366.4	MODESTO		GRAY SHALE	10.7	61.3	
355.7	MODESTO		BLACK SHALE	3.4	72.0	
352.3	MODESTO		COAL	0.5	75.4	
351.8	MODESTO		UNDERCLAY	0.6	75.9	
351.2	MODESTO		GRAY SHALE	4.3	76.5	
346.9	MODESTO		COAL	0.9	80.8	
345.9	MODESTO		UNDERCLAY	0.5	81.8	
345.4	MODESTO		DARK GRAY SHALE	7.8	82.3	
337.7	MODESTO		GRAY SHALE	10.0	90.0	
327.7	MODESTO		GRAY SHALE	2.3	100.0	3
325.4	MODESTO		LIMESTONE	3.3	102.3	
322.1	MODESTO		GRAY SHALE	18.4	105.6	
303.7	MODESTO		DARK GRAY SHALE	12.3	124.0	DGY SH W/ SIDERITE BANDS
291.4	MODESTO		COAL	0.3	136.3	
291.1	MODESTO		UNDERCLAY	0.4	136.6	
290.7	MODESTO		GRAY SHALE	2.3	137.0	
288.4	MODESTO	PIASA	LIMESTONE	1.9	139.3	
286.4	MODESTO		BLACK SHALE	1.0	141.3	
285.4	MODESTO		FOSSILIFEROUS LIMESTONE	0.8	142.3	
284.6	MODESTO		DARK GRAY SHALE	3.3	143.1	
281.3	MODESTO		SHALE	0.1	146.4	SHALE AND SULPHUR
281.2	CARBONDALE	DANVILLE	COAL	1.9	146.5	
279.4	CARBONDALE		GRAY SANDSTONE	2.9	148.3	GY SS W/ COAL STREAKS
276.4	CARBONDALE		SANDY SHALE	0.7	151.3	
275.8	CARBONDALE		BLACK SHALE	1.3	151.9	
274.5	CARBONDALE		LIMESTONE	0.3	153.2	
274.3	CARBONDALE		DARK GRAY SHALE	0.8	153.4	
273.5	CARBONDALE		GRAY SHALE	9.3	154.2	
264.2	CARBONDALE	ALLENBY	COAL	0.5	163.5	
263.7	CARBONDALE		UNDERCLAY	0.5	164.0	
263.2	CARBONDALE		GRAY SHALE	2.0	164.5	
261.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.1	166.5	

257.1	CARBONDALE		CALCAREOUS SHALE	3.1	170.6	
254.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.3	173.7	
246.8	CARBONDALE		GRAY SHALE	4.1	180.9	GY SH W/ SS LENSES (+8" TO MATCH DEPTH)
242.7	CARBONDALE		GRAY SHALE	21.1	185.0	
221.6	CARBONDALE	BRERETON	LIMESTONE	1.2	206.1	
220.4	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	2.2	207.3	
218.3	CARBONDALE	ANNA	BLACK SHALE	3.4	209.4	
214.9	CARBONDALE	ENERGY	DARK GRAY SHALE	4.2	212.8	
210.7	CARBONDALE	ENERGY	GRAY SHALE	4.3	217.0	
206.4	CARBONDALE	ENERGY	BLACK SHALE	0.3	221.3	
206.0	CARBONDALE	HERRIN	COAL	5.2	221.7	
200.9	CARBONDALE		UNDERCLAY	1.0	226.8	
199.9	CARBONDALE		GRAY SHALE	13.2	227.8	
186.7	CARBONDALE		SANDY SHALE	3.9	241.0	
182.8	CARBONDALE		LIMESTONE	2.5	244.9	
180.3	CARBONDALE		GRAY SHALE	1.5	247.4	
178.8	CARBONDALE	BRIAR HILL	COAL	0.5	248.9	
178.3	CARBONDALE		UNDERCLAY	0.6	249.4	
177.7	CARBONDALE	DYKERSBURG	GRAY SHALE	15.0	250.0	
162.7	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	18.0	265.0	
144.7	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	12.0	283.0	GY SS W/ MICA LENSES
132.7	CARBONDALE	DYKERSBURG	SANDY SHALE	6.0	295.0	
126.7	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	6.0	301.0	
120.7	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	307.0	
103.7	CARBONDALE	DYKERSBURG	GRAY SHALE	6.0	324.0	
97.7	CARBONDALE	DYKERSBURG	SANDY SHALE	4.3	330.0	
93.4	CARBONDALE	SPRINGFIELD	COAL	4.2	334.3	
89.2	CARBONDALE		UNDERCLAY	2.6	338.5	

MAPID: 16501064000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.692619 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.758063 **DATE COLLECTED:** 11 / 4 / 1953

SURFACE ELEVATION (FT.): 508.4 **LOGGED (FT.):** 358.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-101 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
508.4			CLAY	8.0	0.0	
500.4	MODESTO		SANDSTONE	17.0	8.0	
483.4	MODESTO		GRAY SANDSTONE	31.0	25.0	
452.4	MODESTO		GRAY SHALE	11.0	56.0	
441.4	MODESTO		SANDY SHALE	3.1	67.0	
438.3	MODESTO		GRAY SHALE	11.9	70.1	
426.4	MODESTO		DARK GRAY SHALE	14.2	82.0	
412.2	MODESTO		BLACK SHALE	3.6	96.2	
408.6	MODESTO		SANDY SHALE	1.3	99.8	
407.4	MODESTO		GRAY SHALE	7.5	101.0	
399.9	MODESTO		DARK GRAY SHALE	8.0	108.5	
391.9	MODESTO		LIMESTONE	0.6	116.5	
391.3	MODESTO		DARK GRAY SHALE	3.9	117.1	
387.4	MODESTO		GRAY SANDSTONE	4.5	121.0	
382.9	MODESTO		CALCAREOUS SHALE	8.5	125.5	
374.4	MODESTO		COAL	0.1	134.0	
374.3	MODESTO		CALCAREOUS SHALE	21.9	134.1	
352.4	MODESTO		GRAY SHALE	1.0	156.0	
351.4	MODESTO	PIASA	LIMESTONE	3.5	157.0	
347.9	MODESTO		GRAY SHALE	2.3	160.5	
345.6	MODESTO		DARK GRAY SHALE	1.0	162.8	
344.6	MODESTO		GRAY SHALE	3.8	163.8	
340.9	CARBONDALE	DANVILLE	COAL	0.2	167.5	
340.7	CARBONDALE		CALCAREOUS SHALE	3.8	167.7	
336.9	CARBONDALE		SILTY SHALE	2.3	171.5	
334.6	CARBONDALE		GRAY SHALE	1.4	173.8	
333.2	CARBONDALE		SILTY SHALE	3.2	175.2	
330.1	CARBONDALE		DARK GRAY SHALE	1.2	178.3	
328.9	CARBONDALE		GRAY SANDSTONE	4.5	179.5	
324.4	CARBONDALE		GRAY SHALE	1.2	184.0	
323.2	CARBONDALE	ALLENBY	COAL	0.2	185.2	
323.1	CARBONDALE		DARK GRAY SHALE	2.7	185.3	
320.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	188.0	
316.1	CARBONDALE		GRAY SHALE	5.8	192.3	
310.4	CARBONDALE	ANVIL ROCK	SILTY SHALE	9.0	198.0	
301.4	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	4.5	207.0	
296.9	CARBONDALE	ANVIL ROCK	WHITE SANDSTONE	4.0	211.5	
292.9	CARBONDALE		DARK GRAY SHALE	11.4	215.5	
281.5	CARBONDALE	BRERETON	LIMESTONE	0.5	226.9	

281.0	CARBONDALE	BRERETON	LIMESTONE	1.8	227.4	
279.2	CARBONDALE	ANNA	BLACK SHALE	1.9	229.2	
277.3	CARBONDALE	ANNA	UNCLASSIFIED	0.5	231.1	PYRITE LAYER
276.8	CARBONDALE	ANNA	BLACK SHALE	0.4	231.6	
276.4	CARBONDALE	ENERGY	DARK GRAY SHALE	1.5	232.0	
274.9	CARBONDALE	ENERGY	GRAY SHALE	9.6	233.5	
265.3	CARBONDALE	HERRIN	COAL	5.0	243.1	
260.3	CARBONDALE		UNDERCLAY	1.6	248.1	
258.7	CARBONDALE		DARK GRAY SHALE	36.0	249.7	
222.7	CARBONDALE		SANDSTONE	10.3	285.7	
212.4	CARBONDALE		GRAY SHALE	2.5	296.0	
209.9	CARBONDALE		GRAY SANDSTONE	21.5	298.5	
188.4	CARBONDALE		GRAY SHALE	18.0	320.0	
170.4	CARBONDALE		DARK GRAY SHALE	14.0	338.0	
156.4	CARBONDALE		DARK GRAY SHALE	2.1	352.0	
154.3	CARBONDALE	SPRINGFIELD	COAL	4.3	354.1	
150.1	CARBONDALE		UNDERCLAY	1.0	358.3	

MAPID: 16501066000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 22' S line, 36' W line of SW NE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693595 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.749837 **DATE COLLECTED:** 11 / 12 / 1953

SURFACE ELEVATION (FT.): 450.3 **LOGGED (FT.):** 346.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-103 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.3			CLAY	9.0	0.0	
441.3			SANDSTONE	14.5	9.0	
426.8			GRAY SHALE	3.1	23.5	
423.7			GRAY SANDSTONE	1.2	26.6	
422.5			GRAY SHALE	8.3	27.8	
414.3			DARK GRAY SHALE	19.8	36.0	
394.5			BLACK SHALE	2.0	55.8	
392.5			DARK GRAY SHALE	1.3	57.8	
391.1			BLACK SHALE	0.8	59.2	
390.3			GRAY SHALE	2.3	60.0	
388.0			GRAY SHALE	2.2	62.3	
385.8			GRAY SANDSTONE	6.5	64.5	
379.3			GRAY SHALE	31.5	71.0	
347.8			GRAY SANDSTONE	41.5	102.5	
306.3			GRAY SANDSTONE	8.0	144.0	
298.3			GRAY SHALE	5.0	152.0	
293.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	157.0	
289.3	CARBONDALE	BANKSTON FORK	GRAY SHALE	1.0	161.0	
288.3	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	162.0	
285.8	CARBONDALE		GRAY SHALE	11.5	164.5	
274.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.0	176.0	
267.3	CARBONDALE		DARK GRAY SHALE	22.0	183.0	
245.3	CARBONDALE	BRERETON	LIMESTONE	1.0	205.0	
244.3	CARBONDALE	BRERETON	LIMESTONE	4.8	206.0	
239.5	CARBONDALE	ANNA	BLACK SHALE	1.7	210.8	
237.8	CARBONDALE	HERRIN	COAL	4.9	212.5	
232.8	CARBONDALE		UNDERCLAY	2.6	217.5	
230.2	CARBONDALE		DARK GRAY SHALE	75.0	220.1	
155.2	CARBONDALE		GRAY SANDSTONE	4.0	295.1	
151.2	CARBONDALE		DARK GRAY SHALE	7.4	299.1	+5" ADJUSTMENT TO FIX DEPTH
143.8	CARBONDALE		GRAY SHALE	10.8	306.5	
133.0	CARBONDALE		GRAY SHALE	0.7	317.3	
132.3	CARBONDALE		DARK GRAY SHALE	21.8	318.0	
110.5	CARBONDALE	SPRINGFIELD	COAL	4.8	339.8	
105.6	CARBONDALE		UNDERCLAY	1.0	344.7	

MAPID: 16501069000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 215' N line, 34' E line of NE NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.698342 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.752838 **DATE COLLECTED:** 0 / 0 / 1953

SURFACE ELEVATION (FT.): 484.9 **LOGGED (FT.):** 380.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-106 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
484.9			CLAY	10.0	0.0	
474.9	MODESTO		SANDSTONE	60.0	10.0	
414.9	MODESTO		GRAY SHALE	30.0	70.0	LGY SH W/ HD SPOTTED LIME
384.9	MODESTO		SANDSTONE	40.0	100.0	
344.9	MODESTO		SANDSTONE	30.0	140.0	
314.9	MODESTO		SHALE	8.0	170.0	
306.9	MODESTO	PIASA	LIMESTONE	2.0	178.0	
304.9	MODESTO		GRAY SHALE	2.0	180.0	
302.9	MODESTO		SANDSTONE	4.0	182.0	
298.9			LIMESTONE	0.5	186.0	
298.4			GRAY SHALE	12.0	186.5	
286.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	198.5	
282.2	CARBONDALE		GRAY SHALE	35.5	202.7	
246.7	CARBONDALE	BRERETON	LIMESTONE	0.8	238.2	
245.9	CARBONDALE	BRERETON	LIMESTONE	5.8	239.0	
240.1	CARBONDALE	ANNA	BLACK SHALE	3.1	244.8	
237.0	CARBONDALE	ENERGY	DARK GRAY SHALE	1.3	247.9	
235.6	CARBONDALE	HERRIN	COAL	4.1	249.3	
231.6	CARBONDALE		UNDERCLAY	0.5	253.3	
231.1	CARBONDALE		LIGHT SHALE	17.5	253.8	
213.6	CARBONDALE		LIMESTONE	1.5	271.3	
212.1	CARBONDALE		GRAY SHALE	31.0	272.8	
181.1	CARBONDALE	ST. DAVID	LIMESTONE	1.5	303.8	
179.6	CARBONDALE	DYKERSBURG	GRAY SHALE	10.7	305.3	
168.9	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	30.0	316.0	
138.9	CARBONDALE	DYKERSBURG	SHALE	8.0	346.0	
130.9	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	20.3	354.0	
110.6	CARBONDALE	SPRINGFIELD	COAL	4.2	374.3	
106.4	CARBONDALE		UNDERCLAY	1.6	378.5	

MAPID: 16501106000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 853' N line, 125' E line of NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.703149 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.751053 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 504.0 **LOGGED (FT.):** 267.2 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY COAL CO. 43-68 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
255.6	CARBONDALE	JAMESTOWN	BONE COAL	0.3	248.4	
255.3	CARBONDALE	BRERETON	LIMESTONE	3.4	248.7	
251.9	CARBONDALE	ANNA	BLACK SHALE	3.3	252.1	
248.7	CARBONDALE	ENERGY	GRAY SHALE	6.7	255.3	
242.0	CARBONDALE	HERRIN	COAL	5.2	262.0	

MAPID: 16501120000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 219' S line, 17' W line of SW SE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.693672 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.754062 **DATE COLLECTED:** 10 / 29 / 1952

SURFACE ELEVATION (FT.): 419.2 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-67 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.2			CLAY	7.0	0.0	
412.2			CLAY	3.0	7.0	
409.2			UNCLASSIFIED	23.0	10.0	GLACIAL DRIFT
386.2	MODESTO		GRAY SHALE	4.5	33.0	
381.7	MODESTO		SANDSTONE	1.5	37.5	
380.2	MODESTO		GRAY SHALE	5.0	39.0	
375.2	MODESTO		SANDSTONE	2.0	44.0	
373.2	MODESTO		GRAY SHALE	7.0	46.0	
366.2	MODESTO		GRAY SHALE	10.0	53.0	
356.2	MODESTO		GRAY SHALE	13.0	63.0	
343.2	MODESTO		LIMESTONE	1.3	76.0	
341.9	MODESTO		CALCAREOUS SHALE	7.7	77.3	
334.2	MODESTO		GRAY SHALE	7.0	85.0	
327.2	MODESTO	PIASA	LIMESTONE	1.0	92.0	
326.2	MODESTO		CALCAREOUS SHALE	4.5	93.0	
321.7			GRAY SHALE	2.5	97.5	
319.2			LIMESTONE	0.8	100.0	
318.4			CALCAREOUS SHALE	6.3	100.8	
312.2	CARBONDALE		GRAY SHALE	4.3	107.0	
307.9	CARBONDALE	ALLENBY	COAL	0.5	111.3	
307.4	CARBONDALE		GRAY SHALE	8.3	111.8	
299.2	CARBONDALE	BANKSTON FORK	LIMESTONE	1.3	120.0	
297.9	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	4.8	121.3	
293.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	126.0	
289.9	CARBONDALE		CALCAREOUS SHALE	5.0	129.3	
284.9	CARBONDALE		GRAY SHALE	8.7	134.3	
276.2	CARBONDALE		SANDY SHALE	9.0	143.0	
267.2	CARBONDALE		COAL	1.8	152.0	
265.4	CARBONDALE		GRAY SHALE	10.2	153.8	
255.2	CARBONDALE	BRERETON	LIMESTONE	1.3	164.0	
253.9	CARBONDALE		DARK GRAY SHALE	6.8	165.3	
247.2	CARBONDALE	HERRIN	COAL	3.8	172.0	
243.4	CARBONDALE		UNDERCLAY	1.0	175.8	
242.4	CARBONDALE		GRAY SANDSTONE	0.1	176.8	
242.4	CARBONDALE		DARK GRAY SHALE	1.2	176.8	
241.2	CARBONDALE		GRAY SHALE	7.0	178.0	
234.2	CARBONDALE		SANDY SHALE	7.0	185.0	
227.2	CARBONDALE		GRAY SANDSTONE	3.3	192.0	
223.9	CARBONDALE	BRIAR HILL	COAL	0.7	195.3	

223.2	CARBONDALE		GRAY SHALE	12.0	196.0	
211.2	CARBONDALE		SANDY SHALE	9.0	208.0	
202.2	CARBONDALE		GRAY SANDSTONE	9.0	217.0	
193.2	CARBONDALE		GRAY SHALE	4.0	226.0	
189.2	CARBONDALE		SANDSTONE	12.3	230.0	
176.9	CARBONDALE		SANDSTONE	7.3	242.3	
169.6	CARBONDALE		SANDY SHALE	2.4	249.6	
167.2	CARBONDALE		SANDSTONE	0.1	252.0	
167.1	CARBONDALE		SANDY SHALE	0.1	252.1	
167.0	CARBONDALE		SANDSTONE	2.5	252.2	SS W/ COAL STREAKS
164.5	CARBONDALE		SANDY SHALE	0.4	254.7	
164.2	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.2	255.0	
162.9	CARBONDALE	DYKERSBURG	SANDY SHALE	4.8	256.3	
158.2	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	261.0	
156.2	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	263.0	
134.2	CARBONDALE	DYKERSBURG	SANDY SHALE	8.1	285.0	
126.1	CARBONDALE	SPRINGFIELD	COAL	4.5	293.1	
121.6	CARBONDALE		UNDERCLAY	1.3	297.6	
120.4	CARBONDALE		GRAY SANDSTONE	1.2	298.8	

MAPID: 16501348000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 152' N line, 54' E line of NE SE SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.698405 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.749336 **DATE COLLECTED:** 1 / 1 / 1954

SURFACE ELEVATION (FT.): 472.9 **LOGGED (FT.):** 351.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-118 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.9			CLAY	5.0	0.0	
467.9			CLAY	4.0	5.0	
463.9			SANDSTONE	4.0	9.0	
459.9			SANDSTONE	5.0	13.0	
454.9			GRAY SANDSTONE	3.0	18.0	
451.9			GRAY SANDSTONE	35.0	21.0	
416.9			SANDSTONE	12.0	56.0	
404.9			GRAY SHALE	18.0	68.0	
386.9			GRAY SHALE	24.0	86.0	
362.9			LIMESTONE	4.0	110.0	
358.9			GRAY SHALE	15.0	114.0	
343.9			GRAY SHALE	58.0	129.0	STICKY, LIGHT GRAY SHALE
285.9	CARBONDALE		SANDSTONE	18.0	187.0	
267.9	CARBONDALE		GRAY SHALE	1.0	205.0	
266.9	CARBONDALE	BRERETON	LIMESTONE	2.0	206.0	
264.9	CARBONDALE	BRERETON	LIMESTONE	2.5	208.0	
262.4	CARBONDALE	ANNA	BLACK SHALE	1.8	210.5	
260.6	CARBONDALE	ENERGY	DARK GRAY SHALE	1.9	212.3	
258.6	CARBONDALE	ENERGY	DARK GRAY SHALE	6.5	214.3	
252.1	CARBONDALE	HERRIN	COAL	4.1	220.8	
248.1	CARBONDALE		UNDERCLAY	0.5	224.8	
247.6	CARBONDALE		GRAY SHALE	21.0	225.3	LGY SH W/ THIN LIME STREAKS
226.6	CARBONDALE		DARK GRAY SHALE	9.7	246.3	
216.9	CARBONDALE		SANDSTONE	22.0	256.0	
194.9	CARBONDALE		SHALE	15.0	278.0	
179.9	CARBONDALE		SANDSTONE	20.0	293.0	
159.9	CARBONDALE		GRAY SHALE	3.0	313.0	
156.9	CARBONDALE		DARK GRAY SHALE	0.3	316.0	
156.6	CARBONDALE		DARK GRAY SHALE	12.8	316.3	
143.9	CARBONDALE		DARK GRAY SHALE	12.0	329.0	
131.9	CARBONDALE		DARK GRAY SHALE	5.1	341.0	
126.8	CARBONDALE	SPRINGFIELD	COAL	4.3	346.1	
122.6	CARBONDALE		UNDERCLAY	1.0	350.3	

MAPID: 16526138000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 25' S line, 10' W line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.707177 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.753458 **DATE COLLECTED:** 8 / 15 / 1974

SURFACE ELEVATION (FT.): 480.2 **LOGGED (FT.):** 388.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO/AYRSHIRE COAL CO.C317 **WELL TYPE:** Coal Test

COMMENT: PERMIT 80; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.2	PLEISTOCENE		SILT	1.0	0.0	
479.2	PLEISTOCENE		CLAY	6.0	1.0	
473.2	MODESTO		SANDY SHALE	11.0	7.0	
462.2	MODESTO		SANDSTONE	50.0	18.0	
412.2	MODESTO		SANDY SHALE	20.0	68.0	
392.2	MODESTO		GRAY SHALE	14.5	88.0	
377.7	MODESTO		COAL	1.5	102.5	
376.2	MODESTO		UNDERCLAY	1.0	104.0	
375.2	MODESTO		GRAY SHALE	45.5	105.0	
329.7	MODESTO		LIMESTONE	1.0	150.5	
328.7	MODESTO		GRAY SHALE	6.5	151.5	
322.2	MODESTO		SANDY SHALE	37.0	158.0	
285.2	MODESTO		COAL	0.7	195.0	
284.5	MODESTO		UNDERCLAY	1.3	195.7	
283.2	CARBONDALE		GRAY SHALE	1.0	197.0	
282.2	CARBONDALE	DANVILLE	COAL	1.0	198.0	
281.2	CARBONDALE		UNDERCLAY	1.0	199.0	
280.2	CARBONDALE		GRAY SHALE	3.0	200.0	
277.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	203.0	
272.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	30.0	208.0	
242.2	CARBONDALE		GRAY SHALE	8.0	238.0	DARK
234.2	CARBONDALE	JAMESTOWN	BLACK SHALE	0.5	246.0	
233.7	CARBONDALE	BRERETON	LIMESTONE	8.5	246.5	
225.2	CARBONDALE	ANNA	BLACK SHALE	2.5	255.0	
222.7	CARBONDALE	ENERGY	GRAY SHALE	1.0	257.5	
221.7	CARBONDALE	HERRIN	COAL	5.3	258.5	
216.4	CARBONDALE		UNDERCLAY	2.2	263.8	
214.2	CARBONDALE		SANDY SHALE	64.0	266.0	
150.2	CARBONDALE		GRAY SHALE	8.0	330.0	
142.2	CARBONDALE		SANDY SHALE	2.0	338.0	
140.2	CARBONDALE		GRAY SHALE	33.0	340.0	
107.2	CARBONDALE	SPRINGFIELD	COAL	4.4	373.0	
102.8	CARBONDALE		UNDERCLAY	1.6	377.4	
101.2	CARBONDALE		SANDY SHALE	9.0	379.0	

MAPID: 16526179000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 370' S line, 760' E line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.691898 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.750745 **DATE COLLECTED:** 12 / 19 / 1985
SURFACE ELEVATION (FT.): 418.7 **LOGGED (FT.):** 28.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. C273AP **WELL TYPE:** Water Well
COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.7	PLEISTOCENE		CLAY	26.5	0.0	BROWN
392.2			SANDSTONE	1.5	26.5	GRAY

MAPID: 16526180000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 263' S line, 434' W line of NE SE
QUADRANGLE: HARCO **LONGITUDE:** -88.692005 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.750544 **DATE COLLECTED:** 12 / 11 / 1980
SURFACE ELEVATION (FT.): 418.6 **LOGGED (FT.):** 28.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. C273LA **WELL TYPE:** Water Well
COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.6	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	CLAY
398.6	PLEISTOCENE		SILTY CLAYSTONE	5.0	20.0	GRAY
393.6			SANDSTONE	3.0	25.0	SOFT

MAPID: 16590882000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 7 **QUARTERS/FOOTAGES:** 300' N line, 475' E line of SE SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.699866 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748918 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 390.1 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 92-40 **WELL TYPE:** Coal Test

COMMENT: PERMIT #110 MINE #21

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.0	PLEISTOCENE		CLAY	6.0	0.0	
448.0	PLEISTOCENE		SAND	28.0	6.0	
420.0	MODESTO		SHALY SANDSTONE	18.0	34.0	
402.0	MODESTO		SHALE	26.2	52.0	
375.8	MODESTO		SANDY SHALE	15.8	78.2	
360.0	MODESTO		SANDSTONE	30.6	94.0	
329.4	MODESTO		SANDY SHALE	16.4	124.6	
313.0	MODESTO		LIMESTONE	1.5	141.0	
311.5	MODESTO		SHALE	7.3	142.5	
304.2	MODESTO		SANDSTONE	11.6	149.8	
292.7	MODESTO		SANDY SHALE	31.7	161.3	
261.0	CARBONDALE	DANVILLE	COAL	2.0	193.0	
259.0	CARBONDALE		SHALE	4.0	195.0	
255.0	CARBONDALE	ANVIL ROCK	SANDSTONE	22.0	199.0	
233.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	1.8	221.0	
231.2	CARBONDALE	ANVIL ROCK	SANDSTONE	4.2	222.8	
227.0	CARBONDALE	CONANT	LIMESTONE	0.5	227.0	
226.5	CARBONDALE		SANDSTONE	5.5	227.5	
221.0	CARBONDALE		SHALE	3.5	233.0	LIMEY
217.5	CARBONDALE	BRERETON	LIMESTONE	5.6	236.5	
211.9	CARBONDALE		DARK SHALE	1.2	242.1	
210.7	CARBONDALE		BLACK SHALE	6.6	243.3	
204.2	CARBONDALE		SHALE	8.6	249.8	
195.6	CARBONDALE		BLACK SHALE	2.7	258.4	
192.9	CARBONDALE	HERRIN	COAL	2.3	261.1	
190.6	CARBONDALE	HERRIN	COAL	4.5	263.4	
186.1	CARBONDALE		UNDERCLAY	3.5	267.9	
182.6	CARBONDALE		SANDY SHALE	32.8	271.4	
149.8	CARBONDALE		SANDSTONE	36.8	304.2	
112.9	CARBONDALE		SANDY SHALE	8.0	341.1	
104.9	CARBONDALE		SANDSTONE	11.0	349.1	
93.9	CARBONDALE		SANDY SHALE	30.0	360.1	
63.9	CARBONDALE	SPRINGFIELD	MINE OPENING	-	390.1	OLD MINE WORKS

MAPID: 16500363000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.673199 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.759009 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 479.5 **LOGGED (FT.):** 246.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.5			UNCONSOLIDATED	11.6	0.0	
467.9	MODESTO		SANDSTONE	4.2	11.6	
463.7	MODESTO		SHALE	5.3	15.8	
458.4	MODESTO		COAL	0.7	21.1	W/ SH
457.7	MODESTO		BLACK SHALE	0.5	21.8	
457.3	MODESTO		SHALE	4.8	22.2	
452.5	MODESTO		SHALE	5.3	27.0	
447.2	MODESTO		SHALE	12.0	32.3	
435.2	MODESTO		COAL	0.1	44.3	
435.1	MODESTO		SHALE	0.3	44.4	
434.7	MODESTO		CLAYSTONE	0.5	44.8	
434.2	MODESTO	PIASA	LIMESTONE	4.8	45.3	
429.4	MODESTO		BLACK SHALE	1.6	50.1	
427.8	MODESTO		SHALE	4.9	51.7	
423.0	CARBONDALE	DANVILLE	COAL	2.0	56.5	
421.0	CARBONDALE		SHALE	3.3	58.5	
417.7	CARBONDALE		SANDSTONE	5.2	61.8	
412.5	CARBONDALE		SHALE	3.3	67.0	
409.2	CARBONDALE		COAL	0.2	70.3	
409.0	CARBONDALE		SHALE	1.7	70.5	
407.3	CARBONDALE		COAL	0.5	72.2	
406.8	CARBONDALE		SHALE	7.8	72.7	
399.0	CARBONDALE		CALCAREOUS SHALE	2.8	80.5	
396.2	CARBONDALE		SHALE	3.6	83.3	
392.6	CARBONDALE		COAL	0.4	86.9	
392.2	CARBONDALE		COAL	0.5	87.3	
391.8	CARBONDALE		SHALE	0.5	87.7	
391.3	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	88.2	
385.3	CARBONDALE	ANVIL ROCK	SHALE	23.7	94.2	
361.6	CARBONDALE	ANVIL ROCK	LIMESTONE	0.5	117.9	
361.1	CARBONDALE	JAMESTOWN	COAL	0.3	118.4	
360.9	CARBONDALE		SHALE	0.2	118.6	
360.7	CARBONDALE	BRERETON	LIMESTONE	4.8	118.8	
355.8	CARBONDALE		BLACK SHALE	1.8	123.7	
354.1	CARBONDALE		LIMESTONE	0.2	125.4	
353.9	CARBONDALE	HERRIN	COAL	1.3	125.6	
352.6	CARBONDALE	HERRIN	COAL WITH SHALE	0.2	126.9	
352.4	CARBONDALE	HERRIN	COAL	3.5	127.1	
348.9	CARBONDALE	HERRIN	COAL	1.0	130.6	

347.9	CARBONDALE		DARK SHALE	2.0	131.6
345.9	CARBONDALE		SHALE	18.3	133.6
327.6	CARBONDALE		SHALE	9.9	151.9
317.7	CARBONDALE	DYKERSBURG	SANDSTONE	6.2	161.8
311.6	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	167.9
301.5	CARBONDALE	DYKERSBURG	SANDSTONE	7.5	178.0
294.0	CARBONDALE	DYKERSBURG	SANDY SHALE	0.8	185.5
293.3	CARBONDALE	DYKERSBURG	SANDSTONE	10.2	186.2
283.1	CARBONDALE	DYKERSBURG	SHALE	34.9	196.4
248.2	CARBONDALE	SPRINGFIELD	COAL	4.3	231.3
243.9	CARBONDALE		UNDERCLAY/SHALE	0.6	235.6
243.3	CARBONDALE		SHALE	10.0	236.2

MAPID: 16500365000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.682372 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.759006 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 446.5 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
446.5			UNCONSOLIDATED	15.0	0.0	
431.5	CARBONDALE		SHALE	3.0	15.0	
428.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	18.0	
425.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	21.0	
423.5	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	23.0	
403.5	CARBONDALE	ANVIL ROCK	SHALE	22.0	43.0	
381.5	CARBONDALE	BRERETON	LIMESTONE	2.0	65.0	
379.5	CARBONDALE	BRERETON	LIMESTONE	4.4	67.0	
375.1	CARBONDALE		COAL	0.1	71.4	
375.0	CARBONDALE	ANNA	BLACK SHALE	2.3	71.5	
372.7	CARBONDALE	HERRIN	COAL	5.1	73.8	
367.6	CARBONDALE		UNDERCLAY	3.1	78.9	
364.5	CARBONDALE		DARK SHALE	35.0	82.0	
329.5	CARBONDALE	DYKERSBURG	SANDSTONE	36.0	117.0	
293.5	CARBONDALE	DYKERSBURG	DARK SHALE	40.0	153.0	
253.5	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	193.0	
252.5	CARBONDALE	SPRINGFIELD	COAL	4.4	194.0	
248.1	CARBONDALE		UNDERCLAY	1.6	198.4	

MAPID: 16500367000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.68233 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.751637 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 421.4 **LOGGED (FT.):** 246.4 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.4			UNCLASSIFIED	18.0	0.0	
403.4	MODESTO		SANDSTONE	2.3	18.0	
401.1	MODESTO	PIASA	LIMESTONE	1.8	20.3	
399.4	MODESTO		SHALE	2.7	22.0	
396.7	MODESTO		SHALE	3.7	24.7	
393.1	MODESTO		SHALE	1.8	28.3	
391.2	CARBONDALE	DANVILLE	COAL	1.1	30.2	
390.1	CARBONDALE		SHALE	1.4	31.3	
388.7	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	32.7	
383.7	CARBONDALE	ANVIL ROCK	SHALE	26.4	37.7	
357.3	CARBONDALE	BRERETON	LIMESTONE	5.3	64.1	
352.0	CARBONDALE	ANNA	BLACK SHALE	1.8	69.4	
350.3	CARBONDALE	HERRIN	COAL	5.3	71.1	
344.9	CARBONDALE		UNDERCLAY	0.5	76.5	
344.4	CARBONDALE		SHALE	37.1	77.0	
307.4	CARBONDALE		SANDSTONE	44.0	114.0	
263.3	CARBONDALE		SHALE	25.0	158.1	
238.3	CARBONDALE	BRIAR HILL	COAL	0.5	183.1	
237.8	CARBONDALE		SHALE	3.5	183.6	
234.3	CARBONDALE		SHALE	24.8	187.1	
209.5	CARBONDALE		DARK SHALE	9.1	211.9	
200.4	CARBONDALE		SHALE	25.3	221.0	

MAPID: 16500368000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE SW SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685186 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.747492 **DATE COLLECTED:** 8 / 18 / 1905

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 192.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	15.8	0.0	
389.2			BLACK SHALE	11.5	15.8	
377.7			BONE COAL	0.8	27.3	
376.9			UNDERCLAY	0.5	28.1	
376.4			ARGILACEOUS SHALE	6.3	28.6	
370.1			SANDSTONE	3.5	34.9	
366.6			SHALE	4.1	38.4	
362.5			SHALE	4.7	42.5	
357.8			SHALE	21.8	47.2	W/ SS
336.0			SHALE	4.7	69.0	
331.3				6.5	73.7	
324.8			SANDSTONE/SHALE	11.7	80.2	
313.1			SANDSTONE/COAL	8.7	91.9	
304.4			SHALE	0.5	100.6	
304.0			SANDSTONE/SHALE	3.0	101.0	
300.9			COAL	0.5	104.1	
300.5			DARK SHALE	2.8	104.5	
297.7			SANDSTONE	1.5	107.3	
296.2			SHALE	3.3	108.8	
292.9			COAL	0.3	112.1	
292.6			LIMESTONE	2.7	112.4	
289.9			SHALE	0.9	115.1	
289.0			COAL	0.8	116.0	
288.1			SHALE	1.3	116.9	
286.8			SHALE	2.8	118.2	
284.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	121.0	
279.0	CARBONDALE		SHALE	2.9	126.0	
276.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.1	128.9	
271.0	CARBONDALE	ANVIL ROCK	DARK SHALE	1.6	134.0	
269.4	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	8.5	135.6	
260.9	CARBONDALE	ANVIL ROCK	SHALE	7.2	144.1	
253.7	CARBONDALE	ANVIL ROCK	SHALE	9.6	151.3	
244.1	CARBONDALE	ANVIL ROCK	SHALE	0.7	160.9	
243.4	CARBONDALE	JAMESTOWN	COAL	0.2	161.6	
243.2	CARBONDALE		LIMESTONE	0.3	161.8	
243.0	CARBONDALE		BLACK SHALE	2.3	162.0	
240.7	CARBONDALE	BRERETON	LIMESTONE	7.1	164.3	
233.6	CARBONDALE	ANNA	BLACK SHALE	0.8	171.4	
232.9	CARBONDALE	HERRIN	COAL	5.5	172.1	

227.4	CARBONDALE	BLACK SHALE	1.0	177.6
226.4	CARBONDALE	SHALE	2.8	178.6
223.6	CARBONDALE	SHALE	10.8	181.4

MAPID: 16500368000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685186 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.747492 **DATE COLLECTED:** 8 / 18 / 1905
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 192.2 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	15.0	0.0	
390.0			ROCK	97.1	15.0	
292.9			COAL	0.3	112.1	
292.6			ROCK	3.6	112.4	
289.0			COAL	0.8	116.0	
288.1			ROCK	30.3	116.9	
257.9			SHALE	14.6	147.1	
243.2			LIMESTONE	0.3	161.8	
243.0			BLACK SHALE	2.3	162.0	
240.7			LIMESTONE	7.1	164.3	
233.6			BLACK SHALE	0.8	171.4	
232.9	CARBONDALE	HERRIN	COAL	5.5	172.1	
227.4	CARBONDALE		ROCK	0.0	177.6	

MAPID: 16500369000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE NE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67138 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.748406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 279.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.0	CARBONDALE	HERRIN	COAL	5.3	149.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	4.2	274.0	

MAPID: 16500369000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE NE SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67138 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.748406 **DATE COLLECTED:** 7 / 8 / 1905

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 279.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	33.5	0.0	
391.5			ROCK	33.0	33.5	
358.5			COAL	1.0	66.5	
357.5			ROCK	13.5	67.5	
344.0			COAL	0.2	81.0	
343.8			ROCK	34.0	81.2	
309.8			SHALE	20.0	115.2	
289.8			SANDSTONE	7.3	135.2	
282.5			LIMESTONE	2.2	142.5	
280.3			SILTSTONE	4.2	144.7	
276.2	CARBONDALE	HERRIN	COAL	5.3	148.8	
270.9	CARBONDALE		UNDERCLAY	4.0	154.1	
266.9	CARBONDALE		ROCK	92.1	158.1	
174.8	CARBONDALE		SHALE	17.5	250.2	
157.3	CARBONDALE		SILTSTONE	6.0	267.7	
151.3	CARBONDALE	SPRINGFIELD	COAL	4.2	273.7	
147.2	CARBONDALE		UNDERCLAY	0.0	277.8	

MAPID: 16500369000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE NE SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67138 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.748406 **DATE COLLECTED:** 7 / 8 / 1905

SURFACE ELEVATION (FT.): 425.1 **LOGGED (FT.):** 279.2 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.1			UNCONSOLIDATED	33.5	0.0	
391.6	MODESTO		SANDSTONE	4.0	33.5	
387.6	MODESTO		ARGILACEOUS SHALE	28.0	37.5	
359.6	MODESTO		SHALE	1.0	65.5	
358.6	CARBONDALE	DANVILLE	COAL	1.0	66.5	
357.6	CARBONDALE		UNDERCLAY	4.0	67.5	
353.6	CARBONDALE		SANDY SHALE	9.5	71.5	
344.1	CARBONDALE	ALLENBY	COAL	0.2	81.0	
343.9	CARBONDALE		UNDERCLAY	2.0	81.2	
341.9	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	83.2	
340.9	CARBONDALE		SANDY SHALE	31.0	84.2	
309.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.0	115.2	
289.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.3	135.2	
288.6	CARBONDALE	ANVIL ROCK	SHALE	6.0	136.5	
282.6	CARBONDALE	BRERETON	LIMESTONE	2.2	142.5	
280.4	CARBONDALE	ANNA	SHALE	4.2	144.7	
276.3	CARBONDALE	HERRIN	COAL	5.3	148.8	
271.0	CARBONDALE		UNDERCLAY	4.0	154.1	
267.0	CARBONDALE		SHALE	5.0	158.1	
262.0	CARBONDALE		SANDY SHALE	19.0	163.1	
243.0	CARBONDALE		BLACK SHALE	10.0	182.1	
233.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.1	192.1	
227.9	CARBONDALE	DYKERSBURG	SANDY SHALE	53.0	197.2	
174.9	CARBONDALE	DYKERSBURG	SANDY SHALE	17.5	250.2	
157.4	CARBONDALE	DYKERSBURG	SHALE	6.0	267.7	
151.4	CARBONDALE	SPRINGFIELD	COAL	4.2	273.7	
147.3	CARBONDALE		UNDERCLAY	1.3	277.8	

MAPID: 16500370000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675418 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.749791 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 382.5 **LOGGED (FT.):** 305.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.5			UNCONSOLIDATED	55.0	0.0	
327.5	MODESTO		SHALE	5.0	55.0	
322.5	MODESTO		SANDY SHALE	3.0	60.0	
319.5	MODESTO		DARK SHALE	26.5	63.0	
293.0	CARBONDALE	DANVILLE	COAL	1.8	89.5	
291.2	CARBONDALE		GRAY SHALE	13.7	91.3	
277.5	CARBONDALE	ALLENBY	COAL	0.5	105.0	
277.0	CARBONDALE		GRAY SHALE	7.5	105.5	
269.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	113.0	
264.5	CARBONDALE		DARK SHALE	10.0	118.0	
254.5	CARBONDALE		SANDSTONE	6.0	128.0	
248.5	CARBONDALE		COAL	0.5	134.0	
248.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.5	134.5	
235.5	CARBONDALE	ANVIL ROCK	DARK SHALE	13.0	147.0	
222.5	CARBONDALE	ANNA	BLACK SHALE	1.3	160.0	
221.2	CARBONDALE	HERRIN	COAL	5.2	161.3	
216.1	CARBONDALE		GRAY SHALE	24.1	166.4	
192.0	CARBONDALE	BRIAR HILL	COAL	0.5	190.5	
191.5	CARBONDALE	DYKERSBURG	DARK SHALE	7.0	191.0	
184.5	CARBONDALE	DYKERSBURG	GRAY SHALE	20.0	198.0	
164.5	CARBONDALE	DYKERSBURG	DARK SHALE	10.0	218.0	
154.5	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	228.0	
134.5	CARBONDALE	DYKERSBURG	GRAY SHALE	48.0	248.0	
86.5	CARBONDALE	DYKERSBURG	SANDSTONE	1.8	296.0	
84.7	CARBONDALE	SPRINGFIELD	COAL	5.3	297.8	
79.5	CARBONDALE		UNDERCLAY	2.0	303.0	

MAPID: 16500371000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680576 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.74657 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.4 **LOGGED (FT.):** 257.4 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.4			UNCONSOLIDATED	22.9	0.0	
374.5	MODESTO		SHALE	9.5	22.9	
365.0	MODESTO		COAL	0.2	32.4	
364.9	MODESTO		SHALE	30.1	32.5	
334.7	MODESTO		SANDSTONE	18.8	62.7	
315.9	MODESTO		SHALE	5.3	81.5	
310.6	MODESTO		BLACK SHALE	0.6	86.8	
310.1	MODESTO		UNDERCLAY	0.7	87.3	
309.4	MODESTO		SHALE	4.0	88.0	
305.4	MODESTO		SHALE	7.1	92.0	
298.3	CARBONDALE	DANVILLE	COAL	2.3	99.1	
295.9	CARBONDALE		SHALE	7.8	101.5	
288.1	CARBONDALE		COAL	0.3	109.3	
287.9	CARBONDALE		SANDSTONE	2.6	109.5	
285.3	CARBONDALE		SHALE	1.7	112.1	
283.6	CARBONDALE		COAL	0.5	113.8	
283.1	CARBONDALE		DARK SHALE	0.5	114.3	
282.6	CARBONDALE		SHALE	1.5	114.8	
281.1	CARBONDALE		CALCAREOUS SHALE	3.4	116.3	
277.7	CARBONDALE		SHALE	11.0	119.7	
266.7	CARBONDALE		COAL	0.1	130.7	
266.6	CARBONDALE	ANVIL ROCK	SHALE	15.3	130.8	
251.4	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	146.0	
246.9	CARBONDALE	ANVIL ROCK	SHALE	3.1	150.5	
243.8	CARBONDALE	ANVIL ROCK	SANDSTONE	7.3	153.6	
236.5	CARBONDALE	ANVIL ROCK	SHALE	4.0	160.9	
232.5	CARBONDALE	JAMESTOWN	COAL	0.2	164.9	
232.3	CARBONDALE		UNDERCLAY	1.2	165.1	
231.1	CARBONDALE		SHALE	2.4	166.3	
228.8	CARBONDALE	BRERETON	LIMESTONE	6.2	168.6	
222.6	CARBONDALE	HERRIN	COAL	5.5	174.8	
217.1	CARBONDALE		UNDERCLAY	0.4	180.3	
216.7	CARBONDALE		DARK SHALE	1.8	180.7	
215.0	CARBONDALE		SHALE	9.7	182.4	W/ LS STREAK
205.3	CARBONDALE	DYKERSBURG	SHALE	35.4	192.1	
169.9	CARBONDALE	DYKERSBURG	SANDSTONE	29.9	227.5	

MAPID: 16500371000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680576 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.74657 **DATE COLLECTED:** 4 / 21 / 1982

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 257.5 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	22.9	0.0	
374.1			ROCK	76.3	22.9	
297.9	CARBONDALE	DANVILLE	COAL	2.3	99.1	
295.5	CARBONDALE		ROCK	12.3	101.5	
283.2	CARBONDALE		COAL	0.5	113.8	
282.7	CARBONDALE		ROCK	16.4	114.3	
266.3	CARBONDALE		COAL	0.1	130.7	
266.2	CARBONDALE		ROCK	34.1	130.8	
232.1	CARBONDALE		COAL	0.2	164.9	
231.9	CARBONDALE		UNDERCLAY	1.2	165.1	
230.7	CARBONDALE		SHALE	2.3	166.3	
228.4	CARBONDALE		LIMESTONE	6.2	168.6	
222.2	CARBONDALE	HERRIN	COAL	5.5	174.8	
216.7	CARBONDALE		UNDERCLAY	0.4	180.3	
216.3			ROCK	0.0	180.7	

MAPID: 16500372000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW SW SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674819 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.746565 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 312.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0			UNCONSOLIDATED	18.0	0.0	
378.0			DARK SHALE	4.5	18.0	
373.5			COAL	0.4	22.5	
373.1			UNDERCLAY	3.1	22.9	
370.0			SHALE	5.0	26.0	
365.0			GRAY SHALE	17.0	31.0	
348.0			SANDSTONE	21.0	48.0	
327.0			DARK SHALE	9.0	69.0	
318.0			DARK SHALE	2.7	78.0	
315.3			COAL	0.2	80.7	
315.2			GRAY SHALE	1.2	80.8	
314.0			CALCAREOUS SHALE	1.0	82.0	
313.0			LIMESTONE	2.0	83.0	
311.0			CALCAREOUS SHALE	1.0	85.0	
310.0			DARK SHALE	2.0	86.0	
308.0			GRAY SHALE	2.0	88.0	
306.0			DARK SHALE	2.8	90.0	
303.2			COAL	1.7	92.8	
301.5			DARK SHALE	12.2	94.5	
289.3			COAL	0.8	106.7	
288.5			DARK SHALE	8.5	107.5	
280.0			COAL	0.1	116.0	
279.9			UNDERCLAY	1.9	116.1	
278.0			GRAY SHALE	2.0	118.0	
276.0			SANDY SHALE	23.5	120.0	
252.5			SANDSTONE	17.0	143.5	
235.5			DARK SHALE	1.2	160.5	
234.3			COAL	0.2	161.7	
234.2	CARBONDALE	ANNA	DARK SHALE	3.2	161.8	
231.0	CARBONDALE	HERRIN	COAL	5.3	165.0	
225.7	CARBONDALE		UNDERCLAY	2.3	170.3	
223.5	CARBONDALE		GRAY SHALE	5.5	172.5	
218.0	CARBONDALE		SANDY SHALE	16.3	178.0	
201.7	CARBONDALE	BRIAR HILL	COAL	1.1	194.3	W/ BKSH
200.7	CARBONDALE	DYKERSBURG	SANDY SHALE	20.7	195.3	
180.0	CARBONDALE	DYKERSBURG	SANDSTONE	55.0	216.0	
125.0	CARBONDALE		SANDY DARK SHALE	9.0	271.0	
116.0	CARBONDALE		SANDY SHALE	25.2	280.0	
90.8	CARBONDALE	SPRINGFIELD	COAL	5.3	305.2	

85.5	CARBONDALE		UNDERCLAY	1.5	310.5

MAPID: 16500372000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW SW SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674819 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.746565 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 312.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG-SALINE COLLIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0			UNCONSOLIDATED	7.0	0.0	
389.0			ROCK	15.5	7.0	
373.5			COAL	0.4	22.5	
373.1			ROCK	57.8	22.9	
315.3			COAL	0.2	80.7	
315.2			ROCK	12.0	80.8	
303.2			COAL	1.7	92.8	
301.5			ROCK	12.2	94.5	
289.3			COAL	0.9	106.7	
288.5			ROCK	8.5	107.5	
280.0			COAL	0.1	116.0	
279.9			ROCK	20.6	116.1	
259.3			SHALE	6.8	136.7	
252.5			SANDSTONE	17.1	143.5	
235.4			BLACK SHALE	1.1	160.6	
234.3			COAL	0.2	161.7	
234.2			BLACK SHALE	3.2	161.8	
231.0	CARBONDALE	HERRIN	COAL	5.3	165.0	
225.7	CARBONDALE		UNDERCLAY	2.3	170.3	
223.5	CARBONDALE		ROCK	21.8	172.5	
201.7	CARBONDALE	BRIAR HILL	COAL	1.1	194.3	
200.7	CARBONDALE		ROCK	84.7	195.3	
116.0	CARBONDALE		BLACK SHALE	25.2	280.0	
90.8	CARBONDALE	SPRINGFIELD	COAL	5.3	305.2	
85.5	CARBONDALE		UNDERCLAY	1.5	310.5	

MAPID: 16500920000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 590' N line, 560' E line of NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.677442 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.759222 **DATE COLLECTED:** 10 / 19 / 1948

SURFACE ELEVATION (FT.): 449.8 **LOGGED (FT.):** 209.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-20 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.8			CLAY	4.0	0.0	
445.8			SANDSTONE	4.0	4.0	
441.8			SANDSTONE	14.0	8.0	
427.8			SHALE	15.0	22.0	
412.8			LIMESTONE	3.0	37.0	
409.8			SHALE	39.0	40.0	
370.8			LIMESTONE	4.8	79.0	
366.0			SHALE	62.0	83.8	
304.0			LIMESTONE	4.2	145.8	
299.8			SANDSTONE	10.0	150.0	
289.8			SHALE	10.0	160.0	
279.8			SHALE	34.2	170.0	
245.6	CARBONDALE	SPRINGFIELD	COAL	3.9	204.2	
241.7	CARBONDALE		UNDERCLAY	1.0	208.1	

MAPID: 16500921000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 290' N line, 520' E line of NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.677308 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760049 **DATE COLLECTED:** 10 / 22 / 1948

SURFACE ELEVATION (FT.): 456.9 **LOGGED (FT.):** 220.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.9			CLAY	2.5	0.0	
454.4	MODESTO		SANDSTONE	4.0	2.5	
450.4	MODESTO		SANDSTONE	8.0	6.5	
442.4	MODESTO		SHALE	2.5	14.5	
439.9	MODESTO	PIASA	LIMESTONE	4.8	17.0	
435.1	MODESTO		SHALE	5.2	21.8	
429.9	CARBONDALE	DANVILLE	COAL	3.0	27.0	
426.9	CARBONDALE		SHALE	18.0	30.0	
408.9	CARBONDALE		LIMESTONE	2.0	48.0	
406.9	CARBONDALE		SHALE	1.0	50.0	
405.9	CARBONDALE		LIMESTONE	2.5	51.0	
403.4	CARBONDALE		SHALE	3.5	53.5	
399.9	CARBONDALE		COAL	1.0	57.0	
398.9	CARBONDALE		SHALE	31.0	58.0	
367.9	CARBONDALE	BRERETON	LIMESTONE	5.2	89.0	
362.7	CARBONDALE	ANNA	BLACK SHALE	5.5	94.2	
357.2	CARBONDALE	HERRIN	COAL	6.1	99.7	
351.1	CARBONDALE		UNDERCLAY	1.5	105.8	
349.6	CARBONDALE		SHALE	57.8	107.3	
291.9	CARBONDALE		SHALE	10.0	165.0	
281.9	CARBONDALE		SHALE	40.8	175.0	
241.1	CARBONDALE	SPRINGFIELD	COAL	4.1	215.8	
237.1	CARBONDALE		UNDERCLAY	0.8	219.8	

MAPID: 16500923000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 70' S line, 915' E line of NW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.67866 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757356 **DATE COLLECTED:** 11 / 1 / 1948

SURFACE ELEVATION (FT.): 443.9 **LOGGED (FT.):** 204.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-23 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.9			CLAY	8.0	0.0	
435.9	MODESTO		SHALE	2.0	8.0	
433.9	MODESTO		SANDSTONE	10.0	10.0	
423.9	CARBONDALE	DANVILLE	COAL	2.5	20.0	
421.4	CARBONDALE		SHALE	11.0	22.5	
410.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	33.5	
407.9	CARBONDALE		SHALE	38.8	36.0	
369.1	CARBONDALE	BRERETON	LIMESTONE	4.3	74.8	
364.8	CARBONDALE	ANNA	BLACK SHALE	2.3	79.1	
362.5	CARBONDALE	HERRIN	COAL	6.3	81.4	
356.1	CARBONDALE		SHALE	81.3	87.8	
274.9	CARBONDALE		SHALE	29.4	169.0	
245.5	CARBONDALE	SPRINGFIELD	COAL	4.3	198.4	
241.2	CARBONDALE		UNDERCLAY	1.3	202.7	

MAPID: 16500935000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 19' S line, 13' W line of SW SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.68919 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.75353 **DATE COLLECTED:** 10 / 12 / 1949

SURFACE ELEVATION (FT.): 438.3 **LOGGED (FT.):** 333.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-35 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.3			CLAY	15.0	0.0	
423.3			SANDSTONE	2.0	15.0	
421.3			SANDSTONE	4.0	17.0	
417.3			SANDSTONE	10.0	21.0	
407.3			SHALE	29.0	31.0	
378.3			LIMESTONE	4.5	60.0	
373.8			SHALE	11.5	64.5	
362.3			GRAY SHALE	16.0	76.0	
346.3			SANDSTONE	1.5	92.0	SS W/ CHERT STREAKS
344.8			GRAY SHALE	2.0	93.5	
342.8			GRAY SHALE	2.0	95.5	GY SH W/ SS
340.8			GRAY SHALE	1.0	97.5	
339.8			SANDSTONE	1.9	98.5	SS W/ SH & CHERT
337.9			GRAY SHALE	1.3	100.4	
336.6			SANDSTONE	0.8	101.7	
335.8			UNCLASSIFIED	0.3	102.5	CHERT
335.5			SHALE	1.5	102.8	SH W/ SS & CHERT
334.0			GRAY SHALE	2.0	104.3	
332.0			GRAY SHALE	1.1	106.3	
331.0			DARK GRAY SHALE	1.2	107.3	
329.8			SANDSTONE	2.0	108.5	
327.8			GRAY SHALE	6.5	110.5	
321.3			SHALE	1.7	117.0	SH W/ SS STREAKS
319.6			SANDSTONE	1.5	118.7	SS W/ SHALE STREAKS
318.1			DARK GRAY SHALE	1.2	120.2	
317.0			SHALE	2.2	121.3	SH W/ SS STREAKS
314.8			SANDY SHALE	3.3	123.5	
311.5			SHALE	2.0	126.8	SH W/ SS STREAKS
309.5			SANDSTONE	1.4	128.8	
308.0			DARK SHALE	6.8	130.3	
301.3			DARK GRAY SHALE	5.5	137.0	
295.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	142.5	
290.8	CARBONDALE		DARK GRAY SHALE	1.5	147.5	
289.3	CARBONDALE		SHALE	4.0	149.0	
285.3	CARBONDALE		LIMESTONE	0.8	153.0	
284.5	CARBONDALE		DARK SHALE	3.2	153.8	
281.3	CARBONDALE		SANDY SHALE	2.2	157.0	
279.1	CARBONDALE		COAL	0.2	159.2	
279.0	CARBONDALE		SHALE	1.4	159.3	

277.5	CARBONDALE		GRAY SHALE	1.0	160.8	
276.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	161.8	SS W/ SHALE & COAL STREAKS
268.0	CARBONDALE		SHALE	3.2	170.3	SH W/ SS STREAKS
264.9	CARBONDALE		GRAY SHALE	3.6	173.4	
261.3	CARBONDALE		DARK SHALE	9.8	177.0	
251.5	CARBONDALE	CONANT	LIMESTONE	0.5	186.8	
251.0	CARBONDALE	JAMESTOWN	COAL	0.3	187.3	
250.7	CARBONDALE		LIMESTONE	0.3	187.6	
250.5	CARBONDALE		BLACK SHALE	3.3	187.8	BK SH W/ LS STREAKS
247.1	CARBONDALE	BRERETON	LIMESTONE	6.6	191.2	
240.5	CARBONDALE	ANNA	BLACK SHALE	1.1	197.8	
239.5	CARBONDALE	HERRIN	COAL	5.0	198.8	
234.5	CARBONDALE		UNDERCLAY	2.8	203.8	
231.6	CARBONDALE		SHALE	27.0	206.7	SH W/ CHERT STREAKS
204.6	CARBONDALE		BLACK SHALE	2.0	233.7	BK SH W/ CHERT STREAKS
202.6	CARBONDALE		SANDSTONE	10.0	235.7	
192.6	CARBONDALE		SANDSTONE	41.8	245.7	SS W/ COAL STREAKS
150.8	CARBONDALE		SHALE	39.8	287.5	
111.0	CARBONDALE		BLACK SHALE	0.1	327.3	
111.0	CARBONDALE	SPRINGFIELD	COAL	4.6	327.3	
106.4	CARBONDALE		UNDERCLAY	2.0	331.9	

MAPID: 16500937000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 565' S line, 8' W line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.684618 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.755038 **DATE COLLECTED:** 10 / 31 / 1949

SURFACE ELEVATION (FT.): 431.4 **LOGGED (FT.):** 225.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-37 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.4			UNCONSOLIDATED	15.0	0.0	CLAY AND GRAVEL
416.4			SANDSTONE	4.0	15.0	
412.4			SANDSTONE	3.0	19.0	
409.4			SHALE	22.5	22.0	
386.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	44.5	
380.9	CARBONDALE		SHALE	36.5	50.5	
344.4	CARBONDALE	BRERETON	LIMESTONE	9.5	87.0	
334.9	CARBONDALE	HERRIN	COAL	5.0	96.5	
329.9	CARBONDALE		UNDERCLAY	2.5	101.5	
327.4	CARBONDALE		SHALE	17.0	104.0	SH W/ CHERT STREAKS
310.4	CARBONDALE		GRAY SHALE	11.5	121.0	
298.9	CARBONDALE		SANDSTONE	26.5	132.5	
272.4	CARBONDALE		DARK SHALE	0.5	159.0	
271.9	CARBONDALE		SANDSTONE	29.0	159.5	
242.9	CARBONDALE		DARK SHALE	11.5	188.5	
231.4	CARBONDALE		SHALE	20.4	200.0	
211.0	CARBONDALE	SPRINGFIELD	COAL	4.3	220.4	
206.7	CARBONDALE		UNDERCLAY	1.0	224.7	

MAPID: 16500938000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 603' N line, 8' W line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.684606 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.751814 **DATE COLLECTED:** 11 / 10 / 1949

SURFACE ELEVATION (FT.): 458.7 **LOGGED (FT.):** 354.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-38 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.7			UNCONSOLIDATED	11.0	0.0	CLAY AND SAND
447.7			SANDSTONE	4.0	11.0	
443.7			SANDSTONE	8.0	15.0	
435.7			SHALE	62.0	23.0	
373.7			SHALE	25.0	85.0	SH W/ CHERT
348.7			LIMESTONE	5.0	110.0	
343.7			SHALE	1.0	115.0	
342.7			SHALE	71.0	116.0	SH W/ CHERT STREAKS
271.7			SANDSTONE	5.0	187.0	
266.7			GRAY SHALE	6.0	192.0	
260.7			SANDSTONE	4.0	198.0	
256.7			SHALE	14.0	202.0	
242.7			GRAY SHALE	6.6	216.0	
236.1	CARBONDALE	CONANT	LIMESTONE	0.7	222.6	
235.4	CARBONDALE		BLACK SHALE	0.1	223.3	
235.4	CARBONDALE	JAMESTOWN	COAL	0.2	223.3	
235.2	CARBONDALE		LIMESTONE	0.5	223.5	
234.7	CARBONDALE		BLACK SHALE	1.9	224.0	
232.8	CARBONDALE	BRERETON	LIMESTONE	8.1	225.9	
224.7	CARBONDALE	ANNA	BLACK SHALE	0.3	234.0	
224.4	CARBONDALE	HERRIN	COAL	4.9	234.3	
219.5	CARBONDALE		UNDERCLAY	0.5	239.2	
219.0	CARBONDALE		DARK SHALE	5.0	239.7	
214.0	CARBONDALE		GRAY SHALE	15.0	244.7	
199.0	CARBONDALE		CALCAREOUS SHALE	12.3	259.7	CALC SH W/ CHERT STREAKS
186.7	CARBONDALE		DARK SHALE	3.7	272.0	
183.0	CARBONDALE		SHALE	4.0	275.7	
179.0	CARBONDALE		BLACK SHALE	12.0	279.7	
167.0	CARBONDALE		SANDSTONE	12.8	291.7	
154.3	CARBONDALE		SHALE	9.0	304.4	SH W/ SS STREAKS
145.3	CARBONDALE		DARK SHALE	32.7	313.4	
112.6	CARBONDALE		SHALE	0.1	346.1	
112.5	CARBONDALE	SPRINGFIELD	COAL	4.1	346.2	
108.4	CARBONDALE		UNDERCLAY	4.0	350.3	

MAPID: 16500939000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 14' N line, 613' W line of SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.682525 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757124 **DATE COLLECTED:** 11 / 12 / 1949

SURFACE ELEVATION (FT.): 436.1 **LOGGED (FT.):** 174.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-39 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.1			CLAY	10.0	0.0	
426.1			SANDY CLAY	4.0	10.0	
422.1			SANDSTONE	4.0	14.0	
418.1			SANDSTONE	4.0	18.0	
414.1			SHALE	13.0	22.0	
401.1			LIMESTONE	3.5	35.0	
397.6			SHALE	1.0	38.5	
396.6			LIMESTONE	3.0	39.5	
393.6			SHALE	53.5	42.5	
340.1			CALCAREOUS SHALE	2.0	96.0	
338.1			SANDSTONE	34.0	98.0	SS W/ COAL STREAKS
304.1			SHALE	3.8	132.0	SH W/ SS STREAKS
300.3			SHALE	0.3	135.8	
300.1			SHALE	1.7	136.0	SH W/ SS STREAKS
298.4			SHALE	31.2	137.7	
267.3	CARBONDALE	SPRINGFIELD	COAL	4.3	168.8	
263.0	CARBONDALE		UNDERCLAY	1.0	173.1	

MAPID: 16500940000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 9' N line, 502' E line of SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.686402 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757135 **DATE COLLECTED:** 11 / 22 / 1949

SURFACE ELEVATION (FT.): 459.9 **LOGGED (FT.):** 280.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-40 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.9			CLAY	10.0	0.0	
449.9	MODESTO		SANDSTONE	4.0	10.0	
445.9	MODESTO		SANDSTONE	6.0	14.0	
439.9	MODESTO		SANDSTONE	11.0	20.0	
428.9	MODESTO		SHALE	18.0	31.0	
410.9	MODESTO		LIMESTONE	2.0	49.0	
408.9	MODESTO		SHALE	8.5	51.0	SH W/ CHERT STREAKS
400.4	MODESTO		LIMESTONE	0.5	59.5	
399.9	MODESTO		BLACK SHALE	1.0	60.0	
398.9	MODESTO	PIASA	LIMESTONE	4.0	61.0	
394.9	MODESTO		GRAY SHALE	4.0	65.0	
390.9	MODESTO		BLACK SHALE	2.3	69.0	
388.6	CARBONDALE	DANVILLE	COAL	1.0	71.3	
387.6	CARBONDALE		UNDERCLAY	1.8	72.3	
385.9	CARBONDALE		SHALE	3.4	74.0	SH W/ SS STREAKS
382.5	CARBONDALE		GRAY SHALE	4.0	77.4	
378.5	CARBONDALE		COAL	0.1	81.4	
378.4	CARBONDALE		SHALE	0.4	81.5	
378.0	CARBONDALE		SANDSTONE	7.1	81.9	
370.9	CARBONDALE		DARK SHALE	0.7	89.0	DK SH W/ CHERT STREAKS
370.2	CARBONDALE		COAL	0.7	89.7	
369.6	CARBONDALE		DARK SHALE	1.7	90.3	
367.9	CARBONDALE		GRAY SHALE	3.0	92.0	
364.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	95.0	
359.4	CARBONDALE		GRAY SHALE	7.0	100.5	LGY SH W/ LS STREAKS
352.4	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	107.5	
347.9	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	112.0	
339.9	CARBONDALE		DARK GRAY SHALE	17.0	120.0	
322.9	CARBONDALE	CONANT	LIMESTONE	0.4	137.0	
322.5	CARBONDALE	JAMESTOWN	COAL	0.2	137.4	
322.3	CARBONDALE		LIMESTONE	0.8	137.6	
321.6	CARBONDALE		SHALE	2.3	138.3	SH W/ LS STREAKS
319.3	CARBONDALE	BRERETON	LIMESTONE	6.0	140.6	
313.3	CARBONDALE	ANNA	BLACK SHALE	1.4	146.6	
311.9	CARBONDALE	HERRIN	COAL	5.1	148.0	
306.8	CARBONDALE		UNDERCLAY	2.5	153.1	
304.3	CARBONDALE		GRAY SHALE	17.0	155.6	
287.3	CARBONDALE		SANDSTONE	1.0	172.6	
286.3	CARBONDALE		DARK GRAY SHALE	4.4	173.6	

281.9	CARBONDALE		GRAY SHALE	6.0	178.0	
275.9	CARBONDALE		SANDSTONE	10.0	184.0	
265.9	CARBONDALE		SANDSTONE	24.0	194.0	SS W/ COAL STREAKS
241.9	CARBONDALE		SANDSTONE	24.0	218.0	
217.9	CARBONDALE		SHALE	31.6	242.0	
186.3	CARBONDALE		SHALE	0.1	273.6	
186.2	CARBONDALE	SPRINGFIELD	COAL	4.3	273.7	
181.9	CARBONDALE		UNDERCLAY	2.0	278.0	

MAPID: 16500941000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 11' S line, 50' W line of SW NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.684482 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757193 **DATE COLLECTED:** 12 / 8 / 1949

SURFACE ELEVATION (FT.): 450.9 **LOGGED (FT.):** 303.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-41 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.9			SANDY CLAY	11.0	0.0	
439.9	MODESTO		SANDSTONE	4.0	11.0	
435.9	MODESTO		SANDSTONE	2.0	15.0	
433.9	MODESTO		SANDSTONE	5.0	17.0	
428.9	MODESTO		SHALE	17.0	22.0	
411.9	MODESTO		LIMESTONE	1.0	39.0	
410.9	MODESTO		SHALE	1.0	40.0	
409.9	MODESTO	PIASA	LIMESTONE	5.0	41.0	
404.9			DARK SHALE	12.0	46.0	
392.9			SANDSTONE	14.0	58.0	
378.9			SANDSTONE	65.0	72.0	SS W/ COAL STREAKS
313.9	CARBONDALE		SHALE	3.5	137.0	SH W/ SS STREAKS
310.4	CARBONDALE		GRAY SHALE	6.0	140.5	
304.4	CARBONDALE		DARK SHALE	17.5	146.5	
286.9	CARBONDALE		DARK SHALE	0.4	164.0	
286.5	CARBONDALE		SANDY SHALE	2.6	164.4	
283.9	CARBONDALE		GRAY SHALE	1.0	167.0	
282.9	CARBONDALE		GRAY SHALE	3.5	168.0	
279.4	CARBONDALE		DARK SHALE	75.5	171.5	
203.9	CARBONDALE		DARK SHALE	2.7	247.0	
201.2	CARBONDALE		GRAY SHALE	7.3	249.7	
193.9	CARBONDALE		LIMESTONE	0.5	257.0	
193.4	CARBONDALE		CALCAREOUS SHALE	2.5	257.5	
190.9	CARBONDALE		GRAY SHALE	3.0	260.0	
187.9	CARBONDALE		DARK SHALE	25.0	263.0	
162.9	CARBONDALE		DARK GRAY SHALE	4.0	288.0	
158.9	CARBONDALE		SHALE	0.5	292.0	
158.4	CARBONDALE		GRAY SHALE	2.5	292.5	
155.9	CARBONDALE		BLACK SHALE	2.5	295.0	
153.4	CARBONDALE	HOUCHIN CREEK	COAL	2.2	297.5	
151.2	CARBONDALE		UNDERCLAY	2.4	299.7	
148.8	CARBONDALE		UNDERCLAY	1.1	302.1	UCLY W/ COAL STREAKS

MAPID: 16500943000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 19' N line, 50' W line of NW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689084 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.76079 **DATE COLLECTED:** 12 / 29 / 1949

SURFACE ELEVATION (FT.): 493.3 **LOGGED (FT.):** 330.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-43 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
493.3			UNCONSOLIDATED	12.0	0.0	CLAY, SAND, AND GRAVEL
481.3	MODESTO		SANDSTONE	2.0	12.0	
479.3	MODESTO		SANDSTONE	6.0	14.0	
473.3	MODESTO		SANDSTONE	10.0	20.0	
463.3	MODESTO		SHALE	1.0	30.0	
462.3	MODESTO		LIMESTONE	2.0	31.0	
460.3	MODESTO		SHALE	36.0	33.0	
424.3	MODESTO		LIMESTONE	4.0	69.0	
420.3	MODESTO		SHALE	23.0	73.0	
397.3	MODESTO		LIMESTONE	7.0	96.0	
390.3	MODESTO		SHALE	13.0	103.0	
377.3	MODESTO		LIMESTONE	4.0	116.0	
373.3	MODESTO		SHALE	16.0	120.0	
357.3	MODESTO		DARK SHALE	13.3	136.0	DK SH W/ CHERT STREAKS
344.0	MODESTO	PIASA	LIMESTONE	4.0	149.3	
340.0	MODESTO		BLACK SHALE	1.4	153.3	
338.5	MODESTO		GRAY SHALE	2.3	154.8	
336.2	MODESTO		BLACK SHALE	2.3	157.1	
334.0	CARBONDALE	DANVILLE	COAL	2.7	159.3	
331.3	CARBONDALE		UNDERCLAY	1.0	162.0	
330.3	CARBONDALE		SANDSTONE	7.0	163.0	
323.3	CARBONDALE		GRAY SHALE	6.0	170.0	
317.3	CARBONDALE		LIMESTONE	0.3	176.0	
317.0	CARBONDALE		SANDSTONE	3.0	176.3	
314.0	CARBONDALE		CALCAREOUS SHALE	8.5	179.3	
305.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	187.8	
301.8	CARBONDALE		SHALE	1.5	191.5	SH W/ LS STREAKS
300.3	CARBONDALE		DARK SHALE	14.8	193.0	
285.5	CARBONDALE	BRERETON	LIMESTONE	9.2	207.8	
276.3	CARBONDALE	ANNA	BLACK SHALE	2.6	217.0	
273.7	CARBONDALE	HERRIN	COAL	5.7	219.6	
268.0	CARBONDALE		UNDERCLAY	0.8	225.3	
267.3	CARBONDALE		SHALE	4.0	226.0	
263.3	CARBONDALE		CALCAREOUS SHALE	2.0	230.0	
261.3	CARBONDALE		SHALE	14.0	232.0	SH W/ LS STREAKS
247.3	CARBONDALE		SHALE	5.0	246.0	
242.3	CARBONDALE		SANDSTONE	38.0	251.0	
204.3	CARBONDALE		DARK GRAY SHALE	36.6	289.0	
167.7	CARBONDALE	SPRINGFIELD	COAL	4.1	325.6	

163.6	CARBONDALE	UNDERCLAY	1.0	329.7

MAPID: 16501089000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 84' N line, 50' W line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689086 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760611 **DATE COLLECTED:** 6 / 16 / 1953

SURFACE ELEVATION (FT.): 413.7 **LOGGED (FT.):** 356.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-84 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.7			CLAY	5.0	0.0	
408.7	MODESTO		SANDSTONE	2.0	5.0	
406.7	MODESTO		SANDSTONE	4.0	7.0	
402.7	MODESTO		SANDSTONE	10.6	11.0	
392.1	MODESTO		SANDSTONE	34.4	21.6	
357.7	MODESTO		DARK GRAY SHALE	8.5	56.0	
349.2	MODESTO		LIMESTONE	1.0	64.5	
348.2	MODESTO		GRAY SHALE	9.0	65.5	
339.2	MODESTO		DARK GRAY SHALE	6.5	74.5	
332.7	MODESTO		GRAY SHALE	2.0	81.0	
330.7	MODESTO		DARK GRAY SHALE	0.5	83.0	
330.2	MODESTO		GRAY SHALE	3.5	83.5	
326.7	MODESTO		DARK GRAY SHALE	5.0	87.0	
321.7	MODESTO		BLACK SHALE	2.4	92.0	
319.3	MODESTO		BLACK SHALE	1.6	94.4	
317.7	MODESTO		GRAY SHALE	9.5	96.0	
308.2	MODESTO		GRAY SHALE	12.5	105.5	LGY SH W/ LS STREAKS
295.7	MODESTO		GRAY SHALE	18.0	118.0	
277.7	MODESTO		DARK GRAY SHALE	8.0	136.0	
269.7	MODESTO	PIASA	LIMESTONE	5.5	144.0	
264.2	MODESTO		GRAY SHALE	6.5	149.5	
257.7	MODESTO		GRAY SHALE	3.0	156.0	
254.7	CARBONDALE	DANVILLE	COAL	2.2	159.0	
252.5	CARBONDALE		UNDERCLAY	0.7	161.2	
251.9	CARBONDALE		LIMESTONE	1.2	161.8	
250.7	CARBONDALE		GRAY SHALE	2.0	163.0	
248.7	CARBONDALE		SANDSTONE	12.0	165.0	
236.7	CARBONDALE		LIMESTONE	0.6	177.0	
236.1	CARBONDALE	ALLENBY	COAL	0.7	177.6	
235.4	CARBONDALE		UNDERCLAY	1.8	178.3	
233.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	180.0	
231.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	182.0	
229.7	CARBONDALE		CALCAREOUS SHALE	9.8	184.0	
219.9	CARBONDALE		SANDSTONE	1.1	193.8	
218.8	CARBONDALE		COAL	0.3	194.9	
218.5	CARBONDALE		DARK GRAY SHALE	1.0	195.2	
217.5	CARBONDALE	ANVIL ROCK	SANDSTONE	1.5	196.2	
216.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.2	197.7	
206.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.5	206.8	

205.4	CARBONDALE		DARK GRAY SHALE	8.0	208.3	
197.4	CARBONDALE		CALCAREOUS SHALE	0.5	216.3	
196.9	CARBONDALE		CALCAREOUS SHALE	3.5	216.8	
193.4	CARBONDALE		DARK GRAY SHALE	3.8	220.3	
189.6	CARBONDALE	BRERETON	LIMESTONE	2.0	224.1	
187.6	CARBONDALE	ANNA	BLACK SHALE	3.9	226.1	
183.7	CARBONDALE		LIMESTONE	0.1	230.0	
183.6	CARBONDALE		DARK GRAY SHALE	2.8	230.1	
180.8	CARBONDALE	HERRIN	COAL	0.7	232.9	
180.1	CARBONDALE		UNDERCLAY	11.4	233.6	
168.7	CARBONDALE		GRAY SHALE	20.0	245.0	LGY SH W/ LS STREAKS
148.7	CARBONDALE		DARK GRAY SHALE	2.2	265.0	
146.5	CARBONDALE	BRIAR HILL	COAL	0.8	267.2	
145.7	CARBONDALE		DARK GRAY SHALE	4.0	268.0	
141.7	CARBONDALE		DARK GRAY SHALE	3.3	272.0	
138.4	CARBONDALE		SANDSTONE	9.2	275.3	
129.2	CARBONDALE		SANDSTONE	16.3	284.5	
112.9	CARBONDALE		DARK GRAY SHALE	7.3	300.8	
105.7	CARBONDALE		SANDSTONE	0.8	308.0	
104.9	CARBONDALE		DARK GRAY SHALE	0.4	308.8	
104.5	CARBONDALE		SANDSTONE	1.3	309.2	
103.2	CARBONDALE		DARK GRAY SHALE	12.0	310.5	
91.2	CARBONDALE		DARK GRAY SHALE	15.5	322.5	
75.7	CARBONDALE		DARK GRAY SHALE	10.8	338.0	
64.9	CARBONDALE		SHALE	0.7	348.8	
64.2	CARBONDALE	SPRINGFIELD	COAL	3.7	349.5	
60.5	CARBONDALE		UNDERCLAY	0.7	353.2	
59.9	CARBONDALE		SHALE	3.0	353.8	

MAPID: 16501094000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 64' N line, 33' W line of NW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689144 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760666 **DATE COLLECTED:** 8 / 7 / 1953

SURFACE ELEVATION (FT.): 489.8 **LOGGED (FT.):** 338.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-89 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
489.8			CLAY	10.0	0.0	
479.8	MODESTO		SANDSTONE	8.0	10.0	
471.8	MODESTO		SANDSTONE	2.0	18.0	
469.8	MODESTO		SANDSTONE	12.0	20.0	
457.8	MODESTO		GRAY SHALE	39.0	32.0	
418.8	MODESTO		LIMESTONE	2.0	71.0	
416.8	MODESTO		GRAY SHALE	12.0	73.0	
404.8	MODESTO		DARK GRAY SHALE	3.0	85.0	
401.8	MODESTO		DARK GRAY SHALE	1.0	88.0	
400.8	MODESTO		BLACK SHALE	0.5	89.0	
400.3	MODESTO		DARK GRAY SHALE	7.5	89.5	
392.8	MODESTO		BLACK SHALE	2.2	97.0	
390.6	MODESTO		DARK GRAY SHALE	0.3	99.2	
390.3	MODESTO		COAL	0.3	99.5	
390.0	MODESTO		DARK GRAY SHALE	1.3	99.8	
388.6	MODESTO		SANDSTONE	30.8	101.2	
357.8	MODESTO		SILTSTONE	15.0	132.0	
342.8	MODESTO		DARK GRAY SHALE	4.0	147.0	
338.8	MODESTO	PIASA	LIMESTONE	2.5	151.0	
336.3	MODESTO		GRAY SHALE	0.5	153.5	
335.8	MODESTO		BLACK SHALE	2.0	154.0	
333.8	MODESTO		GRAY SHALE	4.0	156.0	
329.8	CARBONDALE	DANVILLE	COAL	1.5	160.0	
328.3	CARBONDALE		GRAY SHALE	21.5	161.5	
306.8	CARBONDALE		LIMESTONE	0.5	183.0	
306.3	CARBONDALE		LIMESTONE	2.6	183.5	
303.7	CARBONDALE		GRAY SHALE	1.9	186.1	
301.8	CARBONDALE		GRAY SHALE	5.0	188.0	
296.8	CARBONDALE		SILTSTONE	3.5	193.0	
293.3	CARBONDALE		DARK GRAY SHALE	1.3	196.5	
292.0	CARBONDALE		COAL	0.3	197.8	
291.8	CARBONDALE		SILTSTONE	4.5	198.0	
287.3	CARBONDALE		GRAY SHALE	1.5	202.5	
285.8	CARBONDALE		SANDSTONE	2.8	204.0	
283.0	CARBONDALE		LIMESTONE	0.2	206.8	
282.8	CARBONDALE		SANDSTONE	3.8	207.0	
279.0	CARBONDALE		DARK GRAY SHALE	3.9	210.8	
275.1	CARBONDALE		DARK GRAY SHALE	11.8	214.7	
263.3	CARBONDALE	BRERETON	LIMESTONE	3.0	226.5	

260.3	CARBONDALE	BRERETON	LIMESTONE	1.0	229.5
259.3	CARBONDALE		BLACK SHALE	2.9	230.5
256.4	CARBONDALE		DARK SHALE	2.3	233.4
254.1	CARBONDALE		DARK GRAY SHALE	0.3	235.7
253.9	CARBONDALE	HERRIN	COAL	5.6	235.9
248.3	CARBONDALE		UNDERCLAY	0.5	241.5
247.8	CARBONDALE		DARK GRAY SHALE	2.3	242.0
245.5	CARBONDALE		DARK GRAY SHALE	1.2	244.3
244.3	CARBONDALE		SILTSTONE	15.5	245.5
228.8	CARBONDALE		SANDSTONE	34.0	261.0
194.8	CARBONDALE		SILTSTONE	2.3	295.0
192.5	CARBONDALE		DARK GRAY SHALE	19.4	297.3
173.0	CARBONDALE		DARK GRAY SHALE	13.7	316.8
159.4	CARBONDALE	SPRINGFIELD	COAL	4.8	330.4
154.5	CARBONDALE		CALCAREOUS SHALE	0.4	335.3
154.1	CARBONDALE		SANDY SHALE	2.3	335.7

MAPID: 16501105000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' N line, 31' W line of SW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689146 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.759002 **DATE COLLECTED:** 11 / 6 / 1952

SURFACE ELEVATION (FT.): 488.2 **LOGGED (FT.):** 366.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-69 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
488.2			SAND	3.0	0.0	
485.2			CLAY	6.0	3.0	
479.2			SAND	5.0	9.0	
474.2			CLAY	6.0	14.0	
468.2	MODESTO		GRAY SHALE	18.0	20.0	
450.2	MODESTO		GRAY SANDSTONE	4.0	38.0	
446.2	MODESTO		GRAY SHALE	7.4	42.0	
438.8	MODESTO		LIMESTONE	0.6	49.4	
438.2	MODESTO		CALCAREOUS SHALE	3.3	50.0	
434.9	MODESTO		GRAY SHALE	5.2	53.3	
429.7	MODESTO		COAL	0.5	58.5	
429.2	MODESTO		GRAY SHALE	5.0	59.0	
424.2	MODESTO		COAL	0.4	64.0	
423.8	MODESTO		GRAY SHALE	20.6	64.4	
403.2	MODESTO		LIMESTONE	0.9	85.0	
402.3	MODESTO		GRAY SHALE	6.1	85.9	
396.2	MODESTO		COAL	0.6	92.0	
395.6	MODESTO		GRAY SHALE	37.4	92.6	
358.2	MODESTO		GRAY SHALE	11.0	130.0	
347.2	MODESTO		GRAY SHALE	1.0	141.0	
346.2	MODESTO		GRAY SHALE	8.3	142.0	
337.9	MODESTO	PIASA	LIMESTONE	3.3	150.3	
334.6	MODESTO		CALCAREOUS SHALE	4.4	153.6	
330.2	MODESTO		GRAY SHALE	4.0	158.0	
326.2	CARBONDALE	DANVILLE	COAL	1.7	162.0	
324.5	CARBONDALE		GRAY SHALE	18.3	163.7	
306.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	182.0	
300.5	CARBONDALE		GRAY SHALE	2.5	187.7	GY SH W/ LS STREAKS
298.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	4.6	190.2	
293.4	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	1.7	194.8	
291.8	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.2	196.4	W/ SS LENSES
289.6	CARBONDALE	ANVIL ROCK	SANDSTONE	7.2	198.6	
282.4	CARBONDALE	ANVIL ROCK	SANDSTONE	1.3	205.8	SS W/ SHALE LENSES
281.2	CARBONDALE		DARK GRAY SHALE	7.5	207.0	
273.7	CARBONDALE		DARK GRAY SHALE	6.7	214.5	
267.0	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	0.3	221.2	
266.7	CARBONDALE	BRERETON	LIMESTONE	0.2	221.5	
266.5	CARBONDALE	ANNA	BLACK SHALE	1.3	221.7	

265.2	CARBONDALE	ANNA	BLACK SHALE	3.0	223.0
262.2	CARBONDALE	ENERGY	DARK GRAY SHALE	7.0	226.0
255.2	CARBONDALE	ENERGY	GRAY SHALE	3.6	233.0
251.6	CARBONDALE	HERRIN	COAL	5.4	236.6
246.2	CARBONDALE		UNDERCLAY	2.0	242.0
244.2	CARBONDALE		GRAY SHALE	23.0	244.0
221.2	CARBONDALE		LIMESTONE	2.3	267.0
218.9	CARBONDALE		CALCAREOUS SHALE	5.0	269.3
213.9	CARBONDALE		GRAY SHALE	12.8	274.3
201.2	CARBONDALE	BRIAR HILL	COAL	0.7	287.0
200.5	CARBONDALE		GRAY SHALE	8.3	287.7
192.2	CARBONDALE		SANDSTONE	21.0	296.0
171.2	CARBONDALE	ST. DAVID	LIMESTONE	3.0	317.0
168.2	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	320.0
166.2	CARBONDALE	DYKERSBURG	GRAY SHALE	7.5	322.0
158.7	CARBONDALE	DYKERSBURG	GRAY SHALE	7.0	329.5
151.7	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	336.5
136.7	CARBONDALE	DYKERSBURG	SANDY SHALE	6.5	351.5
130.2	CARBONDALE	SPRINGFIELD	COAL	4.5	358.0
125.7	CARBONDALE		UNDERCLAY	3.5	362.5

MAPID: 16501105000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' N line, 31' W line of SW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689146 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.759002 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 488.0 **LOGGED (FT.):** 242.1 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
304.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	183.6	
299.7	CARBONDALE	LAWSON	CLAYSTONE	2.5	188.3	
297.2	CARBONDALE	LAWSON	SANDSTONE	4.5	190.8	
292.7	CARBONDALE	LAWSON	CLAYSTONE & SHALE	3.3	195.3	
289.3	CARBONDALE	LAWSON	SANDSTONE	7.8	198.7	
281.5	CARBONDALE	LAWSON	GRAY SHALE	13.6	206.5	
267.9	CARBONDALE	CONANT	CALCAREOUS SHALE	0.2	220.1	
267.7	CARBONDALE	JAMESTOWN	BONE COAL	0.1	220.3	
267.5	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	0.2	220.5	
267.3	CARBONDALE	ANNA	BLACK SHALE	2.3	220.7	
265.0	CARBONDALE	ENERGY	DARK GRAY SHALE	0.7	223.0	
264.3	CARBONDALE	ENERGY	GRAY SHALE	13.3	223.7	
251.0	CARBONDALE	HERRIN	COAL	5.1	237.0	

MAPID: 16501107000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 366' N line, 46' W line of NW NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.689094 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.759832 **DATE COLLECTED:** 11 / 14 / 1952

SURFACE ELEVATION (FT.): 477.9 **LOGGED (FT.):** 356.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-70 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-3698

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
477.9			UNCONSOLIDATED	4.0	0.0	SANDY LOAM
473.9	MODESTO		SANDSTONE	4.0	4.0	
469.9	MODESTO		GRAY SHALE	5.0	8.0	
464.9	MODESTO		GRAY SANDSTONE	3.0	13.0	
461.9	MODESTO		GRAY SANDSTONE	18.5	16.0	
443.4	MODESTO		DARK GRAY SHALE	5.0	34.5	
438.4	MODESTO		GRAY SANDSTONE	19.0	39.5	
419.4	MODESTO		COAL	0.8	58.5	
418.6	MODESTO		GRAY SHALE	2.7	59.3	
415.9	MODESTO		GRAY SANDSTONE	4.0	62.0	
411.9	MODESTO		GRAY SHALE	1.0	66.0	
410.9	MODESTO		CALCAREOUS SHALE	2.5	67.0	
408.4	MODESTO		DARK GRAY SHALE	13.5	69.5	
394.9	MODESTO		BLACK SHALE	8.5	83.0	
386.4	MODESTO		COAL	0.5	91.5	
385.9	MODESTO		GRAY SHALE	6.5	92.0	
379.4	MODESTO		DARK GRAY SHALE	3.5	98.5	
375.9	MODESTO		CALCAREOUS SHALE	8.0	102.0	
367.9	MODESTO		GRAY SANDSTONE	13.5	110.0	
354.4	MODESTO		CALCAREOUS SHALE	4.5	123.5	
349.9	MODESTO		DARK GRAY SHALE	8.0	128.0	
341.9	MODESTO		GRAY SHALE	9.6	136.0	
332.3	MODESTO	PIASA	LIMESTONE	2.8	145.6	
329.6	MODESTO		CALCAREOUS SHALE	3.5	148.3	
326.1	MODESTO		GRAY SHALE	5.8	151.8	
320.2	CARBONDALE	DANVILLE	COAL	0.7	157.7	
319.6	CARBONDALE	DANVILLE	GRAY SHALE	1.0	158.3	
318.6	CARBONDALE	DANVILLE	COAL	0.8	159.3	
317.7	CARBONDALE		GRAY SHALE	18.0	160.2	
299.7	CARBONDALE	ALLENBY	COAL	0.6	178.2	
299.1	CARBONDALE		GRAY SHALE	3.3	178.8	
295.9	CARBONDALE		GRAY SHALE	0.3	182.0	
295.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	182.3	
291.0	CARBONDALE		GRAY SHALE	3.9	186.9	
287.1	CARBONDALE		SANDSTONE	0.2	190.8	
286.9	CARBONDALE		SANDSTONE	0.8	191.0	
286.1	CARBONDALE		SANDY SHALE	2.3	191.8	
283.9	CARBONDALE		GRAY SANDSTONE	2.4	194.0	
281.5	CARBONDALE		COAL	0.3	196.4	

281.1	CARBONDALE		GRAY SHALE	0.8	196.8
280.4	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	16.2	197.5
264.2	CARBONDALE		GRAY SHALE	2.8	213.7
261.4	CARBONDALE		GRAY SHALE	8.2	216.5
253.2	CARBONDALE		CALCAREOUS SHALE	0.3	224.7
253.0	CARBONDALE	BRERETON	LIMESTONE	5.4	224.9
247.6	CARBONDALE	ANNA	BLACK SHALE	3.1	230.3
244.5	CARBONDALE	ANNA	BLACK SHALE	0.3	233.4
244.1	CARBONDALE	HERRIN	COAL	4.6	233.8
239.6	CARBONDALE		UNDERCLAY	0.7	238.3
238.9	CARBONDALE		UNDERCLAY	0.8	239.0
238.1	CARBONDALE		DARK GRAY SHALE	2.6	239.8
235.5	CARBONDALE		FOSSILIFEROUS LIMESTONE	1.1	242.4
234.4	CARBONDALE		GRAY SANDSTONE	1.0	243.5
233.4	CARBONDALE		DARK GRAY SHALE	3.0	244.5
230.4	CARBONDALE		FOSSILIFEROUS LIMESTONE	2.0	247.5
228.4	CARBONDALE		CALCAREOUS SHALE	13.0	249.5
215.4	CARBONDALE		BLACK SHALE	3.5	262.5
211.9	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.5	266.0
210.4	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	2.5	267.5
207.9	CARBONDALE	DYKERSBURG	GRAY SHALE	22.0	270.0
185.9	CARBONDALE	DYKERSBURG	SANDSTONE	19.0	292.0
166.9	CARBONDALE	DYKERSBURG	GRAY SHALE	11.0	311.0
155.9	CARBONDALE	DYKERSBURG	SANDY SHALE	28.0	322.0
127.9	CARBONDALE	DYKERSBURG	GRAY SHALE	0.1	350.0
127.8	CARBONDALE	SPRINGFIELD	COAL	4.1	350.1
123.7	CARBONDALE		UNDERCLAY	0.3	354.2
123.5	CARBONDALE		CLAYSTONE	0.4	354.4
123.1	CARBONDALE		UNDERCLAY	1.2	354.8

MAPID: 16501116000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 190' N line, 19' W line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.68919 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760319 **DATE COLLECTED:** 2 / 20 / 1953

SURFACE ELEVATION (FT.): 480.9 **LOGGED (FT.):** 360.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-80 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.9			CLAY	5.0	0.0	
475.9	MODESTO		SANDSTONE	5.0	5.0	
470.9	MODESTO		SANDSTONE	1.3	10.0	
469.6	MODESTO		SANDSTONE	26.7	11.3	
442.9	MODESTO		SANDY SHALE	18.0	38.0	
424.9	MODESTO		GRAY SHALE	3.6	56.0	
421.3	MODESTO		COAL	0.6	59.6	
420.7	MODESTO		GRAY SHALE	2.8	60.2	
417.9	MODESTO		GRAY SHALE	18.3	63.0	
399.6	MODESTO		LIMESTONE	2.8	81.3	
396.9	MODESTO		CALCAREOUS SHALE	3.0	84.0	
393.9	MODESTO		GRAY SHALE	3.0	87.0	
390.9	MODESTO		COAL	0.5	90.0	
390.4	MODESTO		BLACK SHALE	1.2	90.5	
389.2	MODESTO		COAL	0.5	91.7	
388.7	MODESTO		BLACK SHALE	1.8	92.2	
386.9	MODESTO		COAL	0.3	94.0	
386.6	MODESTO		GRAY SHALE	23.7	94.3	
362.9	MODESTO		CALCAREOUS SHALE	5.0	118.0	
357.9	MODESTO		GRAY SHALE	20.0	123.0	
337.9	MODESTO		GRAY SHALE	6.4	143.0	
331.5	MODESTO	PIASA	LIMESTONE	3.3	149.4	
328.1	MODESTO		GRAY SHALE	0.3	152.8	
327.9	MODESTO		LIMESTONE	0.3	153.0	
327.6	MODESTO		BLACK SHALE	1.8	153.3	
325.9	MODESTO		CONGLOMERATE & SHALE	5.0	155.0	
320.9	MODESTO		GRAY SHALE	2.3	160.0	
318.6	CARBONDALE	DANVILLE	COAL	1.9	162.3	
316.7	CARBONDALE		GRAY SHALE	11.8	164.2	
304.9	CARBONDALE		GRAY SHALE	12.4	176.0	
292.5	CARBONDALE		LIMESTONE	1.6	188.4	
290.9	CARBONDALE		GRAY SHALE	2.0	190.0	
288.9	CARBONDALE	ALLENBY	COAL	0.5	192.0	
288.4	CARBONDALE		GRAY SHALE	10.5	192.5	
277.9	CARBONDALE		CALCAREOUS SHALE	3.0	203.0	
274.9	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	206.0	
271.3	CARBONDALE		CALCAREOUS SHALE	4.4	209.6	
266.9	CARBONDALE		SANDY SHALE	12.0	214.0	
254.9	CARBONDALE	BRERETON	LIMESTONE	1.0	226.0	

253.9	CARBONDALE	BRERETON	LIMESTONE	0.5	227.0	
253.4	CARBONDALE	ANNA	BLACK SHALE	4.5	227.5	
248.9	CARBONDALE	ENERGY	GRAY SHALE	3.0	232.0	
245.9	CARBONDALE	ENERGY	GRAY SHALE	2.2	235.0	
243.7	CARBONDALE	ENERGY	BLACK SHALE	0.3	237.2	
243.5	CARBONDALE	HERRIN	COAL	5.5	237.4	
238.0	CARBONDALE		UNDERCLAY	1.1	242.9	
236.9	CARBONDALE		GRAY SHALE	7.0	244.0	
229.9	CARBONDALE		LIMESTONE	2.3	251.0	
227.6	CARBONDALE		GRAY SHALE	11.8	253.3	
215.9	CARBONDALE		GRAY SHALE	8.0	265.0	
207.9	CARBONDALE	BRIAR HILL	COAL	0.7	273.0	
207.2	CARBONDALE		GRAY SHALE	17.3	273.7	
189.9	CARBONDALE		LIMESTONE	1.3	291.0	
188.6	CARBONDALE		GRAY SHALE	22.8	292.3	
165.9	CARBONDALE		SANDY SHALE	11.0	315.0	
154.9	CARBONDALE		GRAY SHALE	5.0	326.0	
149.9	CARBONDALE		SANDY SHALE	1.8	331.0	
148.1	CARBONDALE		UNDERCLAY	0.1	332.8	
148.1	CARBONDALE		SANDY SHALE	7.0	332.8	
141.1	CARBONDALE		UNDERCLAY	0.3	339.8	
140.8	CARBONDALE		SANDY SHALE	9.9	340.1	
130.9	CARBONDALE		SANDY SHALE	2.7	350.0	
128.2	CARBONDALE	SPRINGFIELD	COAL	5.0	352.7	
123.2	CARBONDALE		BLACK SHALE	0.3	357.7	
122.9	CARBONDALE		GRAY SHALE	0.6	358.0	GY SH W/ CALC SH STREAKS
122.3	CARBONDALE		GRAY SHALE	1.4	358.6	GY SH W/ LS STREAKS

MAPID: 16502722000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.681197 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.75439 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Electric Log
SOURCE: NATION OIL CO., SCHWARTZ 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
46.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	380.0	
11.0	CARBONDALE	SURVANT	COAL	0.8	415.0	
-34.0	CARBONDALE	COLCHESTER	COAL	0.5	460.0	
-90.0	CARBONDALE	DEKOVEN	COAL	3.0	516.0	
-116.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	542.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-124.0	CARBONDALE	DAVIS	COAL	5.0	550.0	
-161.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	587.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502722000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.681197 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.75439 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2316.0 **LOG TYPE:**
SOURCE: NATION OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1092.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1518.0	
-1495.0			LIMESTONE	-	1921.0	
-1890.0		BASE BARLOW	LIMESTONE	-	2316.0	

MAPID: 16503027000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67199 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.752568 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 1380.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	358.0	
-15.0	SPOON	DAVIS	UNCLASSIFIED	-	445.0	
-950.0	BASE OF PENN.		UNCLASSIFIED	-	1380.0	

MAPID: 16503027000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67199 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.752568 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 2291.0 **LOG TYPE:**
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1091.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1530.0	
-1507.0			LIMESTONE	-	1946.0	
-1852.0		BASE BARLOW	LIMESTONE	-	2291.0	

MAPID: 16503027000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: HARCO **LONGITUDE:** -88.67199 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.752568 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 2845.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., CAIN W E COMMUNI **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
175.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	255.0	
130.0	CARBONDALE	SURVANT	COAL	1.0	300.0	
70.0	CARBONDALE	COLCHESTER	COAL	0.5	360.0	
12.0	CARBONDALE	DEKOVEN	COAL	3.5	418.0	
12.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	418.0	
-15.0	CARBONDALE	DAVIS	COAL	4.0	445.0	
-59.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	489.0	65% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-65.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	495.0	

MAPID: 16523982000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.683485 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.752557 **DATE COLLECTED:** 5 / 13 / 1977

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 641.0 **LOG TYPE:** Drillers Log

SOURCE: PAUL WEIR 95081 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCLASSIFIED	400.0	0.0	GEOPHYSICAL LOG AVAILABLE
60.0	CARBONDALE		GRAY SHALE	18.3	400.0	
41.7	CARBONDALE		DARK GRAY SHALE	0.6	418.3	
41.1	CARBONDALE	HANOVER	GRAY LIMESTONE	1.3	418.9	
39.8	CARBONDALE	EXCELLO	BLACK SHALE	3.5	420.2	
36.3	CARBONDALE	EXCELLO	GRAY LIMESTONE	0.6	423.7	
35.7	CARBONDALE	EXCELLO	BLACK SHALE	0.2	424.3	
35.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	424.5	
34.0	CARBONDALE		UNCLASSIFIED	1.1	426.0	LOG SAYS 'CORE LOSS'
33.0	CARBONDALE		GRAY SHALE	0.7	427.0	
32.3	CARBONDALE		GRAY SANDSTONE	9.2	427.7	
23.1	CARBONDALE		GRAY SHALE	2.5	436.9	
20.6	CARBONDALE		GRAY SANDSTONE	0.7	439.4	
19.9	CARBONDALE		GRAY SHALE	31.2	440.1	
-11.3	CARBONDALE	SURVANT	COAL	1.5	471.3	
-12.8	CARBONDALE		CLAYSTONE	0.6	472.8	LOG SAYS 'UNDERCLAY'
-13.3	CARBONDALE		GRAY SANDSTONE	2.2	473.3	
-15.5	CARBONDALE		GRAY SHALE	3.4	475.5	
-18.9	CARBONDALE		DARK GRAY SHALE	4.3	478.9	
-23.2	CARBONDALE		GRAY SHALE	2.8	483.2	
-26.0	CARBONDALE		GRAY SANDSTONE	1.2	486.0	
-27.2	CARBONDALE		GRAY SHALE	0.5	487.2	
-27.7	CARBONDALE		GRAY SANDSTONE	0.2	487.7	
-27.9	CARBONDALE		GRAY SHALE	16.9	487.9	
-44.8	CARBONDALE		DARK GRAY SHALE	8.6	504.8	
-53.4	CARBONDALE		IRONSTONE	0.2	513.4	
-53.6	CARBONDALE		DARK GRAY SHALE	4.9	513.6	
-58.5	CARBONDALE		IRONSTONE	0.3	518.5	
-58.8	CARBONDALE		DARK GRAY SHALE	8.9	518.8	
-67.7	CARBONDALE		IRONSTONE	0.3	527.7	
-68.0	CARBONDALE		DARK GRAY SHALE	6.5	528.0	
-74.5	CARBONDALE	COLCHESTER	COAL	0.2	534.5	
-74.7	SPOON		BROWN SHALE	2.9	534.7	BROWNISH-GRAY SHALE
-77.6	SPOON		GRAY SANDSTONE	3.7	537.6	
-81.3	SPOON		GRAY SHALE	0.8	541.3	
-82.1	SPOON		GRAY SANDSTONE	34.6	542.1	
-116.7	SPOON		DARK GRAY SHALE	19.5	576.7	
-136.2	SPOON	DEKOVEN	COAL	4.6	596.2	
-140.8	SPOON		CLAYSTONE	1.2	600.8	'UNDERCLAY'

-142.0	SPOON	GRAY SANDSTONE	5.2	602.0	
-147.2	SPOON	DARK GRAY SHALE	1.1	607.2	
-148.3	SPOON	GRAY SANDSTONE	5.4	608.3	
-153.7	SPOON	DARK GRAY SHALE	0.8	613.7	
-154.5	SPOON	UNCLASSIFIED	0.2	614.5	LOG SAYS 'CORE LOSS'
-154.7	SPOON	GRAY SHALE	3.1	614.7	
-157.8	SPOON	BLACK SHALE	5.6	617.8	
-163.4	SPOON	CLAYSTONE	2.6	623.4	UNDERCLAY
-166.0	SPOON	UNCLASSIFIED	0.2	626.0	LOG SAYS 'CORE LOSS'.2
-166.2	SPOON	GRAY SHALE	10.8	626.2	
-177.0	SPOON	BROWN LIMESTONE	0.3	637.0	
-177.3	SPOON	GRAY SANDSTONE	0.7	637.3	
-178.0	SPOON	GRAY SHALE	0.6	638.0	
-178.6	SPOON	SANDSTONE	0.6	638.6	WITH GY SH
-179.2	SPOON	SHALE	0.8	639.2	WITH SS
-180.0	SPOON	SANDSTONE	0.3	640.0	WITH GY SH
-180.3	SPOON	GRAY SHALE	0.6	640.3	WITH SS
-180.9	SPOON	UNCLASSIFIED	0.1	640.9	LOG SAYS 'CORE LOSS'

MAPID: 16526134000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.685807 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.758072 **DATE COLLECTED:** 7 / 26 / 2000

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 750.0 **LOG TYPE:** Other Core Study

SOURCE: MID-CONTINENT METHANE DDH-2A **WELL TYPE:** Coal Test

COMMENT: CORE #C-14946

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.0			UNKNOWN	411.0	0.0	
-17.0			SHALE	6.5	411.0	SLIGHTLY CALCAREOUS, PLANT IMPRESSIONS
-23.5			COAL	0.6	417.5	REMOVED BY COMPANY
-24.1			CLAYSTONE & SILTSTONE	0.3	418.1	MICACEOUS, PLANT FRAGS, ROOTLETS
-24.4			SILTSTONE	2.9	418.4	LARGE PLANT FRAGS, MICACEOUS
-27.3			GRAY SHALE	1.4	421.3	CARBONACEOUS PLANT FRAGS
-28.7			UNKNOWN	122.3	422.7	NO CORE
-151.0			COAL	1.5	545.0	REMOVED BY COMPANY
-152.5			BLACK SHALE	0.7	546.5	BONE COAL? CARBONACEOUS
-153.2			CLAYSTONE & SILTSTONE	0.8	547.2	PLANT FRAGMENTS
-154.0			DARK SHALE	1.2	548.0	
-155.2				0.1	549.2	CARBONACEOUS
-155.3			COAL	1.7	549.3	REMOVED BY COMPANY
-156.9			SILTSTONE	0.3	550.9	MINOR CARBONACEOUS MATERIAL
-157.3				1.8	551.3	PLANT DEBRIS
-159.0			SILTSTONE	10.8	553.0	MICACEOUS, CARBONACEOUS PLANT MATERIAL
-169.8			SHALE	2.7	563.8	CARBONACEOUS
-172.5			BLACK SHALE	0.8	566.5	CARBONACEOUS
-173.3	CARBONDALE	DAVIS	COAL	2.0	567.3	REMOVED BY COMPANY
-175.3			SHALE	1.0	569.3	SOME CARBONIZED PLANT MATERIAL
-176.3			CLAYSTONE & SILTSTONE	1.5	570.3	ABUNDANT PLANT FRAGMENTS
-177.8			UNKNOWN	94.3	571.8	MISSING INTERVAL
-272.0			GRAY SHALE	10.5	666.0	SOME CARBONACEOUS MATERIAL
-282.5			COAL	1.0	676.5	REMOVED BY COMPANY
-283.5				1.3	677.5	CARBONACEOUS PLANT FRAGMENTS
-284.8			BLACK SHALE	1.2	678.8	FISSILE
-286.0				1.0	680.0	NODULAR
-287.0			UNKNOWN	1.0	681.0	MISSING INTERVAL
-288.0			BLACK SHALE	0.5	682.0	VERY CALCAREOUS
-288.5			BLACK SHALE	1.5	682.5	MASSIVE
-290.0			BLACK SHALE	0.1	684.0	FISSILE
-290.1			COAL	0.5	684.1	REMOVED BY COMPANY
-290.6				0.7	684.6	SOME PLANT MATERIAL
-291.3			SILTSTONE	1.3	685.3	CARBONACEOUS PLANT MATERIAL
-292.6			SANDSTONE	1.1	686.6	
-293.7			CLAYSTONE & SILTSTONE	2.8	687.7	FRIABLE
-296.5			SANDSTONE	2.8	690.5	MICACEOUS

-299.3	CLAYSTONE & SILTSTONE	0.3	693.3	FRIABLE
-299.6	SANDSTONE	2.7	693.6	
-302.3		0.7	696.3	FISSILE
-303.0	UNKNOWN	33.0	697.0	MISSING INTERVAL
-336.0	SILTSTONE	0.8	730.0	
-336.8	SILTY CLAYSTONE	3.5	730.8	FISSILE
-340.3	SILTSTONE	1.1	734.3	NON-CALCAREOUS
-341.4	CLAYSTONE & SILTSTONE	4.4	735.4	OCCASIONAL PLANT FRAGS;IRON CONCRETIONS
-345.8	SILTY CLAYSTONE	2.4	739.8	CARBONACEOUS PLANT FRAGS, MICACEOUS
-348.2	CLAYSTONE & SILTSTONE	0.6	742.2	CARBONACEOUS PLANT FRAGS

MAPID: 16500373000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.661765 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.753404 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 480.4 **LOGGED (FT.):** 283.2 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.4			UNCONSOLIDATED	7.0	0.0	
473.4	MODESTO		SANDSTONE	26.0	7.0	
447.4	MODESTO		ARGILACEOUS SHALE	7.0	33.0	
440.4	MODESTO	PIASA	LIMESTONE	3.0	40.0	
437.4	MODESTO		ARGILACEOUS SHALE	10.0	43.0	
427.4	MODESTO		BLACK SHALE	1.5	53.0	
425.9	CARBONDALE	DANVILLE	COAL	1.5	54.5	
424.4	CARBONDALE		SHALE	10.0	56.0	
414.4	CARBONDALE		SANDSTONE	5.0	66.0	
409.4	CARBONDALE		ARGILACEOUS SHALE	3.0	71.0	
406.4	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	74.0	
404.9	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	75.5	
392.9	CARBONDALE	ANVIL ROCK	SHALE	13.0	87.5	
379.9	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	100.5	
371.9	CARBONDALE	ANVIL ROCK	SHALE	23.0	108.5	
348.9	CARBONDALE	BRERETON	LIMESTONE	5.5	131.5	
343.4	CARBONDALE	ANNA	SHALE	0.5	137.0	
342.9	CARBONDALE	HERRIN	COAL	6.2	137.5	
336.7	CARBONDALE		UNDERCLAY	1.0	143.7	
335.7	CARBONDALE		ARGILACEOUS SHALE	20.5	144.7	
315.2	CARBONDALE		SHALE	21.5	165.2	
293.7	CARBONDALE	DYKERSBURG	SANDSTONE	50.0	186.7	
243.7	CARBONDALE	DYKERSBURG	SHALE	40.0	236.7	
203.7	CARBONDALE	SPRINGFIELD	COAL	6.5	276.7	

MAPID: 16500374000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.661765 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.753404 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 479.7 **LOGGED (FT.):** 243.4 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.7			UNCONSOLIDATED	7.3	0.0	
472.4	MODESTO		SANDSTONE	24.7	7.3	
447.7	CARBONDALE	DANVILLE	COAL	2.0	32.0	
445.7	CARBONDALE		SANDSTONE	4.0	34.0	
441.7	CARBONDALE		ARGILACEOUS SHALE	3.0	38.0	
438.7	CARBONDALE	ALLENBY	COAL	0.4	41.0	
438.3	CARBONDALE		ARGILACEOUS SHALE	2.0	41.4	
436.3	CARBONDALE		SANDSTONE	8.6	43.4	
427.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	52.0	
423.7	CARBONDALE		SANDSTONE	10.0	56.0	
413.7	CARBONDALE		LIMESTONE	1.0	66.0	
412.7	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	67.0	
403.7	CARBONDALE	ANVIL ROCK	SHALE	2.0	76.0	
401.7	CARBONDALE	ANVIL ROCK	SANDSTONE	31.0	78.0	
370.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	109.0	
368.7	CARBONDALE	ANNA	BLACK SHALE	2.0	111.0	
366.7	CARBONDALE	HERRIN	COAL	7.0	113.0	
359.7	CARBONDALE		UNDERCLAY	1.0	120.0	
358.7	CARBONDALE		SANDY SHALE	2.0	121.0	
356.7	CARBONDALE		SHALE	14.0	123.0	
342.7	CARBONDALE		BLACK SHALE	3.0	137.0	
339.7	CARBONDALE		SANDY SHALE	1.0	140.0	
338.7	CARBONDALE		SHALE	12.0	141.0	
326.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	153.0	
324.7	CARBONDALE	DYKERSBURG	SHALE	14.0	155.0	
310.7	CARBONDALE	DYKERSBURG	SANDSTONE	32.0	169.0	
278.7	CARBONDALE	DYKERSBURG	SHALE	36.0	201.0	
242.7	CARBONDALE	SPRINGFIELD	COAL	6.4	237.0	

MAPID: 16500374000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARCO **LONGITUDE:** -88.661765 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.753404 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 243.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0	CARBONDALE	HERRIN	COAL	7.0	113.0	
243.0	CARBONDALE	SPRINGFIELD	COAL	6.4	237.0	

MAPID: 16501083000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 84' S line, 165' W line of NE SW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.668034 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.755532 **DATE COLLECTED:** 6 / 23 / 1951

SURFACE ELEVATION (FT.): 489.9 **LOGGED (FT.):** 249.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-62 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
489.9			CLAY	16.0	0.0	CLAY, SAND, AND GRAVEL
473.9			SANDSTONE	4.0	16.0	
469.9			SANDSTONE	5.5	20.0	
464.4			SANDSTONE	7.5	25.5	
456.9			GRAY SHALE	25.7	33.0	
431.2			COAL	0.3	58.7	
430.9			GRAY SHALE	7.4	59.0	
423.5			COAL	0.5	66.4	
423.0			GRAY SHALE	4.3	66.9	
418.6	CARBONDALE	ALLENBY	COAL	0.5	71.3	
418.1	CARBONDALE		GRAY SHALE	3.8	71.8	
414.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.9	75.5	
411.5	CARBONDALE		GRAY SHALE	6.6	78.4	
404.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	85.0	
388.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	15.0	101.0	
373.9	CARBONDALE		GRAY SHALE	16.1	116.0	
357.8	CARBONDALE	HERRIN	COAL	4.8	132.1	
353.1	CARBONDALE		UNDERCLAY	1.2	136.8	
351.9	CARBONDALE		GRAY SHALE	17.0	138.0	
334.9	CARBONDALE		GRAY SHALE	8.3	155.0	
326.6	CARBONDALE	BRIAR HILL	COAL	0.5	163.3	
326.1	CARBONDALE		GRAY SHALE	4.0	163.8	
322.1	CARBONDALE	DYKERSBURG	SANDSTONE	8.4	167.8	
313.6	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	1.7	176.3	
312.0	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	177.9	
310.0	CARBONDALE	DYKERSBURG	SANDSTONE	2.2	179.9	
307.8	CARBONDALE	DYKERSBURG	SANDSTONE	0.7	182.1	
307.1	CARBONDALE	DYKERSBURG	SANDSTONE	0.8	182.8	
306.3	CARBONDALE	DYKERSBURG	SANDSTONE	0.7	183.6	DGY SS W/ COAL STREAKS
305.6	CARBONDALE	DYKERSBURG	SANDSTONE	1.8	184.3	
303.9	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	186.0	SS W/ COAL STREAKS
293.9	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	196.0	
282.9	CARBONDALE	DYKERSBURG	SANDSTONE	0.7	207.0	
282.2	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	2.6	207.7	
279.6	CARBONDALE	DYKERSBURG	GRAY SHALE	3.8	210.3	
275.9	CARBONDALE	DYKERSBURG	GRAY SHALE	6.6	214.0	
269.3	CARBONDALE	DYKERSBURG	SANDY SHALE	6.4	220.6	
262.9	CARBONDALE	DYKERSBURG	SANDY SHALE	16.5	227.0	
246.4	CARBONDALE	SPRINGFIELD	COAL	4.5	243.5	

241.9	CARBONDALE	UNDERCLAY	1.5	248.0

MAPID: 16501084000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 12' N line, 111' E line of NE SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.66223 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757068 **DATE COLLECTED:** 6 / 30 / 1951

SURFACE ELEVATION (FT.): 472.2 **LOGGED (FT.):** 244.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-63 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.2			CLAY	12.0	0.0	CLAY, SAND, AND GRAVEL
460.2	MODESTO		SANDSTONE	3.0	12.0	
457.2	MODESTO		GRAY SHALE	18.0	15.0	
439.2	CARBONDALE	DANVILLE	COAL	0.5	33.0	
438.7	CARBONDALE		GRAY SHALE	4.5	33.5	
434.2	CARBONDALE		SANDY SHALE	3.3	38.0	
430.9	CARBONDALE		GRAY SHALE	12.1	41.3	
418.9	CARBONDALE	ALLENBY	COAL	0.5	53.3	
418.4	CARBONDALE		GRAY SHALE	3.2	53.8	
415.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	57.0	
409.7	CARBONDALE		CALCAREOUS SHALE	1.4	62.5	
408.3	CARBONDALE	ANVIL ROCK	SANDSTONE	1.3	63.9	
406.9	CARBONDALE	ANVIL ROCK	SANDSTONE	14.8	65.3	
392.2	CARBONDALE	ANVIL ROCK	GRAY SHALE	13.0	80.0	
379.2	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	10.3	93.0	
368.9	CARBONDALE	ANVIL ROCK	SANDSTONE	2.2	103.3	SS W/ SHALE
366.8	CARBONDALE		GRAY SHALE	6.3	105.4	
360.5	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.4	111.7	
360.1	CARBONDALE	JAMESTOWN	COAL	0.3	112.1	
359.8	CARBONDALE		GRAY SHALE	1.7	112.4	GY SH W/ COAL STREAKS
358.1	CARBONDALE	ANNA	BLACK SHALE	1.0	114.1	
357.1	CARBONDALE	HERRIN	COAL	0.1	115.1	COAL STREAK
357.0	CARBONDALE	HERRIN	BLACK SHALE	0.1	115.2	
356.9	CARBONDALE	HERRIN	COAL	5.3	115.3	
351.7	CARBONDALE		UNDERCLAY	2.5	120.5	
349.2	CARBONDALE		GRAY SHALE	1.4	123.0	GY SH W/LIME
347.8	CARBONDALE		LIMESTONE	1.8	124.4	
345.9	CARBONDALE		GRAY SHALE	1.2	126.3	GY SH W/ LIME
344.8	CARBONDALE		LIMESTONE	1.5	127.4	LS W/ GRAY SHALE
343.3	CARBONDALE		GRAY SHALE	0.4	128.9	
342.9	CARBONDALE		LIMESTONE	0.3	129.3	
342.5	CARBONDALE		GRAY SHALE	2.1	129.7	
340.4	CARBONDALE		CALCAREOUS SHALE	0.9	131.8	
339.5	CARBONDALE		GRAY SHALE	4.3	132.7	GY SH W/ LIME
335.2	CARBONDALE		GRAY SHALE	3.5	137.0	
331.7	CARBONDALE		SANDSTONE	0.2	140.5	SS BAND
331.5	CARBONDALE		GRAY SHALE	0.7	140.7	GY SH W/ SS
330.9	CARBONDALE		SANDSTONE	0.1	141.3	

330.8	CARBONDALE		GRAY SHALE	0.9	141.4	
329.9	CARBONDALE		SANDSTONE	0.1	142.3	SS BAND
329.8	CARBONDALE		GRAY SHALE	2.5	142.4	
327.3	CARBONDALE		GRAY SHALE	0.3	144.9	
326.9	CARBONDALE	BRIAR HILL	COAL	0.4	145.3	
326.5	CARBONDALE		DARK GRAY SHALE	4.7	145.7	
321.9	CARBONDALE		DARK GRAY SHALE	1.9	150.3	
319.9	CARBONDALE	DYKERSBURG	SANDSTONE	0.3	152.3	SS BAND
319.7	CARBONDALE	DYKERSBURG	GRAY SHALE	0.9	152.5	
318.8	CARBONDALE	DYKERSBURG	SANDSTONE	0.1	153.4	SS BAND
318.7	CARBONDALE	DYKERSBURG	GRAY SHALE	1.5	153.5	
317.2	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	1.8	155.0	
315.4	CARBONDALE	DYKERSBURG	SANDSTONE	0.9	156.8	
314.4	CARBONDALE	DYKERSBURG	SHALE	0.3	157.8	
314.2	CARBONDALE	DYKERSBURG	SANDSTONE	16.8	158.0	
297.4	CARBONDALE	DYKERSBURG	SANDSTONE	0.9	174.8	SS W/ COAL STREAKS
296.5	CARBONDALE	DYKERSBURG	SANDSTONE	4.7	175.7	
291.9	CARBONDALE	DYKERSBURG	SANDSTONE	2.3	180.3	SANDSTONE AND GRAY SHALE
289.5	CARBONDALE	DYKERSBURG	SANDSTONE	15.8	182.7	
273.7	CARBONDALE	DYKERSBURG	SHALE	0.3	198.5	
273.4	CARBONDALE	DYKERSBURG	SANDSTONE	8.2	198.8	
265.2	CARBONDALE	DYKERSBURG	SANDSTONE	5.2	207.0	
260.0	CARBONDALE	DYKERSBURG	GRAY SHALE	1.6	212.2	
258.4	CARBONDALE	DYKERSBURG	GRAY SHALE	3.3	213.8	
255.2	CARBONDALE	DYKERSBURG	GRAY SHALE	21.4	217.0	
233.8	CARBONDALE	SPRINGFIELD	COAL	4.3	238.4	
229.5	CARBONDALE	SPRINGFIELD	COAL	1.3	242.7	

MAPID: 16501085000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 135' N line, 144' E line of NE NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.662417 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.760424 **DATE COLLECTED:** 7 / 1 / 1951

SURFACE ELEVATION (FT.): 479.5 **LOGGED (FT.):** 273.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-64 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.5			CLAY	12.0	0.0	CLAY, SAND, AND GRAVEL
467.5	MODESTO		SANDSTONE	9.4	12.0	
458.1	MODESTO		SANDSTONE	16.6	21.4	
441.5	MODESTO		GRAY SHALE	6.4	38.0	
435.1	MODESTO		COAL	0.5	44.4	
434.6	MODESTO		GRAY SHALE	1.8	44.9	
432.7	MODESTO	PIASA	LIMESTONE	3.3	46.8	
429.5	MODESTO		CALCAREOUS SHALE	1.6	50.0	
427.9	MODESTO		GRAY SHALE	5.0	51.6	
422.9	CARBONDALE	DANVILLE	COAL	1.8	56.6	
421.1	CARBONDALE		GRAY SHALE	13.8	58.4	
407.2	CARBONDALE	ALLENBY	COAL	0.5	72.3	
406.7	CARBONDALE		GRAY SHALE	11.7	72.8	1
395.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	84.4	
393.6	CARBONDALE		GRAY SHALE	3.1	85.9	
390.5	CARBONDALE		COAL	0.3	89.0	
390.2	CARBONDALE		GRAY SHALE	1.7	89.3	
388.5	CARBONDALE		GRAY SHALE	13.0	91.0	
375.5	CARBONDALE		GRAY SANDSTONE	18.3	104.0	GY SS W/ COAL STREAKS
357.2	CARBONDALE		GRAY SHALE	5.4	122.3	
351.8	CARBONDALE	BRERETON	LIMESTONE	2.5	127.7	
349.3	CARBONDALE	ANNA	BLACK SHALE	2.2	130.2	
347.1	CARBONDALE	ENERGY	GRAY SHALE	1.9	132.4	
345.2	CARBONDALE	HERRIN	COAL	5.9	134.3	
339.3	CARBONDALE		UNDERCLAY	1.1	140.2	
338.2	CARBONDALE		GRAY SHALE	6.0	141.3	
332.2	CARBONDALE		LIMESTONE	2.3	147.3	
329.9	CARBONDALE		CALCAREOUS SHALE	4.3	149.6	
325.7	CARBONDALE		GRAY SHALE	6.6	153.8	
319.1	CARBONDALE	BRIAR HILL	COAL	0.3	160.4	
318.7	CARBONDALE	DYKERSBURG	GRAY SHALE	14.3	160.8	
304.5	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	175.0	
292.5	CARBONDALE	DYKERSBURG	SANDSTONE	38.0	187.0	
254.5	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	225.0	SS W/ COAL STREAKS
250.5	CARBONDALE	DYKERSBURG	SANDY SHALE	9.8	229.0	
240.7	CARBONDALE	DYKERSBURG	SANDY SHALE	12.3	238.8	
228.5	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	251.0	
215.5	CARBONDALE	DYKERSBURG	GRAY SHALE	2.2	264.0	
213.3	CARBONDALE	SPRINGFIELD	COAL	5.4	266.2	

207.8	CARBONDALE	UNDERCLAY	1.3	271.7	

MAPID: 16501109000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 55' S line, 20' W line of NE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657054 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.74982 **DATE COLLECTED:** 6 / 26 / 1953

SURFACE ELEVATION (FT.): 457.8 **LOGGED (FT.):** 209.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
457.8			CLAY	26.0	0.0	
431.8	CARBONDALE		SANDSTONE	7.5	26.0	WITH SS SEAMS
424.3	CARBONDALE	BANKSTON FORK	LIMESTONE	9.1	33.5	
415.2	CARBONDALE		SANDSTONE	4.4	42.6	
410.8	CARBONDALE		SANDY SHALE	2.0	47.0	
408.8	CARBONDALE		GRAY SHALE	20.0	49.0	
388.8	CARBONDALE		DARK SHALE	3.5	69.0	
385.3	CARBONDALE		GRAY SHALE	4.5	72.5	
380.8	CARBONDALE	HERRIN	COAL	5.0	77.0	MIXED WITH SHALE
375.8	CARBONDALE		GRAY SHALE	4.0	82.0	
371.8	CARBONDALE		LIMESTONE	4.5	86.0	WITH SHALE
367.3	CARBONDALE		GRAY SHALE	0.5	90.5	
366.8	CARBONDALE	BRIAR HILL	COAL	0.8	91.0	
366.0	CARBONDALE	DYKERSBURG	SANDY SHALE	15.2	91.8	
350.8	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	107.0	
347.8	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	110.0	
342.8	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	115.0	WITH SLA SEAMS
329.8	CARBONDALE	DYKERSBURG	SANDY SHALE	68.0	128.0	WITH SS SEAMS
261.8	CARBONDALE	SPRINGFIELD	COAL	4.5	196.0	
257.3	CARBONDALE		SANDY CLAYSTONE	8.5	200.5	SANDY UNDERCLAY

MAPID: 16501110000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 285' N line, 60' W line of SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.656887 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.74888 **DATE COLLECTED:** 7 / 28 / 1953

SURFACE ELEVATION (FT.): 441.1 **LOGGED (FT.):** 194.2 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.1			UNCLASSIFIED	17.0	0.0	LOG SAYS 'NO CORE'
424.1	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	1.3	17.0	
422.8	CARBONDALE		GRAY SHALE	0.7	18.3	
422.2	CARBONDALE		WHITE SILTSTONE	2.4	18.9	
419.8	CARBONDALE		GRAY SILTSTONE	0.3	21.3	
419.4	CARBONDALE		DARK GRAY SHALE	0.8	21.7	
418.6	CARBONDALE		GRAY SHALE	3.1	22.5	
415.5	CARBONDALE		DARK GRAY SHALE	11.4	25.6	OCCASIONAL LAMINAE OF LGY ST
404.9	CARBONDALE		DARK GRAY SHALE	5.9	36.2	
398.2	CARBONDALE		DARK GRAY SHALE	1.6	42.9	
396.6	CARBONDALE	CONANT	LIMESTONE	0.3	44.5	
397.3	CARBONDALE	JAMESTOWN	COAL	0.1	43.8	VERY BONY
397.1	CARBONDALE		SHALE	0.2	44.0	WITH OCCASIONAL COAL STREAKS
396.9	CARBONDALE		DARK GRAY SHALE	0.1	44.2	
396.8	CARBONDALE	BRERETON	LIMESTONE	1.0	44.3	
395.8	CARBONDALE	BRERETON	GRAY LIMESTONE	6.2	45.3	
389.7	CARBONDALE	BRERETON	GRAY LIMESTONE	0.4	51.4	WITH DGY SH AND CO MATRIX
389.3	CARBONDALE		DARK GRAY SHALE	0.2	51.8	
389.1	CARBONDALE		GRAY LIMESTONE	0.5	52.0	
388.6	CARBONDALE	HERRIN	COAL	2.1	52.5	HOLE 6' NORTH ENCOUNTERED 5'6" OF COAL
386.5	CARBONDALE		CLAYSTONE	0.4	54.6	
386.1	CARBONDALE		GRAY SHALE	0.3	55.0	
385.8	CARBONDALE		LIMESTONE	0.4	55.3	
385.4	CARBONDALE		GRAY SHALE	0.9	55.7	
384.5	CARBONDALE		GRAY LIMESTONE	0.5	56.6	
384.0	CARBONDALE		GRAY SHALE	0.4	57.1	
383.6	CARBONDALE		GRAY LIMESTONE	0.6	57.5	
383.0	CARBONDALE		GRAY SHALE	2.0	58.1	
381.0	CARBONDALE		GRAY SILTSTONE	1.3	60.1	
379.7	CARBONDALE		GRAY SHALE	3.8	61.4	WITH SOME LGY ST MIXED LAMINAE
375.8	CARBONDALE		GRAY SHALE	2.3	65.3	
373.5	CARBONDALE		NO RECORD	7.4	67.6	NO RECORD GIVEN IN LOG
366.1	CARBONDALE		GRAY SHALE	2.0	75.0	
364.1	CARBONDALE		GRAY SHALE	7.6	77.0	WITH IRREGULAR LENSES & KNOTS OF LGY ST
356.5	CARBONDALE		DARK GRAY SHALE	0.2	84.6	
356.3	CARBONDALE		BLACK SHALE	0.2	84.8	
356.2	CARBONDALE		COAL	0.3	84.9	
355.9	CARBONDALE		CLAYSTONE	0.4	85.2	UNDERCLAY

355.5	CARBONDALE		GRAY SILTSTONE	0.8	85.6	
354.8	CARBONDALE		GRAY SILTSTONE	0.6	86.3	
354.2	CARBONDALE		GRAY SHALE	1.6	86.9	
352.6	CARBONDALE		GRAY SHALE	2.9	88.5	WITH COALY PLANT DEBRIS
349.7	CARBONDALE		GRAY SHALE	2.2	91.4	
347.5	CARBONDALE		DARK GRAY SHALE	0.1	93.6	
347.4	CARBONDALE	BRIAR HILL	COAL	1.3	93.7	
346.1	CARBONDALE		GRAY SHALE	0.2	95.0	
345.9	CARBONDALE		GRAY SILTSTONE	0.4	95.2	
345.5	CARBONDALE		DARK GRAY SHALE	0.8	95.6	
344.7	CARBONDALE		DARK GRAY SHALE	0.8	96.4	W/ AN OCCASIONAL SMALL FOSSIL
343.8	CARBONDALE		GRAY SILTSTONE	0.2	97.3	
343.7	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.4	97.4	
343.3	CARBONDALE	DYKERSBURG	GRAY SHALE	4.1	97.8	WITH THIN GY ST LAMINAE
339.2	CARBONDALE	DYKERSBURG	GRAY SHALE	4.3	101.9	
334.9	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	5.1	106.2	
329.8	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	8.8	111.3	
321.1	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	0.4	120.0	
320.7	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	20.9	120.4	
299.8	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	5.1	141.3	
294.7	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	2.3	146.4	WITH LGY ST MIXED
292.3	CARBONDALE	DYKERSBURG	GRAY SHALE	1.2	148.8	
291.2	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	3.8	149.9	
287.4	CARBONDALE	DYKERSBURG	GRAY SHALE	5.8	153.7	
281.7	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	1.8	159.4	
279.8	CARBONDALE	DYKERSBURG	GRAY SHALE	4.8	161.3	
275.0	CARBONDALE		UNCLASSIFIED	1.4	166.1	GAP IN LOG
273.6	CARBONDALE	SPRINGFIELD	COAL	5.8	167.5	DRILLER REPORTS 5'10" OF #5 CO
267.8	CARBONDALE		SHALE	1.0	173.3	
266.8	CARBONDALE		GRAY SILTSTONE	2.8	174.3	
263.9	CARBONDALE		GRAY SILTSTONE	1.8	177.2	
262.2	CARBONDALE		GRAY SHALE	5.0	178.9	
257.2	CARBONDALE		GRAY SILTSTONE	10.2	183.9	
247.0	CARBONDALE		DARK GRAY SHALE	0.0	194.1	

MAPID: 16501111000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 265' N line, 35' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.65708 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.752633 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 514.3 **LOGGED (FT.):** 274.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
514.3			CLAY	13.0	0.0	CLAY SURFACE LAYER
501.3			CLAY	17.0	13.0	WITH SOME SHALE
484.3			SANDY SHALE	37.0	30.0	
447.3			SANDSTONE	7.0	67.0	
440.3			GRAY SANDSTONE	3.5	74.0	
436.8			GRAY SILTSTONE	1.3	77.5	
435.5			GRAY SANDSTONE	1.0	78.8	
434.5			GRAY SILTSTONE	0.5	79.8	
434.0			GRAY SANDSTONE	3.8	80.3	
430.3			GRAY SILTSTONE	1.9	84.0	
428.4			GRAY SANDSTONE	2.0	85.9	
426.4			GRAY SILTSTONE	2.1	87.9	
424.3			GRAY SANDSTONE	2.4	90.0	
421.9			GRAY SILTSTONE	1.4	92.4	
420.5			GRAY SILTSTONE	1.8	93.8	
418.6			GRAY SILTSTONE	2.8	95.7	
415.9			GRAY SANDSTONE	4.4	98.4	
411.5			NO RECORD	5.2	102.8	NO RECORD GIVEN IN LOG
406.3			GRAY SANDSTONE	1.1	108.0	
405.2			GRAY SILTSTONE	1.5	109.1	
403.7			GRAY SHALE	1.1	110.6	
402.6			GRAY SILTSTONE	0.9	111.7	
401.7			GRAY SHALE	0.7	112.6	
401.0			GRAY SANDSTONE	5.0	113.3	
396.0			DARK GRAY SHALE	3.5	118.3	
392.5			DARK GRAY SHALE	6.3	121.8	
386.3			DARK GRAY SHALE	4.5	128.0	
381.8			DARK GRAY SHALE	1.0	132.5	
380.8			GRAY SHALE	0.2	133.5	
380.6			DARK GRAY SHALE	0.2	133.7	
380.5			NO RECORD	4.7	133.8	NO RECORD GIVEN IN LOG
375.8	CARBONDALE	BRERETON	LIMESTONE	1.3	138.5	
374.5	CARBONDALE		BLACK SHALE	0.2	139.8	
374.3	CARBONDALE		DARK SHALE	2.5	140.0	
371.8	CARBONDALE	HERRIN	COAL	4.7	142.5	
367.1	CARBONDALE		NO RECORD	2.9	147.2	NO RECORD GIVEN IN LOG
364.2	CARBONDALE		CLAYSTONE	0.3	150.1	UNDERCLAY
363.9	CARBONDALE		SHALE	1.2	150.4	
362.7	CARBONDALE		GRAY SHALE	0.4	151.6	

362.3	CARBONDALE		GRAY LIMESTONE	0.6	152.0	
361.7	CARBONDALE		SHALE	2.5	152.6	
359.2	CARBONDALE		GRAY SHALE	3.9	155.1	
355.3	CARBONDALE		GRAY SHALE	10.2	159.0	
345.1	CARBONDALE		DARK GRAY SHALE	0.1	169.2	
345.0	CARBONDALE		GRAY SHALE	0.3	169.3	
344.7	CARBONDALE		DARK GRAY SHALE	0.0	169.6	
344.7	CARBONDALE	BRIAR HILL	COAL	0.3	169.6	
344.4	CARBONDALE		CLAYSTONE	0.5	169.9	UNDERCLAY
343.9	CARBONDALE		GRAY SILTSTONE	1.6	170.4	
342.3	CARBONDALE		GRAY SILTSTONE	2.0	172.0	WITH LGY SS
340.3	CARBONDALE		GRAY SILTSTONE	0.8	174.0	WITH LGY SS
339.5	CARBONDALE		GRAY SILTSTONE	4.8	174.8	
334.8	CARBONDALE		GRAY SILTSTONE	3.3	179.5	WITH OCCASIONAL COALY STRIP
331.5	CARBONDALE		GRAY SANDSTONE	3.8	182.8	
327.7	CARBONDALE		GRAY SILTSTONE	0.9	186.6	
326.8	CARBONDALE		GRAY SANDSTONE	11.5	187.5	
315.3	CARBONDALE		GRAY SANDSTONE	7.5	199.0	
307.8	CARBONDALE		GRAY SANDSTONE	8.7	206.5	WITH DGY ST CONCENTRATIONS
299.1	CARBONDALE		UNCLASSIFIED	2.6	215.2	
296.5	CARBONDALE		GRAY SANDSTONE	0.5	217.8	
296.0	CARBONDALE		GRAY SANDSTONE	0.3	218.3	WITH DGY SH MIXED
295.8	CARBONDALE		GRAY SANDSTONE	1.5	218.5	
294.3	CARBONDALE		DARK GRAY SHALE	0.4	220.0	
293.9	CARBONDALE		GRAY SANDSTONE	1.1	220.4	
292.8	CARBONDALE		GRAY SHALE	0.7	221.5	
292.1	CARBONDALE		GRAY SANDSTONE	4.3	222.2	
287.8	CARBONDALE		GRAY SANDSTONE	2.9	226.5	
284.9	CARBONDALE		GRAY SANDSTONE	4.4	229.4	
280.5	CARBONDALE		GRAY SHALE	4.1	233.8	
276.3	CARBONDALE		GRAY SHALE	7.1	238.0	
269.2	CARBONDALE		GRAY SILTSTONE	8.5	245.1	
260.7	CARBONDALE		NO RECORD	2.4	253.6	NO RECORD GIVEN IN LOG
258.3	CARBONDALE		GRAY SILTSTONE	6.0	256.0	
252.3	CARBONDALE		GRAY SHALE	4.8	262.0	-10" TO MATCH LOG ENTRY
247.5	CARBONDALE		DARK GRAY SHALE	0.8	266.8	
246.8	CARBONDALE	SPRINGFIELD	COAL	4.2	267.5	
242.6	CARBONDALE		CLAYSTONE	0.3	271.7	UNDERCLAY
242.3	CARBONDALE		CLAYSTONE	1.3	272.0	UNDERCLAY
241.0	CARBONDALE		DARK CLAYSTONE	0.3	273.3	
240.8	CARBONDALE		GRAY SHALE	0.3	273.5	
240.5	CARBONDALE		SHALE	0.2	273.8	

MAPID: 16501111000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 265' N line, 35' W line of NE SE

QUADRANGLE: HARCO **LONGITUDE:** -88.65708 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.752633 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 514.0 **LOGGED (FT.):** 147.7 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
478.8	CARBONDALE	LAWSON	SILTY SHALE	36.0	35.2	
442.8	CARBONDALE	LAWSON	SANDSTONE	7.0	71.2	
435.8	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	3.0	78.2	
432.8	CARBONDALE	LAWSON	SANDSTONE	33.0	81.2	
399.8	CARBONDALE	LAWSON	SILTY SHALE	20.0	114.2	
379.8	CARBONDALE		CLAYSTONE & SHALE	5.0	134.2	
374.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	1.3	139.2	
373.5	CARBONDALE	ANNA	BLACK SHALE	2.5	140.5	
371.0	CARBONDALE	HERRIN	COAL	4.7	143.0	

MAPID: 16501130000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: HARCO **LONGITUDE:** -88.656221 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757979 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 211.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	11.0	0.0	SURFACE CLAY
-	CARBONDALE	DANVILLE	COAL	3.0	11.0	
-	CARBONDALE		UNDERCLAY	4.0	14.0	
-	CARBONDALE		SANDY SHALE	15.0	18.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	33.0	
-	CARBONDALE		GRAY SHALE	1.6	38.3	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	6.8	39.8	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	1.4	46.7	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	1.8	48.0	WITH SHALE
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	1.8	49.8	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	2.0	51.5	
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	1.2	53.5	0
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	3.2	54.7	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.8	57.8	
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	1.2	65.7	
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	2.0	66.8	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	2.6	68.8	
-	CARBONDALE	ANVIL ROCK	DARK GRAY SHALE	2.5	71.4	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	1.6	73.9	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	2.5	75.5	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.8	78.0	CORRECTED TO MATCH LOG
-	CARBONDALE	JAMESTOWN	COAL	0.1	78.8	
-	CARBONDALE		BLACK SHALE	0.2	78.8	
-	CARBONDALE		CLAYSTONE	0.7	79.0	UNDERCLAY
-	CARBONDALE		BLACK SHALE	1.0	79.7	
-	CARBONDALE	BRERETON	LIMESTONE	5.8	80.7	
-	CARBONDALE	ANNA	BLACK SHALE	0.3	86.5	
-	CARBONDALE	ANNA	BLACK SHALE	0.2	86.8	
-	CARBONDALE	HERRIN	COAL	5.0	87.0	
-	CARBONDALE		UNDERCLAY	3.0	92.0	
-	CARBONDALE		SANDY SHALE	54.0	95.0	
-	CARBONDALE		GRAY SANDSTONE	24.0	149.0	
-	CARBONDALE		SANDY SHALE	11.0	173.0	
-	CARBONDALE		SANDY SHALE	22.0	184.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	206.0	
-	CARBONDALE		UNDERCLAY	0.5	210.5	

MAPID: 16501344000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 380' N line, 348' E line of SW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658298 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.748631 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 463.7 **LOGGED (FT.):** 429.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-72 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
463.7			UNCONSOLIDATED	5.0	0.0	
458.7	MODESTO		SANDSTONE	2.0	5.0	
456.7	MODESTO		SANDSTONE	9.0	7.0	
447.7	MODESTO		SHALE	2.0	16.0	
445.7	MODESTO		SANDSTONE	3.0	18.0	
442.7	MODESTO		SANDSTONE	9.0	21.0	
433.7	MODESTO		SANDSTONE	4.5	30.0	
429.2	MODESTO		DARK GRAY SHALE	5.5	34.5	
423.7	MODESTO		GRAY SHALE	2.5	40.0	
421.2	MODESTO		GRAY SANDSTONE	9.0	42.5	
412.2	MODESTO		BLACK SHALE	1.0	51.5	
411.2	MODESTO		GRAY SHALE	3.5	52.5	
407.7	MODESTO		SANDSTONE	9.0	56.0	
398.7	MODESTO		DARK GRAY SHALE	27.0	65.0	
371.7	MODESTO		DARK GRAY SHALE	5.5	92.0	
366.2	MODESTO		DARK GRAY SHALE	4.0	97.5	
362.2	MODESTO		BLACK SHALE	1.5	101.5	
360.7	MODESTO		DARK GRAY SHALE	2.5	103.0	
358.2	MODESTO		SANDSTONE	3.0	105.5	
355.2	MODESTO		COAL	0.3	108.5	
354.9	MODESTO		CALCAREOUS SHALE	3.0	108.8	
351.9	MODESTO		FOSSILIFEROUS LIMESTONE	2.3	111.8	
349.7	MODESTO		DARK GRAY SHALE	1.0	114.0	
348.7	MODESTO		GRAY SHALE	5.5	115.0	
343.2	MODESTO		CALCAREOUS SHALE	13.5	120.5	
329.7	MODESTO		SANDSTONE	7.0	134.0	
322.7	MODESTO		SANDY SHALE	15.0	141.0	
307.7	MODESTO		GRAY SHALE	28.0	156.0	
279.7	MODESTO		SANDY SHALE	19.0	184.0	
260.7	MODESTO		GRAY SHALE	12.0	203.0	
248.7	CARBONDALE	DANVILLE	COAL	1.8	215.0	
246.9	CARBONDALE		UNDERCLAY	0.6	216.8	
246.4	CARBONDALE		GRAY SHALE	3.7	217.3	GY SH W/ LS STREAKS
242.7	CARBONDALE		SANDY SHALE	2.3	221.0	SDY SH W/ SS STREAKS
240.4	CARBONDALE		GRAY SHALE	5.8	223.3	
234.7	CARBONDALE		SANDY SHALE	2.3	229.0	
232.4	CARBONDALE		GRAY SHALE	7.2	231.3	
225.2	CARBONDALE		GRAY SHALE	18.0	238.5	

207.2	CARBONDALE		SHALE	10.0	256.5	
197.2	CARBONDALE		GRAY SHALE	3.5	266.5	
193.7	CARBONDALE		SANDSTONE	21.0	270.0	
172.7	CARBONDALE		SANDSTONE	1.9	291.0	
170.8	CARBONDALE		BLACK SHALE	5.7	292.9	
165.1	CARBONDALE	HERRIN	COAL	2.3	298.6	
162.9	CARBONDALE		UNDERCLAY	2.2	300.8	
160.7	CARBONDALE		SANDY SHALE	15.5	303.0	
145.2	CARBONDALE		SANDY SHALE	12.5	318.5	
132.7	CARBONDALE		SANDSTONE	5.0	331.0	
127.7	CARBONDALE		GRAY SHALE	10.0	336.0	
117.7	CARBONDALE		DARK GRAY SHALE	4.6	346.0	
113.1	CARBONDALE	SPRINGFIELD	COAL	1.5	350.6	
111.6	CARBONDALE		GRAY SHALE	3.7	352.1	
107.9	CARBONDALE		SANDSTONE	3.3	355.8	
104.6	CARBONDALE		SANDSTONE	2.3	359.1	
102.3	CARBONDALE		SANDSTONE	0.3	361.4	
102.0	CARBONDALE		BLACK SHALE	1.8	361.7	
100.2	CARBONDALE		DARK GRAY SHALE	3.5	363.5	
96.7	CARBONDALE		SANDSTONE	2.3	367.0	
94.4	CARBONDALE		DARK GRAY SHALE	1.8	369.3	
92.7	CARBONDALE		DARK GRAY SHALE	11.0	371.0	DGY SH W/ CALC STREAKS
81.7	CARBONDALE		DARK GRAY SHALE	2.5	382.0	
79.2	CARBONDALE		DARK GRAY SHALE	12.0	384.5	
67.2	CARBONDALE		DARK GRAY SHALE	6.0	396.5	
61.2	CARBONDALE		DARK GRAY SHALE	11.5	402.5	
49.7	CARBONDALE		DARK GRAY SHALE	4.6	414.0	
45.1	CARBONDALE		LIMESTONE	0.3	418.6	
44.9	CARBONDALE		DARK GRAY SHALE	4.3	418.8	
40.5	CARBONDALE	EXCELLO	BLACK SHALE	1.8	423.2	
38.7	CARBONDALE	EXCELLO	PYRITE	0.1	425.0	
38.6	CARBONDALE	HOUCHIN CREEK	COAL	0.4	425.1	
38.2	CARBONDALE		UNDERCLAY	1.0	425.5	
37.2	CARBONDALE		SANDSTONE	2.5	426.5	

MAPID: 16503631000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2030' N line, 990' W line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6582 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.747771 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 2290.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1073.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1506.0	
-1467.0			LIMESTONE	-	1900.0	
-1857.0		BASE BARLOW	LIMESTONE	-	2290.0	

MAPID: 16503838000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 410' N line, 300' W line of SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665189 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.748607 **DATE COLLECTED:** 12 / 0 / 1973
SURFACE ELEVATION (FT.): 499.0 **LOGGED (FT.):** 1400.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	375.0	
44.0	SPOON	DAVIS	UNCLASSIFIED	-	455.0	
-901.0	BASE OF PENN.		UNCLASSIFIED	-	1400.0	

MAPID: 16503838000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 410' N line, 300' W line of SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665189 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.748607 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-195.0	CARBONDALE	BRERETON	LIMESTONE	-	610.0	
-1569.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1984.0	
-1985.0			LIMESTONE	-	2400.0	
-2395.0		BASE BARLOW	LIMESTONE	-	2810.0	

MAPID: 16503838000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** 410' N line, 300' W line of SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665189 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.748607 **DATE COLLECTED:** 12 / 0 / 1973
SURFACE ELEVATION (FT.): 499.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., C & H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
228.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	271.0	
187.0	CARBONDALE	SURVANT	COAL	0.8	312.0	
122.0	CARBONDALE	COLCHESTER	COAL	0.5	377.0	
61.0	CARBONDALE	DEKOVEN	COAL	3.0	438.0	
61.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	438.0	
43.0	CARBONDALE	DAVIS	COAL	3.8	456.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16500375000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW/c
QUADRANGLE: HARCO **LONGITUDE:** -88.643372 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.753345 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 241.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			UNCONSOLIDATED	9.0	0.0	
433.0	MODESTO		SANDSTONE	43.0	9.0	
390.0	CARBONDALE	DANVILLE	COAL	1.0	52.0	
389.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	53.0	
381.0	CARBONDALE	ANVIL ROCK	SANDSTONE	41.0	61.0	
340.0	CARBONDALE	JAMESTOWN	COAL	0.5	102.0	
339.5	CARBONDALE	BRERETON	LIMESTONE	3.5	102.5	
336.0	CARBONDALE	ANNA	SHALE	2.0	106.0	
334.0	CARBONDALE	HERRIN	COAL	6.0	108.0	
328.0	CARBONDALE		UNDERCLAY	1.0	114.0	
327.0	CARBONDALE		SANDY SHALE	3.5	115.0	
323.5	CARBONDALE		SANDY SHALE	19.5	118.5	
304.0	CARBONDALE	BRIAR HILL	COAL	1.0	138.0	
303.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	139.0	
291.0	CARBONDALE	DYKERSBURG	SANDY SHALE	19.0	151.0	
272.0	CARBONDALE	DYKERSBURG	SANDY DARK SHALE	22.0	170.0	
250.0	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	192.0	
241.0	CARBONDALE	DYKERSBURG	SANDY SHALE	33.0	201.0	
208.0	CARBONDALE	SPRINGFIELD	COAL	4.7	234.0	
203.3	CARBONDALE		UNDERCLAY	2.3	238.7	

MAPID: 16500375000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW/c

QUADRANGLE: HARCO **LONGITUDE:** -88.643372 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.753345 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 241.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	43.0	9.0	
389.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	53.0	
381.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	41.0	61.0	
334.0	CARBONDALE	HERRIN	COAL	6.0	108.0	
304.0	CARBONDALE	BRIAR HILL	COAL	1.0	138.0	
303.0	CARBONDALE	CANTON		12.0	139.0	
208.0	CARBONDALE	SPRINGFIELD	COAL	4.7	234.0	

MAPID: 16500376000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SW NE

QUADRANGLE: HARCO **LONGITUDE:** -88.639919 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.754272 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 268.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.0			UNCONSOLIDATED	8.7	0.0	
440.3	MODESTO		SANDSTONE	25.3	8.7	
415.0	MODESTO		ARGILACEOUS SHALE	8.0	34.0	
407.0	MODESTO	PIASA	LIMESTONE	7.0	42.0	
400.0	MODESTO		BLACK SHALE	2.0	49.0	
398.0	CARBONDALE	DANVILLE	COAL	2.5	51.0	
395.5			UNDERCLAY	2.0	53.5	
393.5			SHALE	16.5	55.5	
377.0			ARGILACEOUS SHALE	24.0	72.0	
353.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	96.0	
348.0	CARBONDALE	ANVIL ROCK	SHALE	22.5	101.0	
325.5	CARBONDALE	BRERETON	LIMESTONE	7.0	123.5	
318.5	CARBONDALE	ANNA	SHALE	1.5	130.5	
317.0	CARBONDALE	HERRIN	COAL	6.0	132.0	
311.0	CARBONDALE		UNDERCLAY	2.0	138.0	
309.0	CARBONDALE		SANDSTONE	30.0	140.0	
279.0	CARBONDALE		SHALE	7.5	170.0	
271.5	CARBONDALE	BRIAR HILL	COAL	1.5	177.5	
270.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	179.0	
265.0	CARBONDALE	DYKERSBURG	SHALE	12.0	184.0	
253.0	CARBONDALE	DYKERSBURG	SANDSTONE	50.0	196.0	
203.0	CARBONDALE	DYKERSBURG	SHALE	15.0	246.0	
188.0	CARBONDALE	SPRINGFIELD	COAL	7.3	261.0	

MAPID: 16503503000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE SW NW
QUADRANGLE: HARCO **LONGITUDE:** -88.649285 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756109 **DATE COLLECTED:** 0 / 0 / 1965
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 214.8 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. N-13-6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	208.5	0.0	CORE NOT RECORDED FROM 0'-208'6"
-	CARBONDALE	SPRINGFIELD	COAL	4.6	208.5	
-	CARBONDALE		UNDERCLAY	0.3	213.1	UNDERCLAY
-	CARBONDALE		CLAYSTONE	0.2	213.5	
-	CARBONDALE		GRAY LIMESTONE	0.4	213.7	DOLOMITIC
-	CARBONDALE		CLAYSTONE	0.7	214.1	

MAPID: 16503504000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.64007 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757958 **DATE COLLECTED:** 0 / 0 / 1965
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 217.2 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. N-13-5 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	210.8	0.0	210'10" NOT RECORDED IN LOG
-	CARBONDALE	SPRINGFIELD	COAL	4.7	210.8	
-	CARBONDALE		UNDERCLAY	1.6	215.6	UNDERCLAY

MAPID: 16503529000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' N line, 0' E line of NW NE
QUADRANGLE: HARCO **LONGITUDE:** -88.639025 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.76072 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 80.4 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE COLLIERIES H-423 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	26.9	UPPER BENCH
363.1	CARBONDALE	BANKSTON FORK	GRAY SHALE	2.3	32.9	SHALE PARTING
360.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	35.3	LOWER BENCH
359.0	CARBONDALE	LAWSON	SILTY SHALE	5.0	37.0	
354.0	CARBONDALE	LAWSON	SANDSTONE	6.0	42.0	
348.0	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	4.0	48.0	
344.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	13.8	52.0	
330.2	CARBONDALE	CONANT	BLACK SHALE	0.8	65.8	
329.4	CARBONDALE	JAMESTOWN	COAL	0.3	66.6	
329.1	CARBONDALE		CLAYSTONE	0.5	66.9	
328.6	CARBONDALE	BRERETON	LIMESTONE	5.8	67.4	
322.7	CARBONDALE	ANNA	BLACK SHALE	1.8	73.3	
321.0	CARBONDALE	HERRIN	COAL	5.4	75.0	

MAPID: 16503620000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645702 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.754252 **DATE COLLECTED:** 9 / 0 / 1969
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 2847.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., MITCHELL-HANKI **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	338.0	
87.0	CARBONDALE	SURVANT	COAL	1.2	390.0	
5.0	CARBONDALE	COLCHESTER	COAL	0.5	472.0	
-16.0	CARBONDALE	DEKOVEN	COAL	3.0	493.0	
-16.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	493.0	
-55.0	CARBONDALE	DAVIS	COAL	3.5	532.0	
-142.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	619.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-156.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	633.0	

MAPID: 16503620000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.645702 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.754252 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 2400.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	KINKAID	BASE L KINKAID	UNCLASSIFIED	-		
-1521.0			LIMESTONE	-	1998.0	
-1923.0		BASE BARLOW	LIMESTONE	-	2400.0	

MAPID: 16503643000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 50' N line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.651778 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.760591 **DATE COLLECTED:** 6 / 0 / 1970
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 1410.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-10.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	438.0	
-78.0	SPOON	DAVIS	UNCLASSIFIED	-	506.0	
-982.0	BASE OF PENN.		UNCLASSIFIED	-	1410.0	

MAPID: 16503643000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 50' N line, 330' W line of NW
QUADRANGLE: HARCO **LONGITUDE:** -88.651778 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.760591 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2360.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1122.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1550.0	
-1932.0		BASE BARLOW	LIMESTONE	-	2360.0	

MAPID: 16503643000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 50' N line, 330' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.651778 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.760591 **DATE COLLECTED:** 6 / 0 / 1970

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 2824.0 **LOG TYPE:** Nuclear Log

SOURCE: BREHM, C. E. DRLG.&PROD., PANKEY UNIT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
123.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	305.0	
70.0	CARBONDALE	SURVANT	COAL	1.7	358.0	
-13.0	CARBONDALE	COLCHESTER	COAL	0.0	441.0	
-54.0	CARBONDALE	DEKOVEN	COAL	4.5	482.0	
-54.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	482.0	
-72.0	CARBONDALE	DAVIS	COAL	5.0	500.0	
-92.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	520.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-110.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	538.0	

MAPID: 16523983000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.648956 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.746866 **DATE COLLECTED:** 5 / 19 / 1977

SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 558.4 **LOG TYPE:** Drillers Log

SOURCE: PAUL WEIR 95101 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.0			UNCLASSIFIED	308.0	0.0	GEOPHYSICAL LOG AVAILABLE
124.0	CARBONDALE		GRAY SHALE	12.1	308.0	
111.9	CARBONDALE		DARK GRAY SHALE	5.6	320.1	
106.3	CARBONDALE		GRAY LIMESTONE	0.9	325.7	
105.4	CARBONDALE	EXCELLO	BLACK SHALE	4.1	326.6	
101.3	CARBONDALE	HOUCHIN CREEK	COAL	2.1	330.7	
99.2	CARBONDALE		GRAY SHALE	12.0	332.8	
87.2	CARBONDALE		GRAY SANDSTONE	2.4	344.8	
84.8	CARBONDALE		GRAY SHALE	0.9	347.2	
83.9	CARBONDALE		GRAY SANDSTONE	0.3	348.1	
83.6	CARBONDALE		GRAY SHALE	0.2	348.4	
83.4	CARBONDALE		GRAY SANDSTONE	3.3	348.6	WITH BANDS OF SHALE
80.1	CARBONDALE		GRAY SHALE	29.4	351.9	
50.7	CARBONDALE	SURVANT - UPPER	COAL	1.4	381.3	SURVANT/LOWELL (#2-A) COAL
49.4	CARBONDALE		GRAY SHALE	0.7	382.6	
48.7	CARBONDALE		GRAY SANDSTONE	1.1	383.3	
47.6	CARBONDALE		GRAY SHALE	0.6	384.4	
47.0	CARBONDALE		GRAY SANDSTONE	0.9	385.0	
46.1	CARBONDALE		GRAY SHALE	0.6	385.9	
45.5	CARBONDALE		DARK GRAY SHALE	0.3	386.5	
45.2	CARBONDALE		DARK GRAY SHALE	2.1	386.8	
43.2	CARBONDALE		GRAY SHALE	3.3	388.8	
39.9	CARBONDALE		DARK GRAY SHALE	1.4	392.1	
38.5	CARBONDALE	SURVANT - LOWER	COAL	0.8	393.5	
37.7	CARBONDALE		GRAY SHALE	2.5	394.3	WITH SS STREAKS
35.5	CARBONDALE		GRAY SANDSTONE	1.0	396.5	WITH STREAKS OF GY SH
34.5	CARBONDALE		GRAY SHALE	0.5	397.5	
34.0	CARBONDALE		GRAY SANDSTONE	1.8	398.0	WITH BANDS OF GY SH
32.2	CARBONDALE		GRAY SHALE	0.4	399.8	
31.8	CARBONDALE		GRAY SANDSTONE	0.4	400.2	WITH OCCASIONAL GY SH STREAKS
31.4	CARBONDALE		GRAY SHALE	0.2	400.6	
31.2	CARBONDALE		GRAY SANDSTONE	2.9	400.8	WITH ABUNDANT BANDS OF GY SH
28.3	CARBONDALE		GRAY SHALE	14.3	403.7	
14.0	CARBONDALE		DARK GRAY SHALE	21.6	418.0	
-7.6	CARBONDALE		GRAY SHALE	3.6	439.6	
-11.2	CARBONDALE		DARK GRAY SHALE	13.3	443.2	
-24.5	CARBONDALE		LIMESTONE	0.3	456.5	
-24.8	CARBONDALE		DARK GRAY SHALE	0.6	456.8	

-25.4	CARBONDALE	COLCHESTER	COAL	0.8	457.4	
-26.2	SPOON		CLAYSTONE	1.0	458.2	UNDERCLAY
-27.2	SPOON		GRAY SHALE	6.8	459.2	CONTAINS ONE LENS OF COAL
-34.0	SPOON		GRAY SANDSTONE	1.2	466.0	
-35.2	SPOON		GRAY SHALE	0.3	467.2	
-35.5	SPOON		GRAY SANDSTONE	0.1	467.5	
-35.6	SPOON		GRAY SHALE	0.4	467.6	
-36.0	SPOON		GRAY SANDSTONE	0.7	468.0	
-36.7	SPOON		GRAY SANDSTONE	0.8	468.7	WITH COAL STREAKS
-37.5	SPOON		GRAY SANDSTONE	10.7	469.5	
-48.2	SPOON		GRAY SHALE	0.7	480.2	
-48.9	SPOON		GRAY SANDSTONE	0.6	480.9	
-49.5	SPOON		GRAY SHALE	22.7	481.5	
-72.2	SPOON		DARK GRAY SHALE	5.3	504.2	
-77.5	SPOON	DEKOVEN	COAL	1.9	509.5	UPPER DEKOVAN COAL (SPOON FORMATION)
-79.4	SPOON		DARK GRAY SHALE	2.5	511.4	
-81.9	SPOON	LOWER DEKOVEN	COAL	1.8	513.9	LOWER DEKOVAN COAL
-83.7	SPOON		CLAYSTONE	1.7	515.7	UNDERCLAY
-85.3	SPOON		DARK GRAY SHALE	7.6	517.3	
-92.9	SPOON	DAVIS	COAL	5.5	524.9	LOG SAYS 'DAVIS SEAM SAMPLED'
-98.3	SPOON		DARK GRAY SHALE	1.0	530.3	
-99.3	SPOON		GRAY SHALE	6.3	531.3	
-105.6	SPOON		GRAY SANDSTONE	4.3	537.6	
-109.9	SPOON		UNCLASSIFIED	1.0	541.9	LOG SAYS 'CORE LOSS'
-110.9	SPOON		GRAY SANDSTONE	0.2	542.9	
-111.1	SPOON		GRAY SHALE	0.1	543.1	
-111.2	SPOON		GRAY SANDSTONE	5.2	543.2	
-116.4	SPOON		GRAY LIMESTONE	1.1	548.4	
-117.5	SPOON		GRAY SHALE	1.5	549.5	
-119.0	SPOON		GRAY LIMESTONE	1.3	551.0	
-120.3	SPOON		CLAYSTONE	2.1	552.3	'UNDERCLAY'
-122.4	SPOON		GRAY SHALE	1.4	554.4	
-123.8	SPOON		GRAY SANDSTONE	0.4	555.8	
-124.2	SPOON		GRAY SHALE	0.1	556.2	
-124.3	SPOON		GRAY SANDSTONE	1.1	556.3	
-125.4	SPOON		GRAY SHALE	0.3	557.4	
-125.7	SPOON		GRAY SANDSTONE	0.7	557.7	

MAPID: 16526181000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 165' N line, 165' E line of NE SW

QUADRANGLE: HARCO **LONGITUDE:** -88.643927 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.752888 **DATE COLLECTED:** 9 / 18 / 1974

SURFACE ELEVATION (FT.): 455.4 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE H295G **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.4	PLEISTOCENE		CLAY	9.0	0.0	
446.4	PLEISTOCENE		SANDSTONE	4.0	9.0	SOFT
442.4	MODESTO		SANDSTONE	4.0	13.0	CORING BEGAN
438.4	MODESTO		SANDY SHALE	14.0	17.0	GRAY
424.4	MODESTO		SANDSTONE	13.0	31.0	
411.4	MODESTO		GRAY SHALE	5.5	44.0	DARK
405.9	CARBONDALE	DANVILLE	COAL	1.5	49.5	
404.4	CARBONDALE		UNDERCLAY	1.0	51.0	
403.4	CARBONDALE		GRAY SHALE	15.5	52.0	
387.9	CARBONDALE		SANDSTONE	1.4	67.5	
386.5	CARBONDALE	ALLENBY	COAL	1.0	68.9	
385.5	CARBONDALE		UNDERCLAY	1.1	69.9	
384.4	CARBONDALE		GRAY SHALE	4.0	71.0	
380.4	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	75.0	
372.4	CARBONDALE		GRAY SHALE	6.0	83.0	
366.4	CARBONDALE		SANDY SHALE	17.0	89.0	GRAY
349.4	CARBONDALE		GRAY SHALE	4.0	106.0	DARK
345.4	CARBONDALE	ANNA	BLACK SHALE	3.0	110.0	
342.4	CARBONDALE	ENERGY	GRAY SHALE	6.0	113.0	DARK
336.4	CARBONDALE	HERRIN	COAL	5.7	119.0	
330.7	CARBONDALE		UNDERCLAY	2.3	124.7	

MAPID: 16526182000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 300' S line, 60' E line of NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.643757 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.757862 **DATE COLLECTED:** 10 / 9 / 1974

SURFACE ELEVATION (FT.): 416.9 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. H371C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.9	PLEISTOCENE		SILT	1.0	0.0	
415.9	PLEISTOCENE		CLAY	4.0	1.0	
411.9	MODESTO		SANDSTONE	1.5	5.0	SOFT; CORING BEGAN
410.4	MODESTO		GRAY SHALE	12.5	6.5	
397.9	CARBONDALE	DANVILLE	COAL	1.7	19.0	
396.2	CARBONDALE		UNDERCLAY	0.3	20.7	
395.9	CARBONDALE		SANDY SHALE	14.0	21.0	
381.9	CARBONDALE	ALLENBY	COAL	0.6	35.0	
381.3	CARBONDALE		UNDERCLAY	0.4	35.6	
380.9	CARBONDALE		GRAY SHALE	4.0	36.0	SOFT
376.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	40.0	
369.4	CARBONDALE		SANDY SHALE	31.5	47.5	
337.9	CARBONDALE		SHALE	2.0	79.0	DARK
335.9	CARBONDALE	BRERETON	LIMESTONE	7.5	81.0	
328.4	CARBONDALE	ANNA	BLACK SHALE	0.5	88.5	
327.9	CARBONDALE	HERRIN	COAL	5.2	89.0	
322.7	CARBONDALE		UNDERCLAY	1.8	94.2	

MAPID: 16526183000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: HARCO **LONGITUDE:** -88.649155 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.752411 **DATE COLLECTED:** 8 / 10 / 1965

SURFACE ELEVATION (FT.): 460.9 **LOGGED (FT.):** 227.1 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. N-13-9 **WELL TYPE:** Coal Test

COMMENT: PERMIT 90 (WITHDRAWN); MINE #20

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.9	PLEISTOCENE		CLAY	7.5	0.0	
453.4	PLEISTOCENE		SAND	0.5	7.5	
452.9	PLEISTOCENE		CLAY	5.0	8.0	WITH SAND
447.9	MODESTO		GRAY SHALE	15.0	13.0	
432.9	MODESTO	PIASA	LIMESTONE	0.5	28.0	HARD
432.4	MODESTO		SHALE	1.5	28.5	DARK GRAY
430.9	MODESTO		GRAY SHALE	3.0	30.0	STICKY
427.9	CARBONDALE	DANVILLE	COAL	2.0	33.0	
425.9	CARBONDALE		UNDERCLAY	1.5	35.0	
424.4	CARBONDALE		SANDSTONE	1.5	36.5	
422.9	CARBONDALE		SANDY SHALE	7.5	38.0	
415.4	CARBONDALE		SANDSTONE	2.0	45.5	GRAY
413.4	CARBONDALE		SHALE	0.5	47.5	MUD SEAM CREVICE; CIRCULATION LOST
412.9	CARBONDALE		SANDSTONE	3.0	48.0	GRAY
409.9	CARBONDALE		GRAY SHALE	2.5	51.0	
407.4	CARBONDALE	ALLENBY	COAL	0.5	53.5	
406.9	CARBONDALE		UNDERCLAY	1.0	54.0	
405.9	CARBONDALE		SANDY SHALE	3.0	55.0	
402.9	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	58.0	HARD & BROKEN
393.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	67.0	
391.9	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	69.0	
389.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.5	71.5	
383.9	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	77.0	
374.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	86.0	WITH SANDSTONE LAMINATIONS
372.9	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	88.0	
366.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.5	94.0	
364.4	CARBONDALE	BRERETON	LIMESTONE	5.5	96.5	
358.9	CARBONDALE	ANNA	BLACK SHALE	1.3	102.0	
357.6	CARBONDALE	HERRIN	COAL	5.3	103.3	
352.2	CARBONDALE		UNDERCLAY	1.3	108.7	
350.9	CARBONDALE		SANDY SHALE	2.0	110.0	
348.9	CARBONDALE		SANDSTONE	2.0	112.0	
346.9	CARBONDALE		LIMESTONE	3.0	114.0	
343.9	CARBONDALE		SANDY SHALE	19.0	117.0	
324.9	CARBONDALE	BRIAR HILL	COAL	0.8	136.0	
324.1	CARBONDALE		UNDERCLAY	1.2	136.8	
322.9	CARBONDALE	DYKERSBURG	SANDY SHALE	26.0	138.0	
296.9	CARBONDALE	DYKERSBURG	SANDSTONE	2.5	164.0	
294.4	CARBONDALE	DYKERSBURG	LIMESTONE	0.5	166.5	HARD

293.9	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	167.0	
289.9	CARBONDALE	DYKERSBURG	SANDY SHALE	1.5	171.0	
288.4	CARBONDALE	DYKERSBURG	SANDSTONE	1.5	172.5	
286.9	CARBONDALE	DYKERSBURG	SANDY SHALE	7.0	174.0	
279.9	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	181.0	WITH SANDSTONE BEDS
266.9	CARBONDALE	DYKERSBURG	SANDSTONE	2.5	194.0	
264.4	CARBONDALE	DYKERSBURG	SANDY SHALE	24.6	196.5	
239.8	CARBONDALE	SPRINGFIELD	COAL	4.5	221.1	
235.3	CARBONDALE		UNDERCLAY	1.5	225.6	

MAPID: 165273B0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW NE SW SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.649587 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.748251 **DATE COLLECTED:** 0 / 0 / 1938

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 11.9 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	7.5		
-			COAL	0.4		
-			ROCK	5.0		

MAPID: 16590867000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:** 300' S line, 60' E line of NE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.643757 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.757862 **DATE COLLECTED:** 10 / 9 / 1974
SURFACE ELEVATION (FT.): 416.9 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX H370MG **WELL TYPE:** Coal Test
COMMENT: PERMIT 249; HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.9	PLEISTOCENE		SILT	1.0	0.0	
415.9	PLEISTOCENE		CLAY	4.0	1.0	
411.9	MODESTO		SANDSTONE	1.5	5.0	
410.4	MODESTO		GRAY SHALE	12.5	6.5	
397.9	CARBONDALE	DANVILLE	COAL	1.7	19.0	
396.2	CARBONDALE		UNDERCLAY	0.3	20.7	
395.9	CARBONDALE		SANDY SHALE	14.0	21.0	
381.9	CARBONDALE	ALLENBY	COAL	0.6	35.0	
381.3	CARBONDALE		UNDERCLAY	0.4	35.6	
380.9	CARBONDALE		GRAY SHALE	4.0	36.0	
376.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	40.0	
369.4	CARBONDALE		SANDY SHALE	31.5	47.5	
337.9	CARBONDALE		DARK SHALE	2.0	79.0	
335.9	CARBONDALE	BRERETON	LIMESTONE	7.5	81.0	
328.4	CARBONDALE	ANNA	BLACK SHALE	0.5	88.5	
327.9	CARBONDALE	HERRIN	COAL	5.2	89.0	
322.7	CARBONDALE		UNDERCLAY	1.8	94.2	

MAPID: 16500377000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.621265 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.759969 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 416.9 **LOGGED (FT.):** 1415.0 **LOG TYPE:** Drillers Log
SOURCE: WHEATLEY ETAL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-51.1	SPOON	DAVIS	UNCLASSIFIED	-	468.0	
-998.1	BASE OF PENN.		UNCLASSIFIED	-	1415.0	

MAPID: 16500377000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.621265 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.759969 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 468.0 **LOG TYPE:**

SOURCE: WHEATLEY ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	117.0	
180.0	CARBONDALE	SPRINGFIELD	COAL	-	237.0	
-51.0	CARBONDALE	COLCHESTER	COAL	-	468.0	

MAPID: 16500378000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617694 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.759094 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.2 **LOGGED (FT.):** 291.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.2			UNCONSOLIDATED	64.0	0.0	
309.2	CARBONDALE	ANVIL ROCK	SHALE	12.2	64.0	
297.0	CARBONDALE	ANVIL ROCK	SHALE	17.8	76.2	
279.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.9	94.0	
271.3	CARBONDALE	JAMESTOWN	COAL	0.3	101.9	
270.9	CARBONDALE	HERRIN	COAL	0.0	102.3	
270.9	CARBONDALE		SHALE	9.0	102.3	
261.9	CARBONDALE		LIMESTONE	0.5	111.3	
261.4	CARBONDALE	DYKERSBURG	SHALE	32.8	111.8	
228.7	CARBONDALE	DYKERSBURG	SANDY SHALE	21.8	144.5	
206.9	CARBONDALE	DYKERSBURG	SHALE	15.3	166.3	
191.7	CARBONDALE	DYKERSBURG	BLACK SHALE	5.5	181.5	
186.2	CARBONDALE	SPRINGFIELD	COAL	5.0	187.0	
181.2	CARBONDALE		UNDERCLAY	8.0	192.0	
173.2	CARBONDALE		SANDY SHALE	16.0	200.0	
157.2	CARBONDALE		SHALE	19.8	216.0	
137.4	CARBONDALE		CALCAREOUS SHALE	2.3	235.8	
135.2	CARBONDALE		BLACK SHALE	4.5	238.0	
130.7	CARBONDALE		COAL	1.2	242.5	
129.5	CARBONDALE		UNDERCLAY	12.3	243.7	
117.2	CARBONDALE		SHALE	2.8	256.0	
114.4	CARBONDALE		SHALE	11.1	258.8	
103.3	CARBONDALE		SHALE	14.8	269.9	
88.5	CARBONDALE		COAL	1.2	284.7	
87.4	CARBONDALE		UNDERCLAY	5.2	285.8	

MAPID: 16500379000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627097 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.755287 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 195.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	71.0	
212.0	CARBONDALE	SPRINGFIELD	COAL	-	195.0	

MAPID: 16500379000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARCO **LONGITUDE:** -88.627097 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.755287 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 203.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.0	CARBONDALE	HERRIN	COAL	5.5	71.0	
297.0	CARBONDALE	BRIAR HILL	COAL	1.0	110.0	
212.0	CARBONDALE	SPRINGFIELD	COAL	7.0	195.0	

MAPID: 16500379000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.627097 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.755287 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.1 **LOGGED (FT.):** 203.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.1			UNCONSOLIDATED	20.0	0.0	
387.1	CARBONDALE		SANDSTONE	2.0	20.0	
385.1	CARBONDALE		LIMESTONE	7.0	22.0	
378.1	CARBONDALE		SANDSTONE	34.0	29.0	
344.1	CARBONDALE	BANKSTON FORK	LIMESTONE	0.3	63.0	
343.8	CARBONDALE	JAMESTOWN	COAL	0.2	63.3	
343.6	CARBONDALE		BLACK SHALE	2.5	63.5	
341.1	CARBONDALE	BRERETON	LIMESTONE	5.5	66.0	
335.6	CARBONDALE	HERRIN	COAL	5.5	71.5	
330.1	CARBONDALE		UNDERCLAY	3.0	77.0	
327.1	CARBONDALE		SHALE	30.0	80.0	
297.1	CARBONDALE	BRIAR HILL	COAL	1.0	110.0	
296.1	CARBONDALE	DYKERSBURG	SHALE	9.0	111.0	
287.1	CARBONDALE	DYKERSBURG	SANDY SHALE	47.0	120.0	
240.1	CARBONDALE	DYKERSBURG	SHALE	28.0	167.0	
212.1	CARBONDALE	SPRINGFIELD	COAL	7.0	195.0	
205.1	CARBONDALE		UNDERCLAY	1.0	202.0	

MAPID: 16500380000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622354 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.751659 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.4 **LOGGED (FT.):** 301.8 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.4			UNCONSOLIDATED	53.4	0.0	
323.0	MODESTO		SHALE	18.3	53.4	
304.6	CARBONDALE	DANVILLE	COAL	2.0	71.8	
302.6	CARBONDALE		SHALE	3.6	73.8	
299.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	77.3	
297.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	62.9	79.1	
234.4	CARBONDALE	HERRIN	COAL	9.3	142.0	
225.1	CARBONDALE		UNDERCLAY	2.8	151.3	
222.4	CARBONDALE		SANDY SHALE	30.1	154.0	
192.3	CARBONDALE		SHALE	4.0	184.1	
188.3	CARBONDALE		BLACK SHALE	6.3	188.1	
182.0	CARBONDALE	BRIAR HILL	COAL	2.7	194.4	
179.3	CARBONDALE		SHALE	2.2	197.1	
177.1	CARBONDALE	DYKERSBURG	SANDSTONE	1.8	199.3	
175.3	CARBONDALE	DYKERSBURG	SHALE	8.2	201.1	
167.1	CARBONDALE	DYKERSBURG	SANDY SHALE	47.4	209.3	
119.7	CARBONDALE	DYKERSBURG	SHALE	4.0	256.7	
115.7	CARBONDALE	SPRINGFIELD	COAL	1.4	260.7	
114.3	CARBONDALE	SPRINGFIELD	UNDERCLAY	3.3	262.1	
111.1	CARBONDALE	SPRINGFIELD	COAL	8.3	265.3	
102.8	CARBONDALE	SPRINGFIELD	COAL	1.2	273.6	
101.6	CARBONDALE		SANDY SHALE	27.0	274.8	

MAPID: 16500380000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.622354 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.751659 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 260.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
234.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	142.0	
116.0	CARBONDALE	SPRINGFIELD	COAL	-	260.0	

MAPID: 16500381000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633187 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.746472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 217.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	97.0	
183.0	CARBONDALE	SPRINGFIELD	COAL	-	217.0	

MAPID: 16500381000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633187 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 226.7 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.0			UNCONSOLIDATED	13.5	0.0	
387.5			ROCK	12.7	13.5	
374.8			COAL	2.2	26.2	
372.7			ROCK	12.6	28.3	
360.1			COAL	0.2	40.9	
359.9			ROCK	3.1	41.1	
356.8			COAL	0.7	44.2	
356.2			ROCK	22.8	44.8	
333.3			SANDSTONE	8.0	67.7	
325.3			SHALE	12.1	75.7	
313.2			LIMESTONE	0.8	87.8	
312.4			SHALE	2.6	88.6	
309.8			LIMESTONE	6.0	91.2	
303.8			SHALE	0.3	97.2	
303.6	CARBONDALE	HERRIN	COAL	5.4	97.4	
298.1	CARBONDALE		ROCK	36.7	102.9	
261.4	CARBONDALE	BRIAR HILL	COAL	2.0	139.6	
259.4	CARBONDALE		ROCK	31.6	141.6	
227.8	CARBONDALE		SHALE	44.2	173.2	
183.7	CARBONDALE		COAL	0.3	217.3	
183.3	CARBONDALE		SHALE	0.1	217.7	
183.2	CARBONDALE	SPRINGFIELD	COAL	5.2	217.8	
178.0			ROCK	0.0	223.0	

MAPID: 16500381000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SW SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633187 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.746472 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.5 **LOGGED (FT.):** 226.6 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.5			UNCONSOLIDATED	13.5	0.0	
387.0	MODESTO		SANDSTONE	5.0	13.5	
382.0	MODESTO		SHALE	7.7	18.5	
374.3	CARBONDALE	DANVILLE	COAL	2.2	26.2	
372.2	CARBONDALE		SHALE	4.2	28.3	
368.0	CARBONDALE		SANDSTONE	4.5	32.5	
363.5	CARBONDALE		SHALE	3.9	37.0	
359.6	CARBONDALE	"Allenby rider"	COAL	0.2	40.9	
359.4	CARBONDALE		SHALE	3.1	41.1	
356.3	CARBONDALE	ALLENBY	COAL	0.7	44.2	
355.7	CARBONDALE		SHALE	3.8	44.8	
351.7	CARBONDALE		SHALE	15.9	48.8	
335.8	CARBONDALE		SANDSTONE	11.0	64.7	
324.8	CARBONDALE		SHALE	12.1	75.7	
312.7	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	87.8	
312.2	CARBONDALE	JAMESTOWN	COAL	0.3	88.3	
311.9	CARBONDALE		SHALE	2.6	88.6	
309.3	CARBONDALE	BRERETON	LIMESTONE	6.0	91.2	
303.3	CARBONDALE	ANNA	BLACK SHALE	0.3	97.2	
303.1	CARBONDALE	HERRIN	COAL	5.5	97.4	
297.6	CARBONDALE		SHALE	1.6	102.9	
296.0	CARBONDALE		SANDSTONE	11.2	104.5	
284.8	CARBONDALE		SHALE	23.9	115.7	
260.9	CARBONDALE	BRIAR HILL	COAL	2.0	139.6	
258.9	CARBONDALE	DYKERSBURG	SHALE	75.8	141.6	
183.2	CARBONDALE	SPRINGFIELD	COAL	5.7	217.3	
177.5	CARBONDALE		SHALE	0.3	223.0	
177.2	CARBONDALE		SHALE	0.9	223.3	
176.2	CARBONDALE		SANDSTONE	2.3	224.3	

MAPID: 16500959000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 660' S line, 35' W line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.619885 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747977 **DATE COLLECTED:** 5 / 24 / 1946

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 241.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 10 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCLASSIFIED	40.0	0.0	NO CORE DATA UNTIL 40'
330.0			CLAY	0.8	40.0	
329.2			SILTSTONE	0.5	40.8	
328.7			GRAY SILTSTONE	0.2	41.3	
328.5			GRAY SILTSTONE	0.5	41.5	WITH GY SH INTERLAMINATIONS
328.0			GRAY SILTSTONE	0.1	42.0	
327.9			GRAY SILTSTONE	1.7	42.1	WITH GY SH INTERLAMINATION
326.2			GRAY SILTSTONE	0.5	43.8	
325.7			GRAY SHALE	0.4	44.3	
325.3			GRAY SHALE	0.6	44.7	WITH LGY ST STREAKS
324.7			SHALE	0.6	45.3	
324.2			SHALE	0.9	45.8	
323.2			UNCERTAIN	0.2	46.8	LOOSE DGY PEBBLES (LOOKS LIKE COAL BALL)
323.1			UNCLASSIFIED	2.1	46.9	+2'1" ADJUSTMENT TO MATCH LOOG
321.0			UNCLASSIFIED	0.4	49.0	+5" ADJUSTMENT FOR GAP IN CORE
320.6			CLAYSTONE	0.5	49.4	UNDERCLAY
320.1			GRAY SILTSTONE	2.0	49.9	
318.1			GRAY SHALE	0.3	51.9	
317.8			UNCLASSIFIED	4.8	52.2	+4'10" ADJUSTMENT FOR CORE GAP
313.0			CLAYSTONE	1.3	57.0	
311.7	CARBONDALE	ALLENBY	COAL	0.2	58.3	COAL FRAGMENTS
311.5	CARBONDALE		CLAYSTONE	0.5	58.5	
311.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.3	59.0	
310.7	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	1.7	59.3	+4" ADJUSTMENT TO MATCH CORE MARKER
309.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	61.0	
307.2	CARBONDALE	BANKSTON FORK	FOSSILIFEROUS LIMESTONE	0.5	62.8	
306.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	63.3	WITH SHALE PARTINGS
304.2	CARBONDALE		GRAY SHALE	0.2	65.8	
304.0	CARBONDALE		GRAY SHALE	1.4	66.0	
302.6	CARBONDALE		GRAY SHALE	1.3	67.4	
301.2	CARBONDALE		DARK GRAY SHALE	2.3	68.8	+2'1" ADJUSTMENT TO MATCH LOG MARKER
299.0	CARBONDALE		DARK GRAY SHALE	2.8	71.0	
296.2	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	3.3	73.8	
293.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.3	77.0	
292.7	CARBONDALE	ANVIL ROCK	GRAY SHALE	0.4	77.3	
292.3	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.2	77.7	
292.1	CARBONDALE	ANVIL ROCK	GRAY SHALE	0.5	77.9	

291.6	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.6	78.4	
291.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	2.0	79.0	2'1/2" ADJUSTMENT TO MATCH LOG MARKER
289.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.3	81.0	WITH SHALE BANDS
287.7	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.8	82.3	
286.8	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.7	83.2	
285.2	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.0	84.8	
284.2	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.8	85.8	
283.3	CARBONDALE		GRAY SHALE	4.3	86.7	
279.0	CARBONDALE		DARK GRAY SHALE	2.8	91.0	
276.2	CARBONDALE	JAMESTOWN	COAL	0.1	93.8	
276.0	CARBONDALE	BRERETON	LIMESTONE	1.5	94.0	+2" TO MATCH LOG DEPTH
274.5	CARBONDALE	ANNA	BLACK SHALE	3.3	95.5	
271.2	CARBONDALE	ENERGY	GRAY SHALE	3.2	98.8	+1'1/2" ADJUSTMENT TO MATCH LOG MARKER
268.0	CARBONDALE	HERRIN	COAL	5.4	102.0	LOG SAYS HERRIN (#6) TAKEN OUT
262.6	CARBONDALE		CLAYSTONE	1.2	107.4	
261.4	CARBONDALE		GRAY SILTSTONE	1.1	108.6	
260.2	CARBONDALE		CLAYSTONE	2.3	109.8	+2'1.5" ADJUSTMENT TO MATCH LOG MARKER
258.0	CARBONDALE		GRAY SHALE	2.4	112.0	
255.6	CARBONDALE		GRAY SHALE	3.3	114.4	WITH LIMESTONE BANDS
252.2	CARBONDALE		GRAY SHALE	1.4	117.8	
250.9	CARBONDALE		UNCLASSIFIED	0.4	119.1	LOG SAYS 'SEPTARIAN CONCRETTION'
250.5	CARBONDALE		GRAY SHALE	2.5	119.5	
248.0	CARBONDALE		GRAY SHALE	7.6	122.0	
240.4	CARBONDALE		DARK GRAY SHALE	2.4	129.6	+1/2" ADJUSTMENT TO MATCH LOG MARKER
238.0	CARBONDALE		DARK GRAY SHALE	10.0	132.0	
228.0	CARBONDALE		DARK GRAY SHALE	3.5	142.0	
224.5	CARBONDALE	BRIAR HILL	COAL	2.3	145.5	
222.2	CARBONDALE		GRAY SILTSTONE	0.3	147.8	
221.9	CARBONDALE		GRAY SHALE	0.9	148.1	-5" ADJUSTMENT TO MATCH LOG MARKER
221.0	CARBONDALE		DARK GRAY SHALE	1.1	149.0	
219.9	CARBONDALE		GRAY SHALE	0.9	150.1	
219.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	151.0	
217.7	CARBONDALE	DYKERSBURG	GRAY SHALE	0.7	152.3	-1/2" ADJUSTMENT TO MATCH LOG
217.0	CARBONDALE	DYKERSBURG	GRAY SHALE	2.3	153.0	
214.7	CARBONDALE	DYKERSBURG	GRAY SHALE	1.9	155.3	
212.8	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	1.9	157.2	
210.9	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	1.8	159.1	
209.1	CARBONDALE	DYKERSBURG	SHALE	8.1	160.9	WITH SILTSTONE MIXED (-1.5" ADJUSTMENT)
201.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	9.0	169.0	+6" ADJUSTMENT TO MATCH LOG MARKER
192.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	10.0	178.0	
182.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	42.0	188.0	
140.0	CARBONDALE	DYKERSBURG	GRAY SHALE	2.3	230.0	WITH COAL STREAKS
137.7	CARBONDALE	SPRINGFIELD	COAL	7.1	232.3	
130.7	CARBONDALE		UNDERCLAY	1.7	239.3	

MAPID: 16500959000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 660' S line, 35' W line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.619885 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.747977 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 107.6 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
329.9	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	6.9	60.1	
323.0	CARBONDALE	LAWSON	CLAYSTONE	1.6	67.0	
321.4	CARBONDALE	LAWSON	GRAY SHALE	6.3	68.6	
315.1	CARBONDALE	LAWSON	SHALE & SILTSTONE	12.9	74.9	
302.2	CARBONDALE	LAWSON	GRAY SHALE	7.0	87.8	
295.2	CARBONDALE	CONANT	CALCAREOUS SHALE	0.3	94.8	
295.0	CARBONDALE	JAMESTOWN	BONE COAL	0.1	95.0	
294.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	1.4	95.2	
293.5	CARBONDALE	ANNA	BLACK SHALE	3.3	96.5	
290.2	CARBONDALE	ENERGY	GRAY SHALE	2.2	99.8	
288.0	CARBONDALE	HERRIN	COAL	5.6	102.0	

MAPID: 16501112000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616554 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747115 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 377.2 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.2			CLAY	30.0	0.0	
347.2	MODESTO		SHALE	7.0	30.0	
340.2	CARBONDALE	DANVILLE	COAL	2.0	37.0	
338.2	CARBONDALE		DARK SHALE	19.0	39.0	
319.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	58.0	
314.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	31.0	63.0	
283.2	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	6.0	94.0	
277.2	CARBONDALE	ANNA	BLACK SHALE	1.0	100.0	
276.2	CARBONDALE	HERRIN	COAL	6.0	101.0	
270.2	CARBONDALE		GRAY SHALE	0.5	107.0	
269.7	CARBONDALE		GRAY SILTSTONE	1.7	107.5	
268.0	CARBONDALE		GRAY SHALE	15.8	109.2	
252.2	CARBONDALE		GRAY SHALE	10.0	125.0	+3" TO MATCH LOG
242.2	CARBONDALE		GRAY SHALE	12.8	135.0	
229.4	CARBONDALE		BONE COAL	0.1	147.8	
229.3	CARBONDALE	BRIAR HILL	COAL	1.7	147.9	
227.6	CARBONDALE		GRAY SILTSTONE	0.4	149.6	
227.2	CARBONDALE		GRAY SILTSTONE	0.3	150.0	
226.9	CARBONDALE		GRAY SHALE	1.0	150.3	
225.9	CARBONDALE		SHALE	3.0	151.3	
222.9	CARBONDALE		DARK GRAY SHALE	0.2	154.3	
222.8	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.6	154.4	-2" TO MATCH LOG
222.2	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.1	155.0	
222.1	CARBONDALE	DYKERSBURG	GRAY SHALE	5.8	155.1	
216.4	CARBONDALE	DYKERSBURG	GRAY SHALE	4.2	160.8	-2" TO MATCH LOG
212.2	CARBONDALE	DYKERSBURG	SILTSTONE	9.9	165.0	W¿¿¿¿¿¿WITH SHALE (LAMINATED)
202.3	CARBONDALE	DYKERSBURG	SILTSTONE	0.1	174.9	+1" CORRECTION TO MATCH LOG
202.2	CARBONDALE	DYKERSBURG	GRAY SHALE	10.0	175.0	
192.2	CARBONDALE	DYKERSBURG	SHALE	5.0	185.0	WITH ST INTERLAMINATIONS (ABOUT 40%)
187.2	CARBONDALE	DYKERSBURG	GRAY SHALE	5.0	190.0	+2" CORRECTION TO MATCH LOG
182.2	CARBONDALE	DYKERSBURG	GRAY SHALE	10.0	195.0	WITH LGY ST
172.2	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	205.0	WITH ABOUT 40% LGY ST LAMINATIONS
169.2	CARBONDALE	DYKERSBURG	GRAY SHALE	6.0	208.0	
163.2	CARBONDALE	DYKERSBURG	SHALE	1.0	214.0	WITH ST LAMINATIONS (-2" TO MATCH LOG)
162.2	CARBONDALE	DYKERSBURG	GRAY SHALE	16.8	215.0	
145.4	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	0.5	231.8	

144.9	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	2.8	232.3	+1' ADJUSTMENT TO MATCH LOG
142.2	CARBONDALE	DYKERSBURG	SHALE	0.4	235.0	WITH SS (50-50) CONTAINING COALY STREAKS
141.8	CARBONDALE	DYKERSBURG	GRAY SHALE	4.6	235.4	+11" ADJUSTMENT TO MATCH LOG
137.2	CARBONDALE	DYKERSBURG	DARK SHALE	1.0	240.0	
136.2	CARBONDALE	SPRINGFIELD	COAL	9.0	241.0	
127.2	CARBONDALE		BLACK SHALE	1.0	250.0	

MAPID: 16501410000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.632961 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.754286 **DATE COLLECTED:** 3 / 0 / 1947

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2840.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., LEWIS JAMES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	300.0	
105.0	CARBONDALE	SURVANT	COAL	0.8	350.0	
32.0	CARBONDALE	COLCHESTER	COAL	0.5	423.0	
-17.0	CARBONDALE	DEKOVEN	COAL	3.0	472.0	
-17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	472.0	
-50.0	CARBONDALE	DAVIS	COAL	3.8	505.0	
-132.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	587.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-143.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	598.0	

MAPID: 16501410000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.632961 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.754286 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2366.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	CARBONDALE	BRERETON	LIMESTONE	-	100.0	
240.0	CARBONDALE	SPRINGFIELD	COAL	-	215.0	
34.0	CARBONDALE	COLCHESTER	COAL	-	421.0	
-1101.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1556.0	
-1498.0			LIMESTONE	-	1953.0	
-1911.0		BASE BARLOW	LIMESTONE	-	2366.0	

MAPID: 16501410000C **VERSION:** 3 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: HARCO **LONGITUDE:** -88.632961 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.754286 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 422.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. 1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	CARBONDALE	HERRIN	COAL	-	100.0	
310.0	CARBONDALE	BRIAR HILL	COAL	-	145.0	
239.0	CARBONDALE	SPRINGFIELD	COAL	6.0	216.0	
155.0	CARBONDALE	HOUCHIN CREEK	COAL	-	300.0	
33.0	CARBONDALE	COLCHESTER	COAL	-	422.0	

MAPID: 16503498000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: HARCO **LONGITUDE:** -88.626023 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.759906 **DATE COLLECTED:** 7 / 17 / 1965

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 235.8 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. N-13-1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.0			CLAY	2.0	0.0	
401.0			SANDSTONE	0.5	2.0	
400.5			CLAY	6.5	2.5	
394.0	MODESTO		GRAY SHALE	2.0	9.0	
392.0	MODESTO		UNCLASSIFIED	0.3	11.0	LOG SAYS 'SOOT BAND'
391.7	MODESTO		GRAY SHALE	2.7	11.3	
389.0	MODESTO	PIASA	LIMESTONE	3.0	14.0	
386.0	MODESTO		UNCLASSIFIED	1.0	17.0	LOG SAYS 'MUD SEAM'
385.0	MODESTO		DARK GRAY SHALE	8.0	18.0	
377.0	CARBONDALE	DANVILLE	COAL	1.8	26.0	
375.2	CARBONDALE		UNDERCLAY	1.3	27.8	
374.0	CARBONDALE		SANDY SHALE	3.0	29.0	
371.0	CARBONDALE		GRAY SANDSTONE	2.0	32.0	
369.0	CARBONDALE		SANDY SHALE	2.0	34.0	
367.0	CARBONDALE		GRAY SANDSTONE	1.5	36.0	
365.5	CARBONDALE		SANDY SHALE	3.7	37.5	
361.8	CARBONDALE		COAL	0.5	41.2	
361.3	CARBONDALE		UNDERCLAY	0.8	41.7	
360.5	CARBONDALE		SANDY SHALE	2.0	42.5	
358.5	CARBONDALE	ALLENBY	COAL	0.8	44.5	
357.7	CARBONDALE		UNDERCLAY	0.8	45.3	
356.8	CARBONDALE		SANDY SHALE	3.3	46.2	
353.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	49.5	
346.5	CARBONDALE		SANDY SHALE	4.0	56.5	
342.5	CARBONDALE		GRAY SANDSTONE	18.5	60.5	
324.0	CARBONDALE		SANDY SHALE	10.0	79.0	
314.0	CARBONDALE		COAL	0.5	89.0	
313.5	CARBONDALE		UNDERCLAY	0.5	89.5	
313.0	CARBONDALE		SANDY SHALE	1.5	90.0	
311.5	CARBONDALE	BRERETON	LIMESTONE	7.5	91.5	
304.0	CARBONDALE		GRAY SHALE	0.2	99.0	
303.8	CARBONDALE	HERRIN	COAL	5.3	99.2	
298.6	CARBONDALE		UNDERCLAY	1.6	104.4	
297.0	CARBONDALE		SANDY SHALE	2.5	106.0	
294.5	CARBONDALE		GRAY SANDSTONE	0.5	108.5	
294.0	CARBONDALE		SANDY SHALE	26.0	109.0	
268.0	CARBONDALE		SANDY SHALE	6.0	135.0	
262.0	CARBONDALE	BRIAR HILL	COAL	1.7	141.0	
260.3	CARBONDALE		UNDERCLAY	1.3	142.7	

259.0	CARBONDALE	DYKERSBURG	SANDY SHALE	6.0	144.0
253.0	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	150.0
250.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	153.0
240.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	1.0	163.0
239.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	164.0
229.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	1.0	174.0
228.0	CARBONDALE	DYKERSBURG	SANDY SHALE	52.2	175.0
175.8	CARBONDALE	SPRINGFIELD	COAL	7.2	227.2
168.7	CARBONDALE		UNDERCLAY	1.5	234.3

MAPID: 16503534000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.618881 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.758156 **DATE COLLECTED:** 11 / 7 / 1967

SURFACE ELEVATION (FT.): 383.4 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 67-6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.4			CLAY	14.0	0.0	
369.4			BROWN SHALE	2.7	14.0	
366.7	CARBONDALE		GRAY SHALE	9.3	16.7	
357.4	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	26.0	
355.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.0	28.0	
338.4	CARBONDALE	JAMESTOWN	COAL	0.5	45.0	
337.9	CARBONDALE	BRERETON	BLUE LIMESTONE	1.0	45.5	
336.9	CARBONDALE	ANNA	BLACK SHALE	2.5	46.5	
334.4	CARBONDALE	ENERGY	GRAY SHALE	4.7	49.0	
329.7	CARBONDALE	HERRIN	COAL	5.2	53.7	
324.6	CARBONDALE		UNDERCLAY	4.0	58.8	
320.6	CARBONDALE		WHITE SANDSTONE	13.2	62.8	WITH SHALE BANDS
307.4	CARBONDALE		SANDY SHALE	20.0	76.0	
287.4	CARBONDALE	BRIAR HILL	COAL	1.0	96.0	
286.4	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	97.0	
269.4	CARBONDALE	DYKERSBURG	SANDSTONE	33.0	114.0	
236.4	CARBONDALE	DYKERSBURG	SANDY SHALE	27.0	147.0	
209.4	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	2.4	174.0	
207.0	CARBONDALE	DYKERSBURG	GRAY SHALE	0.8	176.4	
206.1	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	3.4	177.3	
202.7	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	0.2	180.7	
202.6	CARBONDALE	DYKERSBURG	GRAY SHALE	0.3	180.8	
202.3	CARBONDALE	DYKERSBURG	GRAY SHALE	0.6	181.1	
201.7	CARBONDALE	SPRINGFIELD	COAL	1.3	181.7	
200.4	CARBONDALE	SPRINGFIELD	COAL	5.7	183.0	
194.7	CARBONDALE		UNDERCLAY	0.3	188.7	

MAPID: 16526184000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 65' N line, 1' E line of NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.624849 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.760664 **DATE COLLECTED:** 9 / 16 / 1974

SURFACE ELEVATION (FT.): 401.8 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE P330DC **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.8	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
396.8	PLEISTOCENE		CLAY	11.0	5.0	
385.8	CARBONDALE		GRAY SHALE	5.4	16.0	SOFT; CORING BEGAN
380.4	CARBONDALE		GRAY SHALE	5.6	21.4	
374.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	27.0	
369.4	CARBONDALE		SANDY SHALE	7.6	32.4	
361.8	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	40.0	
341.8	CARBONDALE		SHALE	10.0	60.0	DARK
331.8	CARBONDALE	ANNA	BLACK SHALE	8.8	70.0	
323.0	CARBONDALE	HERRIN	COAL	4.4	78.8	
318.6	CARBONDALE		UNDERCLAY	2.8	83.2	

MAPID: 16526185000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 660' N line, 30' W line of NW NW

QUADRANGLE: HARCO **LONGITUDE:** -88.634206 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.758897 **DATE COLLECTED:** 6 / 8 / 1976

SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. P376 **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.2	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
382.2	PLEISTOCENE		CLAY	5.0	18.0	
377.2	MODESTO		GRAY SHALE	6.0	23.0	
371.2	CARBONDALE	DANVILLE	COAL	0.4	29.0	
370.8	CARBONDALE		SHALE	3.0	29.4	
367.8	CARBONDALE	ALLENBY	COAL	0.5	32.4	
367.3	CARBONDALE		SHALE	4.6	32.9	
362.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	37.5	
357.2	CARBONDALE		CALCAREOUS SHALE	13.0	43.0	
344.2	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	56.0	
323.2	CARBONDALE		SANDY SHALE	6.0	77.0	
317.2	CARBONDALE	BRERETON	LIMESTONE	3.8	83.0	
313.4	CARBONDALE	ANNA	BLACK SHALE	0.7	86.8	
312.7	CARBONDALE	HERRIN	COAL	5.3	87.5	
307.4	CARBONDALE		SHALE	3.2	92.8	
304.2	CARBONDALE		SANDY SHALE	8.0	96.0	

MAPID: 16526186000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 354' N line, 328' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.616361 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.760036 **DATE COLLECTED:** 4 / 13 / 1982

SURFACE ELEVATION (FT.): 402.3 **LOGGED (FT.):** 122.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. P383E **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.3	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	CLAY
389.3	MODESTO		SANDSTONE	13.5	13.0	BROWN
375.8	MODESTO		GRAY SHALE	10.5	26.5	
365.3	CARBONDALE	DANVILLE	COAL	1.7	37.0	
363.6	CARBONDALE		SANDY SHALE	10.8	38.7	GRAY
352.8	CARBONDALE		SANDSTONE	5.5	49.5	
347.3	CARBONDALE		GRAY SHALE	1.0	55.0	
346.3	CARBONDALE	ALLENBY	COAL	0.8	56.0	
345.5	CARBONDALE		GRAY SHALE	6.2	56.8	
339.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	63.0	BROWN
331.8	CARBONDALE		SILTY SHALE	5.2	70.5	
326.6	CARBONDALE	ANVIL ROCK	SANDSTONE	9.3	75.7	
317.3	CARBONDALE		SANDY SHALE	12.0	85.0	
305.3	CARBONDALE		BLACK SHALE	1.2	97.0	
304.1	CARBONDALE	BRERETON	LIMESTONE	6.5	98.2	BLACK
297.6	CARBONDALE	ANNA	BLACK SHALE	1.3	104.7	
296.3	CARBONDALE	ANNA	LIMESTONE	0.7	106.0	BLACK
295.6	CARBONDALE	ANNA	BLACK SHALE	0.3	106.7	
295.3	CARBONDALE	HERRIN	COAL	5.2	107.0	
290.1	CARBONDALE		UNDERCLAY	4.8	112.2	
285.3	CARBONDALE		SHALE WITH LIMESTONE	5.0	117.0	GRAY

MAPID: 16526269000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 825' S line, 660' W line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617734 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.752146 **DATE COLLECTED:** 3 / 30 / 1973
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P283J **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SILT	4.0	0.0	
371.0	PLEISTOCENE		CLAY	6.0	4.0	
365.0	PLEISTOCENE		UNCONSOLIDATED	33.0	10.0	
332.0	CARBONDALE	ALLENBY	COAL	1.0	43.0	SOFT
331.0	CARBONDALE		GRAY SHALE	5.0	44.0	HARD
326.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	49.0	HARD
318.0	CARBONDALE		GRAY SHALE	26.0	57.0	HARD; DARK
292.0	CARBONDALE	BRERETON	LIMESTONE	3.0	83.0	HARD
289.0	CARBONDALE	ANNA	BLACK SHALE	3.0	86.0	HARD
286.0	CARBONDALE	HERRIN	COAL	5.7	89.0	
280.3	CARBONDALE		UNDERCLAY	1.3	94.7	

MAPID: 16526270000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 660' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617741 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.753562 **DATE COLLECTED:** 9 / 20 / 1973
SURFACE ELEVATION (FT.): 373.3 **LOGGED (FT.):** 118.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P308 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.3	PLEISTOCENE		SILT	3.0	0.0	
370.3	PLEISTOCENE		CLAY	7.0	3.0	
363.3	PLEISTOCENE		UNCONSOLIDATED	64.0	10.0	
299.3			GRAY SHALE	17.0	74.0	DARK
282.3			COAL	1.5	91.0	
280.8			UNDERCLAY	1.5	92.5	
279.3			GRAY SHALE	24.0	94.0	DARK

MAPID: 16526271000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617753 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.755428 **DATE COLLECTED:** 9 / 21 / 1973
SURFACE ELEVATION (FT.): 374.5 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P333 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.5	PLEISTOCENE		SILT	4.0	0.0	
370.5	PLEISTOCENE		CLAY	15.0	4.0	
355.5	PLEISTOCENE		UNCONSOLIDATED	60.0	19.0	
295.5			GRAY SHALE	5.0	79.0	
290.5			COAL	1.0	84.0	
289.5			GRAY SHALE	23.0	85.0	

MAPID: 16526272000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' N line, 660' W line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.617762 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.757245 **DATE COLLECTED:** 9 / 20 / 1973
SURFACE ELEVATION (FT.): 374.6 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P358 **WELL TYPE:** Coal Test
COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.6	PLEISTOCENE		SILT	4.0	0.0	
370.6	PLEISTOCENE		CLAY	17.0	4.0	
353.6	PLEISTOCENE		UNCONSOLIDATED	57.0	21.0	
296.6			GRAY SHALE	16.0	78.0	
280.6			COAL	1.0	94.0	
279.6			GRAY SHALE	13.0	95.0	HARD

MAPID: 16590204000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.61891 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.4 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX P-407B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.4	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590205000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624534 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.4 **LOGGED (FT.):** 105.5 **LOG TYPE:** Company map
SOURCE: AMAX P-405 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
302.4	CARBONDALE	HERRIN	COAL	5.5	100.0	

MAPID: 16590206000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.626895 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761061 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.7 **LOGGED (FT.):** 87.0 **LOG TYPE:** Company map
SOURCE: AMAX P-404 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
301.7	CARBONDALE	HERRIN	COAL	5.0	82.0	

MAPID: 16590207000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634222 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761031 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.1 **LOGGED (FT.):** 111.3 **LOG TYPE:** Company map
SOURCE: AMAX H-425 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.1	CARBONDALE	DANVILLE	COAL	1.5	38.0	
301.1	CARBONDALE	HERRIN	COAL	5.3	106.0	

MAPID: 16590212000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.6343 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757172 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.5 **LOGGED (FT.):** 106.3 **LOG TYPE:** Company map
SOURCE: AMAX H-375 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
327.5	CARBONDALE	HERRIN	COAL	5.3	101.0	

MAPID: 16590213000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629507 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757268 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 115.2 **LOG TYPE:** Company map
SOURCE: AMAX P-353 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.0	CARBONDALE	DANVILLE	COAL	1.5	40.0	
331.0	CARBONDALE	HERRIN	COAL	5.2	110.0	

MAPID: 16590214000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.626898 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759148 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.8 **LOGGED (FT.):** 118.8 **LOG TYPE:** Company map
SOURCE: AMAX P-379 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.8	CARBONDALE	DANVILLE	COAL	2.0	41.0	
316.8	CARBONDALE	HERRIN	COAL	1.3	114.0	
315.5	CARBONDALE	HERRIN	COAL	0.4	115.3	
315.0	CARBONDALE	HERRIN	COAL	3.0	115.8	

MAPID: 16590215000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624599 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759175 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.9 **LOGGED (FT.):** 101.8 **LOG TYPE:** Company map
SOURCE: AMAX P-380 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.9	CARBONDALE	DANVILLE	COAL	1.7	24.0	
314.9	CARBONDALE	HERRIN	COAL	5.8	96.0	

MAPID: 16590216000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.619897 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759205 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.1 **LOGGED (FT.):** 110.3 **LOG TYPE:** Company map
SOURCE: AMAX P-382 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.1	CARBONDALE	DANVILLE	COAL	2.0	38.0	
363.1	CARBONDALE	ALLENBY	COAL	1.0	58.0	
316.1	CARBONDALE	HERRIN	COAL	5.3	105.0	

MAPID: 16590217000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617546 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759231 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.7 **LOGGED (FT.):** 83.5 **LOG TYPE:** Company map
SOURCE: AMAX P-383 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.7	CARBONDALE	ALLENBY	COAL	1.2	29.0	
311.7	CARBONDALE	HERRIN	COAL	5.5	78.0	

MAPID: 16590221000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.61761 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.758312 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.4 **LOGGED (FT.):** 69.7 **LOG TYPE:** Company map
SOURCE: AMAX P-358 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.4	CARBONDALE	HERRIN	COAL	5.7	64.0	

MAPID: 16590222000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617638 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.6 **LOGGED (FT.):** 109.0 **LOG TYPE:** Company map
SOURCE: AMAX P-358 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
266.6	CARBONDALE	BRIAR HILL	COAL	1.0	108.0	

MAPID: 16590223000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.619443 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 68.1 **LOG TYPE:** Company map
SOURCE: AMAX P-357N **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
326.0	CARBONDALE	HERRIN	COAL	5.1	63.0	

MAPID: 16590224000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624743 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757318 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.7 **LOGGED (FT.):** 89.3 **LOG TYPE:** Company map
SOURCE: AMAX P-355 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.7	CARBONDALE	HERRIN	COAL	5.3	84.0	

MAPID: 16590225000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627017 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757294 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.5 **LOGGED (FT.):** 115.9 **LOG TYPE:** Company map
SOURCE: AMAX P-354 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.5	CARBONDALE	DANVILLE	COAL	1.5	50.0	
330.5	CARBONDALE	HERRIN	COAL	4.9	111.0	

MAPID: 16590226000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629565 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755629 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.9 **LOGGED (FT.):** 96.0 **LOG TYPE:** Company map
SOURCE: AMAX P-328 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.9	CARBONDALE	DANVILLE	COAL	2.0	27.0	
387.9	CARBONDALE	ALLENBY	COAL	2.5	53.0	
349.9	CARBONDALE	HERRIN	COAL	5.0	91.0	

MAPID: 16590227000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627111 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755619 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.5 **LOGGED (FT.):** 72.2 **LOG TYPE:** Company map
SOURCE: AMAX P-329 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.5	CARBONDALE	ALLENBY	COAL	2.1	34.0	
349.5	CARBONDALE	HERRIN	COAL	5.2	67.0	

MAPID: 16590228000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624784 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.8 **LOGGED (FT.):** 59.6 **LOG TYPE:** Company map
SOURCE: AMAX P-330 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
346.8	CARBONDALE	HERRIN	COAL	4.6	55.0	

MAPID: 16590229000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620013 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756823 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.6 **LOGGED (FT.):** 189.2 **LOG TYPE:** Company map
SOURCE: AMAX P-332D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
327.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	54.0	
327.6	CARBONDALE	BRIAR HILL	COAL	2.5	54.0	
198.6	CARBONDALE	SPRINGFIELD	COAL	6.2	183.0	

MAPID: 16590230000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755562 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 78.6 **LOG TYPE:** Company map
SOURCE: AMAX P-332 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	BRIAR HILL	COAL	1.6	77.0	

MAPID: 16590231000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617692 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755552 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.5 **LOGGED (FT.):** 109.0 **LOG TYPE:** Company map
SOURCE: AMAX P-333 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
266.5	CARBONDALE	BRIAR HILL	COAL	1.0	108.0	

MAPID: 16590236000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75376 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.3 **LOGGED (FT.):** 119.5 **LOG TYPE:** Company map
SOURCE: AMAX P-308 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
255.3	CARBONDALE	BRIAR HILL	COAL	1.5	118.0	

MAPID: 16590237000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620068 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753784 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 75.5 **LOG TYPE:** Company map
SOURCE: AMAX P-307 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.4	CARBONDALE	BRIAR HILL	COAL	1.5	74.0	

MAPID: 16590238000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624816 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.754729 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.8 **LOGGED (FT.):** 52.6 **LOG TYPE:** Company map
SOURCE: AMAX P-305C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.8	CARBONDALE	HERRIN	COAL	5.6	47.0	

MAPID: 16590239000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624839 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753718 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.9 **LOGGED (FT.):** 139.3 **LOG TYPE:** Company map
SOURCE: AMAX P-305 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.9	CARBONDALE	BRIAR HILL	COAL	1.8	68.0	
251.9	CARBONDALE	SPRINGFIELD	COAL	6.3	133.0	

MAPID: 16590240000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.625892 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.754638 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.1 **LOGGED (FT.):** 58.5 **LOG TYPE:** Company map
SOURCE: AMAX P-304A **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
353.1	CARBONDALE	HERRIN	COAL	5.5	53.0	

MAPID: 16590241000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627241 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.754584 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.4 **LOGGED (FT.):** 64.3 **LOG TYPE:** Company map
SOURCE: AMAX P-304C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.4	CARBONDALE	HERRIN	COAL	5.3	59.0	

MAPID: 16590242000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627269 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753709 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.9 **LOGGED (FT.):** 154.0 **LOG TYPE:** Company map
SOURCE: AMAX P-304 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.9	CARBONDALE	BRIAR HILL	COAL	1.6	74.0	
242.9	CARBONDALE	SPRINGFIELD	COAL	6.0	148.0	

MAPID: 16590243000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.628444 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753724 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.6 **LOGGED (FT.):** 42.2 **LOG TYPE:** Company map
SOURCE: AMAX P-303B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.6	CARBONDALE	HERRIN	COAL	5.2	37.0	

MAPID: 16590244000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629568 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753699 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.6 **LOGGED (FT.):** 61.6 **LOG TYPE:** Company map
SOURCE: AMAX P-303 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.6	CARBONDALE	ALLENBY	COAL	2.0	47.0	
362.6	CARBONDALE	HERRIN	COAL	5.6	56.0	

MAPID: 16590246000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.632005 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753682 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 84.0 **LOG TYPE:** Company map
SOURCE: AMAX P-302 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.0	CARBONDALE	DANVILLE	COAL	1.3	17.0	
397.0	CARBONDALE	ALLENBY	COAL	1.5	43.0	
361.0	CARBONDALE	HERRIN	COAL	5.0	79.0	

MAPID: 16590247000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.633152 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753738 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 109.5 **LOG TYPE:** Company map
SOURCE: AMAX P-301B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.0	CARBONDALE	HERRIN	COAL	5.5	104.0	

MAPID: 16590248000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.634353 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753645 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.6 **LOGGED (FT.):** 117.0 **LOG TYPE:** Company map
SOURCE: AMAX H-325 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
347.6	CARBONDALE	HERRIN	COAL	5.0	112.0	

MAPID: 16590249000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.632022 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75175 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.3 **LOGGED (FT.):** 62.5 **LOG TYPE:** Company map
SOURCE: AMAX P-277 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.3	CARBONDALE	HERRIN	COAL	5.5	57.0	

MAPID: 16590250000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.630832 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751779 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.7 **LOGGED (FT.):** 43.5 **LOG TYPE:** Company map
SOURCE: AMAX P-277B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.7	CARBONDALE	HERRIN	COAL	5.5	38.0	

MAPID: 16590251000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629628 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.752786 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.4 **LOGGED (FT.):** 45.5 **LOG TYPE:** Company map
SOURCE: AMAX P-278C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.4	CARBONDALE	HERRIN	COAL	5.5	40.0	

MAPID: 16590252000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.629622 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751834 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.8 **LOGGED (FT.):** 88.0 **LOG TYPE:** Company map
SOURCE: AMAX P-278 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.8	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	88.0	

MAPID: 16590253000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARCO **LONGITUDE:** -88.627149 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751853 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.2 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX P-279 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
280.2	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	

MAPID: 16590254000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.624952 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751859 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX P-280 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	

MAPID: 16590255000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.620106 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751741 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.2 **LOGGED (FT.):** 108.6 **LOG TYPE:** Company map
SOURCE: AMAX P-282 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.2	CARBONDALE	BRIAR HILL	COAL	1.6	107.0	

MAPID: 16590256000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.617791 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.752276 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 94.7 **LOG TYPE:** Company map
SOURCE: AMAX P-283J **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.0	CARBONDALE	HERRIN	COAL	5.7	89.0	

MAPID: 16590258000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620074 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749864 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 94.8 **LOG TYPE:** Company map
SOURCE: AMAX P-257 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.2	CARBONDALE	HERRIN	COAL	5.8	89.0	

MAPID: 16590259000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625091 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749872 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.3 **LOGGED (FT.):** 138.0 **LOG TYPE:** Company map
SOURCE: AMAX P-255 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
246.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	138.0	

MAPID: 16590260000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.630894 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.750093 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.8 **LOGGED (FT.):** 35.8 **LOG TYPE:** Company map
SOURCE: AMAX P-252BC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.8	CARBONDALE	HERRIN	COAL	4.8	31.0	

MAPID: 16590261000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.632027 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.4 **LOGGED (FT.):** 44.0 **LOG TYPE:** Company map
SOURCE: AMAX P-252 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.4	CARBONDALE	HERRIN	COAL	6.0	38.0	

MAPID: 16590262000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634257 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.1 **LOGGED (FT.):** 38.6 **LOG TYPE:** Company map
SOURCE: AMAX P-251 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.1	CARBONDALE	HERRIN	COAL	5.6	33.0	

MAPID: 16590265000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.631894 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747939 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.7 **LOGGED (FT.):** 82.6 **LOG TYPE:** Company map
SOURCE: AMAX P-227 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
305.7	CARBONDALE	HERRIN	COAL	5.6	77.0	

MAPID: 16590266000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629616 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.747985 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.4 **LOGGED (FT.):** 69.0 **LOG TYPE:** Company map
SOURCE: AMAX P-228 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.4	CARBONDALE	BRIAR HILL	COAL	2.0	67.0	

MAPID: 16590267000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625076 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 108.0 **LOG TYPE:** Company map
SOURCE: AMAX P-230CC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	108.0	

MAPID: 16590800000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 336' N line, 1308' W line of SW SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629351 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748911 **DATE COLLECTED:** 1 / 21 / 1982

SURFACE ELEVATION (FT.): 378.3 **LOGGED (FT.):** 77.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P228C **WELL TYPE:** Coal Test

COMMENT: PERMIT 286; DELTA, HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.3	PLEISTOCENE		CLAY	31.5	0.0	
346.8	PLEISTOCENE		UNCONSOLIDATED	25.5	31.5	
321.3	CARBONDALE		SANDSTONE	3.2	57.0	BROWN
318.1	CARBONDALE	BRERETON	LIMESTONE	0.3	60.2	DARK GRAY
317.8	CARBONDALE	ANNA	BLACK SHALE	1.7	60.5	
316.1	CARBONDALE	HERRIN	COAL	5.4	62.2	
310.7	CARBONDALE		UNDERCLAY	1.4	67.6	
309.3	CARBONDALE		GRAY SHALE	8.0	69.0	

MAPID: 16590818000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.61999 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746158 **DATE COLLECTED:** 11 / 8 / 1972

SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 126.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P207Y **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.2	PLEISTOCENE		SILT	2.0	0.0	
398.2	PLEISTOCENE		CLAY	3.0	2.0	
395.2	MODESTO		SANDY SHALE	15.0	5.0	
380.2	MODESTO		SANDSTONE	20.0	20.0	
360.2	MODESTO		GRAY SHALE	1.0	40.0	
359.2	MODESTO		BLACK SHALE	2.0	41.0	
357.2	MODESTO		GRAY SHALE	4.0	43.0	
353.2	MODESTO		DARK GRAY SHALE	3.0	47.0	
350.2	CARBONDALE	DANVILLE	COAL	1.8	50.0	
348.4	CARBONDALE		UNDERCLAY	1.3	51.8	
347.2	CARBONDALE		GRAY SHALE	4.0	53.0	
343.2	CARBONDALE		SANDY SHALE	11.0	57.0	
332.2	CARBONDALE	ALLENBY	COAL	0.6	68.0	
331.6	CARBONDALE		UNDERCLAY	1.4	68.6	
330.2	CARBONDALE		GRAY SHALE	2.0	70.0	
328.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	72.0	
322.2	CARBONDALE		GRAY SHALE	4.0	78.0	
318.2	CARBONDALE		SANDY SHALE	6.0	82.0	
312.2	CARBONDALE		SANDSTONE	10.0	88.0	
302.2	CARBONDALE		DARK GRAY SHALE	10.5	98.0	
291.7	CARBONDALE	BRERETON	LIMESTONE	0.5	108.5	
291.2	CARBONDALE	ANNA	BLACK SHALE	2.0	109.0	
289.2	CARBONDALE	ENERGY	GRAY SHALE	8.0	111.0	
281.2	CARBONDALE	HERRIN	COAL	5.6	119.0	
275.6	CARBONDALE		UNDERCLAY	1.4	124.6	

MAPID: 16590819000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 640' S line, 52' E line of SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620119 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74789 **DATE COLLECTED:** 11 / 29 / 1982

SURFACE ELEVATION (FT.): 375.3 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P206GG **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.3	PLEISTOCENE		CLAY	22.0	0.0	BROWN
353.3	PLEISTOCENE		UNCONSOLIDATED	18.0	22.0	GRAY
335.3	CARBONDALE		SANDY SHALE	6.0	40.0	
329.3	CARBONDALE		GRAY SHALE	2.2	46.0	
327.1	CARBONDALE		SANDSTONE	0.8	48.2	GRAY
326.3	CARBONDALE		GRAY SHALE	2.0	49.0	
324.3	CARBONDALE	ALLENBY	COAL	0.4	51.0	
323.9	CARBONDALE		GRAY SHALE	6.0	51.4	
317.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	57.4	LIGHT GRAY
310.7	CARBONDALE		GRAY SHALE	3.4	64.6	
307.3	CARBONDALE		SILTY SHALE	13.6	68.0	
293.7	CARBONDALE		GRAY SHALE	10.1	81.6	
283.6	CARBONDALE	CONANT	LIMESTONE	1.0	91.7	DARK GRAY
282.6	CARBONDALE		BLACK SHALE	0.6	92.7	
282.0	CARBONDALE	BRERETON	LIMESTONE	5.1	93.3	DARK GRAY
276.9	CARBONDALE	ANNA	BLACK SHALE	0.9	98.4	
276.0	CARBONDALE	HERRIN	COAL	5.7	99.3	
270.3	CARBONDALE		UNDERCLAY	2.0	105.0	
268.3	CARBONDALE		GRAY SHALE	1.5	107.0	
266.8	CARBONDALE		CALCAREOUS SHALE	7.5	108.5	

MAPID: 16590820000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 60' S line, 270' E line of NE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620887 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.750143 **DATE COLLECTED:** 8 / 9 / 1993

SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 107.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P256PE **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.4	PLEISTOCENE		CLAY	8.0	0.0	BROWN
367.4	PLEISTOCENE		UNCONSOLIDATED	15.0	8.0	BROWN
352.4	PLEISTOCENE		UNCONSOLIDATED	20.0	23.0	GRAY
332.4	PLEISTOCENE		SAND & GRAVEL	2.0	43.0	
330.4	PLEISTOCENE		GLACIAL DRIFT	25.0	45.0	GRAY
305.4	CARBONDALE		SANDY SHALE	9.1	70.0	
296.3	CARBONDALE		SANDY SHALE	1.1	79.1	LIMY
295.2	CARBONDALE		SANDY DARK SHALE	2.3	80.2	
292.9	CARBONDALE		CALCAREOUS BLACK SHALE	0.6	82.5	
292.3	CARBONDALE		BLACK SHALE	2.1	83.1	
290.2	CARBONDALE	BRERETON	LIMESTONE	3.3	85.2	DARK GRAY
286.9	CARBONDALE	HERRIN	COAL	5.1	88.5	
281.8	CARBONDALE		GRAY SHALE	4.2	93.6	
277.6	CARBONDALE		SANDY SHALE	9.2	97.8	LIMY

MAPID: 16590821000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620032 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753535 **DATE COLLECTED:** 11 / 14 / 1972
SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 158.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P307 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.4	PLEISTOCENE		SILT	2.0	0.0	
372.4	PLEISTOCENE		CLAY	5.0	2.0	
367.4	PLEISTOCENE		UNCONSOLIDATED	55.0	7.0	
312.4	CARBONDALE		GRAY SHALE	4.0	62.0	
308.4	CARBONDALE		SANDY SHALE	5.0	66.0	
303.4	CARBONDALE		DARK GRAY SHALE	3.0	71.0	
300.4	CARBONDALE	BRIAR HILL	COAL	1.5	74.0	
298.9	CARBONDALE		UNDERCLAY	1.5	75.5	
297.4	CARBONDALE		GRAY SHALE	1.0	77.0	
296.4	CARBONDALE		SANDSTONE	1.0	78.0	
295.4	CARBONDALE		SANDY SHALE	11.0	79.0	
284.4	CARBONDALE		DARK GRAY SHALE	10.0	90.0	
274.4	CARBONDALE		SANDY SHALE	20.0	100.0	
254.4	CARBONDALE		DARK GRAY SHALE	38.0	120.0	

MAPID: 16590822000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.620045 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.755377 **DATE COLLECTED:** 3 / 30 / 1973
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 118.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P332 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SILT	5.0	0.0	
370.0	PLEISTOCENE		CLAY	14.0	5.0	
356.0	PLEISTOCENE		UNCONSOLIDATED	49.0	19.0	
307.0	CARBONDALE		GRAY SHALE	9.0	68.0	
298.0	CARBONDALE	BRIAR HILL	COAL	1.7	77.0	
296.3	CARBONDALE		UNDERCLAY	0.5	78.7	
295.8	CARBONDALE		GRAY SHALE	39.0	79.2	#6 COAL MISSING

MAPID: 16590852000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 548' N line, 440' E line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616833 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748431 **DATE COLLECTED:** 4 / 20 / 1993

SURFACE ELEVATION (FT.): 380.5 **LOGGED (FT.):** 148.6 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. P233L **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.5	PLEISTOCENE		CLAY	4.0	0.0	BROWN
376.5	PLEISTOCENE		UNCONSOLIDATED	7.0	4.0	BROWN
369.5	MODESTO		SANDSTONE	13.0	11.0	BROWN
356.5	MODESTO		SANDSTONE	1.8	24.0	LIGHT GRAY
354.7	MODESTO		SILTY SHALE	2.3	25.8	
352.4	MODESTO		SANDSTONE	15.8	28.1	LIGHT GRAY
336.6	MODESTO	PIASA	LIMESTONE	0.1	43.9	GRAY
336.5	MODESTO		CALCAREOUS SHALE	0.9	44.0	
335.6	MODESTO		BLACK SHALE	1.2	44.9	
334.4	MODESTO		DARK GRAY SHALE	1.6	46.1	
332.8	MODESTO		GRAY SHALE	4.3	47.7	
328.5	CARBONDALE	DANVILLE	COAL	2.1	52.0	
326.4	CARBONDALE		GRAY SHALE	3.6	54.1	ROOTED
322.8	CARBONDALE		GRAY SHALE	3.2	57.7	
319.6	CARBONDALE		GRAY SHALE	2.1	60.9	
317.5	CARBONDALE	ALLENBY	COAL	0.4	63.0	
317.1	CARBONDALE		SILTSTONE	1.9	63.4	
315.2	CARBONDALE		GRAY SHALE	0.4	65.3	
314.8	CARBONDALE		SANDSTONE	1.6	65.7	LIGHT GRAY
313.2	CARBONDALE		SILTSTONE	0.3	67.3	GRAY
312.9	CARBONDALE		SHALE	1.5	67.6	GREEN-GRAY
311.4	CARBONDALE		DARK GRAY SHALE	0.6	69.1	
310.8	CARBONDALE	ALLENBY	COAL	1.1	69.7	
309.7	CARBONDALE		UNDERCLAY	3.5	70.8	
306.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.9	74.3	TAN
298.3	CARBONDALE		SILTY SHALE	5.3	82.2	
293.0	CARBONDALE		SILTSTONE	4.0	87.5	LIGHT GRAY
289.0	CARBONDALE		SANDSTONE	4.7	91.5	LIGHT GRAY
284.3	CARBONDALE		SILTSTONE	3.6	96.2	LIGHT GRAY
280.7	CARBONDALE		SILTY SHALE	9.7	99.8	
271.0	CARBONDALE		GRAY SHALE	2.3	109.5	
268.7	CARBONDALE	CONANT	LIMESTONE	0.5	111.8	GRAY
268.2	CARBONDALE	JAMESTOWN	SHALY COAL	0.2	112.3	
268.0	CARBONDALE		CALCAREOUS SHALE	3.8	112.5	
264.2	CARBONDALE	BRERETON	LIMESTONE	3.0	116.3	DARK GRAY
261.2	CARBONDALE	ANNA	BLACK SHALE	2.0	119.3	
259.2	CARBONDALE	HERRIN	COAL	5.3	121.3	
253.9	CARBONDALE		UNDERCLAY	3.5	126.6	
250.4	CARBONDALE		SILTY SHALE	18.5	130.1	

MAPID: 16590853000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 635' N line, 310' W line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.618784 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748162 **DATE COLLECTED:** 5 / 26 / 1993

SURFACE ELEVATION (FT.): 382.1 **LOGGED (FT.):** 136.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P232BG **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.1	PLEISTOCENE		CLAY	4.0	0.0	BROWN
378.1	PLEISTOCENE		UNCONSOLIDATED	2.0	4.0	BROWN
376.1	MODESTO		SANDSTONE	6.0	6.0	
370.1	MODESTO		SANDSTONE	16.0	12.0	BROWN
354.1	MODESTO		SANDSTONE	7.0	28.0	GRAY
347.1	MODESTO		CALCAREOUS SANDSTONE	5.2	35.0	GRAY
341.9	MODESTO		SANDY DARK SHALE	1.8	40.2	
340.1	MODESTO		SANDY SHALE	6.5	42.0	
333.6	CARBONDALE	DANVILLE	COAL	2.3	48.5	
331.3	CARBONDALE		SANDY SHALE	4.2	50.8	
327.1	CARBONDALE		SANDY SHALE	9.3	55.0	LIMY
317.8	CARBONDALE	ALLENBY	COAL	0.4	64.3	
317.4	CARBONDALE		SANDY SHALE	3.9	64.7	
313.5	CARBONDALE		CALCAREOUS SHALE	1.1	68.6	
312.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.8	69.7	BROWN
304.6	CARBONDALE		SANDY SHALE	12.0	77.5	
292.6	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	89.5	
282.1	CARBONDALE		SANDY SHALE	10.5	100.0	
271.6	CARBONDALE		BLACK SHALE	0.7	110.5	
270.9	CARBONDALE	JAMESTOWN	COAL	0.3	111.2	
270.6	CARBONDALE		BLACK SHALE	1.8	111.5	
268.8	CARBONDALE	BRERETON	LIMESTONE	3.4	113.3	DARK GRAY
265.4	CARBONDALE	ANNA	BLACK SHALE	0.9	116.7	
264.5	CARBONDALE	HERRIN	COAL	5.5	117.6	
259.0	CARBONDALE		UNDERCLAY	2.9	123.1	
256.1	CARBONDALE		SANDY SHALE	10.0	126.0	LIMY

MAPID: 16590854000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 295' N line, 1' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624632 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.748977 **DATE COLLECTED:** 4 / 4 / 1973
SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P230CC **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.1	PLEISTOCENE		SILT	4.0	0.0	
372.1	PLEISTOCENE		CLAY	6.0	4.0	
366.1	PLEISTOCENE		UNCONSOLIDATED	66.0	10.0	
300.1	CARBONDALE		GRAY SHALE	32.0	76.0	NO COAL

MAPID: 16590855000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 336' N line, 1308' W line of SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629351 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.748911 **DATE COLLECTED:** 1 / 21 / 1982
SURFACE ELEVATION (FT.): 378.3 **LOGGED (FT.):** 77.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P228C **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.3	PLEISTOCENE		CLAY	31.5	0.0	BROWN
346.8	PLEISTOCENE		UNCONSOLIDATED	25.5	31.5	GRAY
321.3	CARBONDALE		SANDSTONE	3.2	57.0	BROWN
318.1	CARBONDALE	BRERETON	LIMESTONE	0.3	60.2	DARK GRAY
317.8	CARBONDALE	ANNA	BLACK SHALE	1.7	60.5	
316.1	CARBONDALE	HERRIN	COAL	5.4	62.2	
310.7	CARBONDALE		UNDERCLAY	1.4	67.6	
309.3	CARBONDALE		GRAY SHALE	8.0	69.0	

MAPID: 16590874000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.617774 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.759117 **DATE COLLECTED:** 10 / 24 / 1973

SURFACE ELEVATION (FT.): 389.6 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE P383 **WELL TYPE:** Coal Test

COMMENT: PERMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.6	PLEISTOCENE		SILT	2.0	0.0	
387.6	PLEISTOCENE		CLAY	9.0	2.0	
378.6			SANDSTONE	7.0	11.0	SOFT
371.6			SANDY SHALE	11.0	18.0	HARD
360.6	CARBONDALE	ALLENBY	COAL	1.2	29.0	
359.4	CARBONDALE		GRAY SHALE	6.8	30.2	
352.6	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	37.0	HARD
344.6	CARBONDALE		SANDY SHALE	27.0	45.0	HARD; GRAY
317.6	CARBONDALE	BRERETON	LIMESTONE	1.0	72.0	HARD
316.6	CARBONDALE	ANNA	BLACK SHALE	3.0	73.0	
313.6	CARBONDALE	ENERGY	GRAY SHALE	2.0	76.0	
311.6	CARBONDALE	HERRIN	COAL	5.5	78.0	
306.1	CARBONDALE		UNDERCLAY	1.5	83.5	

MAPID: 16500382000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** S2 NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.601476 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.755473 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 369.8 **LOGGED (FT.):** 260.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.8			UNCONSOLIDATED	12.0	0.0	
357.8	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	12.0	
355.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	14.0	
341.8	CARBONDALE	ANVIL ROCK	DARK SHALE	8.5	28.0	
333.3	CARBONDALE	JAMESTOWN	COAL	0.3	36.5	
333.0	CARBONDALE		UNDERCLAY	0.7	36.8	
332.3	CARBONDALE	ANNA	DARK SHALE	4.5	37.5	
327.8	CARBONDALE	HERRIN	COAL	5.1	42.0	
322.7	CARBONDALE		UNDERCLAY	6.0	47.1	
316.7	CARBONDALE		GRAY SHALE	47.0	53.1	
269.7	CARBONDALE		SANDY SHALE	10.0	100.1	
259.7	CARBONDALE		GRAY SHALE	8.0	110.1	
251.7	CARBONDALE		DARK SHALE	15.9	118.1	
235.8	CARBONDALE		SANDSTONE	17.0	134.0	
218.8	CARBONDALE		DARK SHALE	3.0	151.0	
215.8	CARBONDALE		LIMESTONE	2.0	154.0	
213.8	CARBONDALE		GRAY SHALE	1.0	156.0	
212.8	CARBONDALE		SANDSTONE	27.0	157.0	
185.8	CARBONDALE		SHALE	5.0	184.0	
180.8	CARBONDALE		SANDSTONE	8.0	189.0	
172.8	CARBONDALE		SHALE	5.5	197.0	
167.3	CARBONDALE		SANDSTONE	18.5	202.5	
148.8	CARBONDALE		SHALE	1.5	221.0	
147.3	CARBONDALE		SANDSTONE	28.5	222.5	
118.8	CARBONDALE	ST. DAVID	LIMESTONE	2.5	251.0	
116.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	253.5	
114.3	CARBONDALE	SPRINGFIELD	COAL	2.5	255.5	
111.8	CARBONDALE		UNDERCLAY	2.0	258.0	

MAPID: 16500382000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** S2 NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.601476 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.755473 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 255.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
328.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	42.0	
115.0	CARBONDALE	SPRINGFIELD	COAL	-	255.0	

MAPID: 16500383000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608417 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.751764 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 263.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	112.0	
109.0	CARBONDALE	SPRINGFIELD	COAL	-	263.0	

MAPID: 16500383000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.608417 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.751764 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 273.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	HERRIN	COAL	5.7	112.0	
216.0	CARBONDALE	BRIAR HILL	COAL	1.8	156.0	
109.0	CARBONDALE	SPRINGFIELD	COAL	6.1	263.0	

MAPID: 16500383000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.608417 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.751764 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 372.4 **LOGGED (FT.):** 272.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.4			UNCONSOLIDATED	75.8	0.0	
296.6	CARBONDALE	BANKSTON FORK	LIMESTONE	1.2	75.8	
295.4	CARBONDALE		CLAYSTONE	2.8	77.0	
292.6	CARBONDALE	ANVIL ROCK	SHALE	4.5	79.8	
288.1	CARBONDALE	ANVIL ROCK	SANDSTONE	6.9	84.3	
281.1	CARBONDALE	ANVIL ROCK	SHALE	14.0	91.3	
267.1	CARBONDALE	BRERETON	LIMESTONE	4.7	105.3	
262.5	CARBONDALE	ANNA	SHALE	2.1	109.9	
260.4	CARBONDALE	ANNA	BLACK SHALE	0.3	112.0	
260.1	CARBONDALE	HERRIN	COAL	5.7	112.3	
254.4	CARBONDALE		UNDERCLAY	3.0	118.0	
251.4	CARBONDALE		SANDY SHALE	7.3	121.0	
244.1	CARBONDALE		SHALE	25.8	128.3	
218.2	CARBONDALE		SANDY SHALE	2.4	154.2	
215.8	CARBONDALE	BRIAR HILL	COAL	1.8	156.6	
214.0	CARBONDALE		UNDERCLAY	3.6	158.4	
210.4	CARBONDALE	DYKERSBURG	SANDY SHALE	6.0	162.0	
204.4	CARBONDALE	DYKERSBURG	SANDY SHALE	14.2	168.0	
190.2	CARBONDALE	DYKERSBURG	SANDY SHALE	28.4	182.2	
161.8	CARBONDALE	DYKERSBURG	SANDY SHALE	49.9	210.6	
111.9	CARBONDALE	DYKERSBURG	SHALE	2.5	260.5	
109.4	CARBONDALE	SPRINGFIELD	COAL	6.1	263.0	
103.3	CARBONDALE		UNDERCLAY	3.7	269.1	

MAPID: 16500956000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.604927 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747168 **DATE COLLECTED:** 5 / 7 / 1946

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 266.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3			CLAY	25.0	0.0	
344.3			SAND	36.0	25.0	
308.3	CARBONDALE		SANDSTONE	3.0	61.0	
305.3	CARBONDALE		GRAY SHALE	5.0	64.0	
300.3	CARBONDALE		COAL	0.3	69.0	
300.0	CARBONDALE		UNDERCLAY	0.8	69.3	
299.3	CARBONDALE		GRAY SHALE	2.3	70.0	
297.0	CARBONDALE	ALLENBY	COAL	1.2	72.3	
295.8	CARBONDALE		CLAYSTONE	1.5	73.5	
294.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	75.0	
287.3	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	82.0	
271.3	CARBONDALE		GRAY SHALE	14.0	98.0	
257.3	CARBONDALE		BLACK SHALE	2.0	112.0	
255.3	CARBONDALE	BRERETON	LIMESTONE	6.0	114.0	
249.3	CARBONDALE	ANNA	BLACK SHALE	1.8	120.0	
247.5	CARBONDALE	HERRIN	COAL	5.0	121.8	
242.5	CARBONDALE		UNDERCLAY	2.2	126.8	
240.3	CARBONDALE		SANDSTONE	11.0	129.0	
229.3	CARBONDALE		GRAY SHALE	22.0	140.0	
207.3	CARBONDALE		GRAY SHALE	12.0	162.0	
195.3	CARBONDALE	BRIAR HILL	COAL	1.6	174.0	
193.7	CARBONDALE	DYKERSBURG	SANDY SHALE	34.4	175.6	
159.3	CARBONDALE	DYKERSBURG	SANDSTONE	32.0	210.0	
127.3	CARBONDALE	SPRINGFIELD	COAL	0.6	242.0	
126.7	CARBONDALE	SPRINGFIELD	BLACK SHALE	12.7	242.6	WITH COAL SEAMS
114.0	CARBONDALE	SPRINGFIELD	COAL	6.0	255.3	
108.0	CARBONDALE		BLACK SHALE	1.8	261.3	
106.3	CARBONDALE		BLACK SHALE	2.0	263.0	WITH FIRE CLAY
104.3	CARBONDALE		UNDERCLAY	1.0	265.0	

MAPID: 16500957000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.607255 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.749003 **DATE COLLECTED:** 5 / 15 / 1946

SURFACE ELEVATION (FT.): 320.3 **LOGGED (FT.):** 284.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.3			CLAY	24.0	0.0	
296.3			CLAY	16.0	24.0	
280.3			SAND	18.0	40.0	
262.3	MODESTO		GRAY SHALE	5.0	58.0	
257.3	MODESTO		SANDY SHALE	4.0	63.0	
253.3	MODESTO		BLACK SHALE	1.0	67.0	
252.3	CARBONDALE	DANVILLE	COAL	0.2	68.0	
252.1	CARBONDALE		BLACK SHALE	2.8	68.2	
249.3	CARBONDALE		SANDY SHALE	12.0	71.0	
237.3	CARBONDALE	ALLENBY	COAL	1.1	83.0	
236.2	CARBONDALE		SANDSTONE	1.9	84.1	
234.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	86.0	WITH SHALE
231.3	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	89.0	
227.3	CARBONDALE	ANVIL ROCK	LIMESTONE	0.3	93.0	
227.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.7	93.3	
208.3	CARBONDALE		BLACK SHALE	3.0	112.0	
205.3	CARBONDALE		SHALE	7.7	115.0	GRAY AND BLACK SHALE
197.6	CARBONDALE	HERRIN	COAL	5.5	122.7	
192.1	CARBONDALE		UNDERCLAY	1.8	128.2	
190.3	CARBONDALE		SANDY SHALE	10.0	130.0	
180.3	CARBONDALE		GRAY SHALE	26.7	140.0	
153.6	CARBONDALE	BRIAR HILL	COAL	1.8	166.7	
151.8	CARBONDALE		SANDY SHALE	10.5	168.5	
141.3	CARBONDALE		LIMESTONE	1.0	179.0	WITH SHALE
140.3	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	180.0	WITH SOME SHALE
120.3	CARBONDALE	DYKERSBURG	SANDY SHALE	65.0	200.0	
55.3	CARBONDALE	DYKERSBURG	COAL	0.1	265.0	
55.2	CARBONDALE	DYKERSBURG	BLACK SHALE	1.9	265.1	WITH SLATE SEAMS
53.3	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	267.0	GRAY AND BLACK
51.3	CARBONDALE	SPRINGFIELD	COAL	6.3	269.0	
45.0	CARBONDALE		SANDY SHALE	7.7	275.3	
37.3	CARBONDALE		UNDERCLAY	1.0	283.0	

MAPID: 16500958000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.614221 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.750824 **DATE COLLECTED:** 5 / 20 / 1946

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 258.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			CLAY	33.0	0.0	
346.0			SAND	11.0	33.0	
335.0	CARBONDALE	DANVILLE	COAL	1.3	44.0	
333.7	CARBONDALE		GRAY SHALE	6.8	45.3	
327.0	CARBONDALE		SANDSTONE	2.0	52.0	
325.0	CARBONDALE		BLACK SHALE	3.0	54.0	
322.0	CARBONDALE		SANDSTONE	7.0	57.0	
315.0	CARBONDALE		GRAY SHALE	5.0	64.0	
310.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	69.0	
305.0	CARBONDALE		GRAY SHALE	6.0	74.0	
299.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	80.0	
289.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	90.0	
286.0	CARBONDALE		GRAY SHALE	5.0	93.0	
281.0	CARBONDALE		LIMESTONE	0.5	98.0	
280.5	CARBONDALE		COAL	0.3	98.5	
280.2	CARBONDALE		BLACK SHALE	4.2	98.8	
276.0	CARBONDALE		SANDY SHALE	6.5	103.0	
269.5	CARBONDALE	HERRIN	COAL	5.2	109.5	
264.3	CARBONDALE		UNDERCLAY	6.3	114.7	
258.0	CARBONDALE		SANDSTONE	2.0	121.0	
256.0	CARBONDALE		GRAY SHALE	35.0	123.0	
221.0	CARBONDALE		LIMESTONE	0.5	158.0	
220.5	CARBONDALE		GRAY SHALE	2.5	158.5	
218.0	CARBONDALE	BRIAR HILL	COAL	1.3	161.0	
216.7	CARBONDALE	DYKERSBURG	GRAY SHALE	17.7	162.3	
199.0	CARBONDALE	DYKERSBURG	SANDY SHALE	50.0	180.0	
149.0	CARBONDALE	DYKERSBURG	GRAY SHALE	9.0	230.0	
140.0	CARBONDALE	DYKERSBURG	BLACK SHALE	6.4	239.0	WITH SEAMS OF COAL
133.6	CARBONDALE	SPRINGFIELD	COAL	5.6	245.4	
128.0	CARBONDALE		UNDERCLAY	7.0	251.0	

MAPID: 16500958000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.614221 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.750824 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 115.2 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
310.9	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	5.3	69.1	
305.7	CARBONDALE	LAWSON	GRAY SHALE	4.8	74.3	
300.9	CARBONDALE	LAWSON	SHALE & SILTSTONE	12.1	79.1	
288.8	CARBONDALE	LAWSON	SILTY SHALE	4.2	91.2	
284.7	CARBONDALE	CONANT	CALCAREOUS SHALE	4.3	95.3	
280.4	CARBONDALE		CLAYSTONE	0.6	99.6	
279.8	CARBONDALE	ANNA	BLACK SHALE	2.1	100.2	
277.7	CARBONDALE	ENERGY	GRAY SHALE	7.8	102.3	
270.0	CARBONDALE	HERRIN	COAL	5.2	110.0	

MAPID: 16501075000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 110' N line, 180' W line of NW SE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.600855 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757011 **DATE COLLECTED:** 12 / 18 / 1953

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 417.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 43-112 **WELL TYPE:** Coal Test

COMMENT: ELEV EST. FROM TOPO BY CGT; LOG SAID 516

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.0			CLAY	10.0	0.0	
378.0			CLAY	5.0	10.0	
373.0	MODESTO		SANDSTONE	6.0	15.0	
367.0	MODESTO		GRAY SANDSTONE	65.0	21.0	
302.0	MODESTO		SANDSTONE	80.0	86.0	
222.0	MODESTO		GRAY SANDSTONE	45.0	166.0	
177.0	MODESTO		SHALE	5.0	211.0	
172.0	MODESTO	PIASA	LIMESTONE	4.5	216.0	
167.5			SHALE	10.0	220.5	
157.5			SANDSTONE	18.5	230.5	
139.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	249.0	
138.0	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	3.5	250.0	
134.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	22.5	253.5	
112.0	CARBONDALE	ANVIL ROCK	SILTY SHALE	13.3	276.0	
98.7	CARBONDALE		LIMESTONE	0.3	289.3	
98.5	CARBONDALE		BLACK SHALE	0.2	289.5	
98.3	CARBONDALE	BRERETON	LIMESTONE	6.3	289.7	
92.0	CARBONDALE	ANNA	BLACK SHALE	2.7	296.0	
89.3	CARBONDALE	ENERGY	GRAY SHALE	5.8	298.7	
83.5	CARBONDALE	HERRIN	COAL	4.7	304.5	
78.8	CARBONDALE		UNDERCLAY	0.8	309.2	
78.0	CARBONDALE		GRAY SANDSTONE	65.0	310.0	
13.0	CARBONDALE		GRAY SHALE	10.0	375.0	
3.0	CARBONDALE		DARK GRAY SHALE	11.0	385.0	
-8.0	CARBONDALE		GRAY SHALE	14.0	396.0	
-22.0	CARBONDALE		DARK SHALE	2.8	410.0	
-24.8	CARBONDALE	SPRINGFIELD	COAL	4.1	412.8	
-28.9	CARBONDALE		UNDERCLAY	0.2	416.9	

MAPID: 16501113000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.611912 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747142 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 268.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			CLAY	40.0	0.0	
331.0	MODESTO		SHALE	8.0	40.0	
323.0	CARBONDALE	DANVILLE	COAL	2.0	48.0	
321.0	CARBONDALE		DARK SHALE	9.0	50.0	
312.0	CARBONDALE		GRAY SHALE	20.0	59.0	
292.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	79.0	
286.0	CARBONDALE		GRAY SHALE	0.9	85.0	
285.1	CARBONDALE		GRAY SHALE	3.1	85.9	
282.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.0	89.0	
279.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	10.4	92.0	
268.6	CARBONDALE		BLACK SHALE	0.6	102.4	
268.0	CARBONDALE	BRERETON	LIMESTONE	6.0	103.0	
262.0	CARBONDALE	ANNA	BLACK SHALE	2.0	109.0	
260.0	CARBONDALE	HERRIN	COAL	6.0	111.0	+1' ADJUSTMENT TO MATCH LOG
254.0	CARBONDALE		GRAY SHALE	6.5	117.0	
247.5	CARBONDALE		GRAY SHALE	4.3	123.5	
243.2	CARBONDALE		LIMESTONE	0.3	127.8	-10" ADJUSTMENT TO MATCH LOG
242.9	CARBONDALE		GRAY SILTSTONE	2.2	128.1	
240.7	CARBONDALE		LIMESTONE	0.8	130.3	+6" ADJUSTMENT TO MATCH LOG MARKER
240.0	CARBONDALE		GRAY SHALE	4.8	131.0	
235.2	CARBONDALE		GRAY SHALE	16.3	135.8	
218.9	CARBONDALE		DARK GRAY SHALE	0.2	152.1	
218.7	CARBONDALE		GRAY SHALE	4.0	152.3	
214.7	CARBONDALE	BRIAR HILL	COAL	1.8	156.3	
212.9	CARBONDALE		GRAY SILTSTONE	2.8	158.1	
210.2	CARBONDALE		GRAY SHALE	3.0	160.8	
207.2	CARBONDALE		DARK GRAY SHALE	0.1	163.8	
207.1	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.8	163.9	VERY FOSSILIFEROUS
206.2	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.3	164.8	VERY FOSSILIFEROUS
205.0	CARBONDALE	DYKERSBURG	GRAY SHALE	10.0	166.0	
195.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	0.5	176.0	
194.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	0.7	176.5	
193.8	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	177.2	
190.8	CARBONDALE	DYKERSBURG	GRAY SHALE	2.8	180.2	WITH LGY ST MIXED (-2" TO MATCH LOG)
188.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	0.4	183.0	
187.6	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	6.6	183.4	+1" ADJUSTED TO MATCH LOG MARKER
181.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	4.0	190.0	WITH SHALE MIXED
177.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	6.0	194.0	+2" ADJUSTED TO MATCH LOG MARKER

171.0	CARBONDALE	DYKERSBURG	GRAY SHALE	46.0	200.0	
125.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	4.0	246.0	ADJUSTED TO MATCH LOG MARKER
121.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	3.8	250.0	
117.2	CARBONDALE	DYKERSBURG	GRAY SHALE	3.2	253.8	-1" ADJUSTMENT TO MATCH LOG MARKER
114.0	CARBONDALE	SPRINGFIELD	COAL	8.7	257.0	
105.3	CARBONDALE		BLACK SHALE	2.3	265.7	

MAPID: 16502525000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.600334 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760088 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1490.0 **LOG TYPE:** Electric Log

SOURCE: FLEMING, F.J. DRLG CO. **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-48.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	430.0	
-118.0	SPOON	DAVIS	UNCLASSIFIED	-	500.0	
-1108.0	BASE OF PENN.		UNCLASSIFIED	-	1490.0	

MAPID: 16502525000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.600334 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.760088 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2345.0 **LOG TYPE:**

SOURCE: FLEMING, F.J. DRLG CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
242.0	CARBONDALE	BRERETON	LIMESTONE	-	140.0	
240.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	142.0	
127.0	CARBONDALE	SPRINGFIELD	COAL	-	255.0	
-43.0	CARBONDALE	COLCHESTER	COAL	-	425.0	
-1178.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1560.0	
-1559.0			LIMESTONE	-	1941.0	
-1963.0		BASE BARLOW	LIMESTONE	-	2345.0	

MAPID: 16502525000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.600334 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.760088 **DATE COLLECTED:** 7 / 0 / 1954
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2832.0 **LOG TYPE:** Electric Log
SOURCE: FLEMING, F.J. DRLG CO., COWGUR W M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
67.0	CARBONDALE	HOUCHIN CREEK	COAL	3.5	315.0	
37.0	CARBONDALE	SURVANT	COAL	0.8	345.0	
-44.0	CARBONDALE	COLCHESTER	COAL	0.5	426.0	
-92.0	CARBONDALE	DEKOVEN	COAL	3.0	474.0	
-98.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	480.0	
-113.0	CARBONDALE	DAVIS	COAL	5.0	495.0	
-192.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	574.0	
-216.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	598.0	

MAPID: 16502525000C **VERSION:** 4 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.600334 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760088 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 316.0 **LOG TYPE:** Electric Log
SOURCE: F. L. FLEMING ET. AL. 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.0	CARBONDALE	HERRIN	COAL	-	147.0	
128.5	CARBONDALE	SPRINGFIELD	COAL	5.5	253.5	
66.0	CARBONDALE	HOUCHIN CREEK	COAL	-	316.0	

MAPID: 16503216000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600272 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747187 **DATE COLLECTED:** 9 / 5 / 1958

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 268.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			CLAY	18.0	0.0	
354.0			SANDY CLAY	44.0	18.0	
310.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	62.0	
307.5	CARBONDALE		GRAY SHALE	7.5	64.5	
300.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	30.0	72.0	
270.0	CARBONDALE	BRERETON	LIMESTONE	7.0	102.0	
263.0	CARBONDALE	ANNA	DARK SHALE	0.5	109.0	
262.5	CARBONDALE	HERRIN	COAL	5.5	109.5	
257.0	CARBONDALE		UNDERCLAY	2.0	115.0	
255.0	CARBONDALE		SANDSTONE	20.0	117.0	
235.0	CARBONDALE		SANDY SHALE	19.0	137.0	
216.0	CARBONDALE	BRIAR HILL	COAL	0.8	156.0	
215.2	CARBONDALE	ST. DAVID	LIMESTONE	0.7	156.8	
214.5	CARBONDALE	DYKERSBURG	SANDSTONE	46.5	157.5	WITH SHALE SEAMS
168.0	CARBONDALE	DYKERSBURG	GRAY SHALE	54.5	204.0	
113.5	CARBONDALE	DYKERSBURG	GRAY SHALE	1.5	258.5	SOFT, LOOSE GY SH
112.0	CARBONDALE	SPRINGFIELD	COAL	6.5	260.0	
105.5	CARBONDALE		UNDERCLAY	1.5	266.5	

MAPID: 16503217000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.609574 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.752684 **DATE COLLECTED:** 9 / 15 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			CLAY	25.0	0.0	
350.0			SANDY CLAY	58.0	25.0	CLAY, SAND, AND GRAVEL
292.0	CARBONDALE		SANDY SHALE	4.0	83.0	
288.0	CARBONDALE	BRIAR HILL	COAL	2.0	87.0	
286.0	CARBONDALE		SANDY SHALE	91.0	89.0	WITH SS
195.0	CARBONDALE	SPRINGFIELD	COAL	0.0	180.0	GALATIA CHANNEL - COAL MISSING
195.0	CARBONDALE		SANDY SHALE	44.8	180.0	
150.2	CARBONDALE		LIMESTONE	0.1	224.8	
150.2	CARBONDALE		SHALE	13.2	224.8	WITH HARD SEAMS
137.0	CARBONDALE	EXCELLO	BLACK SHALE	5.8	238.0	
131.2	CARBONDALE	HOUCHIN CREEK	COAL	1.4	243.8	
129.7	CARBONDALE		UNDERCLAY	2.8	245.3	
127.0	CARBONDALE		SANDY SHALE	7.0	248.0	

MAPID: 16503218000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.606096 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.753615 **DATE COLLECTED:** 8 / 13 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 347.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. D **WELL TYPE:** Coal Test

COMMENT: CENTER OF SECTION 12

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			CLAY	20.0	0.0	
355.0			SANDY CLAY	62.2	20.0	WITH SAND SEAMS
292.8	CARBONDALE		SANDY SHALE	33.8	82.2	
259.0	CARBONDALE		SHALE	24.0	116.0	AND SS SEAMS
235.0	CARBONDALE		SANDSTONE	38.0	140.0	
197.0	CARBONDALE	SPRINGFIELD	COAL	0.0	178.0	GALATIA CHANNEL - COAL MISSING
197.0	CARBONDALE		SHALE	38.0	178.0	SILTY SHALE
159.0	CARBONDALE		BLACK SHALE	19.7	216.0	
139.3	CARBONDALE	HOUCHIN CREEK	COAL	1.7	235.7	
137.7			UNDERCLAY	2.2	237.3	
135.5			SANDY SHALE	39.5	239.5	
96.0			SANDSTONE	3.4	279.0	WITH HARD SHALE
92.6			COAL	0.6	282.4	
92.0			SANDY SHALE	11.0	283.0	
81.0			GRAY SHALE	2.8	294.0	
78.2			COAL	1.0	296.8	
77.2			SANDY SHALE	19.3	297.8	
58.0			DARK GRAY SHALE	3.0	317.0	
55.0			LIMESTONE	13.0	320.0	
42.0			SANDY SHALE	0.3	333.0	
41.7			SANDSTONE	0.7	333.3	
41.0			SANDY SHALE	10.0	334.0	
31.0			UNCLASSIFIED	3.0	344.0	GAP IN DRILLER'S LOG (+3')

MAPID: 16503219000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SW NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.604352 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.750396 **DATE COLLECTED:** 8 / 20 / 1958

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			CLAY	12.0	0.0	
367.0			SANDY CLAY	69.0	12.0	AND SAND
298.0	CARBONDALE	ANVIL ROCK	SANDSTONE	26.0	81.0	
272.0	CARBONDALE	BRERETON	LIMESTONE	6.0	107.0	
266.0	CARBONDALE	ANNA	BLACK SHALE	3.0	113.0	
263.0	CARBONDALE	HERRIN	COAL	5.0	116.0	
258.0	CARBONDALE		UNDERCLAY	2.5	121.0	
255.5	CARBONDALE		SANDSTONE	14.5	123.5	
241.0	CARBONDALE		SANDY SHALE	22.0	138.0	
219.0	CARBONDALE	BRIAR HILL	COAL	1.2	160.0	
217.8	CARBONDALE		SANDY SHALE	6.2	161.2	
211.7	CARBONDALE	ST. DAVID	LIMESTONE	0.7	167.3	
211.0	CARBONDALE	DYKERSBURG	SANDSTONE	57.0	168.0	WITH SHALE SEAMS
154.0	CARBONDALE	DYKERSBURG	SANDY SHALE	42.0	225.0	
112.0	CARBONDALE	SPRINGFIELD	COAL	2.5	267.0	
109.5	CARBONDALE	SPRINGFIELD	COAL	4.5	269.5	WITH SHALE BANDS
105.0	CARBONDALE		GRAY SHALE	10.0	274.0	

MAPID: 16503220000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597942 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.747196 **DATE COLLECTED:** 9 / 10 / 1958

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 233.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			CLAY	10.0	0.0	
361.0			SANDY CLAY	12.0	10.0	
349.0			CLAY	8.0	22.0	WITH SAND
341.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	30.0	
334.5	CARBONDALE		SHALE	10.5	36.5	WITH SS SEAMS
324.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.0	47.0	
307.0	CARBONDALE		SHALY LIMESTONE	2.0	64.0	
305.0	CARBONDALE	BRERETON	LIMESTONE	5.0	66.0	
300.0	CARBONDALE	ANNA	DARK SHALE	0.5	71.0	
299.5	CARBONDALE	HERRIN	COAL	5.5	71.5	
294.0	CARBONDALE		UNDERCLAY	35.5	77.0	SS W/ SHALE SEEMS
258.5	CARBONDALE	BRIAR HILL	COAL	2.5	112.5	
256.0	CARBONDALE		SANDY SHALE	2.0	115.0	
254.0	CARBONDALE		SANDSTONE	6.0	117.0	
248.0	CARBONDALE		SHALY LIMESTONE	10.0	123.0	
238.0	CARBONDALE		UNCLASSIFIED	65.0	133.0	+65' ADJUSTMENT TO FIX ERROR/GAP IN LOG
173.0	CARBONDALE	SPRINGFIELD	COAL	0.0	198.0	GALATIA CHANNEL - COAL MISSING
173.0	CARBONDALE		GRAY SHALE	13.0	198.0	+4" ADJUSTMENT TO MATCH LOG MARKER
160.0	CARBONDALE		DARK GRAY SHALE	9.0	211.0	+2'9" ADJUSTMENT TO MATCH LOG MARKER
151.0	CARBONDALE		GRAY SANDSTONE	2.9	220.0	
148.1	CARBONDALE		GRAY SILTSTONE	3.4	222.9	
144.7	CARBONDALE		GRAY SILTSTONE	0.2	226.3	+2" ADJUSTMENT TO MATCH LOG MARKER
144.5	CARBONDALE		GRAY SILTSTONE	6.5	226.5	

MAPID: 16503221000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE NE NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.61131 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.753139 **DATE COLLECTED:** 8 / 27 / 1958

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 212.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. F **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.0			CLAY	22.0	0.0	
352.0			SANDY CLAY	21.5	22.0	
330.5	MODESTO	PIASA	LIMESTONE	10.5	43.5	
320.0	MODESTO		SHALE	5.0	54.0	
315.0	CARBONDALE	DANVILLE	COAL	2.0	59.0	
313.0	CARBONDALE		SHALE	35.0	61.0	
278.0	CARBONDALE	HERRIN	COAL	4.0	96.0	
274.0	CARBONDALE		UNDERCLAY	2.0	100.0	
272.0	CARBONDALE		SHALE	5.0	102.0	
267.0	CARBONDALE	ST. DAVID	LIMESTONE	1.8	107.0	
265.2	CARBONDALE	DYKERSBURG	SANDY SHALE	21.2	108.8	
244.0	CARBONDALE	DYKERSBURG	SANDSTONE	60.0	130.0	WITH SHALE SEAMS
184.0	CARBONDALE	DYKERSBURG	SHALE	7.0	190.0	
177.0	CARBONDALE	SPRINGFIELD	COAL	9.5	197.0	AND SHALE STREAKS
167.5	CARBONDALE		UNDERCLAY	2.5	206.5	
165.0	CARBONDALE		SHALY LIMESTONE	3.5	209.0	

MAPID: 16503533000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.60494 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.754542 **DATE COLLECTED:** 10 / 26 / 1967

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 221.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 67-3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			SANDY CLAY	26.0	0.0	
344.0			UNCLASSIFIED	17.0	26.0	LOG SAYS 'BLUE MUD'
327.0	CARBONDALE		SHALE	3.0	43.0	
324.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	46.0	
317.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	6.0	53.0	
311.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	59.0	
302.0	CARBONDALE	BRERETON	LIMESTONE	1.0	68.0	
301.0	CARBONDALE	ANNA	BLACK SHALE	3.0	69.0	
298.0	CARBONDALE	ENERGY	GRAY SHALE	5.5	72.0	
292.5	CARBONDALE	HERRIN	COAL	4.6	77.5	
287.9	CARBONDALE		UNDERCLAY	3.9	82.1	
284.0	CARBONDALE		WHITE SANDSTONE	16.0	86.0	WITH SHALE BANDS
268.0	CARBONDALE		SANDY SHALE	18.7	102.0	
249.3	CARBONDALE	BRIAR HILL	COAL	1.3	120.7	
248.0	CARBONDALE		SANDY SHALE	5.5	122.0	
242.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	127.5	
241.5	CARBONDALE	DYKERSBURG	SANDY SHALE	8.5	128.5	
233.0	CARBONDALE	DYKERSBURG	SANDSTONE	40.0	137.0	
193.0	CARBONDALE	DYKERSBURG	SANDY SHALE	28.0	177.0	
165.0	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	1.4	205.0	
163.6	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	1.7	206.4	
161.9	CARBONDALE	DYKERSBURG	GRAY SILTSTONE	1.1	208.1	
160.8	CARBONDALE	SPRINGFIELD	BONE COAL	4.9	209.2	COAL AND BONE COAL & BANDS
155.9	CARBONDALE	SPRINGFIELD	COAL	6.9	214.1	
149.0	CARBONDALE		UNDERCLAY	0.3	221.0	

MAPID: 16503539000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 0' S line, 330' E line of SE SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.607243 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.753613 **DATE COLLECTED:** 11 / 25 / 1967

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 67-4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			SANDY CLAY	28.0	0.0	
342.0			MUDSTONE	56.0	28.0	
286.0	CARBONDALE	HERRIN	COAL	2.0	84.0	
284.0	CARBONDALE		SANDY SHALE	12.0	86.0	
272.0	CARBONDALE		SANDSTONE	2.0	98.0	
270.0	CARBONDALE		SANDY SHALE	12.0	100.0	WITH SS BANDS
258.0	CARBONDALE		GRAY SANDSTONE	12.0	112.0	
246.0	CARBONDALE		SANDY SHALE	23.0	124.0	
223.0	CARBONDALE		SANDSTONE	13.0	147.0	
210.0	CARBONDALE		SANDY SHALE	37.0	160.0	
173.0	CARBONDALE		SANDSTONE	14.3	197.0	
158.7	CARBONDALE		SANDY SHALE	0.7	211.3	
158.0	CARBONDALE		GRAY SHALE	0.3	212.0	
157.7	CARBONDALE		GRAY SANDSTONE	3.0	212.3	
154.7	CARBONDALE		GRAY SHALE	0.7	215.3	
154.0	CARBONDALE		GRAY SANDSTONE	0.3	216.0	
153.7	CARBONDALE		GRAY SHALE	0.3	216.3	
153.4	CARBONDALE		GRAY SANDSTONE	0.4	216.6	
153.0	CARBONDALE		GRAY SHALE	1.9	217.0	
151.1	CARBONDALE		GRAY SANDSTONE	0.3	218.9	
150.7	CARBONDALE		GRAY SHALE	0.6	219.3	
150.2	CARBONDALE	SPRINGFIELD	COAL	0.0	219.8	COAL MISSING
150.2	CARBONDALE		GRAY SANDSTONE	1.3	219.8	
148.9	CARBONDALE		GRAY SHALE	0.7	221.1	
148.2	CARBONDALE		GRAY SANDSTONE	2.5	221.8	
145.7	CARBONDALE		GRAY SHALE	1.0	224.3	
144.7	CARBONDALE		GRAY SANDSTONE	0.9	225.3	
143.8	CARBONDALE		GRAY SILTSTONE	0.4	226.2	
143.4	CARBONDALE		GRAY SANDSTONE	0.3	226.6	
143.2	CARBONDALE		CLAYSTONE & SILTSTONE	1.3	226.8	
141.8	CARBONDALE		GRAY SHALE	8.5	228.2	
133.3	CARBONDALE		GRAY SHALE	3.6	236.7	
129.7	CARBONDALE	HANOVER	LIMESTONE	0.7	240.3	
129.1	CARBONDALE	EXCELLO	BLACK SHALE	0.2	240.9	
128.9	CARBONDALE	EXCELLO	BLACK SHALE	3.2	241.1	
125.7	CARBONDALE	EXCELLO	DARK GRAY SHALE	0.7	244.3	
125.1	CARBONDALE	HOUCHIN CREEK	COAL	1.7	244.9	
123.4	CARBONDALE		CLAYSTONE & SILTSTONE	1.8	246.6	
121.7	CARBONDALE		GRAY SILTSTONE	1.0	248.3	

120.7	CARBONDALE	CLAYSTONE & SILTSTONE	2.4	249.3	
118.2	CARBONDALE	GRAY SHALE	3.7	251.8	
114.6	CARBONDALE	GRAY SHALE	5.5	255.4	
109.1	CARBONDALE	DARK GRAY SHALE	1.8	260.9	WITH SS BANDS
107.2	CARBONDALE	SANDY SHALE	23.3	262.8	

MAPID: 16526187000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 1' W line of NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.606092 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.75084 **DATE COLLECTED:** 9 / 27 / 1974

SURFACE ELEVATION (FT.): 371.8 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX-AYRSHIRE 9263C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.8	PLEISTOCENE		SILT & CLAY	10.0	0.0	
361.8	PLEISTOCENE		SANDY CLAY	14.0	10.0	
347.8	PLEISTOCENE		UNCONSOLIDATED	47.0	24.0	
300.8	CARBONDALE	DANVILLE	COAL	1.9	71.0	CORING BEGAN
298.9	CARBONDALE		UNDERCLAY	1.1	72.9	
297.8	CARBONDALE		SANDY SHALE	9.8	74.0	
288.0	CARBONDALE		COAL	0.4	83.8	
287.6	CARBONDALE		UNDERCLAY	0.8	84.2	
286.8	CARBONDALE		SANDSTONE	4.5	85.0	
282.3	CARBONDALE		SHALE	2.0	89.5	DARK
280.3	CARBONDALE		COAL	4.0	91.5	
276.3	CARBONDALE		UNDERCLAY	0.5	95.5	
275.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	96.0	
271.8	CARBONDALE		GRAY SHALE	12.0	100.0	
259.8	CARBONDALE	BRERETON	LIMESTONE	0.4	112.0	
259.4	CARBONDALE	ANNA	BLACK SHALE	6.6	112.4	
252.8	CARBONDALE	HERRIN	COAL	6.1	119.0	
246.7	CARBONDALE		UNDERCLAY	1.9	125.1	

MAPID: 16526188000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.614219 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.752682 **DATE COLLECTED:** 9 / 20 / 1974
SURFACE ELEVATION (FT.): 374.7 **LOGGED (FT.):** 120.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX-AYRSHIRE P284A **WELL TYPE:** Coal Test
COMMENT: PREMIT 208 DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.7	PLEISTOCENE		SILT	1.0	0.0	
373.7	PLEISTOCENE		CLAY	18.0	1.0	
355.7	PLEISTOCENE		SAND	8.0	19.0	
347.7	MODESTO		SANDSTONE	15.4	27.0	CORING BEGAN
332.3	MODESTO		SHALE	5.5	42.4	DARK
326.8	CARBONDALE	DANVILLE	COAL	1.8	47.9	
325.0	CARBONDALE		UNDERCLAY	1.3	49.7	
323.7	CARBONDALE		GRAY SHALE	9.2	51.0	
314.5	CARBONDALE		SANDY SHALE	4.0	60.2	HARD
310.5	CARBONDALE		GRAY SHALE	2.6	64.2	
307.9	CARBONDALE	ALLENBY	COAL	1.3	66.8	
306.6	CARBONDALE		UNDERCLAY	1.9	68.1	
304.7	CARBONDALE		GRAY SHALE	1.5	70.0	
303.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.6	71.5	
296.6	CARBONDALE		GRAY SHALE	23.9	78.1	
272.7	CARBONDALE		SHALE	11.0	102.0	DARK
261.7	CARBONDALE	HERRIN	COAL	5.7	113.0	
256.0	CARBONDALE		UNDERCLAY	1.3	118.7	

MAPID: 16590150000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606337 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 75.3 **LOG TYPE:** Company map
SOURCE: AMAX P-413 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.9	CARBONDALE	HERRIN	COAL	5.3	70.0	

MAPID: 16590151000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.601664 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761346 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 107.0 **LOG TYPE:** Company map
SOURCE: AMAX P-415 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.0	CARBONDALE	HERRIN	COAL	5.0	102.0	

MAPID: 16590152000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.608745 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 138.0 **LOG TYPE:** Company map
SOURCE: AMAX P-312 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	138.0	

MAPID: 16590153000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606343 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753879 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.3 **LOGGED (FT.):** 174.0 **LOG TYPE:** Company map
SOURCE: AMAX P-313 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
199.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	174.0	

MAPID: 16590154000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.606341 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.752885 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 91.5 **LOG TYPE:** Company map
SOURCE: AMAX P-288C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	DANVILLE	COAL	1.5	90.0	

MAPID: 16590155000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.60636 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.751919 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 122.3 **LOG TYPE:** Company map
SOURCE: AMAX P-288 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
256.4	CARBONDALE	HERRIN	COAL	5.3	117.0	

MAPID: 16590156000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.606306 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.750108 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.3 **LOGGED (FT.):** 126.6 **LOG TYPE:** Company map
SOURCE: AMAX P-263 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.3	CARBONDALE	HERRIN	COAL	5.6	121.0	

MAPID: 16590158000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.601678 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.750135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.6 **LOGGED (FT.):** 104.1 **LOG TYPE:** Company map
SOURCE: AMAX P-265 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
271.6	CARBONDALE	HERRIN	COAL	4.1	100.0	

MAPID: 16590202000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610662 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761154 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.5 **LOGGED (FT.):** 93.0 **LOG TYPE:** Company map
SOURCE: AMAX P-411 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
281.5	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	92.0	
281.5	CARBONDALE	BRIAR HILL	COAL	1.0	92.0	

MAPID: 16590203000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615193 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761126 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.3 **LOGGED (FT.):** 100.3 **LOG TYPE:** Company map
SOURCE: AMAX P-409 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.3	CARBONDALE	HERRIN	COAL	5.3	95.0	

MAPID: 16590218000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610707 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.3 **LOGGED (FT.):** 138.0 **LOG TYPE:** Company map
SOURCE: AMAX P-361 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	138.0	

MAPID: 16590219000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.613051 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757487 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.8 **LOGGED (FT.):** 109.3 **LOG TYPE:** Company map
SOURCE: AMAX P-360 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
264.8	CARBONDALE	BRIAR HILL	COAL	1.3	108.0	

MAPID: 16590220000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615301 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757424 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.1 **LOGGED (FT.):** 109.5 **LOG TYPE:** Company map
SOURCE: AMAX P-359 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.1	CARBONDALE	BRIAR HILL	COAL	1.5	108.0	

MAPID: 16590232000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610765 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755578 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.3 **LOGGED (FT.):** 108.0 **LOG TYPE:** Company map
SOURCE: AMAX P-336 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
264.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	108.0	

MAPID: 16590233000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.610739 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.7538 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.1 **LOGGED (FT.):** 97.5 **LOG TYPE:** Company map
SOURCE: AMAX P-311 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.1	CARBONDALE	BRIAR HILL	COAL	2.5	95.0	

MAPID: 16590234000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.613051 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753813 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.5 **LOGGED (FT.):** 62.2 **LOG TYPE:** Company map
SOURCE: AMAX P-310 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.5	CARBONDALE	HERRIN	COAL	6.2	56.0	

MAPID: 16590235000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.615325 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753805 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.3 **LOGGED (FT.):** 88.5 **LOG TYPE:** Company map
SOURCE: AMAX P-309 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.3	CARBONDALE	HERRIN	COAL	5.5	83.0	

MAPID: 16590257000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615445 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74998 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.7 **LOGGED (FT.):** 115.2 **LOG TYPE:** Company map
SOURCE: AMAX P-259 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
263.7	CARBONDALE	HERRIN	COAL	5.2	110.0	

MAPID: 16590846000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 500' N line, 400' E line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.598068 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748296 **DATE COLLECTED:** 6 / 22 / 1992

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 105.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL P241NP **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W.HARRISON

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	PLEISTOCENE		CLAY	5.0	0.0	BROWN
364.0	PLEISTOCENE		UNCONSOLIDATED	19.0	5.0	BROWN
345.0	PLEISTOCENE		UNCONSOLIDATED	11.0	24.0	GRAY
334.0	PLEISTOCENE		GLACIAL DRIFT	3.0	35.0	GRAY
331.0	PLEISTOCENE		SAND & GRAVEL	4.5	38.0	GRAY
326.5	PLEISTOCENE		UNCONSOLIDATED	2.5	42.5	
324.0	PLEISTOCENE		GLACIAL DRIFT	26.0	45.0	GRAY
298.0	PLEISTOCENE		UNCONSOLIDATED	9.0	71.0	SOME COAL; GRAY
289.0	CARBONDALE	ANNA	BLACK SHALE	0.5	80.0	WITH BONE COAL
288.5	CARBONDALE	HERRIN	COAL	4.9	80.5	
283.6	CARBONDALE		UNDERCLAY	2.3	85.4	
281.3	CARBONDALE		SANDY SHALE	10.3	87.7	LIMY
271.0	CARBONDALE		SANDY SHALE	7.0	98.0	

MAPID: 16590847000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 628' N line, 125' W line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.601136 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748452 **DATE COLLECTED:** 4 / 15 / 1993

SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P240B **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.7	PLEISTOCENE		CLAY	11.0	0.0	BROWN
359.7	PLEISTOCENE		UNCONSOLIDATED	12.0	11.0	BROWN
347.7	PLEISTOCENE		SAND	5.7	23.0	BROWN
342.0	PLEISTOCENE		UNCONSOLIDATED	3.8	28.7	BROWN
338.2	PLEISTOCENE		GLACIAL DRIFT	49.0	32.5	GRAY
289.2	CARBONDALE		SANDSTONE	0.4	81.5	GRAY
288.8	CARBONDALE		SANDSTONE	6.5	81.9	GRAY
282.3	CARBONDALE		SILTY SHALE	2.8	88.4	
279.5	CARBONDALE		GRAY SHALE	2.2	91.2	
277.3	CARBONDALE	CONANT	ARGILLACEOUS LIMESTONE	0.3	93.4	DARK GRAY
277.0	CARBONDALE	JAMESTOWN	COAL	0.3	93.7	
276.7	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	94.0	
274.7	CARBONDALE	BRERETON	LIMESTONE	6.8	96.0	DARK GRAY
267.9	CARBONDALE	ANNA	BLACK SHALE	0.4	102.8	
267.5	CARBONDALE	HERRIN	COAL	4.8	103.2	
262.7	CARBONDALE		UNDERCLAY	2.6	108.0	
260.1	CARBONDALE		SILTSTONE	1.3	110.6	
258.8	CARBONDALE		SILTY SHALE	4.9	111.9	SIDERITE
253.9	CARBONDALE		SILTY SHALE	9.0	116.8	SIDERITE
244.9	CARBONDALE		SILTY SHALE	1.2	125.8	

MAPID: 16590848000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 575' N line, 92' E line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60663 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748349 **DATE COLLECTED:** 4 / 13 / 1993

SURFACE ELEVATION (FT.): 370.4 **LOGGED (FT.):** 153.2 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P237PK **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.4	PLEISTOCENE		CLAY	9.0	0.0	BROWN
361.4	PLEISTOCENE		UNCONSOLIDATED	7.5	9.0	BROWN
353.9	PLEISTOCENE		UNCONSOLIDATED	6.5	16.5	GRAY
347.4	PLEISTOCENE		GLACIAL DRIFT	4.3	23.0	GRAY
343.1	PLEISTOCENE		SAND	2.1	27.3	BROWN
341.0	PLEISTOCENE		GLACIAL DRIFT	3.1	29.4	GRAY
337.9	PLEISTOCENE		UNCONSOLIDATED	6.5	32.5	GRAY
331.4	PLEISTOCENE		GLACIAL DRIFT	2.0	39.0	WITH COAL; GRAY
329.4	PLEISTOCENE		UNCONSOLIDATED	0.5	41.0	GRAY
328.9	MODESTO		SANDY SHALE	3.0	41.5	
325.9	MODESTO		ARGILLACEOUS SANDSTONE	6.1	44.5	
319.8	MODESTO	PIASA	LIMESTONE	3.0	50.6	BROWN-GRAY
316.8	MODESTO		CALCAREOUS SHALE	1.0	53.6	
315.8	MODESTO		DARK SHALE	0.3	54.6	
315.5	MODESTO		BLACK SHALE	3.2	54.9	
312.3	MODESTO		GRAY SHALE	5.6	58.1	
306.7	CARBONDALE	DANVILLE	COAL	2.0	63.7	
304.7	CARBONDALE		PYRITE	0.2	65.7	
304.5	CARBONDALE		SILTY SHALE	2.2	65.9	
302.3	CARBONDALE		GRAY SHALE	0.4	68.1	
301.9	CARBONDALE		SILTSTONE	1.5	68.5	GRAY
300.4	CARBONDALE		SANDSTONE	1.0	70.0	GRAY
299.4	CARBONDALE		SILTY SHALE	1.0	71.0	
298.4	CARBONDALE		GRAY SHALE	2.8	72.0	SIDERITIC
295.6	CARBONDALE	ALLENBY	COAL	0.2	74.8	RIDER
295.4	CARBONDALE		UNDERCLAY	0.4	75.0	
295.0	CARBONDALE		SANDSTONE	4.8	75.4	LIGHT GRAY
290.2	CARBONDALE		SILTY SHALE	2.0	80.2	
288.2	CARBONDALE	ALLENBY	COAL	1.6	82.2	
286.6	CARBONDALE		UNDERCLAY	0.9	83.8	
285.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	84.7	TAN
280.5	CARBONDALE		GRAY SHALE	3.7	89.9	
276.8	CARBONDALE		SANDSTONE	12.2	93.6	LIGHT GRAY
264.6	CARBONDALE		SANDY SHALE	3.5	105.8	
261.1	CARBONDALE		SILTY SHALE	6.6	109.3	
254.5	CARBONDALE		GRAY SHALE	4.0	115.9	
250.5	CARBONDALE	BRERETON	LIMESTONE	3.3	119.9	GRAY
247.2	CARBONDALE	ANNA	BLACK SHALE	1.9	123.2	

245.3	CARBONDALE	ENERGY	GRAY SHALE	2.0	125.1
243.3	CARBONDALE	HERRIN	COAL	5.2	127.1
238.1	CARBONDALE		UNDERCLAY	4.6	132.3
233.5	CARBONDALE		SILTY SHALE	1.3	136.9
232.2	CARBONDALE		SILTSTONE	2.1	138.2
230.1	CARBONDALE		SILTY SHALE	12.9	140.3

MAPID: 16590849000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 455' N line, 385' W line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.609562 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748593 **DATE COLLECTED:** 5 / 26 / 1993

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 146.5 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P236PE **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0	PLEISTOCENE		CLAY	8.0	0.0	BROWN
364.0	PLEISTOCENE		UNCONSOLIDATED	16.0	8.0	BROWN
348.0	PLEISTOCENE		GLACIAL DRIFT	1.5	24.0	
346.5	PLEISTOCENE		GLACIAL DRIFT	2.0	25.5	GRAY
344.5	PLEISTOCENE		SAND	14.5	27.5	GRAY
330.0	PLEISTOCENE		UNCONSOLIDATED	10.5	42.0	GRAY
319.5	MODESTO	PIASA	LIMESTONE	3.0	52.5	BROWN
316.5	MODESTO		GRAY SHALE	1.5	55.5	
315.0	MODESTO		BLACK SHALE	2.3	57.0	
312.7	MODESTO		GRAY SHALE	7.5	59.3	
305.2	CARBONDALE	DANVILLE	COAL	2.2	66.8	
303.0	CARBONDALE		UNDERCLAY	2.2	69.0	
300.8	CARBONDALE		SANDY SHALE	7.2	71.2	
293.6	CARBONDALE		COAL	0.3	78.4	
293.3	CARBONDALE		SANDY SHALE	0.6	78.7	
292.7	CARBONDALE		COAL	0.8	79.3	
291.9	CARBONDALE	GALUM	LIMESTONE	1.8	80.1	BROWN
290.1	CARBONDALE		GRAY SHALE	2.8	81.9	
287.3	CARBONDALE	ALLENBY	COAL	0.8	84.7	
286.5	CARBONDALE		UNDERCLAY	1.2	85.5	
285.3	CARBONDALE		SANDY SHALE	1.3	86.7	
284.0	CARBONDALE		SANDY SHALE	0.5	88.0	LIMY
283.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	88.5	BROWN
276.2	CARBONDALE		SANDY SHALE	1.4	95.8	
274.8	CARBONDALE		SANDY SHALE	12.8	97.2	LIMY
262.0	CARBONDALE		SANDSTONE	4.0	110.0	GRAY
258.0	CARBONDALE		SANDY SHALE	5.5	114.0	
252.5	CARBONDALE		CALCAREOUS SHALE	0.5	119.5	
252.0	CARBONDALE	JAMESTOWN	COAL	0.3	120.0	
251.7	CARBONDALE		SANDY SHALE	11.0	120.3	
240.7	CARBONDALE	ANNA	BLACK SHALE	0.4	131.3	
240.3	CARBONDALE	HERRIN	COAL	5.0	131.7	
235.3	CARBONDALE		UNDERCLAY	3.3	136.7	
232.0	CARBONDALE		SANDY SHALE	1.5	140.0	
230.5	CARBONDALE		SANDY SHALE	5.0	141.5	LIMY

MAPID: 16590850000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 630' N line, 585' E line of SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.612691 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748322 **DATE COLLECTED:** 5 / 24 / 1993

SURFACE ELEVATION (FT.): 365.6 **LOGGED (FT.):** 129.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P235YC **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.6	PLEISTOCENE		CLAY	7.0	0.0	BROWN
358.6	PLEISTOCENE		UNCONSOLIDATED	21.0	7.0	BROWN
337.6	PLEISTOCENE		SAND	3.0	28.0	BROWN
334.6	PLEISTOCENE		SAND & GRAVEL	4.5	31.0	
330.1	MODESTO		SANDY SHALE	4.2	35.5	
325.9	MODESTO		CARBONACEOUS SHALE	0.3	39.7	
325.6	MODESTO		CLAYSTONE	1.3	40.0	GRAY
324.3	MODESTO	PIASA	LIMESTONE	2.9	41.3	LIGHT GRAY
321.4	MODESTO		CALCAREOUS SHALE	1.1	44.2	
320.3	MODESTO		BLACK SHALE	1.9	45.3	
318.4	MODESTO		DARK GRAY SHALE	8.6	47.2	
309.8	CARBONDALE	DANVILLE	COAL	1.9	55.8	
307.9	CARBONDALE		UNDERCLAY	0.5	57.7	
307.4	CARBONDALE		SILTY SHALE	1.6	58.2	
305.8	CARBONDALE		GRAY SHALE	0.5	59.8	
305.3	CARBONDALE		SILTY SANDSTONE	2.4	60.3	GRAY
302.9	CARBONDALE		SANDY SHALE	4.3	62.7	LIMY
298.6	CARBONDALE		SANDY SHALE	1.0	67.0	
297.6	CARBONDALE		BLACK SHALE	0.3	68.0	WITH BONE COAL
297.3	CARBONDALE		SANDY SHALE	3.7	68.3	
293.6	CARBONDALE	ALLENBY	COAL	0.3	72.0	
293.3	CARBONDALE		SANDY SHALE	0.9	72.3	LIMY
292.4	CARBONDALE		SANDY SHALE	4.0	73.2	
288.4	CARBONDALE		SANDY SHALE	0.3	77.2	LIMY
288.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	77.5	BROWN
280.6	CARBONDALE		SANDY SHALE	5.5	85.0	
275.1	CARBONDALE		SANDY SHALE	4.6	90.5	LIMY
270.5	CARBONDALE		CALCAREOUS SANDSTONE	1.9	95.1	GRAY
268.6	CARBONDALE		SANDSTONE	4.0	97.0	GRAY
264.6	CARBONDALE		SANDY SHALE	8.0	101.0	
256.6	CARBONDALE		BLACK SHALE	0.3	109.0	
256.3	CARBONDALE	BRERETON	LIMESTONE	3.4	109.3	DARK GRAY
252.9	CARBONDALE		CALCAREOUS SHALE	1.0	112.7	
251.9	CARBONDALE	ANNA	BLACK SHALE	0.7	113.7	
251.2	CARBONDALE	ENERGY	GRAY SHALE	1.8	114.4	
249.4	CARBONDALE	HERRIN	COAL	5.7	116.2	
243.7	CARBONDALE		UNDERCLAY	4.2	121.9	
239.5	CARBONDALE		ARGILLACEOUS SANDSTONE	2.9	126.1	GREEN-GRAY

MAPID: 16590851000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** 560' N line, 15' W line of SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615227 **GEOLOGIST:** NORHT

CONFIDENTIAL: N **LATITUDE:** 37.748424 **DATE COLLECTED:** 5 / 20 / 1993

SURFACE ELEVATION (FT.): 368.6 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. P234Z **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA , W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.6	PLEISTOCENE		CLAY	5.0	0.0	BROWN
363.6	PLEISTOCENE		UNCONSOLIDATED	4.2	5.0	BROWN
359.4	MODESTO		SHALE	2.8	9.2	
356.6	MODESTO		SANDSTONE	5.0	12.0	
351.6	MODESTO		SANDSTONE	4.0	17.0	BROWN
347.6	MODESTO		SANDSTONE	4.5	21.0	GRAY
343.1	MODESTO		SANDY SHALE	2.5	25.5	
340.6	MODESTO		CALCAREOUS SANDSTONE	0.3	28.0	GRAY
340.3	MODESTO	PIASA	SANDY LIMESTONE	0.7	28.3	GRAY
339.6	MODESTO		SANDY SHALE	14.4	29.0	
325.2	CARBONDALE	DANVILLE	COAL	0.2	43.4	
325.0	CARBONDALE	DANVILLE	BLACK SHALE	2.3	43.6	
322.7	CARBONDALE	DANVILLE	COAL	2.1	45.9	
320.6	CARBONDALE		SANDY SHALE	9.0	48.0	
311.6	CARBONDALE		CALCAREOUS SANDSTONE	2.0	57.0	GRAY
309.6	CARBONDALE	GALUM	LIMESTONE	0.7	59.0	
308.9	CARBONDALE		SANDSTONE	2.9	59.7	GRAY
306.0	CARBONDALE	ALLENBY	COAL	1.0	62.6	
305.0	CARBONDALE		UNDERCLAY	1.7	63.6	
303.3	CARBONDALE		SANDY SHALE	1.9	65.3	
301.4	CARBONDALE		CALCAREOUS SANDSTONE	0.8	67.2	GRAY
300.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	68.0	BROWN
294.1	CARBONDALE		GRAY SHALE	1.0	74.5	
293.1	CARBONDALE		SANDY SHALE	4.0	75.5	
289.1	CARBONDALE		SANDY SHALE	1.5	79.5	LIMY
287.6	CARBONDALE		CALCAREOUS SANDSTONE	5.0	81.0	GRAY
282.6	CARBONDALE		SANDSTONE	5.0	86.0	GRAY
277.6	CARBONDALE		SANDY SHALE	10.9	91.0	
266.7	CARBONDALE	BRERETON	LIMESTONE	5.5	101.9	DARK GRAY
261.2	CARBONDALE	ANNA	BLACK SHALE	2.1	107.4	
259.1	CARBONDALE	HERRIN	COAL	5.7	109.5	
253.4	CARBONDALE		UNDERCLAY	2.8	115.2	
250.6	CARBONDALE		SANDY SHALE	6.5	118.0	LIMY
244.1	CARBONDALE	HIGGINSVILLE	LIMESTONE	0.4	124.5	GRAY
243.7	CARBONDALE		SANDY SHALE	2.1	124.9	LIMY

MAPID: 16500080100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 100' S line, 600' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.613451 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731703 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 195.1 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C, MINE #16 **WELL TYPE:** Underground mine
COMMENT: OTHER NOTES AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	20.0	0.0	
360.0			ROCK	37.7	20.0	
322.3	CARBONDALE	HERRIN	COAL	4.8	57.7	
317.5	CARBONDALE		ROCK	38.3	62.5	
279.2	CARBONDALE	BRIAR HILL	COAL	1.8	100.8	
277.3	CARBONDALE		ROCK	85.5	102.7	
191.9	CARBONDALE	SPRINGFIELD	COAL	7.0	188.1	

MAPID: 16500384000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60848 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.740697 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 247.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	77.0	
119.0	CARBONDALE	SPRINGFIELD	COAL	-	247.0	

MAPID: 16500384000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60848 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.740697 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 248.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
289.0	CARBONDALE	HERRIN	COAL	5.5	77.0	
237.0	CARBONDALE	BRIAR HILL	COAL	1.0	129.0	
126.0	CARBONDALE	SPRINGFIELD	COAL	8.0	240.0	

MAPID: 16500384000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60848 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.740697 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 248.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	28.0	0.0	
338.0			CLAY	4.0	28.0	
334.0	CARBONDALE	ANVIL ROCK	SANDSTONE	24.5	32.0	
309.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	56.5	
296.5	CARBONDALE	BRERETON	LIMESTONE	8.0	69.5	
288.5	CARBONDALE	HERRIN	COAL	5.5	77.5	
283.0	CARBONDALE		UNDERCLAY	1.7	83.0	
281.3	CARBONDALE		SHALE	5.0	84.7	
276.3	CARBONDALE		SANDSTONE	21.5	89.7	
254.8	CARBONDALE		BLACK SHALE	1.5	111.2	
253.3	CARBONDALE		SHALE	16.0	112.7	
237.3	CARBONDALE	BRIAR HILL	COAL	1.0	128.7	
236.3	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	129.7	
228.3	CARBONDALE	DYKERSBURG	SHALE	22.0	137.7	
206.3	CARBONDALE	DYKERSBURG	SANDSTONE	15.0	159.7	
191.3	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	174.7	
189.3	CARBONDALE	DYKERSBURG	SANDY SHALE	11.0	176.7	
178.3	CARBONDALE	DYKERSBURG	SANDSTONE	22.0	187.7	
156.3	CARBONDALE	DYKERSBURG	SHALE	20.0	209.7	
136.3	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	229.7	
133.3	CARBONDALE	DYKERSBURG	SHALE	7.0	232.7	
126.3	CARBONDALE	SPRINGFIELD	COAL	8.0	239.7	
118.3	CARBONDALE		SHALE	0.5	247.7	

MAPID: 16500385000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.599219 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.737074 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 196.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	103.0	
182.0	CARBONDALE	SPRINGFIELD	COAL	-	196.0	

MAPID: 16500385000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.599219 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.737074 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 208.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
323.0	CARBONDALE	HERRIN	COAL	4.6	55.0	
275.0	CARBONDALE	BRIAR HILL	COAL	1.6	103.0	
182.0	CARBONDALE	SPRINGFIELD	COAL	8.3	196.0	

MAPID: 16500385000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.599219 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.737074 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 378.2 **LOGGED (FT.):** 207.5 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.2			UNCONSOLIDATED	22.9	0.0	
355.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.4	22.9	
344.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.5	33.3	
325.4	CARBONDALE	ANVIL ROCK	SHALE	2.2	52.8	
323.2	CARBONDALE	HERRIN	COAL	4.6	55.0	
318.6	CARBONDALE		UNDERCLAY	2.5	59.6	
316.1	CARBONDALE		SANDSTONE	31.0	62.1	
285.1	CARBONDALE		SANDY SHALE	10.2	93.1	
274.9	CARBONDALE	BRIAR HILL	COAL	1.6	103.3	
273.4	CARBONDALE	DYKERSBURG	SANDY SHALE	29.8	104.8	
243.5				61.6	134.7	
181.9	CARBONDALE	SPRINGFIELD	COAL	7.6	196.3	
174.4	CARBONDALE	SPRINGFIELD	UNDERCLAY	0.3	203.8	
174.0	CARBONDALE	SPRINGFIELD	UNDERCLAY	0.3	204.2	
173.7	CARBONDALE		UNDERCLAY	3.0	204.5	

MAPID: 16500953000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.598119 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.732486 **DATE COLLECTED:** 4 / 11 / 1946

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 228.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			CLAY	18.0	0.0	
386.0	CARBONDALE		SANDSTONE	5.0	18.0	
381.0	CARBONDALE		GRAY SHALE	6.3	23.0	
374.7	CARBONDALE	ALLENBY	COAL	1.2	29.3	
373.5	CARBONDALE		GRAY SHALE	1.5	30.5	
372.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	32.0	
367.0	CARBONDALE		SANDSTONE	28.0	37.0	
339.0	CARBONDALE		GRAY SHALE	8.0	65.0	
331.0	CARBONDALE	JAMESTOWN	BLACK SHALE	0.5	73.0	
330.5	CARBONDALE	BRERETON	LIMESTONE	5.5	73.5	
325.0	CARBONDALE	ANNA	BLACK SHALE	2.0	79.0	
323.0	CARBONDALE	HERRIN	COAL	4.7	81.0	WITH SLATE SEAMS
318.3	CARBONDALE		UNDERCLAY	1.3	85.7	
317.0	CARBONDALE		SANDSTONE	41.0	87.0	
276.0	CARBONDALE		GRAY SHALE	4.0	128.0	
272.0	CARBONDALE	BRIAR HILL	COAL	2.2	132.0	
269.8	CARBONDALE		SANDY SHALE	4.8	134.2	
265.0	CARBONDALE		UNDERCLAY	1.0	139.0	
264.0	CARBONDALE	DYKERSBURG	SANDY SHALE	58.0	140.0	
206.0	CARBONDALE	DYKERSBURG	GRAY SHALE	4.2	198.0	
201.8	CARBONDALE	SPRINGFIELD	COAL	1.3	202.2	
200.6	CARBONDALE	SPRINGFIELD	UNDERCLAY	5.1	203.4	AND GY SH
195.5	CARBONDALE	SPRINGFIELD	COAL	5.5	208.5	
190.0	CARBONDALE	SPRINGFIELD	GRAY SHALE	6.0	214.0	
184.0	CARBONDALE	SPRINGFIELD	COAL	0.5	220.0	
183.5	CARBONDALE	SPRINGFIELD	GRAY SHALE	5.5	220.5	
178.0	CARBONDALE	SPRINGFIELD	COAL	0.7	226.0	
177.3	CARBONDALE		UNDERCLAY	1.8	226.7	

MAPID: 16500953000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.598119 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732486 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 85.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.7	CARBONDALE	DANVILLE	COAL	1.2	29.3	
369.5	CARBONDALE		GRAY SHALE	1.5	30.5	
368.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	32.0	
363.0	CARBONDALE	LAWSON	SANDSTONE	28.0	37.0	
335.0	CARBONDALE	LAWSON	GRAY SHALE	8.0	65.0	
327.0	CARBONDALE		BLACK SHALE	0.5	73.0	
326.5	CARBONDALE	BRERETON	LIMESTONE	5.5	73.5	
321.0	CARBONDALE	ANNA	BLACK SHALE	2.0	79.0	
319.0	CARBONDALE	HERRIN	BONE COAL	4.8	81.0	

MAPID: 16500954000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 244' S line, 0' E line of NE SE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.596836 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.741439 **DATE COLLECTED:** 4 / 23 / 1946

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			CLAY	25.0	0.0	
370.0			SANDY CLAY	15.0	25.0	
355.0			CLAY	10.0	40.0	WITH SAND BOULDERS
345.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.5	50.0	
326.5	CARBONDALE		BLACK SHALE	0.4	68.5	
326.1	CARBONDALE	JAMESTOWN	COAL	0.1	68.9	
326.0	CARBONDALE		LIMESTONE AND SANDSTONE	7.4	69.0	
318.6	CARBONDALE	ANNA	BLACK SHALE	1.1	76.4	
317.5	CARBONDALE	HERRIN	COAL	2.0	77.5	
315.5	CARBONDALE	HERRIN	COAL	3.3	79.5	
312.2	CARBONDALE		SANDY SHALE	43.2	82.8	
269.0	CARBONDALE	BRIAR HILL	COAL	2.2	126.0	
266.8	CARBONDALE		LIMESTONE	0.8	128.2	
266.0	CARBONDALE		SANDY SHALE	8.0	129.0	
258.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	137.0	
256.0	CARBONDALE	DYKERSBURG	GRAY SHALE	1.0	139.0	
255.0	CARBONDALE	DYKERSBURG	SANDY SHALE	56.0	140.0	
199.0	CARBONDALE	DYKERSBURG	BLACK SHALE	11.5	196.0	
187.5	CARBONDALE	DYKERSBURG	BLACK SHALE	1.3	207.5	
186.2	CARBONDALE	SPRINGFIELD	COAL	6.0	208.8	
180.2	CARBONDALE		UNDERCLAY	0.8	214.8	
179.4	CARBONDALE		SANDSTONE	0.9	215.6	

MAPID: 16501011000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59807 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.736162 **DATE COLLECTED:** 4 / 17 / 1946

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 215.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			CLAY	16.0	0.0	
374.0	CARBONDALE		BLUE SHALE	1.0	16.0	
373.0	CARBONDALE	ALLENBY	COAL	0.7	17.0	
372.3	CARBONDALE		GRAY SHALE	4.3	17.7	
368.0	CARBONDALE		GRAY SHALE	16.0	22.0	WITH LIMESTONE
352.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	38.0	
345.0	CARBONDALE		GRAY SHALE	9.0	45.0	
336.0	CARBONDALE		GRAY SHALE	3.0	54.0	
333.0	CARBONDALE		COAL	0.3	57.0	
332.7	CARBONDALE	CONANT	LIMESTONE	2.2	57.3	
330.5	CARBONDALE		GRAY SHALE	2.5	59.5	
328.0	CARBONDALE	BRERETON	LIMESTONE	2.3	62.0	AND SHALE
325.7	CARBONDALE	ANNA	BLACK SHALE	2.7	64.3	
323.0	CARBONDALE	HERRIN	COAL	5.0	67.0	
318.0	CARBONDALE		UNDERCLAY	4.0	72.0	
314.0	CARBONDALE		SANDSTONE	28.0	76.0	
286.0	CARBONDALE		SANDY SHALE	10.0	104.0	
276.0	CARBONDALE	BRIAR HILL	COAL	2.3	114.0	
273.7	CARBONDALE	DYKERSBURG	SANDY SHALE	64.8	116.3	
209.0	CARBONDALE	DYKERSBURG	BLUE SHALE	10.0	181.0	
199.0	CARBONDALE	DYKERSBURG	GRAY SHALE	14.8	191.0	
184.2	CARBONDALE	SPRINGFIELD	COAL	8.8	205.8	
175.5	CARBONDALE		BLACK SHALE	0.5	214.5	WITH GRAY SHALE
175.0	CARBONDALE		UNDERCLAY	0.5	215.0	

MAPID: 16526189000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.613202 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.733277 **DATE COLLECTED:** 5 / 8 / 1982

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 82-18 **WELL TYPE:** Water Well

COMMENT: PERMIT 201

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	19.5	0.0	
362.5	CARBONDALE		SHALE	1.7	19.5	
360.8	CARBONDALE		LIMESTONE	1.3	21.2	
359.5	CARBONDALE		SHALE	6.5	22.5	
353.0	CARBONDALE		BLACK SHALE	8.6	29.0	
344.4	CARBONDALE		SANDSTONE/SHALE	19.6	37.6	SANDSTONE AND SHALE
324.8	CARBONDALE	JAMESTOWN	COAL	0.5	57.2	
324.3	CARBONDALE		SHALE	0.5	57.7	
323.8	CARBONDALE		LIMESTONE	0.8	58.2	
323.0	CARBONDALE		SHALE	1.3	59.0	DARK
321.7	CARBONDALE		LIMESTONE	0.7	60.3	
321.0	CARBONDALE	HERRIN	COAL	5.0	61.0	
316.0	CARBONDALE		SHALE	1.0	66.0	

MAPID: 16526375000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.605019 **GEOLOGIST:** CK

CONFIDENTIAL: N **LATITUDE:** 37.739784 **DATE COLLECTED:** 6 / 6 / 2000

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 734.0 **LOG TYPE:** Other Core Study

SOURCE: MID-CONTINENT METHANE DDH-3 **WELL TYPE:** Coal Test

COMMENT: CORE # C-14947; LOGGED BY D. MORSE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNKNOWN	374.0	0.0	
-2.0			SILTSTONE	0.6	374.0	LEAFY MATERIAL
-2.6			SILTSTONE	0.2	374.6	
-2.8			SILTSTONE	2.0	374.8	CARBONACEOUS
-4.8			SILTSTONE	0.2	376.8	BIOTURBATED
-5.0			SILTSTONE	6.0	377.0	BIOTURBATED, CARBONACEOUS
-11.0			SILTSTONE	9.0	383.0	
-20.0			UNKNOWN	1.0	392.0	CORE MISSING
-21.0			DARK SHALE	1.0	393.0	SLIGHTLY PYRITIC
-22.0			UNKNOWN	0.1	394.0	SIDERITE BAND?
-22.1			DARK SHALE	1.2	394.1	FISSILE
-23.3			UNKNOWN	0.1	395.3	SIDERITE BAND?
-23.4			DARK SHALE	3.7	395.4	CARBONACEOUS
-27.0			BLACK SHALE	1.5	399.0	CARBONACEOUS
-28.5			COAL	1.0	400.5	SAMPLE MISSING
-29.5			SHALE	0.2	401.5	CARBONACEOUS
-29.7	CARBONDALE	COLCHESTER	COAL	0.3	401.7	POSSIBLY COLCHESTER
-30.0	CARBONDALE		SHALE	0.3	402.0	CARBONACEOUS
-30.3	CARBONDALE		COAL	1.0	402.3	SAMPLE MISSING
-31.3	CARBONDALE		SHALE	0.6	403.3	CARBONACEOUS
-31.9	CARBONDALE		UNDERCLAY	2.5	403.9	
-34.4	CARBONDALE		UNKNOWN	15.6	406.4	CORE MISSING
-50.0	CARBONDALE		SANDSTONE	1.0	422.0	MICACEOUS
-51.0	CARBONDALE		SILTSTONE	0.6	423.0	MICACEOUS
-51.6	CARBONDALE		SANDSTONE	2.1	423.6	
-53.7	CARBONDALE		DARK SHALE	0.5	425.7	
-54.1	CARBONDALE		MUDSTONE	0.7	426.1	CARBONACEOUS, PLANT FRAGMENTS
-54.8	CARBONDALE		GRAY SHALE	0.5	426.8	
-55.3	CARBONDALE		MUDSTONE	0.3	427.3	
-55.6	CARBONDALE		DARK SHALE	0.4	427.6	PLANT FRAGMENTS
-56.0	CARBONDALE		UNKNOWN	2.0	428.0	CORE MISSING
-58.0	CARBONDALE		DARK SHALE	1.0	430.0	CARBONACEOUS
-59.0	CARBONDALE	DEKOVEN	COAL	0.2	431.0	POSSIBLY DEKOVEN
-59.2	CARBONDALE		COAL	1.0	431.2	SAMPLE MISSING
-60.2	CARBONDALE		MUDSTONE	4.8	432.2	ROOTS
-65.0	CARBONDALE		UNKNOWN	0.1	437.0	EFFLORESCENCE IN COAL BED
-65.1	CARBONDALE		COAL	0.9	437.1	SAMPLE MISSING
-66.0	CARBONDALE			0.5	438.0	

-66.5	CARBONDALE		BLACK SHALE	0.1	438.5	FISSILE
-66.6	CARBONDALE		MUDSTONE	3.6	438.6	ROOTED
-70.2	CARBONDALE		SILTSTONE	1.6	442.2	
-71.8	CARBONDALE			0.2	443.8	
-72.0	CARBONDALE		UNKNOWN	1.0	444.0	CORE MISSING
-73.0	CARBONDALE		DARK SHALE	1.0	445.0	PLANT & BRACHIOPOD FRAGMENTS
-74.0	CARBONDALE		BLACK SHALE	2.8	446.0	FISSILE
-76.8	CARBONDALE		BLACK SHALE	0.4	448.8	VERY CARBONACEOUS, MANY SHELL FRAGMENTS
-77.2	CARBONDALE	DAVIS	COAL	0.8	449.2	POSSIBLY DAVIS
-78.0			COAL	2.0	450.0	SAMPLE MISSING
-80.0			COAL	0.8	452.0	
-80.8				1.8	452.8	
-82.6			UNKNOWN	107.4	454.6	CORE MISSING
-190.0			MUDSTONE	0.4	562.0	MICACEOUS, POSSIBLE RHYTHMITES
-190.4			GRAY SANDSTONE	3.0	562.4	CARBONACEOUS
-193.4			BLACK SHALE	1.8	565.4	
-195.2			COAL	1.0	567.2	SAMPLE MISSING?
-196.2			SHALE/UNDERCLAY	1.2	568.2	COAL STRINGERS
-197.4			UNDERCLAY	1.6	569.4	NON-FISSILE
-199.0			UNKNOWN	84.0	571.0	CORE MISSING
-283.0			SANDSTONE	3.5	655.0	COAL STRINGERS, RIPPLED BEDDING
-286.5			SANDSTONE	1.3	658.5	MASSIVE
-287.8			SANDSTONE	0.2	659.8	BLKSH CLASTS, MANY COAL/MUD CHIPS
-288.0			GRAY SANDSTONE	1.7	660.0	COAL STRINGERS AND COAL/MUD CHIPS
-289.7			DARK SHALE	2.3	661.7	
-292.0			UNKNOWN	20.0	664.0	CORE MISSING
-312.0			GRAY SHALE	0.7	684.0	CARBONACEOUS
-312.7			COAL	0.3	684.7	CRUMBLY
-313.0			COAL	1.0	685.0	SAMPLE MISSING
-314.0			COAL	0.4	686.0	
-314.4			MUDSTONE	1.1	686.4	PLANT FRAGS
-315.5			UNKNOWN	28.5	687.5	CORE MISSING
-344.0				1.2	716.0	MICROSTRATIFIED RIPPLES
-345.2				0.8	717.2	MICACEOUS
-346.0			UNKNOWN	13.0	718.0	CORE MISSING
-359.0			MUDSTONE	1.4	731.0	
-360.4			CLAYSTONE	1.6	732.4	POLISHED SLICKENSIDES

MAPID: 16590159000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.606377 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746299 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.7 **LOGGED (FT.):** 127.0 **LOG TYPE:** Company map
SOURCE: AMAX P-213 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.7	CARBONDALE	HERRIN	COAL	5.0	122.0	

MAPID: 16590268000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610957 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746202 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 115.8 **LOG TYPE:** Company map
SOURCE: AMAX P-211 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.3	CARBONDALE	HERRIN	COAL	5.8	110.0	

MAPID: 16590269000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615714 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74612 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 107.4 **LOG TYPE:** Company map
SOURCE: AMAX P-209 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.9	CARBONDALE	DANVILLE	COAL	2.0	37.0	
325.9	CARBONDALE	ALLENBY	COAL	0.8	52.0	
275.9	CARBONDALE	HERRIN	COAL	5.4	102.0	

MAPID: 16590285000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615164 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.738797 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.8 **LOGGED (FT.):** 89.6 **LOG TYPE:** Company map
SOURCE: AMAX P-109NB **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.8	CARBONDALE	HERRIN	COAL	4.6	85.0	

MAPID: 16590830000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 370' N line, 230' W line of SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600829 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.741788 **DATE COLLECTED:** 8 / 23 / 1993
SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 107.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P140Z **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.4	PLEISTOCENE		CLAY	8.0	0.0	BROWN
360.4	PLEISTOCENE		UNCONSOLIDATED	27.0	8.0	BROWN
333.4	PLEISTOCENE		UNCONSOLIDATED	8.0	35.0	GRAY
325.4	CARBONDALE		GRAY SHALE	5.3	43.0	WEATHERED
320.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	48.3	BROWN
314.7	CARBONDALE		SANDY SHALE	3.3	53.7	LIMY
311.4	CARBONDALE		SANDSTONE	9.0	57.0	GRAY
302.4	CARBONDALE		CALCAREOUS SANDSTONE	5.0	66.0	GRAY
297.4	CARBONDALE		SANDSTONE	2.7	71.0	GRAY
294.7	CARBONDALE		SANDY SHALE	9.1	73.7	
285.6	CARBONDALE		CALCAREOUS BLACK SHALE	0.9	82.8	
284.7	CARBONDALE	JAMESTOWN	BLACK SHALE & COAL	0.6	83.7	
284.1	CARBONDALE	ANNA	BLACK SHALE	1.2	84.3	
282.9	CARBONDALE	ENERGY	SANDY SHALE	2.9	85.5	
280.0	CARBONDALE	HERRIN	BLACK SHALE & COAL	1.3	88.4	
278.7	CARBONDALE	HERRIN	COAL	3.6	89.7	
275.1	CARBONDALE		GRAY SHALE	2.5	93.3	
272.6	CARBONDALE		SANDY SHALE	11.2	95.8	LIMY

MAPID: 16590831000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 150' S line, 885' E line of NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60974 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743133 **DATE COLLECTED:** 8 / 16 / 1993

SURFACE ELEVATION (FT.): 369.9 **LOGGED (FT.):** 111.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P161N **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.9	PLEISTOCENE		CLAY	8.0	0.0	BROWN
361.9	PLEISTOCENE		UNCONSOLIDATED	9.0	8.0	BROWN
352.9	PLEISTOCENE		GLACIAL DRIFT	4.0	17.0	BROWN
348.9	MODESTO		SHALE	4.5	21.0	
344.4	MODESTO		GRAY SHALE	1.0	25.5	
343.4	MODESTO		BLACK SHALE	0.3	26.5	
343.1	MODESTO		SANDY SHALE	3.9	26.8	
339.2	CARBONDALE	DANVILLE	COAL	2.1	30.7	
337.1	CARBONDALE		SANDY SHALE	9.7	32.8	
327.4	CARBONDALE		BLACK SHALE & COAL	0.3	42.5	
327.1	CARBONDALE		SANDY SHALE	2.6	42.8	
324.5	CARBONDALE	ALLENBY	COAL	0.8	45.4	
323.7	CARBONDALE		GRAY SHALE	3.5	46.2	
320.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	49.7	BROWN
313.7	CARBONDALE		GRAY SHALE	2.8	56.2	
310.9	CARBONDALE		SANDY SHALE	3.0	59.0	LIMY
307.9	CARBONDALE		CALCAREOUS SANDSTONE	11.0	62.0	GRAY
296.9	CARBONDALE		SANDSTONE	4.0	73.0	GRAY
292.9	CARBONDALE		SANDY SHALE	9.8	77.0	
283.1	CARBONDALE		CALCAREOUS BLACK SHALE	0.4	86.8	
282.7	CARBONDALE	JAMESTOWN	COAL	0.5	87.2	
282.2	CARBONDALE		BLACK SHALE	2.2	87.7	
280.0	CARBONDALE	BRERETON	LIMESTONE	5.8	89.9	DARK GRAY
274.2	CARBONDALE	ANNA	BLACK SHALE	0.3	95.7	
273.9	CARBONDALE	HERRIN	COAL	5.2	96.0	
268.7	CARBONDALE		UNDERCLAY	2.8	101.2	
265.9	CARBONDALE		SANDY SHALE	7.0	104.0	LIMY

MAPID: 16590832000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 65' S line, 415' E line of NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.61216 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74286 **DATE COLLECTED:** 8 / 16 / 1993

SURFACE ELEVATION (FT.): 372.8 **LOGGED (FT.):** 106.5 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P160BB **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.8	PLEISTOCENE		CLAY	6.0	0.0	BROWN
366.8	PLEISTOCENE		UNCONSOLIDATED	16.0	6.0	BROWN
350.8	MODESTO		GRAY SHALE	4.0	22.0	
346.8	MODESTO		SANDY SHALE	3.3	26.0	
343.5	CARBONDALE	DANVILLE	COAL	2.3	29.3	
341.2	CARBONDALE		GRAY SHALE	0.9	31.6	
340.3	CARBONDALE		SANDY SHALE	2.3	32.5	
338.0	CARBONDALE		BLACK SHALE & COAL	0.3	34.8	
337.7	CARBONDALE		UNDERCLAY	0.4	35.1	
337.3	CARBONDALE		SANDY SHALE	0.5	35.5	
336.8	CARBONDALE		CALCAREOUS SANDSTONE	4.3	36.0	GRAY
332.5	CARBONDALE	ALLENBY	COAL	0.6	40.3	
331.9	CARBONDALE	ALLENBY	GRAY SHALE	3.1	40.9	
328.8	CARBONDALE	ALLENBY	COAL	0.4	44.0	
328.4	CARBONDALE		GRAY SHALE	4.6	44.4	
323.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	49.0	BROWN
316.8	CARBONDALE		GRAY SHALE	6.5	56.0	
310.3	CARBONDALE		SANDY SHALE	3.5	62.5	
306.8	CARBONDALE		SANDSTONE	2.0	66.0	GRAY
304.8	CARBONDALE		CALCAREOUS SANDSTONE	6.0	68.0	GRAY
298.8	CARBONDALE		SANDY SHALE	4.0	74.0	LIMY
294.8	CARBONDALE		SANDY SHALE	7.5	78.0	
287.3	CARBONDALE		CALCAREOUS BLACK SHALE	0.7	85.5	
286.6	CARBONDALE	JAMESTOWN	COAL	0.4	86.2	
286.2	CARBONDALE	JAMESTOWN	BLACK SHALE	0.9	86.6	
285.3	CARBONDALE	JAMESTOWN	COAL	0.4	87.5	
284.9	CARBONDALE	ENERGY	SANDY SHALE	2.9	87.9	
282.0	CARBONDALE	HERRIN	COAL	5.4	90.8	
276.6	CARBONDALE		GRAY SHALE	2.8	96.2	
273.8	CARBONDALE		CALCAREOUS SHALE	7.5	99.0	

MAPID: 16590833000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 110' S line, 500' W line of NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.613576 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743006 **DATE COLLECTED:** 4 / 12 / 1993

SURFACE ELEVATION (FT.): 376.5 **LOGGED (FT.):** 118.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P159PN **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.5	PLEISTOCENE		CLAY	7.0	0.0	BROWN
369.5	PLEISTOCENE		UNCONSOLIDATED	12.0	7.0	BROWN
357.5	MODESTO		SHALE	7.0	19.0	BROWN
350.5	MODESTO		SHALE	4.0	26.0	DARK GRAY
346.5	CARBONDALE	DANVILLE	COAL	1.9	30.0	
344.6	CARBONDALE		DARK GRAY SHALE	2.6	31.9	
342.0	CARBONDALE		GRAY SHALE	0.8	34.5	
341.2	CARBONDALE		SILTY SHALE	0.5	35.3	
340.7	CARBONDALE		SILTSTONE	1.5	35.8	GRAY
339.2	CARBONDALE		SILTY SHALE	5.0	37.3	
334.2	CARBONDALE	ALLENBY	COAL	0.3	42.3	
333.9	CARBONDALE		UNDERCLAY	0.9	42.6	
333.0	CARBONDALE		GRAY SHALE	1.8	43.5	
331.2	CARBONDALE	ALLENBY	COAL	1.1	45.3	
330.1	CARBONDALE		UNDERCLAY	2.3	46.4	
327.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	48.7	GRAY-TAN
321.3	CARBONDALE		SHALE	1.3	55.2	GRAY-GREEN
320.0	CARBONDALE		SILTY SHALE	3.4	56.5	
316.6	CARBONDALE		SANDSTONE	1.3	59.9	LIGHT GRAY
315.3	CARBONDALE		SILTY SHALE	1.3	61.2	
314.0	CARBONDALE		SANDSTONE	2.5	62.5	LIGHT GRAY
311.5	CARBONDALE		SILTSTONE	2.1	65.0	GRAY
309.4	CARBONDALE		SANDSTONE	1.8	67.1	LIGHT GRAY
307.6	CARBONDALE		SILTSTONE	2.4	68.9	GRAY
305.2	CARBONDALE		SILTY SHALE	7.5	71.3	
297.7	CARBONDALE		GRAY SHALE	2.2	78.8	
295.5	CARBONDALE	CONANT	LIMESTONE	0.4	81.0	GRAY
295.1	CARBONDALE	JAMESTOWN	COAL	0.1	81.4	
295.0	CARBONDALE	ANNA	BLACK SHALE	0.7	81.5	
294.3	CARBONDALE	ENERGY	GRAY SHALE	10.2	82.2	
284.1	CARBONDALE	HERRIN	COAL	5.3	92.4	
278.8	CARBONDALE		UNDERCLAY	2.8	97.7	
276.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.7	100.5	
274.3	CARBONDALE		SILTSTONE	0.7	102.2	GRAY-GREEN
273.6	CARBONDALE		SILTY SHALE	4.5	102.9	
269.1	CARBONDALE		SILTSTONE	5.1	107.4	GREEN-GRAY
264.0	CARBONDALE		ARGILLACEOUS SANDSTONE	2.0	112.5	GREEN-GRAY
262.0	CARBONDALE		SILTY SHALE	3.5	114.5	

MAPID: 16500080102M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 500' N line, 1' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615428 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.744826 **DATE COLLECTED:** 11 / 10 / 1964
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 8.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GLUSKOTER, SAHARA C C, MINE16 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	8.8		

MAPID: 16500386000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617749 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.740636 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 295.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
301.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	98.0	
104.0	CARBONDALE	SPRINGFIELD	COAL	-	295.0	

MAPID: 16500386000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617749 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.740636 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 307.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	CARBONDALE	DANVILLE	COAL	1.8	34.0	
389.0	CARBONDALE	SS BELOW NO. 7		2.2	10.0	
339.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	60.0	
333.0	CARBONDALE	ANVIL ROCK	SANDSTONE	29.0	66.0	
301.0	CARBONDALE	HERRIN	COAL	5.2	98.0	
289.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	23.0	110.0	
250.0	CARBONDALE	BRIAR HILL	COAL	1.8	149.0	
131.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	10.0	268.0	
103.0	CARBONDALE	SPRINGFIELD	COAL	8.7	296.0	

MAPID: 16500386000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617749 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.740636 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.8 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.8			UNCONSOLIDATED	11.8	0.0	
387.0	MODESTO		SANDSTONE	11.5	11.8	
375.5	MODESTO		SHALE	10.6	23.3	
364.9	CARBONDALE	DANVILLE	COAL	1.8	33.9	
363.1	CARBONDALE		UNDERCLAY	4.0	35.7	
359.1	CARBONDALE		SANDSTONE	2.9	39.7	
356.2	CARBONDALE		SHALE	7.0	42.6	
349.2	CARBONDALE	"Allenby rider"	COAL	0.4	49.6	
348.8	CARBONDALE		UNDERCLAY	0.8	50.0	
348.0	CARBONDALE		SANDSTONE	2.4	50.8	
345.6	CARBONDALE	ALLENBY	COAL	0.8	53.2	
344.8	CARBONDALE		UNDERCLAY	5.8	54.0	
339.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	59.8	
333.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.7	65.5	
322.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.1	76.2	
316.5	CARBONDALE	ANVIL ROCK	SANDSTONE	7.3	82.3	
309.3	CARBONDALE	ANNA	BLACK SHALE	8.8	89.5	
300.5	CARBONDALE	HERRIN	COAL	5.2	98.3	
295.3	CARBONDALE		UNDERCLAY	6.1	103.5	
289.2	CARBONDALE		SANDSTONE/SHALE	22.8	109.6	
266.4	CARBONDALE		SANDY SHALE	16.6	132.4	
249.8	CARBONDALE	BRIAR HILL	COAL	1.8	149.0	
248.0	CARBONDALE	DYKERSBURG	SANDY SHALE	17.4	150.8	
230.6	CARBONDALE	DYKERSBURG	SANDSTONE	10.4	168.2	
220.2	CARBONDALE	DYKERSBURG	SHALE	17.2	178.6	
203.0	CARBONDALE	SPRINGFIELD	COAL	8.9	195.8	
194.2	CARBONDALE		UNDERCLAY	2.3	204.6	

MAPID: 16500387000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628638 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.738249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 218.0 **LOG TYPE:**
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	71.0	
162.0	CARBONDALE	SPRINGFIELD	COAL	-	218.0	

MAPID: 16500387000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628638 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	42.3	0.0	
333.7			ROCK	10.3	42.3	
323.4			SANDSTONE/SHALE	14.9	52.6	
308.5			LIMESTONE	4.3	67.5	
304.2	CARBONDALE	HERRIN	COAL	5.5	71.8	
298.7	CARBONDALE		UNDERCLAY	2.6	77.3	
296.2	CARBONDALE		ROCK	41.2	79.8	
255.0	CARBONDALE	BRIAR HILL	COAL	1.8	121.0	
253.2	CARBONDALE		ROCK	49.1	122.8	
204.1	CARBONDALE		SHALE	46.2	171.9	
157.9	CARBONDALE	SPRINGFIELD	COAL	7.5	218.1	
150.4	CARBONDALE		UNDERCLAY	0.0	225.6	

MAPID: 16500387000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NW NE SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628638 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.738249 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.3 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.3			UNCONSOLIDATED	42.3	0.0	
338.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	25.3	42.3	
312.8	CARBONDALE	BRERETON	LIMESTONE	4.3	67.5	
308.5	CARBONDALE	HERRIN	COAL	5.5	71.8	
303.0	CARBONDALE		UNDERCLAY	2.6	77.3	
300.5	CARBONDALE		SANDSTONE	9.0	79.8	
291.5	CARBONDALE		SANDY SHALE	16.6	88.8	
274.9	CARBONDALE		SHALE	15.6	105.4	
259.3	CARBONDALE	BRIAR HILL	COAL	1.8	121.0	
257.5	CARBONDALE	DYKERSBURG	SHALE	3.1	122.8	
254.4	CARBONDALE	DYKERSBURG	SANDY SHALE	46.0	125.9	
208.4	CARBONDALE	DYKERSBURG	SHALE	46.2	171.9	
162.2	CARBONDALE	SPRINGFIELD	COAL	7.5	218.1	
154.7	CARBONDALE		UNDERCLAY	2.4	225.6	

MAPID: 16502975000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 180' S line, 460' E line of SE SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.621704 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.731883 **DATE COLLECTED:** 6 / 8 / 1956

SURFACE ELEVATION (FT.): 381.4 **LOGGED (FT.):** 195.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.4			UNCONSOLIDATED	15.0	0.0	
366.4	CARBONDALE		SANDY SHALE	8.0	15.0	
358.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	23.0	
354.4	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	27.0	
322.4	CARBONDALE	BRERETON	LIMESTONE	7.0	59.0	
315.4	CARBONDALE	ANNA	DARK GRAY SHALE	3.5	66.0	
311.9	CARBONDALE	HERRIN	COAL	4.5	69.5	
307.4	CARBONDALE		UNDERCLAY	1.0	74.0	
306.4	CARBONDALE		SANDY SHALE	44.5	75.0	
261.9	CARBONDALE	BRIAR HILL	COAL	2.0	119.5	
259.9	CARBONDALE	DYKERSBURG	GRAY SHALE	56.2	121.5	
203.7	CARBONDALE	SPRINGFIELD	COAL	2.6	177.7	
201.1	CARBONDALE	SPRINGFIELD	SHALE	0.2	180.3	
201.0	CARBONDALE	SPRINGFIELD	COAL	1.2	180.4	
199.8	CARBONDALE	SPRINGFIELD	SHALE	0.8	181.6	
199.1	CARBONDALE	SPRINGFIELD	COAL	0.4	182.3	
198.7	CARBONDALE	SPRINGFIELD	SHALE	0.2	182.7	WITH COAL SEAMS
198.5	CARBONDALE	SPRINGFIELD	COAL	0.6	182.9	
197.9	CARBONDALE	SPRINGFIELD	SHALE	0.4	183.5	
197.5	CARBONDALE	SPRINGFIELD	COAL	0.1	183.9	COAL PARTING
197.4	CARBONDALE	SPRINGFIELD	SHALE	0.4	184.0	
197.0	CARBONDALE	SPRINGFIELD	COAL	0.1	184.4	COAL PARTING
196.9	CARBONDALE	SPRINGFIELD	ROCK	1.1	184.5	LOG JUST SAYS 'ROCK'
195.8	CARBONDALE	SPRINGFIELD	COAL	0.2	185.6	
195.6	CARBONDALE	SPRINGFIELD	SHALE	1.6	185.8	
194.0	CARBONDALE	SPRINGFIELD	COAL	0.1	187.4	
193.9	CARBONDALE	SPRINGFIELD	SHALE	0.4	187.5	
193.5	CARBONDALE	SPRINGFIELD	COAL	0.1	187.9	
193.4	CARBONDALE	SPRINGFIELD	SHALE	0.1	188.0	
193.3	CARBONDALE	SPRINGFIELD	COAL	0.8	188.1	
192.5	CARBONDALE		DARK GRAY SHALE	6.7	188.9	

MAPID: 16502975000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 180' S line, 460' E line of SE SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.621704 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.731883 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 74.5 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.5	CARBONDALE		SILTY SHALE	8.0	15.5	
357.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	23.5	
353.5	CARBONDALE	LAWSON	SANDSTONE	32.0	27.5	
321.5	CARBONDALE	BRERETON	LIMESTONE	7.0	59.5	
314.5	CARBONDALE	ANNA	BLACK SHALE	3.5	66.5	
311.0	CARBONDALE	HERRIN	COAL	4.5	70.0	

MAPID: 16502976000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 190' S line, 30' W line of SW SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.731916 **DATE COLLECTED:** 6 / 16 / 1956

SURFACE ELEVATION (FT.): 393.6 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.6			UNCONSOLIDATED	13.0	0.0	
380.6	CARBONDALE	DANVILLE	COAL	2.0	13.0	
378.6	CARBONDALE		SANDSTONE	7.0	15.0	
371.6	CARBONDALE		GRAY SHALE	15.0	22.0	
356.6	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	37.0	
348.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	27.0	45.0	WITH SS
321.6	CARBONDALE	BRERETON	BLACK LIMESTONE	8.5	72.0	LOG SAYS 'BLACK LIME'
313.1	CARBONDALE	ANNA	DARK SHALE	1.2	80.5	
311.9	CARBONDALE	HERRIN	COAL	4.8	81.7	
307.1	CARBONDALE		UNDERCLAY	1.0	86.5	
306.1	CARBONDALE		SANDY SHALE	80.5	87.5	
225.6	CARBONDALE		GRAY SHALE	40.2	168.0	
185.4	CARBONDALE	SPRINGFIELD	COAL	0.1	208.2	COAL PARTING
185.3	CARBONDALE	SPRINGFIELD	SHALE	0.1	208.3	
185.3	CARBONDALE	SPRINGFIELD	COAL	3.0	208.3	
182.3	CARBONDALE	SPRINGFIELD	GRAY SHALE	10.7	211.3	
171.6	CARBONDALE	SPRINGFIELD	GRAY SHALE	1.5	222.0	
170.1	CARBONDALE	SPRINGFIELD	COAL	3.5	223.5	
166.6	CARBONDALE		SHALE	1.0	227.0	

MAPID: 16502977000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 180' S line, 110' W line of SW SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624297 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.731872 **DATE COLLECTED:** 6 / 13 / 1956
SURFACE ELEVATION (FT.): 379.3 **LOGGED (FT.):** 187.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 8 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.3			UNCONSOLIDATED	12.0	0.0	
367.3	MODESTO		SANDSTONE	3.0	12.0	
364.3	CARBONDALE	DANVILLE	COAL	2.0	15.0	
362.3	CARBONDALE		SHALE	2.0	17.0	
360.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	19.0	
353.3	CARBONDALE	ANVIL ROCK	SHALE	33.0	26.0	STRIPED SHALE
320.3	CARBONDALE	BRERETON	BLACK LIMESTONE	8.0	59.0	
312.3	CARBONDALE	ANNA	DARK SHALE	3.0	67.0	
309.3	CARBONDALE	HERRIN	COAL	4.0	70.0	
305.3	CARBONDALE		UNDERCLAY	1.0	74.0	
304.3	CARBONDALE		SANDY SHALE	35.0	75.0	
269.3	CARBONDALE		SANDY SHALE	13.0	110.0	
256.3	CARBONDALE	BRIAR HILL	COAL	1.5	123.0	
254.8	CARBONDALE		SHALE	4.5	124.5	
250.3	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.5	129.0	
248.8	CARBONDALE	DYKERSBURG	SANDY SHALE	39.5	130.5	
209.3	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	170.0	
201.3	CARBONDALE	SPRINGFIELD	COAL	7.0	178.0	
194.3	CARBONDALE	SPRINGFIELD	GRAY SHALE	0.1	185.0	
194.2	CARBONDALE	SPRINGFIELD	COAL	0.0	185.1	
194.2	CARBONDALE		GRAY SHALE	1.9	185.1	

MAPID: 16523957000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 370' N line, 395' W line of NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.618629 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.745149 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 240.0 **LOG TYPE:**
SOURCE: PETRO-SEARCH ASSOC., INC **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
317.0	CARBONDALE	HERRIN	UNCLASSIFIED	-	78.0	
155.0	CARBONDALE	SPRINGFIELD	COAL	-	240.0	

MAPID: 16590270000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620134 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74608 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 124.6 **LOG TYPE:** Company map
SOURCE: AMAX P-207 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
281.2	CARBONDALE	HERRIN	COAL	5.6	119.0	

MAPID: 16590271000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627348 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.8 **LOGGED (FT.):** 77.0 **LOG TYPE:** Company map
SOURCE: AMAX P-204 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
299.8	CARBONDALE	BRIAR HILL	COAL	1.0	76.0	

MAPID: 16590272000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629612 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.745997 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.9 **LOGGED (FT.):** 72.8 **LOG TYPE:** Company map
SOURCE: AMAX P-203 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.9	CARBONDALE	HERRIN	COAL	5.8	67.0	

MAPID: 16590273000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.632014 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746018 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.6 **LOGGED (FT.):** 79.2 **LOG TYPE:** Company map
SOURCE: AMAX P-202 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.6	CARBONDALE	HERRIN	COAL	5.2	74.0	

MAPID: 16590274000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63418 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.745472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.3 **LOGGED (FT.):** 100.3 **LOG TYPE:** Company map
SOURCE: AMAX P-176D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.3	CARBONDALE	DANVILLE	COAL	1.0	28.0	
310.3	CARBONDALE	HERRIN	COAL	5.3	95.0	

MAPID: 16590278000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634206 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744155 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 103.2 **LOG TYPE:** Company map
SOURCE: AMAX P-176 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.0	CARBONDALE	DANVILLE	COAL	1.9	38.0	
314.0	CARBONDALE	HERRIN	COAL	5.2	98.0	

MAPID: 16590279000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.630743 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744184 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 318.9 **LOGGED (FT.):** 76.3 **LOG TYPE:** Company map
SOURCE: AMAX P-177B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.9	CARBONDALE	HERRIN	COAL	5.3	71.0	

MAPID: 16590280000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628667 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744229 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.9 **LOGGED (FT.):** 79.5 **LOG TYPE:** Company map
SOURCE: AMAX P-178B **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
302.9	CARBONDALE	HERRIN	COAL	5.5	74.0	

MAPID: 16590281000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627384 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.744255 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 86.0 **LOG TYPE:** Company map
SOURCE: AMAX P-179 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.9	CARBONDALE	HERRIN	COAL	5.0	81.0	

MAPID: 16590282000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624601 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.745233 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.7 **LOGGED (FT.):** 96.2 **LOG TYPE:** Company map
SOURCE: AMAX P-180H **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.7	CARBONDALE	HERRIN	COAL	5.2	91.0	

MAPID: 16590283000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620208 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742511 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.6 **LOGGED (FT.):** 137.0 **LOG TYPE:** Company map
SOURCE: AMAX P-157 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.6	CARBONDALE	DANVILLE	COAL	1.8	60.0	
287.6	CARBONDALE	HERRIN	COAL	5.0	132.0	

MAPID: 16590286000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620261 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.738787 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 122.6 **LOG TYPE:** Company map
SOURCE: AMAX P-107 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.3	CARBONDALE	DANVILLE	COAL	1.8	46.0	
295.3	CARBONDALE	HERRIN	COAL	5.6	117.0	

MAPID: 16590287000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625204 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.738797 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.8 **LOGGED (FT.):** 101.5 **LOG TYPE:** Company map
SOURCE: AMAX P-105 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.8	CARBONDALE	HERRIN	COAL	4.5	97.0	

MAPID: 16590288000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625261 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742397 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.2 **LOGGED (FT.):** 106.2 **LOG TYPE:** Company map
SOURCE: AMAX P-155 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.2	CARBONDALE	HERRIN	COAL	5.2	101.0	

MAPID: 16590289000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627364 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.7 **LOGGED (FT.):** 43.0 **LOG TYPE:** Company map
SOURCE: AMAX P-154 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
339.7	CARBONDALE	HERRIN	COAL	5.0	38.0	

MAPID: 16590290000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629541 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742372 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.9 **LOGGED (FT.):** 73.8 **LOG TYPE:** Company map
SOURCE: AMAX P-153 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.9	CARBONDALE	HERRIN	COAL	4.8	69.0	

MAPID: 16590291000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63195 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742424 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.5 **LOGGED (FT.):** 104.3 **LOG TYPE:** Company map
SOURCE: AMAX P-152 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.5	CARBONDALE	DANVILLE	COAL	1.9	31.0	
311.5	CARBONDALE	HERRIN	COAL	5.3	99.0	

MAPID: 16590292000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634206 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742397 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.4 **LOGGED (FT.):** 120.5 **LOG TYPE:** Company map
SOURCE: AMAX P-151 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.4	CARBONDALE	DANVILLE	COAL	1.0	38.0	
313.4	CARBONDALE	HERRIN	COAL	5.5	115.0	

MAPID: 16590803000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 262' S line, 257' E line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.621194 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.743228 **DATE COLLECTED:** 5 / 3 / 1993
SURFACE ELEVATION (FT.): 417.1 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P156LI3 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.1	PLEISTOCENE		CLAY	7.5	0.0	BROWN
409.6	MODESTO		SANDSTONE	1.2	7.5	
408.4	MODESTO		SANDSTONE	45.3	8.7	BROWN
363.1	MODESTO		SANDY SHALE	8.4	54.0	
354.7	CARBONDALE	DANVILLE	COAL	2.1	62.4	
352.6	CARBONDALE		SANDY SHALE	3.5	64.5	
349.1	CARBONDALE		SANDSTONE	2.0	68.0	GRAY

MAPID: 16590804000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 261' S line, 245' E line of NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620805 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743227 **DATE COLLECTED:** 4 / 29 / 1993

SURFACE ELEVATION (FT.): 416.9 **LOGGED (FT.):** 143.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P156LI2 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.9	PLEISTOCENE		CLAY	7.0	0.0	BROWN
409.9	MODESTO		SANDSTONE	2.0	7.0	
407.9	MODESTO		SANDSTONE	10.5	9.0	BROWN
397.4	MODESTO		CALCAREOUS SANDSTONE	28.5	19.5	BROWN
368.9	MODESTO		SANDSTONE	7.0	48.0	GRAY
361.9	MODESTO		BLACK SHALE	1.3	55.0	
360.6	MODESTO		SANDY SHALE	5.3	56.3	
355.3	CARBONDALE	DANVILLE	COAL	1.9	61.6	
353.4	CARBONDALE		UNDERCLAY	1.5	63.5	
351.9	CARBONDALE		SANDY SHALE	2.0	65.0	
349.9	CARBONDALE		SANDSTONE	9.6	67.0	GRAY
340.3	CARBONDALE	ALLENBY	COAL	0.4	76.6	
339.9	CARBONDALE		GRAY SHALE	0.5	77.0	
339.4	CARBONDALE		CALCAREOUS SANDSTONE	0.8	77.5	GRAY
338.6	CARBONDALE		SANDSTONE	2.0	78.3	GRAY
336.6	CARBONDALE	ALLENBY	COAL	0.8	80.3	
335.8	CARBONDALE		UNDERCLAY	2.4	81.1	
333.4	CARBONDALE		SANDY SHALE	1.9	83.5	
331.5	CARBONDALE	BANKSTON FORK	LIMESTONE	9.7	85.4	BROWN
321.8	CARBONDALE		SANDSTONE	5.9	95.1	GRAY
315.9	CARBONDALE		CALCAREOUS SANDSTONE	13.0	101.0	GRAY
302.9	CARBONDALE		SANDY SHALE	10.0	114.0	
292.9	CARBONDALE	JAMESTOWN	COAL	0.5	124.0	
292.4	CARBONDALE		BLACK SHALE	2.5	124.5	
289.9	CARBONDALE	BRERETON	LIMESTONE	3.5	127.0	DARK GRAY
286.4	CARBONDALE	ANNA	BLACK SHALE	2.1	130.5	
284.3	CARBONDALE	HERRIN	COAL	5.2	132.6	
279.1	CARBONDALE		UNDERCLAY	2.6	137.8	
276.5	CARBONDALE		SANDY SHALE	2.6	140.4	LIMY

MAPID: 16590805000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 261' S line, 232' E line of NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620763 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743227 **DATE COLLECTED:** 4 / 28 / 1993

SURFACE ELEVATION (FT.): 417.4 **LOGGED (FT.):** 283.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P156LI1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.4	PLEISTOCENE		CLAY	7.5	0.0	BROWN
409.9	MODESTO		SANDSTONE	1.0	7.5	
408.9	MODESTO		SANDSTONE	40.5	8.5	BROWN
368.4	MODESTO		SANDSTONE	4.5	49.0	GRAY
363.9	MODESTO		SANDY DARK SHALE	1.6	53.5	
362.3	MODESTO		BLACK SHALE	1.2	55.1	
361.1	MODESTO		SANDY SHALE	5.3	56.3	
355.8	CARBONDALE	DANVILLE	COAL	1.6	61.6	
354.2	CARBONDALE		UNDERCLAY	2.3	63.2	
351.9	CARBONDALE		SANDY SHALE	1.0	65.5	
350.9	CARBONDALE		SANDSTONE	9.2	66.5	GRAY
341.7	CARBONDALE	ALLENBY	COAL	0.3	75.7	
341.4	CARBONDALE		GRAY SHALE	1.5	76.0	
339.9	CARBONDALE		SANDY SHALE	2.7	77.5	
337.2	CARBONDALE	ALLENBY	COAL	0.8	80.2	
336.4	CARBONDALE		UNDERCLAY	2.5	81.0	
333.9	CARBONDALE		SANDY SHALE	2.5	83.5	
331.4	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	86.0	BROWN
322.4	CARBONDALE		SANDY SHALE	2.0	95.0	LIMY
320.4	CARBONDALE		SANDSTONE	3.0	97.0	GRAY
317.4	CARBONDALE		SANDY SHALE	2.0	100.0	LIMY
315.4	CARBONDALE		CALCAREOUS SANDSTONE	8.0	102.0	GRAY
307.4	CARBONDALE		SANDY DARK SHALE	13.0	110.0	
294.4	CARBONDALE		SANDY DARK SHALE	1.3	123.0	LIMY
293.1	CARBONDALE	JAMESTOWN	COAL	0.3	124.3	
292.8	CARBONDALE		BLACK SHALE	0.7	124.6	
292.1	CARBONDALE	BRERETON	LIMESTONE	5.2	125.3	DARK GRAY
286.9	CARBONDALE	ANNA	BLACK SHALE	1.7	130.5	
285.2	CARBONDALE	HERRIN	COAL	5.3	132.2	
279.9	CARBONDALE		UNDERCLAY	2.5	137.5	
277.4	CARBONDALE		SANDY SHALE	3.0	140.0	LIMY
274.4	CARBONDALE		CALCAREOUS SANDSTONE	8.0	143.0	GRAY
266.4	CARBONDALE		SANDY SHALE	31.5	151.0	
234.9	CARBONDALE	BRIAR HILL	COAL	0.8	182.5	
234.1	CARBONDALE		BLACK SHALE	0.2	183.3	
233.9	CARBONDALE	DYKERSBURG	SANDY DARK SHALE	0.5	183.5	
233.4	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	184.0	LIMY
230.4	CARBONDALE	DYKERSBURG	SANDY SHALE	3.3	187.0	

227.1	CARBONDALE	DYKERSBURG	SANDY SHALE	22.6	190.3	LIMY
204.5	CARBONDALE	DYKERSBURG	CALCAREOUS SANDSTONE	5.1	212.9	
199.4	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	218.0	LIMY
190.4	CARBONDALE	DYKERSBURG	SANDY SHALE	48.5	227.0	
141.9	CARBONDALE	SPRINGFIELD	CAVITY	7.5	275.5	#5 OLD WORKS

MAPID: 16590816000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620049 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738777 **DATE COLLECTED:** 12 / 18 / 1972

SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 124.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P107 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.3	PLEISTOCENE		SILT	4.0	0.0	
408.3	PLEISTOCENE		CLAY	8.0	4.0	
400.3	CARBONDALE		SANDSTONE	11.0	12.0	
389.3	CARBONDALE		SANDY SHALE	16.0	23.0	
373.3	CARBONDALE		GRAY SHALE	7.0	39.0	
366.3	CARBONDALE	ALLENBY	COAL	1.8	46.0	
364.5	CARBONDALE		UNDERCLAY	0.3	47.8	
364.3	CARBONDALE		SANDY SHALE	22.0	48.0	
342.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	70.0	
337.3	CARBONDALE		SANDY SHALE	23.0	75.0	
314.3	CARBONDALE		GRAY SHALE	10.0	98.0	
304.3	CARBONDALE	BRERETON	LIMESTONE	7.0	108.0	
297.3	CARBONDALE	ANNA	BLACK SHALE	2.0	115.0	
295.3	CARBONDALE	HERRIN	COAL	5.6	117.0	
289.7	CARBONDALE		UNDERCLAY	1.4	122.6	

MAPID: 16590817000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 676' S line, 45' W line of NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.619825 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744343 **DATE COLLECTED:** 10 / 18 / 1979

SURFACE ELEVATION (FT.): 416.2 **LOGGED (FT.):** 148.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P182YY **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.2	PLEISTOCENE		CLAY	12.0	0.0	
404.2			SANDSTONE	38.0	12.0	BROWN
366.2			GRAY SHALE	16.0	50.0	
350.2			SANDSTONE	5.0	66.0	GRAY
345.2			SANDY SHALE	3.0	71.0	
342.2			GRAY SHALE	2.0	74.0	
340.2	CARBONDALE		LIMESTONE	1.0	76.0	GRAY
339.2	CARBONDALE		SANDSTONE	9.0	77.0	
330.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	86.0	LIGHT GRAY
322.2	CARBONDALE		GRAY SHALE	26.8	94.0	
295.4	CARBONDALE	ANNA	BLACK SHALE	1.8	120.8	
293.6	CARBONDALE	ENERGY	DARK GRAY SHALE	7.1	122.6	
286.5	CARBONDALE	HERRIN	COAL	6.5	129.7	
280.0	CARBONDALE		UNDERCLAY	1.7	136.2	
278.3	CARBONDALE		GRAY SHALE	10.1	137.9	

MAPID: 16590834000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620028 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742462 **DATE COLLECTED:** 11 / 30 / 1972

SURFACE ELEVATION (FT.): 419.6 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P157 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA NW HARRISON

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.6	PLEISTOCENE		SILT	2.0	0.0	
417.6	PLEISTOCENE		CLAY	7.0	2.0	
410.6	MODESTO		SHALE	5.0	9.0	
405.6	MODESTO		SANDSTONE	46.0	14.0	
359.6	CARBONDALE	DANVILLE	COAL	1.8	60.0	
357.8	CARBONDALE		UNDERCLAY	1.2	61.8	
356.6	CARBONDALE		SANDY SHALE	9.0	63.0	
347.6	CARBONDALE		DARK GRAY SHALE	12.0	72.0	
335.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	84.0	
329.6	CARBONDALE		SHALE WITH LIMESTONE	8.0	90.0	
321.6	CARBONDALE		DARK GRAY SHALE	4.0	98.0	
317.6	CARBONDALE		SANDSTONE	8.0	102.0	
309.6	CARBONDALE		SANDY SHALE	4.0	110.0	
305.6	CARBONDALE		DARK GRAY SHALE	9.0	114.0	
296.6	CARBONDALE	ANNA	BLACK SHALE	2.0	123.0	
294.6	CARBONDALE	ENERGY	GRAY SHALE	7.0	125.0	
287.6	CARBONDALE	HERRIN	COAL	5.0	132.0	
282.6	CARBONDALE		UNDERCLAY	2.0	137.0	

MAPID: 16590835000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.6246 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74242 **DATE COLLECTED:** 1 / 17 / 1973

SURFACE ELEVATION (FT.): 387.2 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P155 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA NW HARRISON

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.2	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
380.2	MODESTO		SANDY SHALE	17.0	7.0	
363.2	MODESTO		DARK GRAY SHALE	2.0	24.0	
361.2	CARBONDALE	DANVILLE	COAL	1.5	26.0	
359.7	CARBONDALE		UNDERCLAY	1.5	27.5	
358.2	CARBONDALE		SANDY SHALE	15.0	29.0	
343.2	CARBONDALE	ALLENBY	COAL	1.0	44.0	
342.2	CARBONDALE		UNDERCLAY	1.0	45.0	
341.2	CARBONDALE		GRAY SHALE	2.0	46.0	
339.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	48.0	
334.2	CARBONDALE		GRAY SHALE	7.0	53.0	
327.2	CARBONDALE		SANDY SHALE	14.0	60.0	
313.2	CARBONDALE		SANDSTONE	11.0	74.0	
302.2	CARBONDALE		DARK GRAY SHALE	8.0	85.0	
294.2	CARBONDALE	BRERETON	LIMESTONE	6.5	93.0	
287.7	CARBONDALE	ANNA	BLACK SHALE	1.5	99.5	
286.2	CARBONDALE	HERRIN	COAL	5.2	101.0	
281.0	CARBONDALE		UNDERCLAY	1.8	106.2	

MAPID: 16590836000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.626895 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.742404 **DATE COLLECTED:** 6 / 15 / 1967
SURFACE ELEVATION (FT.): 377.7 **LOGGED (FT.):** 93.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P154 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.7	PLEISTOCENE		CLAY	6.0	0.0	
371.7	PLEISTOCENE		CLAY	12.0	6.0	
359.7	PLEISTOCENE		CLAY	54.0	18.0	
305.7	CARBONDALE	BRERETON	LIMESTONE	2.0	72.0	DARK GRAY
303.7	CARBONDALE	BRERETON	LIMESTONE	4.5	74.0	DARK GRAY
299.2	CARBONDALE	ANNA	BLACK SHALE	3.5	78.5	
295.7	CARBONDALE	ENERGY	GRAY SHALE	4.0	82.0	
291.7	CARBONDALE	HERRIN	COAL	5.0	86.0	
286.7	PLEISTOCENE		UNDERCLAY	2.0	91.0	

MAPID: 16590837000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629179 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.742383 **DATE COLLECTED:** 6 / 16 / 1967
SURFACE ELEVATION (FT.): 376.9 **LOGGED (FT.):** 76.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P153 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.9	PLEISTOCENE		CLAY	3.0	0.0	
373.9	PLEISTOCENE		CLAY	21.5	3.0	BROWN
352.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	24.5	GRAY
348.9	CARBONDALE		SANDY SHALE	5.0	28.0	
343.9	CARBONDALE		SANDSTONE	6.0	33.0	
337.9	CARBONDALE		SANDY SHALE	5.0	39.0	
332.9	CARBONDALE		SANDSTONE	10.0	44.0	
322.9	CARBONDALE		DARK GRAY SHALE	9.0	54.0	
313.9	CARBONDALE	BRERETON	LIMESTONE	5.0	63.0	DARK
308.9	CARBONDALE	ANNA	BLACK SHALE	1.3	68.0	
307.6	CARBONDALE	HERRIN	COAL	4.8	69.3	
302.8	CARBONDALE		UNDERCLAY	1.9	74.1	

MAPID: 16500012900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.640171 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.742776 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 239.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SALINE COUNTY C C **WELL TYPE:** Underground mine
COMMENT: SHAFT LOG FROM QUADE OTHER SAMPLE AVAIL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNKNOWN	0.0	0.0	
177.0			BLACK SHALE	-	233.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.3		

MAPID: 16500066402M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1325' S line, 1745' E line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639871 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734988 **DATE COLLECTED:** 8 / 23 / 1967
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 6.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GLUSKOTER SAHARA # 5 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.3		
-	CARBONDALE		UNDERCLAY	-		

MAPID: 16500388000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 770' N line, 840' E line of NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646002 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.74383 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	12.5	0.0	
-	CARBONDALE		SANDSTONE	33.5	12.5	
-	CARBONDALE		ARGILACEOUS SHALE	22.0	46.0	
-	CARBONDALE		LIMESTONE	5.0	68.0	
-	CARBONDALE		SHALE	6.0	73.0	
-	CARBONDALE		ARGILACEOUS SHALE	3.0	79.0	
-	CARBONDALE	"Allenby rider"	COAL	3.5	82.0	
-	CARBONDALE		UNDERCLAY	1.0	85.5	
-	CARBONDALE		SANDSTONE	15.0	86.5	
-	CARBONDALE	ALLENBY	COAL	1.5	101.5	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	103.0	
-	CARBONDALE	ANVIL ROCK	SHALE	7.0	111.5	
-	CARBONDALE	ANVIL ROCK	SHALE	0.5	118.5	
-	CARBONDALE	ANVIL ROCK	SHALE	5.0	119.0	
-	CARBONDALE	ANVIL ROCK	ARGILACEOUS SHALE	8.5	124.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	132.5	
-	CARBONDALE	ANVIL ROCK	SHALE	6.0	149.5	
-	CARBONDALE	BRERETON	LIMESTONE	7.0	155.5	
-	CARBONDALE	ANNA	SHALE	0.5	162.5	
-	CARBONDALE	HERRIN	COAL	6.0	163.0	
-	CARBONDALE		UNDERCLAY	3.0	169.0	
-	CARBONDALE		ARGILACEOUS SHALE	25.5	172.0	
-	CARBONDALE		SHALE	10.0	197.5	
-	CARBONDALE	BRIAR HILL	COAL	1.0	207.5	
-	CARBONDALE		UNDERCLAY	2.0	208.5	
-	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	19.0	210.5	
-	CARBONDALE	DYKERSBURG	SHALE	57.8	229.5	
-	CARBONDALE	SPRINGFIELD	COAL	5.3	287.3	
-	CARBONDALE		UNDERCLAY	0.5	292.5	

MAPID: 16500388000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 770' N line, 840' E line of NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646002 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.74383 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.0			UNCONSOLIDATED	12.5	0.0	
415.5			ROCK	33.5	12.5	
382.0			SHALE	22.0	46.0	
360.0			LIMESTONE	5.0	68.0	
355.0			SHALE	6.0	73.0	
349.0			SHALE	3.0	79.0	
346.0			COAL	3.5	82.0	
342.5			UNDERCLAY	0.5	85.5	
342.0			ROCK	15.5	86.0	
326.5			COAL	1.5	101.5	
325.0			ROCK	46.0	103.0	
279.0			SHALE	6.0	149.0	
273.0			LIMESTONE	7.5	155.0	
265.5			SHALE	0.5	162.5	
265.0	CARBONDALE	HERRIN	COAL	6.0	163.0	
259.0	CARBONDALE		UNDERCLAY	3.0	169.0	
256.0	CARBONDALE		ROCK	35.5	172.0	
220.5	CARBONDALE		COAL	1.0	207.5	
219.5	CARBONDALE		ROCK	57.0	208.5	
162.5	CARBONDALE		SHALE	21.8	265.5	
140.7	CARBONDALE	SPRINGFIELD	COAL	5.3	287.3	
135.5	CARBONDALE		UNDERCLAY	0.0	292.5	

MAPID: 16500389000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE SE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64367 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.739103 **DATE COLLECTED:** 12 / 5 / 1905

SURFACE ELEVATION (FT.): 388.2 **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.2			UNCONSOLIDATED	30.5	0.0	
357.7	MODESTO		SHALE	5.5	30.5	
352.2	CARBONDALE	DANVILLE	COAL	1.8	36.0	
350.4	CARBONDALE		UNDERCLAY	2.2	37.8	
348.2	CARBONDALE		SANDY SHALE	5.0	40.0	
343.2	CARBONDALE		SANDSTONE	12.0	45.0	
331.2	CARBONDALE	ALLENBY	COAL	0.5	57.0	
330.7	CARBONDALE		UNDERCLAY	4.5	57.5	
326.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	62.0	
318.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	35.0	70.0	
283.2	CARBONDALE	BRERETON	LIMESTONE	8.0	105.0	
275.2	CARBONDALE	HERRIN	COAL	5.5	113.0	
269.7	CARBONDALE		UNDERCLAY	4.5	118.5	
265.2	CARBONDALE		SANDY SHALE	39.0	123.0	
226.2	CARBONDALE	BRIAR HILL	COAL	1.5	162.0	
224.7	CARBONDALE	DYKERSBURG	SANDY SHALE	95.5	163.5	
129.2	CARBONDALE	SPRINGFIELD	COAL	7.2	259.0	
122.0	CARBONDALE		UNDERCLAY	0.8	266.2	

MAPID: 16500389000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE SE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64367 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.739103 **DATE COLLECTED:** 12 / 15 / 1905

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.0			UNCONSOLIDATED	30.5	0.0	
357.5			ROCK	5.5	30.5	
352.0			COAL	1.8	36.0	
350.2			ROCK	19.2	37.8	
331.0			COAL	0.5	57.0	
330.5			ROCK	12.5	57.5	
318.0			SHALE	35.0	70.0	
283.0			LIMESTONE	8.0	105.0	
275.0	CARBONDALE	HERRIN	COAL	5.5	113.0	
269.5	CARBONDALE		UNDERCLAY	4.5	118.5	
265.0	CARBONDALE		ROCK	39.0	123.0	
226.0	CARBONDALE	BRIAR HILL	COAL	1.5	162.0	
224.5	CARBONDALE		ROCK	70.5	163.5	
154.0	CARBONDALE		SHALE	25.0	234.0	
129.0	CARBONDALE	SPRINGFIELD	COAL	7.2	259.0	
121.8	CARBONDALE		UNDERCLAY	0.0	266.2	

MAPID: 16500595000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639027 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.735451 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 285.8 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	14.0	0.0	
401.0			ROCK	54.0	14.0	
347.0			COAL	2.0	68.0	
345.0			ROCK	17.7	70.0	
327.3			COAL	0.8	87.7	
326.5			ROCK	33.0	88.5	
293.5			SHALE	16.3	121.5	
277.2			LIMESTONE	5.0	137.8	
272.2			SHALE	0.7	142.8	
271.6	CARBONDALE	HERRIN	COAL	5.3	143.4	
266.3	CARBONDALE		UNDERCLAY	3.0	148.7	
263.3	CARBONDALE		ROCK	37.8	151.7	
225.5	CARBONDALE	BRIAR HILL	COAL	2.0	189.5	
223.5	CARBONDALE		ROCK	69.0	191.5	
154.5	CARBONDALE		SHALE	16.6	260.5	
137.9	CARBONDALE	SPRINGFIELD	COAL	6.6	277.1	
131.3	CARBONDALE		UNDERCLAY	0.0	283.7	

MAPID: 16500595000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639027 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.735451 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 148.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.5	MODESTO		SHALE & SANDSTONE	34.0	33.5	
347.5	CARBONDALE	DANVILLE	COAL	2.0	67.5	
345.5	CARBONDALE		CLAYSTONE	4.0	69.5	
341.5	CARBONDALE		SILTY SHALE	13.7	73.5	
327.8	CARBONDALE	ALLENBY	BONE COAL	0.8	87.2	
327.0	CARBONDALE		CLAYSTONE	4.4	88.0	
322.6	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	92.4	
314.6	CARBONDALE	LAWSON	SANDSTONE	20.6	100.4	
294.0	CARBONDALE	LAWSON	SILTY SHALE	9.8	121.0	
284.2	CARBONDALE		SHALE	6.5	130.8	
277.7	CARBONDALE	BRERETON	LIMESTONE	5.0	137.3	
272.7	CARBONDALE	ANNA	BLACK SHALE	0.8	142.3	
272.0	CARBONDALE	HERRIN	COAL	5.3	143.0	

MAPID: 16500595000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639027 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.735451 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 285.9 **LOG TYPE:** Drillers Log

SOURCE: SALINE COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	14.0	0.0	
401.0	MODESTO		SHALE	10.0	14.0	
391.0	MODESTO		SANDY SHALE	15.0	24.0	
376.0	MODESTO		SANDSTONE	21.0	39.0	
355.0	MODESTO		SANDY SHALE	5.0	60.0	
350.0	MODESTO		SHALE	3.0	65.0	
347.0	CARBONDALE	DANVILLE	COAL	2.0	68.0	
345.0	CARBONDALE		UNDERCLAY	4.0	70.0	
341.0	CARBONDALE		SANDY SHALE	10.0	74.0	
331.0	CARBONDALE		SHALE	3.7	84.0	
327.3	CARBONDALE	ALLENBY	COAL	0.8	87.7	
326.5			UNDERCLAY	4.4	88.5	
322.1	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	92.9	
314.1	CARBONDALE	ANVIL ROCK	SANDSTONE	20.6	100.9	
293.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.8	121.5	
283.7	CARBONDALE	ANVIL ROCK	SHALE	6.5	131.3	
277.2	CARBONDALE	BRERETON	LIMESTONE	5.0	137.8	
272.2	CARBONDALE	ANNA	SHALE	0.7	142.8	
271.6	CARBONDALE	HERRIN	COAL	5.3	143.4	
266.3	CARBONDALE		UNDERCLAY	3.0	148.7	
263.3	CARBONDALE		CALCAREOUS SHALE	26.8	151.7	
236.5	CARBONDALE		SHALE	11.0	178.5	
225.5	CARBONDALE	BRIAR HILL	COAL	2.0	189.5	
223.5	CARBONDALE	DYKERSBURG	SHALE	11.0	191.5	
212.5	CARBONDALE	DYKERSBURG	SANDY SHALE	58.0	202.5	
154.5	CARBONDALE	DYKERSBURG	SHALE	16.6	260.5	
137.9	CARBONDALE	SPRINGFIELD	COAL	6.6	277.1	
131.3	CARBONDALE		UNDERCLAY	2.2	283.7	

MAPID: 16501411000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 1020' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.648873 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.745033 **DATE COLLECTED:** 12 / 0 / 1950
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log
SOURCE: COLUMBUS EXPLORATION **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-20.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	430.0	
-110.0	SPOON	DAVIS	UNCLASSIFIED	-	520.0	
-1170.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 16501411000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 1020' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.648873 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.745033 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2292.0 **LOG TYPE:**
SOURCE: COLUMBUS EXPLORATION **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.0	CARBONDALE	BRERETON	LIMESTONE	-	113.0	
-1509.0			LIMESTONE	-	1919.0	
-1882.0		BASE BARLOW	LIMESTONE	-	2292.0	

MAPID: 16501411000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 1020' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.648873 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.745033 **DATE COLLECTED:** 12 / 0 / 1950
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2763.0 **LOG TYPE:** Electric Log
SOURCE: COLUMBUS EXPLORATION, OZMENT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	314.0	
48.0	CARBONDALE	SURVANT	COAL	0.8	362.0	
-17.0	CARBONDALE	COLCHESTER	COAL	0.5	427.0	
-93.0	CARBONDALE	DEKOVEN	COAL	2.0	503.0	
-97.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	507.0	
-106.0	CARBONDALE	DAVIS	COAL	4.0	516.0	
-135.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	545.0	
-174.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	584.0	

MAPID: 16500080200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658116 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.735905 **DATE COLLECTED:** 0 / 0 / 1946

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 311.6 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-SAHARA C C MINE # 7 **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	-	0.0	
-			UNKNOWN	305.0		
-	CARBONDALE	SPRINGFIELD	COAL	6.6		

MAPID: 16500402000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SE NE NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652989 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.74365 **DATE COLLECTED:** 10 / 0 / 1916

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 332.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	36.0	0.0	
359.0	MODESTO		SANDSTONE	2.0	36.0	
357.0	MODESTO		SHALE	8.0	38.0	
349.0	CARBONDALE	DANVILLE	COAL	2.0	46.0	
347.0	CARBONDALE		SHALE	5.0	48.0	
342.0	CARBONDALE		SANDSTONE	9.0	53.0	
333.0	CARBONDALE		SHALE	7.0	62.0	
326.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	69.0	
318.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	77.0	
312.0	CARBONDALE	ANVIL ROCK	SHALE	2.0	83.0	
310.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	85.0	
302.0	CARBONDALE	ANVIL ROCK	SHALE	10.0	93.0	
292.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	103.0	
285.0	CARBONDALE	ANVIL ROCK	SHALE	4.0	110.0	
281.0	CARBONDALE	HERRIN	COAL	5.5	114.0	
275.5	CARBONDALE		SANDSTONE	16.0	119.5	
259.5	CARBONDALE		SHALE	28.0	135.5	
231.5	CARBONDALE		SANDSTONE	2.0	163.5	
229.5	CARBONDALE	BRIAR HILL	COAL	1.7	165.5	
227.8	CARBONDALE	DYKERSBURG	SHALE	16.0	167.2	
211.8	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	183.2	
203.8	CARBONDALE	DYKERSBURG	SHALE	35.0	191.2	
168.8	CARBONDALE	SPRINGFIELD	COAL	5.0	226.2	
163.8	CARBONDALE		SHALE	6.0	231.2	
157.8	CARBONDALE		SANDSTONE	42.0	237.2	
115.8	CARBONDALE		SHALE	20.0	279.2	
95.8	CARBONDALE		SANDSTONE	12.0	299.2	
83.8	CARBONDALE		BLACK SHALE	5.0	311.2	
78.8	CARBONDALE		SHALE	12.0	316.2	
66.8	CARBONDALE		COAL	0.5	328.2	
66.3	CARBONDALE		SHALE	4.0	328.7	

MAPID: 16500402000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652989 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.74365 **DATE COLLECTED:** 10 / 0 / 1916
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 332.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	36.0	0.0	
364.0			ROCK	10.0	36.0	
354.0			COAL	2.0	46.0	
352.0			ROCK	45.0	48.0	
307.0			SHALE	10.0	93.0	
297.0			SANDSTONE	7.0	103.0	
290.0			SHALE	4.0	110.0	
286.0	CARBONDALE	HERRIN	COAL	5.5	114.0	
280.5	CARBONDALE		ROCK	46.0	119.5	
234.5	CARBONDALE	BRIAR HILL	COAL	1.7	165.5	
232.8	CARBONDALE		ROCK	32.8	167.2	
200.0	CARBONDALE		SHALE	26.2	200.0	
173.8	CARBONDALE	SPRINGFIELD	COAL	5.0	226.2	
168.8	CARBONDALE		ROCK	97.0	231.2	
71.8	CARBONDALE		COAL	0.5	328.2	
71.3	CARBONDALE		ROCK	0.0	328.7	

MAPID: 16500407000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.660999 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.739129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 319.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
322.0	CARBONDALE	DANVILLE	COAL	1.3	95.0	
315.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	102.0	
303.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	114.0	
293.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	24.0	124.0	
246.0	CARBONDALE	HERRIN	COAL	5.0	171.0	
237.0	CARBONDALE	VERMILIONVILLE		28.0	180.0	
198.0	CARBONDALE	BRIAR HILL	COAL	2.0	219.0	
174.0	CARBONDALE	CANTON		4.0	243.0	
106.0	CARBONDALE	SPRINGFIELD	COAL	6.2	311.0	

MAPID: 16500407000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.660999 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.739129 **DATE COLLECTED:** 12 / 13 / 1905

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 319.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	26.0	0.0	
391.0			ROCK	8.0	26.0	
383.0			COAL	1.0	34.0	
382.0			ROCK	27.0	35.0	
355.0			COAL	1.0	62.0	
354.0			ROCK	32.2	63.0	
321.8			COAL	1.3	95.2	
320.5			ROCK	14.3	96.5	
306.2			COAL	1.1	110.8	
305.7			ROCK	56.8	111.3	
249.0			COAL	0.2	168.0	
248.8			BLACK SHALE	2.7	168.2	
246.2	CARBONDALE	HERRIN	COAL	5.0	170.8	
241.2	CARBONDALE		UNDERCLAY	4.0	175.8	
237.2	CARBONDALE		ROCK	39.0	179.8	
198.2	CARBONDALE	BRIAR HILL	COAL	2.0	218.8	
196.2	CARBONDALE		ROCK	71.2	220.8	
125.0	CARBONDALE		SHALE	19.1	292.0	
105.9	CARBONDALE	SPRINGFIELD	COAL	6.2	311.1	
99.7	CARBONDALE		UNDERCLAY	0.0	317.3	

MAPID: 16500407000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.660999 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.739129 **DATE COLLECTED:** 12 / 3 / 1905

SURFACE ELEVATION (FT.): 416.8 **LOGGED (FT.):** 319.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.8			UNCONSOLIDATED	26.0	0.0	
390.8	MODESTO		BLACK SHALE	8.0	26.0	
382.8	MODESTO		COAL	1.0	34.0	
381.8	MODESTO		GRAY SHALE	19.0	35.0	
362.8	MODESTO		SANDSTONE	6.0	54.0	
356.8	MODESTO		SANDY SHALE	2.0	60.0	
354.8	MODESTO		COAL	1.0	62.0	
353.8	MODESTO		UNDERCLAY	3.0	63.0	
350.8	MODESTO		SANDSTONE	8.0	66.0	
342.8	MODESTO		GRAY SHALE	4.0	74.0	
338.8	MODESTO		SHALE	4.0	78.0	
334.8	MODESTO	PIASA	LIMESTONE	5.0	82.0	
329.8	MODESTO		UNDERCLAY	0.5	87.0	
329.3	MODESTO		SANDSTONE	0.5	87.5	
328.8	MODESTO		BLACK SHALE	1.0	88.0	
327.8	MODESTO		GRAY SHALE	4.0	89.0	
323.8	MODESTO		SHALE	2.2	93.0	
321.6	CARBONDALE	DANVILLE	COAL	1.3	95.2	
320.3	CARBONDALE		DARK SHALE	5.2	96.5	
315.1	CARBONDALE		SANDSTONE	7.0	101.7	
308.1	CARBONDALE		SANDSTONE	1.0	108.7	
307.1	CARBONDALE		SHALE	1.1	109.7	
306.0	CARBONDALE	ALLENBY	COAL	0.5	110.8	
305.5	CARBONDALE		UNDERCLAY	2.9	111.3	
302.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	114.2	
295.1	CARBONDALE		CLAYSTONE	2.0	121.7	
293.1	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	123.7	
269.1	CARBONDALE	ANVIL ROCK	SHALE	6.0	147.7	
263.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.4	153.7	
255.7	CARBONDALE	ANVIL ROCK	BLACK SHALE	1.0	161.1	
254.7	CARBONDALE	BRERETON	LIMESTONE	5.9	162.1	
248.8	CARBONDALE		COAL	0.2	168.0	
248.6	CARBONDALE	ANNA	BLACK SHALE	2.7	168.2	
246.0	CARBONDALE	HERRIN	COAL	5.0	170.8	
241.0	CARBONDALE		UNDERCLAY	4.0	175.8	
237.0	CARBONDALE		SANDSTONE	28.0	179.8	
209.0	CARBONDALE		SANDY SHALE	11.0	207.8	
198.0	CARBONDALE	BRIAR HILL	COAL	2.0	218.8	
196.0	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	220.8	

194.0	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	222.8
192.0	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	224.8
174.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	242.8
170.0	CARBONDALE	DYKERSBURG	SANDY SHALE	64.3	246.8
105.8	CARBONDALE	SPRINGFIELD	COAL	6.2	311.0
99.5	CARBONDALE		UNDERCLAY	2.0	317.3

MAPID: 16500407000C **VERSION:** 4 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.660999 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.739129 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 176.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. 100 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
335.0	MODESTO	PIASA	LIMESTONE	5.0	82.0	
330.0	MODESTO		SHALE	8.2	87.0	
321.8	CARBONDALE	DANVILLE	COAL	1.3	95.2	
320.5	CARBONDALE		SHALE & SANDSTONE	14.3	96.5	
306.3	CARBONDALE	ALLENBY	COAL	0.5	110.7	
305.8	CARBONDALE		CLAYSTONE	2.9	111.2	
302.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	114.2	
295.3	CARBONDALE	LAWSON	CLAYSTONE	2.0	121.7	
293.3	CARBONDALE	LAWSON	SANDSTONE	24.0	123.7	
269.3	CARBONDALE	LAWSON	SHALE	6.0	147.7	
263.3	CARBONDALE	LAWSON	SILTY SHALE	7.4	153.7	
255.9	CARBONDALE		BLACK SHALE	1.0	161.1	
254.9	CARBONDALE	BRERETON	LIMESTONE	5.9	162.1	
249.0	CARBONDALE	ANNA	BLACK SHALE	3.0	168.0	
246.0	CARBONDALE	HERRIN	COAL	5.0	171.0	

MAPID: 16526190000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 1' E line of NE NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652423 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.745015 **DATE COLLECTED:** 11 / 5 / 1974

SURFACE ELEVATION (FT.): 407.5 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. H192C **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.5	PLEISTOCENE		SILT	1.0	0.0	
406.5	PLEISTOCENE		SANDY CLAY	8.0	1.0	
398.5	PLEISTOCENE		SANDY CLAY	13.0	9.0	
385.5	MODESTO		SANDSTONE	1.0	22.0	CORING BEGAN
384.5	CARBONDALE	DANVILLE	COAL	1.0	23.0	
383.5	CARBONDALE		GRAY SHALE	7.0	24.0	
376.5	CARBONDALE	ALLENBY	COAL	0.2	31.0	
376.3	CARBONDALE		SANDSTONE	6.8	31.2	
369.5	CARBONDALE		CORE LOSS	4.0	38.0	
365.5	CARBONDALE		GRAY SHALE	1.0	42.0	DARK
364.5	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	43.0	
354.5	CARBONDALE		SANDY SHALE	27.0	53.0	GRAY
327.5	CARBONDALE	BRERETON	LIMESTONE	0.5	80.0	
327.0	CARBONDALE	ANNA	BLACK SHALE	5.5	80.5	
321.5	CARBONDALE	ENERGY	GRAY SHALE	4.0	86.0	DARK
317.5	CARBONDALE	HERRIN	COAL	5.2	90.0	
312.3	CARBONDALE		UNDERCLAY	1.8	95.2	

MAPID: 16590876000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 50' S line, 10' E line of NE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652407 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.73511 **DATE COLLECTED:** 8 / 6 / 1980

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 199.8 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 80-16 **WELL TYPE:** Coal Test

COMMENT: PERMIT #94 MINE #7

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0	PLEISTOCENE		CLAY	12.8	0.0	
417.2	MODESTO		SHALE	3.7	12.8	
413.5	MODESTO		BLACK SHALE	0.3	16.5	
413.2	MODESTO		SANDSTONE	11.2	16.8	
402.0	MODESTO		SANDY SHALE	11.8	28.0	
390.2	MODESTO		DARK SHALE	7.3	39.8	
383.0	MODESTO	POND CREEK	COAL	0.5	47.0	
382.5	MODESTO		GRAY SHALE	3.5	47.5	
379.0	MODESTO		SANDSTONE	0.5	51.0	
378.5	MODESTO		BLACK SHALE	2.5	51.5	
376.0	MODESTO		SANDSTONE	7.5	54.0	
368.5	MODESTO		SANDSTONE	18.8	61.5	
349.7	MODESTO		GRAY SHALE	21.8	80.3	
328.0	MODESTO	PIASA	LIMESTONE	2.8	102.0	
325.2	MODESTO		BLACK SHALE	3.2	104.8	
322.0	CARBONDALE		DARK SHALE	7.5	108.0	
314.5	CARBONDALE		SANDY SHALE	6.0	115.5	
308.5	CARBONDALE		SANDSTONE	4.5	121.5	
304.0	CARBONDALE		SANDSTONE	6.0	126.0	
298.0	CARBONDALE		GRAY SHALE	5.2	132.0	
292.8	CARBONDALE	BANKSTON FORK	LIMESTONE	8.3	137.2	
284.5	CARBONDALE		SHALE	4.5	145.5	
280.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.8	150.0	
267.2	CARBONDALE		SHALE	16.2	162.8	
251.0	CARBONDALE		BLACK SHALE	2.3	179.0	
248.7	CARBONDALE	BRERETON	LIMESTONE	7.7	181.3	
241.0	CARBONDALE	ANNA	BLACK SHALE	0.7	189.0	
240.3	CARBONDALE	HERRIN	COAL	4.7	189.7	
235.7	CARBONDALE		UNDERCLAY	5.5	194.3	

MAPID: 16590877000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** 250' N line, 125' W line of NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661134 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.737979 **DATE COLLECTED:** 8 / 17 / 1983

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 83-58 **WELL TYPE:** Coal Test

COMMENT: PERMIT #94 MINE #7

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.0	PLEISTOCENE		CLAY	20.0	0.0	
389.0	MODESTO		GRAY SHALE	4.0	20.0	
385.0	MODESTO	POND CREEK	COAL	1.0	24.0	
384.0	MODESTO		GRAY SHALE	17.0	25.0	
367.0	MODESTO		LIMESTONE	0.5	42.0	
366.5	MODESTO		SANDSTONE	0.5	42.5	
366.0	MODESTO		LIMESTONE	1.0	43.0	
365.0	MODESTO		GRAY SHALE	4.0	44.0	
361.0	MODESTO		GRAY SHALE	26.0	48.0	
335.0	MODESTO	DEGRAFF	COAL	1.0	74.0	
334.0	MODESTO		GRAY SHALE	1.0	75.0	
333.0	MODESTO	PIASA	LIMESTONE	2.0	76.0	
331.0	MODESTO		GRAY SHALE	10.0	78.0	
321.0	CARBONDALE	DANVILLE	COAL	2.0	88.0	
319.0	CARBONDALE		GRAY SHALE	2.0	90.0	
317.0	CARBONDALE		SANDSTONE	2.0	92.0	
315.0	CARBONDALE		GRAY SHALE	3.0	94.0	
312.0	CARBONDALE		SANDSTONE	6.0	97.0	
306.0	CARBONDALE		GRAY SHALE	1.0	103.0	
305.0	CARBONDALE	ALLENBY	COAL	1.0	104.0	
304.0	CARBONDALE		BLACK SHALE	3.0	105.0	
301.0	CARBONDALE		SANDSTONE	1.0	108.0	
300.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	109.0	
293.0	CARBONDALE		GRAY SHALE	7.0	116.0	
286.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	123.0	
281.0	CARBONDALE	ANVIL ROCK	GRAY SHALE	13.0	128.0	
268.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	141.0	
259.5	CARBONDALE	BRERETON	LIMESTONE	6.5	149.5	
253.0	CARBONDALE	HERRIN	COAL	4.0	156.0	
249.0	CARBONDALE		UNDERCLAY	2.0	160.0	

MAPID: 16500408000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679402 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.74194 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.0	CARBONDALE	DANVILLE	COAL	9.0	66.0	
315.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.2	87.0	
282.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	120.0	
266.0	CARBONDALE	HERRIN	COAL	5.2	136.0	
231.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	10.0	171.0	
132.0	CARBONDALE	SPRINGFIELD	COAL	4.3	270.0	

MAPID: 16500408000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679402 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.74194 **DATE COLLECTED:** 6 / 23 / 1915

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 275.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	17.5	0.0	
390.5			ROCK	48.5	17.5	
342.0			COAL	0.8	66.0	
341.2			ROCK	8.7	66.8	
332.5			COAL	0.1	75.5	
332.4			ROCK	3.4	75.6	
329.0			COAL	0.5	79.0	
328.5			ROCK	47.5	79.5	
281.0			COAL	0.5	127.0	
280.5			UNDERCLAY	0.5	127.5	
280.0			LIMESTONE	7.0	128.0	
273.0			SHALE	1.3	135.0	
271.7	CARBONDALE	HERRIN	COAL	5.2	136.3	
266.6	CARBONDALE		UNDERCLAY	2.6	141.4	
264.0	CARBONDALE		ROCK	101.0	144.0	
163.0	CARBONDALE		SHALE	25.5	245.0	
137.5	CARBONDALE	SPRINGFIELD	COAL	4.3	270.5	
133.2	CARBONDALE		UNDERCLAY	0.0	274.8	

MAPID: 16500408000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679402 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.74194 **DATE COLLECTED:** 6 / 23 / 1915

SURFACE ELEVATION (FT.): 402.2 **LOGGED (FT.):** 275.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.2			UNCONSOLIDATED	17.5	0.0	
384.7	MODESTO		SANDSTONE	30.5	17.5	
354.2	MODESTO		SHALE	8.0	48.0	
346.2	MODESTO	PIASA	LIMESTONE	3.0	56.0	
343.2	MODESTO		SHALE	7.0	59.0	
336.2	CARBONDALE	DANVILLE	COAL	0.8	66.0	
335.4	CARBONDALE		UNDERCLAY	5.2	66.8	
330.2	CARBONDALE		SHALE	3.5	72.0	
326.7	CARBONDALE	"Allenby rider"	COAL	0.1	75.5	
326.6	CARBONDALE		UNDERCLAY	3.4	75.6	
323.2	CARBONDALE	ALLENBY	COAL	0.5	79.0	
322.7	CARBONDALE		UNDERCLAY	7.5	79.5	
315.2	CARBONDALE	BANKSTON FORK	LIMESTONE	9.2	87.0	
306.0	CARBONDALE		CLAYSTONE	1.8	96.2	
304.2	CARBONDALE	ANVIL ROCK	SHALE	22.0	98.0	
282.2	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	120.0	
276.2	CARBONDALE	ANVIL ROCK	SHALE	1.0	126.0	
275.2	CARBONDALE	JAMESTOWN	COAL	0.5	127.0	
274.7	CARBONDALE		UNDERCLAY	0.5	127.5	
274.2	CARBONDALE	BRERETON	LIMESTONE	7.0	128.0	
267.2	CARBONDALE	ANNA	BLACK SHALE	1.3	135.0	
265.9	CARBONDALE	HERRIN	COAL	5.2	136.3	
260.8	CARBONDALE		UNDERCLAY	2.6	141.4	
258.2	CARBONDALE	DYKERSBURG	SHALE	26.0	144.0	
232.2	CARBONDALE	DYKERSBURG	SHALE	1.0	170.0	
231.2	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	171.0	
221.2	CARBONDALE	DYKERSBURG	SANDY SHALE	79.0	181.0	
142.2	CARBONDALE	DYKERSBURG	SHALE	10.5	260.0	
131.7	CARBONDALE	SPRINGFIELD	COAL	4.3	270.5	
127.4	CARBONDALE		UNDERCLAY	1.0	274.8	

MAPID: 16500409000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SW SE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682843 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.739157 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 393.5 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG SALINE COALIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.5			UNCONSOLIDATED	27.0	0.0	
366.5	MODESTO		SANDY SHALE	6.0	27.0	
360.5	MODESTO		SANDSTONE	23.0	33.0	
337.5	MODESTO		DARK SHALE	7.3	56.0	
330.2	MODESTO		COAL	0.4	63.3	
329.7	MODESTO		DARK SHALE	2.3	63.8	
327.5	MODESTO	PIASA	LIMESTONE	2.0	66.0	
325.5	MODESTO		BLACK SHALE	2.0	68.0	
323.5	MODESTO		GRAY SHALE	4.5	70.0	
319.0	CARBONDALE	DANVILLE	COAL	2.3	74.5	
316.7	CARBONDALE		SANDY SHALE	8.6	76.8	
308.1	CARBONDALE		GRAY SHALE	3.0	85.4	
305.1	CARBONDALE		COAL	0.3	88.4	
304.8	CARBONDALE		SANDSTONE	2.0	88.7	
302.8	CARBONDALE		SANDY SHALE	1.5	90.7	
301.3	CARBONDALE	ALLENBY	COAL	0.8	92.2	
300.5	CARBONDALE		UNDERCLAY	4.0	93.0	
296.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	97.0	
290.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	103.0	
276.5	CARBONDALE	ANVIL ROCK	DARK SHALE	18.2	117.0	
258.3	CARBONDALE	BRERETON	LIMESTONE	6.0	135.2	
252.3	CARBONDALE	ANNA	BLACK SHALE	0.5	141.2	
251.8	CARBONDALE	HERRIN	COAL	4.9	141.7	
246.9	CARBONDALE		UNDERCLAY	3.4	146.6	
243.5	CARBONDALE		GRAY SHALE	3.0	150.0	
240.5	CARBONDALE		SANDY SHALE	10.0	153.0	
230.5	CARBONDALE		SANDY SHALE	13.7	163.0	
216.8	CARBONDALE	BRIAR HILL	COAL	0.8	176.7	
216.1	CARBONDALE	DYKERSBURG	SANDY SHALE	3.6	177.4	
212.5	CARBONDALE	DYKERSBURG	SANDSTONE	48.0	181.0	W/ SH PARTINGS
164.5	CARBONDALE	DYKERSBURG	SANDSTONE	19.0	229.0	
145.5	CARBONDALE	DYKERSBURG	SANDY SHALE	18.7	248.0	
126.8	CARBONDALE	SPRINGFIELD	COAL	4.5	266.7	
122.3	CARBONDALE		UNDERCLAY	3.8	271.2	
118.5	CARBONDALE		GRAY SHALE	5.0	275.0	
113.5	CARBONDALE		SANDY SHALE	20.0	280.0	

MAPID: 16500409000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SW SE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682843 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.739157 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log

SOURCE: HARRISBURG-SALINE COLLIERIES **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.0			UNCONSOLIDATED	20.0	0.0	
374.0			ROCK	54.5	20.0	
319.5			COAL	2.3	74.5	
317.2			ROCK	11.6	76.8	
305.6			COAL	0.3	88.4	
305.3			ROCK	3.5	88.7	
301.8			COAL	0.8	92.2	
301.0			ROCK	27.0	93.0	
274.0			BLACK SHALE	15.2	120.0	
258.8			LIMESTONE	6.0	135.2	
252.8			BLACK SHALE	0.5	141.2	
252.3	CARBONDALE	HERRIN	COAL	4.9	141.7	
247.4	CARBONDALE		UNDERCLAY	3.4	146.6	
244.0	CARBONDALE		ROCK	26.7	150.0	
217.3	CARBONDALE	BRIAR HILL	COAL	0.8	176.7	
216.6	CARBONDALE		ROCK	63.6	177.4	
153.0	CARBONDALE		SANDSTONE	7.0	241.0	
146.0	CARBONDALE		SHALE	18.7	248.0	
127.3	CARBONDALE	SPRINGFIELD	COAL	4.3	266.7	
122.8	CARBONDALE		UNDERCLAY	3.8	271.2	
119.0	CARBONDALE		ROCK	0.0	275.0	

MAPID: 16500410000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6742 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.73779 **DATE COLLECTED:** 1 / 12 / 1920

SURFACE ELEVATION (FT.): 399.2 **LOGGED (FT.):** 275.6 **LOG TYPE:** Drillers Log

SOURCE: OLIPHANT-JOHNSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.2			UNCONSOLIDATED	22.0	0.0	
377.2	MODESTO		SANDSTONE	30.0	22.0	
347.2	MODESTO		GRAY SHALE	3.3	52.0	
343.9	MODESTO		LIMESTONE	0.5	55.3	
343.4	MODESTO		GRAY SHALE	0.8	55.8	
342.7	MODESTO	PIASA	LIMESTONE	2.5	56.5	
340.2	MODESTO		SHALE	1.2	59.0	
339.0	MODESTO		BLACK SHALE	2.2	60.2	
336.9	MODESTO		SHALE	4.5	62.3	
332.4	CARBONDALE	DANVILLE	COAL	2.0	66.8	
330.4	CARBONDALE		SHALE	1.0	68.8	
329.4	CARBONDALE		BLACK SHALE	2.0	69.8	
327.4	CARBONDALE		SHALE	8.0	71.8	
319.4	CARBONDALE	"Allenby rider"	COAL	1.0	79.8	
318.4	CARBONDALE		SANDSTONE	2.0	80.8	
316.4	CARBONDALE	ALLENBY	COAL	1.0	82.8	
315.4	CARBONDALE		UNDERCLAY	2.5	83.8	
312.9	CARBONDALE		SHALE	2.6	86.3	
310.3	CARBONDALE		CALCAREOUS SHALE	3.5	88.9	
306.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	92.4	
299.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	99.4	
296.8	CARBONDALE	ANVIL ROCK	SHALE	21.0	102.4	
275.8	CARBONDALE	ANVIL ROCK	BLACK SHALE	0.5	123.4	
275.3	CARBONDALE	JAMESTOWN	COAL	0.6	123.9	
274.7	CARBONDALE	JAMESTOWN	BLACK SHALE	0.5	124.5	
274.2	CARBONDALE	BRERETON	LIMESTONE	6.6	125.0	
267.6	CARBONDALE	ANNA	BLACK SHALE	0.7	131.6	
266.9	CARBONDALE	HERRIN	COAL	4.9	132.3	
262.0	CARBONDALE		UNDERCLAY	3.5	137.2	
258.5	CARBONDALE		SANDY SHALE	10.0	140.7	
248.5	CARBONDALE		SANDSTONE	10.3	150.7	
238.2	CARBONDALE		SHALE	8.5	161.0	
229.7	CARBONDALE	BRIAR HILL	COAL	1.0	169.5	
228.7	CARBONDALE		SHALE	1.0	170.5	
227.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	171.5	
227.4	CARBONDALE	DYKERSBURG	SANDY SHALE	35.0	171.8	
192.4	CARBONDALE	DYKERSBURG	SANDSTONE	20.5	206.8	
171.9	CARBONDALE	DYKERSBURG	BLACK SHALE	42.0	227.3	
129.9	CARBONDALE	SPRINGFIELD	COAL	5.1	269.3	

124.9	CARBONDALE	SHALE	1.3	274.3

MAPID: 16500411000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677083 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.738244 **DATE COLLECTED:** 11 / 25 / 1919

SURFACE ELEVATION (FT.): 402.2 **LOGGED (FT.):** 249.4 **LOG TYPE:** Drillers Log

SOURCE: OLIPHANT JOHNSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.2			UNCONSOLIDATED	30.0	0.0	
372.2	MODESTO		SANDSTONE	14.0	30.0	
358.2	MODESTO	PIASA	LIMESTONE	4.0	44.0	
354.2	MODESTO		SHALE	1.0	48.0	
353.2	MODESTO		BLACK SHALE	1.8	49.0	
351.4	MODESTO		SHALE	3.2	50.8	
348.2	MODESTO		BLACK SHALE	1.4	54.0	
346.8	CARBONDALE	DANVILLE	COAL	1.7	55.4	
345.1	CARBONDALE		SHALE	3.6	57.1	
341.5	CARBONDALE		SANDSTONE	4.7	60.7	
336.9	CARBONDALE		SHALE	3.0	65.3	
333.9	CARBONDALE	"Allenby rider"	COAL	0.5	68.3	
333.4	CARBONDALE		SHALE	1.8	68.8	
331.6	CARBONDALE	ALLENBY	COAL	1.0	70.6	
330.6	CARBONDALE		UNDERCLAY	1.8	71.6	
328.8	CARBONDALE		SHALE	1.8	73.4	
327.0	CARBONDALE		SANDSTONE	3.5	75.2	
323.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	78.7	
316.7	CARBONDALE		SHALE	1.0	85.5	
315.7	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	86.5	
305.2	CARBONDALE	ANVIL ROCK	SHALE	14.6	97.0	
290.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.7	111.6	
285.9	CARBONDALE		BLACK SHALE	0.4	116.3	
285.5	CARBONDALE	JAMESTOWN	COAL	0.6	116.7	
284.9	CARBONDALE		BLACK SHALE	0.5	117.3	
284.4	CARBONDALE	BRERETON	LIMESTONE	6.4	117.8	
278.0	CARBONDALE	ANNA	BLACK SHALE	1.3	124.2	
276.7	CARBONDALE	HERRIN	COAL	4.4	125.5	
272.3	CARBONDALE	HERRIN	COAL	0.8	129.9	
271.6	CARBONDALE		UNDERCLAY	2.5	130.6	
269.1	CARBONDALE		SANDSTONE	3.3	133.1	
265.7	CARBONDALE		SHALE	9.3	136.5	
256.5	CARBONDALE		SANDSTONE	19.6	145.7	
236.9	CARBONDALE	BRIAR HILL	COAL	1.3	165.3	
235.7	CARBONDALE	DYKERSBURG	SHALE	2.4	166.5	
233.2	CARBONDALE	DYKERSBURG	BLACK SHALE	0.2	169.0	
233.1	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	169.1	
227.1	CARBONDALE	DYKERSBURG	SHALE	69.0	175.1	
158.1	CARBONDALE	SPRINGFIELD	COAL	4.3	244.1	

153.8	CARBONDALE		SHALE	1.0	248.4

MAPID: 16500411000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677083 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.738244 **DATE COLLECTED:** 11 / 25 / 1919

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 249.4 **LOG TYPE:** Drillers Log

SOURCE: OLIPHANT-JOHNSON C C **WELL TYPE:** Coal Test

COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	30.0	0.0	
372.0			ROCK	25.4	30.0	
346.6			COAL	1.7	55.4	
344.9			ROCK	11.3	57.1	
333.7			COAL	0.5	68.3	
333.2			SHALE	1.8	68.8	
331.4			COAL	1.0	70.6	
330.4			ROCK	45.1	71.6	
285.3			COAL	0.6	116.7	
284.7			BLACK SHALE	0.5	117.3	
284.2			LIMESTONE	6.4	117.8	
277.8			BLACK SHALE	1.3	124.2	
276.5	CARBONDALE	HERRIN	COAL	5.1	125.5	
271.4	CARBONDALE		UNDERCLAY	2.5	130.6	
268.9	CARBONDALE		ROCK	32.2	133.1	
236.7	CARBONDALE		COAL	1.3	165.3	
235.5	CARBONDALE		ROCK	56.5	166.5	
179.0	CARBONDALE		SHALE	21.1	223.0	
157.9	CARBONDALE	SPRINGFIELD	COAL	4.3	244.1	
153.6	CARBONDALE		ROCK	0.0	248.4	

MAPID: 16501709000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1599' N line, 1185' W line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685033 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.734276 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 223.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			NO RECORD	51.7	0.0	
348.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.0	51.7	
322.3	CARBONDALE		ARGILACEOUS SHALE	1.5	77.7	
320.8	CARBONDALE	BRERETON	LIMESTONE	6.3	79.2	
314.6	CARBONDALE	HERRIN	COAL	5.7	85.4	
308.9	CARBONDALE		UNDERCLAY	4.0	91.1	
304.9	CARBONDALE		SANDSTONE	29.8	95.1	
275.1	CARBONDALE		SHALE	3.3	124.9	
271.7	CARBONDALE	BRIAR HILL	COAL	1.5	128.3	
270.2	CARBONDALE		SHALE	3.1	129.8	
267.2	CARBONDALE	DYKERSBURG	SANDSTONE	2.7	132.8	
264.5	CARBONDALE	DYKERSBURG	SHALE	1.5	135.5	
263.0	CARBONDALE	DYKERSBURG	SANDSTONE	1.3	137.0	
261.7	CARBONDALE	DYKERSBURG	SHALE	12.3	138.3	
249.4	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	150.6	
237.4	CARBONDALE	DYKERSBURG	SHALE	43.8	162.6	
193.6	CARBONDALE	SPRINGFIELD	COAL	5.3	206.4	
188.2	CARBONDALE		UNDERCLAY	1.5	211.8	
186.7	CARBONDALE		SANDSTONE	10.0	213.3	

MAPID: 16501709000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1599' N line, 1185' W line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685033 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.734276 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 223.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	51.7	0.0	
348.3			ROCK	14.3	51.7	
334.0			SHALE	13.2	66.0	
320.8			LIMESTONE	6.3	79.2	
314.6	CARBONDALE	HERRIN	COAL	5.7	85.4	
308.9	CARBONDALE		UNDERCLAY	4.0	91.1	
304.9	CARBONDALE		ROCK	33.2	95.1	
271.7	CARBONDALE	BRIAR HILL	COAL	1.5	128.3	
270.2	CARBONDALE		ROCK	56.3	129.8	
214.0	CARBONDALE		SHALE	20.5	186.0	
193.5	CARBONDALE	SPRINGFIELD	COAL	5.3	206.5	
188.2	CARBONDALE		UNDERCLAY	1.5	211.8	
186.7			ROCK	0.0	213.3	

MAPID: 16501710000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' S line, 710' E line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682398 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.732109 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 237.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	50.0	0.0	
348.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	50.0	
338.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	60.0	
333.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	65.0	
325.0	CARBONDALE	JAMESTOWN	COAL	0.3	73.0	
324.7	CARBONDALE		SHALE	12.0	73.3	
312.7	CARBONDALE		SHALE	1.5	85.3	
311.2	CARBONDALE	BRERETON	LIMESTONE	6.0	86.8	
305.2	CARBONDALE	ANNA	SHALE	0.5	92.8	
304.7	CARBONDALE	HERRIN	COAL	5.5	93.3	
299.2	CARBONDALE		UNDERCLAY	4.4	98.8	
294.7	CARBONDALE		SANDSTONE	23.1	103.3	
271.7	CARBONDALE		SHALE	5.0	126.3	
266.7	CARBONDALE		COAL	0.4	131.3	
266.2	CARBONDALE		SHALE	3.0	131.8	
263.2	CARBONDALE	BRIAR HILL	COAL	1.0	134.8	
262.2	CARBONDALE	DYKERSBURG	SHALE	18.0	135.8	
244.2	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	153.8	
232.2	CARBONDALE	DYKERSBURG	SHALE	64.2	165.8	
168.0	CARBONDALE	SPRINGFIELD	COAL	5.3	230.0	
162.7	CARBONDALE		UNDERCLAY	1.0	235.3	
161.7	CARBONDALE		SANDSTONE	1.0	236.3	

MAPID: 16501710000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' S line, 710' E line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682398 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.732109 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 237.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	50.0	0.0	
348.0			ROCK	23.0	50.0	
325.0			COAL	0.3	73.0	
324.7			SHALE	13.5	73.3	
311.2			LIMESTONE	6.0	86.8	
305.2			SHALE	0.5	92.8	
304.7	CARBONDALE	HERRIN	COAL	5.5	93.3	
299.2	CARBONDALE		UNDERCLAY	4.4	98.8	
294.7	CARBONDALE		ROCK	28.1	103.3	
266.7	CARBONDALE		COAL	0.5	131.3	
266.2	CARBONDALE		ROCK	3.0	131.8	
263.2	CARBONDALE		COAL	1.0	134.8	
262.2	CARBONDALE		ROCK	69.2	135.8	
193.0	CARBONDALE		SHALE	25.0	205.0	
168.0	CARBONDALE	SPRINGFIELD	COAL	5.3	230.0	
162.7	CARBONDALE		UNDERCLAY	1.0	235.3	
161.7			ROCK	0.0	236.3	

MAPID: 16501711000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 42' N line, 1296' E line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684466 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.738575 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.0			UNCONSOLIDATED	40.0	0.0	
371.0	MODESTO		SANDY SHALE	17.0	40.0	
354.0	MODESTO		GRAY SHALE	7.0	57.0	
347.0	MODESTO	PIASA	LIMESTONE	5.0	64.0	
342.0	CARBONDALE	DANVILLE	BLACK SHALE	2.0	69.0	
340.0	CARBONDALE		GRAY SHALE	28.0	71.0	
312.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	99.0	
305.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.0	106.0	
280.0	CARBONDALE		BLACK SHALE	11.0	131.0	
269.0	CARBONDALE	HERRIN	COAL	5.5	142.0	
263.5	CARBONDALE		UNDERCLAY	3.5	147.5	
260.0	CARBONDALE	DYKERSBURG	SANDY SHALE	31.0	151.0	
229.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	182.0	
228.0	CARBONDALE	DYKERSBURG	GRAY SHALE	88.0	183.0	
140.0	CARBONDALE	SPRINGFIELD	COAL	5.1	271.0	
134.9	CARBONDALE		UNDERCLAY	1.0	276.1	

MAPID: 16501711000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 42' N line, 1296' E line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684466 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738575 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 277.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.0			UNCONSOLIDATED	40.0	0.0	
371.0			ROCK	77.0	40.0	
294.0			SHALE	25.0	117.0	
269.0	CARBONDALE	HERRIN	COAL	5.5	142.0	
263.5	CARBONDALE		UNDERCLAY	3.5	147.5	
260.0	CARBONDALE		ROCK	94.0	151.0	
166.0	CARBONDALE		SHALE	26.0	245.0	
140.0	CARBONDALE	SPRINGFIELD	COAL	5.1	271.0	
134.9	CARBONDALE		UNDERCLAY	0.0	276.1	

MAPID: 16501712000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 150' N line, 123' E line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680389 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.738287 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.0			UNCONSOLIDATED	23.0	0.0	
388.0	MODESTO		GRAY SHALE	37.0	23.0	
351.0	MODESTO		SHALE	8.0	60.0	
343.0	MODESTO	PIASA	LIMESTONE	4.0	68.0	
339.0	CARBONDALE		BLACK SHALE	2.0	72.0	DANVILLE COAL HORIZON
337.0	CARBONDALE		GRAY SHALE	24.0	74.0	
313.0	CARBONDALE		LIMESTONE	9.0	98.0	
304.0	CARBONDALE	ANVIL ROCK	GRAY SHALE	28.0	107.0	
276.0	CARBONDALE	BRERETON	LIMESTONE	7.0	135.0	
269.0	CARBONDALE	HERRIN	COAL	5.4	142.0	
263.6	CARBONDALE		UNDERCLAY	2.6	147.4	
261.0	CARBONDALE	DYKERSBURG	SANDY SHALE	32.0	150.0	
229.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	182.0	
228.0	CARBONDALE	DYKERSBURG	GRAY SHALE	37.0	183.0	
191.0	CARBONDALE	DYKERSBURG	SANDY SHALE	26.0	220.0	
165.0	CARBONDALE	DYKERSBURG	GRAY SHALE	33.4	246.0	
131.6	CARBONDALE	SPRINGFIELD	COAL	3.8	279.4	
127.8	CARBONDALE		UNDERCLAY	0.8	283.2	

MAPID: 16501713000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 36' N line, 757' E line of NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677986 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.738606 **DATE COLLECTED:** 11 / 0 / 1920
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 256.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	15.0	0.0	
382.0			SANDY SHALE	28.0	15.0	
354.0			GRAY SHALE	5.0	43.0	
349.0			LIMESTONE	4.0	48.0	
345.0			BLACK SHALE	3.0	52.0	
342.0			GRAY SHALE	23.0	55.0	
319.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	78.0	
312.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	85.0	
301.0	CARBONDALE	ANVIL ROCK	GRAY SHALE	20.0	96.0	
281.0	CARBONDALE		BLACK SHALE	1.0	116.0	
280.0	CARBONDALE	BRERETON	LIMESTONE	5.0	117.0	
275.0	CARBONDALE	ANNA	BLACK SHALE	1.0	122.0	
274.0	CARBONDALE	HERRIN	COAL	5.3	123.0	
268.7	CARBONDALE		UNDERCLAY	2.7	128.3	
266.0	CARBONDALE		SANDSTONE	15.0	131.0	
251.0	CARBONDALE		GRAY SHALE	20.0	146.0	
231.0	CARBONDALE	BRIAR HILL	COAL	2.0	166.0	
229.0	CARBONDALE	DYKERSBURG	GRAY SHALE	80.2	168.0	
148.8	CARBONDALE	SPRINGFIELD	COAL	4.6	248.2	
144.2	CARBONDALE		UNDERCLAY	3.7	252.8	

MAPID: 16503101000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671878 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.734115 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 1445.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-37.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	434.0	
-118.0	SPOON	DAVIS	UNCLASSIFIED	-	515.0	
-1048.0	BASE OF PENN.		UNCLASSIFIED	-	1445.0	

MAPID: 16503101000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671878 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.734115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2370.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1194.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1591.0	
-1589.0			LIMESTONE	-	1986.0	
-1973.0		BASE BARLOW	LIMESTONE	-	2370.0	

MAPID: 16503101000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671878 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.734115 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2725.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD, DALLAS DEWEY ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	326.0	
27.0	CARBONDALE	SURVANT	COAL	0.8	370.0	
-38.0	CARBONDALE	COLCHESTER	COAL	0.5	435.0	
-108.0	CARBONDALE	DEKOVEN	COAL	5.0	505.0	
-108.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	505.0	
-118.0	CARBONDALE	DAVIS	COAL	3.5	515.0	
-159.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	556.0	
-193.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	590.0	

MAPID: 16503613000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671875 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.732257 **DATE COLLECTED:** 0 / 0 / 1969

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 237.8 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			CLAY	31.0	0.0	
366.0			CLAY	4.5	31.0	
361.5	MODESTO		LIGHT SHALE	3.0	35.5	
358.5	MODESTO	PIASA	GRAY LIMESTONE	2.1	38.5	
356.4	MODESTO		LIGHT SHALE	1.5	40.6	
354.9	MODESTO		GRAY SHALE	7.9	42.1	
347.0	CARBONDALE	DANVILLE	COAL	1.3	50.0	
345.7	CARBONDALE		GRAY SHALE	9.7	51.3	
336.0	CARBONDALE		SANDY SHALE	2.5	61.0	
333.5	CARBONDALE	ALLENBY	COAL	0.8	63.5	
332.7	CARBONDALE		LIGHT SHALE	4.8	64.3	
328.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.3	69.0	
317.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	79.3	
316.7	CARBONDALE	ANVIL ROCK	SANDSTONE	3.2	80.3	
313.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.5	83.5	
300.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	97.0	WITH SOME SHALE
293.0	CARBONDALE	ANNA	BLACK SHALE	3.6	104.0	
289.4	CARBONDALE	ENERGY	GRAY SHALE	4.0	107.6	
285.4	CARBONDALE	HERRIN	COAL	5.0	111.6	
280.4	CARBONDALE		UNDERCLAY	3.9	116.6	
276.5	CARBONDALE		SANDSTONE	15.5	120.5	
261.0	CARBONDALE		SANDY SHALE	9.0	136.0	
252.0	CARBONDALE		SANDY SHALE	2.5	145.0	
249.5	CARBONDALE		GRAY SANDSTONE	1.5	147.5	
248.0	CARBONDALE		GRAY SANDSTONE	7.0	149.0	WITH SHALE BANDS
241.0	CARBONDALE		DARK SHALE	2.8	156.0	
238.2	CARBONDALE	BRIAR HILL	COAL	1.6	158.8	
236.7	CARBONDALE		GRAY SHALE	2.7	160.3	
234.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.3	163.0	
232.7	CARBONDALE		GRAY SHALE	7.8	164.3	
225.0	CARBONDALE		LIMESTONE	0.5	172.0	
224.5	CARBONDALE	DYKERSBURG	GRAY SHALE	1.5	172.5	
223.0	CARBONDALE	DYKERSBURG	SANDY SHALE	1.5	174.0	
221.5	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	6.5	175.5	
215.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	7.0	182.0	WITH SDY SH
208.0	CARBONDALE	DYKERSBURG	SANDY SHALE	13.3	189.0	
194.7	CARBONDALE	DYKERSBURG	GRAY SHALE	29.3	202.3	+1'2
165.3	CARBONDALE	SPRINGFIELD	COAL	4.8	231.7	
160.6	CARBONDALE		UNDERCLAY	1.4	236.4	

MAPID: 16503613000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671875 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732257 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 117.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.1	MODESTO	PIASA	LIMESTONE	2.1	38.9	
359.0	MODESTO		GRAY SHALE	9.4	41.0	
349.6	CARBONDALE	DANVILLE	COAL	1.3	50.4	
348.2	CARBONDALE		SILTY SHALE	12.2	51.8	
336.1	CARBONDALE	ALLENBY	COAL	0.8	63.9	
335.3	CARBONDALE		GRAY SHALE	4.8	64.7	
330.6	CARBONDALE	BANKSTON FORK	LIMESTONE	10.3	69.4	
320.2	CARBONDALE	LAWSON	SILTY SHALE	1.0	79.8	
319.2	CARBONDALE	LAWSON	SANDSTONE	3.2	80.8	
316.1	CARBONDALE	LAWSON	SILTY SHALE	13.5	83.9	
302.6	CARBONDALE	LAWSON	SHALE & SANDSTONE	7.0	97.4	
295.6	CARBONDALE	ANNA	BLACK SHALE	3.6	104.4	
292.0	CARBONDALE	ENERGY	GRAY SHALE	4.0	108.0	
288.0	CARBONDALE	HERRIN	COAL	5.0	112.0	

MAPID: 16590875000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 620' N line, 545' E line of SW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686473 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.740688 **DATE COLLECTED:** 7 / 9 / 1980

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 178.6 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 80-13 **WELL TYPE:** Coal Test

COMMENT: PERMIT #94 MINE #7

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0	PLEISTOCENE		CLAY	6.0	0.0	
444.0	MODESTO		SANDSTONE	5.3	6.0	
438.7	MODESTO		SHALE	12.8	11.3	
425.8	MODESTO		BLACK SHALE	5.4	24.2	
420.4	MODESTO		SANDSTONE	9.1	29.6	
411.3	MODESTO		GRAY SHALE	7.3	38.7	
404.0	MODESTO		SANDSTONE	26.8	46.0	
377.2	MODESTO		LIMESTONE	0.4	72.8	
376.7	MODESTO		SHALE	14.6	73.3	
362.2	MODESTO		SANDY SHALE	1.2	87.8	
361.0	MODESTO	PIASA	LIMESTONE	4.0	89.0	
357.0	MODESTO		GRAY SHALE	0.8	93.0	
356.2	MODESTO		BLACK SHALE	0.3	93.8	
355.8	MODESTO		GRAY SHALE	4.8	94.2	
351.0	CARBONDALE	DANVILLE	COAL	1.8	99.0	#7
349.2	CARBONDALE		GRAY SHALE	20.6	100.8	
328.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	121.4	
325.0	CARBONDALE		SHALE	4.0	125.0	
321.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	129.0	
313.5	CARBONDALE	ANVIL ROCK	SHALE	22.4	136.5	
291.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.3	158.9	
285.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.8	164.2	
277.0	CARBONDALE	HERRIN	COAL	4.0	173.0	
273.0	CARBONDALE		UNDERCLAY	1.6	177.0	

MAPID: 16590878000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 17 **QUARTERS/FOOTAGES:** 150' S line, 120' E line of SW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684989 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739104 **DATE COLLECTED:** 8 / 14 / 1984

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 236.1 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 84-17 **WELL TYPE:** Coal Test

COMMENT: PERMIT #94 MINE #7

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	
377.0	MODESTO		SANDSTONE	7.0	33.0	
370.0	MODESTO		SHALE	16.0	40.0	
354.0	MODESTO	PIASA	LIMESTONE	2.0	56.0	
352.0	MODESTO		SHALE	6.0	58.0	
346.0	MODESTO		DARK SHALE	4.0	64.0	
342.0	CARBONDALE		BLACK SHALE	2.0	68.0	
340.0	CARBONDALE		SHALE	2.0	70.0	
338.0	CARBONDALE		SANDSTONE	16.0	72.0	
322.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	88.0	
319.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	91.0	
316.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	94.0	
309.0	CARBONDALE	ANVIL ROCK	SANDY DARK SHALE	9.0	101.0	
300.0	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	110.0	
283.0	CARBONDALE		BLACK SHALE	3.0	127.0	
280.0	CARBONDALE		SHALE	1.0	130.0	
279.0	CARBONDALE	CONANT	LIMESTONE	3.0	131.0	
276.0	CARBONDALE		BLACK SHALE	0.7	134.0	
275.3	CARBONDALE		SHALE	1.0	134.7	
274.3	CARBONDALE	BRERETON	LIMESTONE	2.7	135.7	
271.7	CARBONDALE	ANNA	BLACK SHALE	0.3	138.3	
271.4	CARBONDALE	HERRIN	COAL	4.8	138.6	
266.6	CARBONDALE		SHALE	2.6	143.4	
264.0	CARBONDALE		SANDY SHALE	2.5	146.0	
261.5	CARBONDALE		SANDSTONE	4.5	148.5	
257.0	CARBONDALE		SANDY SHALE	20.0	153.0	
237.0	CARBONDALE	BRIAR HILL	COAL	0.5	173.0	
236.5	CARBONDALE		SHALE	18.5	173.5	
218.0	CARBONDALE		SHALE	18.0	192.0	
200.0	CARBONDALE		SHALE	26.0	210.0	

MAPID: 16500412000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697632 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738197 **DATE COLLECTED:** 6 / 23 / 1905
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	42.0	0.0	
377.0			ROCK	32.0	42.0	
345.0			SHALE	6.0	74.0	
339.0			LIMESTONE	11.0	80.0	
328.0			SHALE	0.5	91.0	
327.5	CARBONDALE	HERRIN	COAL	4.5	91.5	
323.0	CARBONDALE		UNDERCLAY	1.0	96.0	
322.0	CARBONDALE		ROCK	98.0	97.0	
224.0	CARBONDALE		SHALE	24.5	195.0	
199.5	CARBONDALE	SPRINGFIELD	COAL	5.5	219.5	
194.0	CARBONDALE		CLAYSTONE	0.0	225.0	

MAPID: 16500412000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697632 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.738197 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 95.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.5	CARBONDALE	LAWSON	SHALE	32.0	41.5	
345.5	CARBONDALE		SHALE	6.0	73.5	
339.5	CARBONDALE	BRERETON	LIMESTONE	11.0	79.5	
328.5	CARBONDALE	ANNA	BLACK SHALE	0.5	90.5	
328.0	CARBONDALE	HERRIN	COAL	4.5	91.0	

MAPID: 16500412000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697632 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.738197 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	32.0	42.0	
-	CARBONDALE	HERRIN	COAL	4.5	92.0	
-	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	37.0	141.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.5	220.0	

MAPID: 16500412000C **VERSION:** 4 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697632 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.738197 **DATE COLLECTED:** 6 / 23 / 1905

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	42.0	0.0	
377.0	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	42.0	
345.0	CARBONDALE		SHALE	6.0	74.0	
339.0	CARBONDALE	BRERETON	LIMESTONE	11.0	80.0	
328.0	CARBONDALE	ANNA	SHALE	0.5	91.0	
327.5	CARBONDALE	HERRIN	COAL	4.5	91.5	
323.0	CARBONDALE		UNDERCLAY	1.0	96.0	
322.0	CARBONDALE		SHALE	8.0	97.0	
314.0	CARBONDALE		SANDY SHALE	14.0	105.0	
300.0	CARBONDALE		SHALE	22.0	119.0	
278.0	CARBONDALE	DYKERSBURG	SANDSTONE	37.0	141.0	
241.0	CARBONDALE	DYKERSBURG	SHALE	37.0	178.0	
204.0	CARBONDALE	DYKERSBURG	SANDY SHALE	4.5	215.0	
199.5	CARBONDALE	SPRINGFIELD	COAL	5.5	219.5	
194.0	CARBONDALE		UNDERCLAY	1.0	225.0	

MAPID: 16500413000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SW SE SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691969 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.732638 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.1 **LOGGED (FT.):** 216.6 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.1			UNCONSOLIDATED	45.5	0.0	
358.6	CARBONDALE		SHALE	8.0	45.5	
350.6	CARBONDALE	BRERETON	LIMESTONE	8.0	53.5	
342.6	CARBONDALE	ANNA	SHALE	1.0	61.5	
341.6	CARBONDALE	HERRIN	COAL	5.5	62.5	
336.1	CARBONDALE		UNDERCLAY	4.0	68.0	
332.1	CARBONDALE		SANDY SHALE	31.0	72.0	
301.1	CARBONDALE		LIMESTONE	0.3	103.0	
300.8	CARBONDALE	BRIAR HILL	COAL	1.5	103.3	
299.3	CARBONDALE		SANDY SHALE	4.2	104.8	
295.1	CARBONDALE		SHALE	1.0	109.0	
294.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	110.0	
293.1	CARBONDALE	DYKERSBURG	SANDY SHALE	60.0	111.0	
233.1	CARBONDALE	DYKERSBURG	SHALE	6.0	171.0	
227.1	CARBONDALE	SPRINGFIELD	COAL	5.1	177.0	
222.0	CARBONDALE		UNDERCLAY	7.5	182.1	
214.5	CARBONDALE		SANDY SHALE	27.0	189.6	

MAPID: 16500413000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691969 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732638 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 216.6 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	45.5	0.0	
358.5			SHALE	8.0	45.5	
350.5			LIMESTONE	8.0	53.5	
342.5			SHALE	1.0	61.5	
341.5	CARBONDALE	HERRIN	COAL	5.5	62.5	
336.0	CARBONDALE		UNDERCLAY	4.0	68.0	
332.0	CARBONDALE		ROCK	31.3	72.0	
300.7	CARBONDALE		COAL	1.5	103.3	
299.2	CARBONDALE		ROCK	47.2	104.8	
252.0	CARBONDALE		SHALE	25.0	152.0	
227.0	CARBONDALE	SPRINGFIELD	COAL	5.1	177.0	
221.9	CARBONDALE		UNDERCLAY	7.5	182.1	
214.4			ROCK	0.0	189.6	

MAPID: 16501714000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697621 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.732631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.6 **LOGGED (FT.):** 54.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.6			UNCONSOLIDATED	18.3	0.0	
387.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	18.3	
384.3	CARBONDALE	ANVIL ROCK	SHALE	18.5	21.3	
365.8	CARBONDALE		BLACK SHALE	2.7	39.8	
363.2	CARBONDALE	BRERETON	LIMESTONE	5.7	42.4	
357.5	CARBONDALE	ANNA	BLACK SHALE	1.7	48.1	
355.8	CARBONDALE	HERRIN	COAL	5.0	49.8	
350.8	CARBONDALE		UNDERCLAY	0.0	54.8	

MAPID: 16501714000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697621 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 54.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.0			UNCONSOLIDATED	18.3	0.0	
387.7			ROCK	5.8	18.3	
382.0			SHALE	18.4	24.0	
363.6			LIMESTONE	7.3	42.4	
356.2	CARBONDALE	HERRIN	COAL	5.0	49.8	
351.2			UNDERCLAY	0.0	54.8	

MAPID: 16501747000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.695358 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.731707 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.6 **LOGGED (FT.):** 22.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.6			UNCONSOLIDATED	22.5	0.0	
385.1			LIMESTONE	0.0	22.5	

MAPID: 16501748000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.698754 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.732631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.7 **LOGGED (FT.):** 13.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.7			UNCONSOLIDATED	10.5	0.0	
391.2			SANDSTONE	2.7	10.5	
388.5			LIMESTONE	0.0	13.2	

MAPID: 16502455000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.698197 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.738659 **DATE COLLECTED:** 7 / 8 / 1905

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 279.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	33.5	0.0	
-			SANDSTONE	4.0	33.5	
-			ARGILACEOUS SHALE	28.0	37.5	
-			SHALE	1.0	65.5	
-	CARBONDALE	"Allenby rider"	COAL	1.0	66.5	
-	CARBONDALE		UNDERCLAY	4.0	67.5	
-	CARBONDALE		SANDY SHALE	9.5	71.5	
-	CARBONDALE	ALLENBY	COAL	0.2	81.0	
-	CARBONDALE		UNDERCLAY	2.0	81.2	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	83.2	
-	CARBONDALE		SANDY SHALE	31.0	84.2	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.0	115.2	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	1.3	135.2	
-	CARBONDALE	ANVIL ROCK	SHALE	6.0	136.5	
-	CARBONDALE	BRERETON	LIMESTONE	2.2	142.5	
-	CARBONDALE	ANNA	SHALE	4.2	144.7	
-	CARBONDALE	HERRIN	COAL	5.3	148.8	
-	CARBONDALE		UNDERCLAY	4.0	154.1	
-	CARBONDALE		SHALE	5.0	158.1	
-	CARBONDALE		SANDY SHALE	19.0	163.1	
-	CARBONDALE	TURNER MINE	BLACK SHALE	10.0	182.1	
-	CARBONDALE	DYKERSBURG	SANDSTONE	5.1	192.1	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	70.5	197.2	
-	CARBONDALE	DYKERSBURG	SHALE	6.0	267.7	
-	CARBONDALE	SPRINGFIELD	COAL	4.2	273.7	
-	CARBONDALE		UNDERCLAY	1.3	277.8	

MAPID: 16590881000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** 625' N line, 500' W line of NW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696472 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744358 **DATE COLLECTED:** 0 / 0 / 1983

SURFACE ELEVATION (FT.): 502.0 **LOGGED (FT.):** 318.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 83-3 **WELL TYPE:** Coal Test

COMMENT: PERMIT #110 MINE #21

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
502.0	PLEISTOCENE		CLAY	2.5	0.0	
499.5	PLEISTOCENE		SAND	18.5	2.5	
481.0	MODESTO		SANDSTONE	7.0	21.0	
474.0	MODESTO		SANDY SHALE	12.0	28.0	
462.0	MODESTO		LIMESTONE	3.0	40.0	
459.0	MODESTO		SANDY SHALE	1.0	43.0	
458.0	MODESTO		SANDSTONE	9.0	44.0	
449.0	MODESTO		SHALY SANDSTONE	5.0	53.0	
444.0	MODESTO		SANDY SHALE	14.0	58.0	
430.0	MODESTO		BLACK SHALE	1.0	72.0	
429.0	MODESTO		SHALE	0.5	73.0	
428.5	MODESTO		BLACK SHALE	2.5	73.5	
426.0	MODESTO		SANDY SHALE	2.5	76.0	
423.5	MODESTO	POND CREEK	COAL	2.0	78.5	
421.5	MODESTO		SHALE	6.5	80.5	
415.0	MODESTO		SANDSTONE	13.0	87.0	
402.0	MODESTO		SANDSTONE/LIMESTONE	2.0	100.0	
400.0	MODESTO		SANDSTONE	5.0	102.0	
395.0	MODESTO		SANDY SHALE	4.0	107.0	
391.0	MODESTO	PIASA	LIMESTONE	6.3	111.0	
384.7	MODESTO		SHALE	4.7	117.3	
380.0	MODESTO		SANDY SHALE	1.5	122.0	
378.5	MODESTO		BLACK SHALE	2.5	123.5	
376.0	CARBONDALE		SANDY SHALE	17.0	126.0	
359.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	143.0	
356.0	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	146.0	
339.0	CARBONDALE	ANVIL ROCK	SHALE	27.0	163.0	
312.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	190.0	
310.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	192.0	
301.0	CARBONDALE		BLACK SHALE	1.0	201.0	
300.0	CARBONDALE	BRERETON	LIMESTONE	7.0	202.0	
293.0	CARBONDALE	ANNA	BLACK SHALE	1.7	209.0	
291.3	CARBONDALE	HERRIN	COAL	4.1	210.7	
287.2	CARBONDALE		UNDERCLAY	2.2	214.8	
285.0	CARBONDALE		SANDSTONE	6.0	217.0	
279.0	CARBONDALE		SHALE	37.0	223.0	
242.0	CARBONDALE	BRIAR HILL	COAL	0.5	260.0	
241.5	CARBONDALE		SHALE	6.5	260.5	
235.0	CARBONDALE		SHALY SANDSTONE	17.0	267.0	

218.0	CARBONDALE		SANDSTONE	13.0	284.0	
205.0	CARBONDALE		SHALE	21.0	297.0	
184.0	CARBONDALE	SPRINGFIELD	MINE OPENING	-	318.0	OLD MINE WORKS

MAPID: 16500414000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706106 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.730322 **DATE COLLECTED:** 7 / 25 / 1905

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 165.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	20.0	0.0	
390.0			CLAY	12.0	20.0	
378.0	CARBONDALE	BRERETON	LIMESTONE	7.0	32.0	
371.0	CARBONDALE	ANNA	BLACK SHALE	1.0	39.0	
370.0	CARBONDALE	HERRIN	COAL	2.0	40.0	
368.0	CARBONDALE		UNDERCLAY	4.0	42.0	
364.0	CARBONDALE		SANDSTONE	23.0	46.0	
341.0	CARBONDALE		SHALE	11.0	69.0	
330.0	CARBONDALE	BRIAR HILL	COAL	1.0	80.0	
329.0	CARBONDALE		SANDY SHALE	5.0	81.0	
324.0	CARBONDALE		SHALE	21.0	86.0	
303.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	107.0	
301.0	CARBONDALE	DYKERSBURG	SANDY SHALE	21.0	109.0	
280.0	CARBONDALE	DYKERSBURG	SHALE	29.0	130.0	
251.0	CARBONDALE	SPRINGFIELD	COAL	4.0	159.0	
247.0	CARBONDALE		UNDERCLAY	1.0	163.0	

MAPID: 16500414000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706106 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730322 **DATE COLLECTED:** 7 / 14 / 1905
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 165.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	20.0	0.0	
390.0			ROCK	20.0	20.0	
370.0	CARBONDALE	HERRIN	COAL	2.0	40.0	
368.0	CARBONDALE		UNDERCLAY	4.0	42.0	
364.0	CARBONDALE		ROCK	34.0	46.0	
330.0	CARBONDALE	BRIAR HILL	COAL	1.0	80.0	
329.0	CARBONDALE		ROCK	49.0	81.0	
280.0	CARBONDALE		SHALE	29.0	130.0	
251.0	CARBONDALE	SPRINGFIELD	COAL	4.0	159.0	
247.0			UNDERCLAY	0.0	163.0	

MAPID: 16500415000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696517 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.726249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	16.0	
410.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	18.0	
376.0	CARBONDALE	HERRIN	COAL	3.0	52.0	
331.0	CARBONDALE	BRIAR HILL	COAL	0.5	97.0	
330.0	CARBONDALE	CANTON		5.0	98.0	
254.0	CARBONDALE	SPRINGFIELD	COAL	0.5	174.0	

MAPID: 16500415000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696517 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.726249 **DATE COLLECTED:** 7 / 7 / 1905

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT: OTHER LOGS AVAILABLE IN THIS SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.0			UNCONSOLIDATED	16.0	0.0	
412.0			ROCK	12.0	16.0	
400.0			SHALE	17.0	28.0	
383.0			LIMESTONE	6.0	45.0	
377.0			BLACK SHALE	1.5	51.0	
375.5	CARBONDALE	HERRIN	COAL	3.0	52.5	
372.5	CARBONDALE		UNDERCLAY	6.0	55.5	
367.0	CARBONDALE		ROCK	36.0	61.0	
330.5	CARBONDALE		COAL	0.5	97.5	
330.0	CARBONDALE		ROCK	76.0	98.0	
254.0	CARBONDALE		COAL	0.5	174.0	
253.5	CARBONDALE		ROCK	0.0	174.5	

MAPID: 16500415000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NW SW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696517 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.726249 **DATE COLLECTED:** 7 / 7 / 1905

SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.0			UNCONSOLIDATED	16.0	0.0	
412.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	16.0	
410.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	18.0	
400.0	CARBONDALE		ARGILACEOUS SHALE	17.0	28.0	
383.0	CARBONDALE	BRERETON	LIMESTONE	6.0	45.0	
377.0	CARBONDALE	ANNA	BLACK SHALE	1.5	51.0	
375.5	CARBONDALE	HERRIN	COAL	3.0	52.5	
372.5	CARBONDALE		UNDERCLAY	5.5	55.5	
367.0	CARBONDALE		SANDY SHALE	27.0	61.0	
340.0	CARBONDALE		SHALE	9.5	88.0	
330.5	CARBONDALE	BRIAR HILL	COAL	0.5	97.5	
330.0	CARBONDALE		SANDSTONE	5.0	98.0	
325.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	103.0	
323.0	CARBONDALE	DYKERSBURG	SANDY SHALE	45.0	105.0	
278.0	CARBONDALE	DYKERSBURG	SHALE	10.0	150.0	
268.0	CARBONDALE	DYKERSBURG	ARGILACEOUS SHALE	14.0	160.0	
254.0	CARBONDALE	SPRINGFIELD	COAL	0.5	174.0	
253.5	CARBONDALE		UNDERCLAY	0.5	174.5	
253.0	CARBONDALE		SANDSTONE	5.0	175.0	

MAPID: 16500416000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705031 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718474 **DATE COLLECTED:** 7 / 8 / 1905
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 169.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.0			UNCONSOLIDATED	8.0	0.0	
450.0	CARBONDALE		SHALE	4.0	8.0	
446.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	12.0	
428.0	CARBONDALE		BLACK SHALE	8.0	30.0	
420.0	CARBONDALE	BRERETON	LIMESTONE	2.0	38.0	
418.0	CARBONDALE	HERRIN	COAL	5.5	40.0	
412.5	CARBONDALE		UNDERCLAY	4.0	45.5	
408.5	CARBONDALE		ARGILACEOUS SHALE	9.0	49.5	
399.5	CARBONDALE		SHALE	4.0	58.5	
395.5	CARBONDALE		SANDY SHALE	20.0	62.5	
375.5	CARBONDALE		GRAY SHALE	10.0	82.5	
365.5	CARBONDALE		SANDSTONE	48.0	92.5	
317.5	CARBONDALE		SHALE	5.0	140.5	
312.5	CARBONDALE		COAL	0.3	145.5	
312.2	CARBONDALE	DYKERSBURG	SHALE	19.4	145.8	
292.8	CARBONDALE	SPRINGFIELD	COAL	4.3	165.2	
288.5	CARBONDALE		UNDERCLAY	0.0	169.5	T.D.

MAPID: 16500416000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705031 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.718474 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 45.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0	CARBONDALE	LAWSON	DARK GRAY SHALE	4.0	8.0	
446.0	CARBONDALE	LAWSON	SANDSTONE	18.0	12.0	
428.0	CARBONDALE		BLACK SHALE	8.0	30.0	
420.0	CARBONDALE	BRERETON	LIMESTONE	2.0	38.0	
418.0	CARBONDALE	HERRIN	COAL	5.5	40.0	

MAPID: 16501544000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.699954 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717147 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.7 **LOGGED (FT.):** 26.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.7			UNCONSOLIDATED	24.0	0.0	
415.7			COAL	2.3	24.0	
413.4			UNDERCLAY	0.0	26.3	

MAPID: 16501545000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693134 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.72445 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.4 **LOGGED (FT.):** 39.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.4			UNCONSOLIDATED	34.0	0.0	
377.4			BLACK SHALE	0.5	34.0	
376.9			COAL	4.5	34.5	
372.4			UNDERCLAY	0.0	39.0	T.D.

MAPID: 16501545000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693134 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72445 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 39.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.0			UNCONSOLIDATED	34.0	0.0	
377.0			SHALE	0.5	34.0	
376.5	CARBONDALE	HERRIN	COAL	4.5	34.5	
372.0	CARBONDALE		UNDERCLAY	0.0	39.0	

MAPID: 16501546000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693164 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.71992 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.2 **LOGGED (FT.):** 41.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.2			UNCONSOLIDATED	10.2	0.0	
417.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.1	10.2	
412.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.2	14.3	
396.8	CARBONDALE	JAMESTOWN	COAL	0.7	30.4	W/ SH
396.1	CARBONDALE	BRERETON	LIMESTONE	4.8	31.1	
391.3	CARBONDALE	ANNA	BLACK SHALE	0.8	35.9	
390.5	CARBONDALE	HERRIN	COAL	5.0	36.7	
385.5	CARBONDALE		UNDERCLAY	0.0	41.7	T.D.

MAPID: 16501546000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693164 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71992 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 41.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.0			UNCONSOLIDATED	10.2	0.0	
416.8			ROCK	20.3	10.2	
396.6			COAL	0.7	30.4	
395.9			LIMESTONE	4.8	31.1	
391.1			BLACK SHALE	0.8	35.9	
390.3	CARBONDALE	HERRIN	COAL	5.0	36.7	
385.3	CARBONDALE		UNDERCLAY	0.0	41.7	

MAPID: 16501547000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690901 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.8 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.8			UNCONSOLIDATED	27.9	0.0	
427.9	CARBONDALE	ANVIL ROCK	SANDSTONE	5.1	27.9	
422.8	CARBONDALE	ANVIL ROCK	SHALE	16.8	33.0	
406.0	CARBONDALE	JAMESTOWN	COAL	1.5	49.8	W/ SH
404.5	CARBONDALE	BRERETON	LIMESTONE	7.3	51.3	
397.3	CARBONDALE	HERRIN	COAL	5.1	58.5	
392.2	CARBONDALE		UNDERCLAY	0.0	63.6	T.D.

MAPID: 16501547000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690901 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.719935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	27.9	0.0	
428.1			ROCK	21.8	27.9	
406.2			COAL	1.5	49.8	
404.7			LIMESTONE	7.3	51.3	
397.5			COAL	5.1	58.5	
392.4			UNDERCLAY	0.0	63.6	

MAPID: 16501548000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.692044 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 466.7 **LOGGED (FT.):** 62.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
466.7			UNCONSOLIDATED	24.8	0.0	
441.9	CARBONDALE		SHALY SANDSTONE	9.3	24.8	
432.7	CARBONDALE		CLAYSTONE	15.0	34.0	
417.7	CARBONDALE		BLACK SHALE	0.6	49.0	W/ COAL
417.1	CARBONDALE	BRERETON	LIMESTONE	7.6	49.6	
409.5	CARBONDALE	HERRIN	COAL	5.7	57.2	

MAPID: 16501548000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.692044 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 62.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.0			UNCONSOLIDATED	24.8	0.0	
442.2			ROCK	9.3	24.8	
433.0			SHALE	15.0	34.0	
418.0			BLACK SHALE	0.6	49.0	
417.4			LIMESTONE	7.6	49.6	
409.8	CARBONDALE	HERRIN	COAL	5.7	57.2	
404.2			UNDERCLAY	0.0	62.8	

MAPID: 16501549000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.699954 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717147 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.6 **LOGGED (FT.):** 25.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.6			UNCONSOLIDATED	17.9	0.0	
411.7	CARBONDALE	BRERETON	LIMESTONE	3.0	17.9	
408.7	CARBONDALE	HERRIN	COAL	4.6	20.9	

MAPID: 16501549000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.699954 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717147 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 25.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	17.9	0.0	
412.1			LIMESTONE	3.0	17.9	
409.1	CARBONDALE	HERRIN	COAL	4.6	20.9	
404.5			UNDERCLAY	0.0	25.5	

MAPID: 16501550000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.69428 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.721725 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.6 **LOGGED (FT.):** 45.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.6			UNCONSOLIDATED	11.3	0.0	
407.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.4	11.3	
403.9	CARBONDALE		SHALE	17.0	14.7	
386.9	CARBONDALE		CLAYSTONE	3.3	31.7	
383.6	CARBONDALE		SHALE	4.0	35.0	
379.6	CARBONDALE	BRERETON	LIMESTONE	0.7	39.0	
378.9	CARBONDALE	ANNA	BLACK SHALE	0.6	39.7	
378.3	CARBONDALE	HERRIN	COAL	5.0	40.3	
373.3	CARBONDALE		UNDERCLAY	0.0	45.3	T.D.

MAPID: 16501551000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691998 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.725359 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.6 **LOGGED (FT.):** 45.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.6			UNCONSOLIDATED	18.0	0.0	
391.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.5	18.0	
371.1	CARBONDALE		CLAYSTONE	1.7	38.5	
369.4	CARBONDALE	HERRIN	COAL	5.0	40.2	
364.4	CARBONDALE		UNDERCLAY	0.0	45.2	T.D

MAPID: 16501552000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691972 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.729886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 70.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	32.6	0.0	
389.4			CLAY	3.5	32.6	
385.9	CARBONDALE	ANVIL ROCK	SANDSTONE	2.3	36.1	
383.6	CARBONDALE		SHALE	26.3	38.4	
357.3	CARBONDALE	ANNA	BLACK SHALE	1.0	64.7	
356.3	CARBONDALE	HERRIN	COAL	5.0	65.7	
351.3	CARBONDALE		UNDERCLAY	0.0	70.7	T.D.

MAPID: 16501553000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.698766 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.728059 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.9 **LOGGED (FT.):** 80.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.9			UNCONSOLIDATED	28.3	0.0	
417.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	28.3	
412.9	CARBONDALE		SHALE	11.2	33.0	
401.7	CARBONDALE	ANVIL ROCK	SANDSTONE	5.1	44.2	
396.6	CARBONDALE		SHALE	18.6	49.3	
378.1	CARBONDALE		BLACK SHALE	1.6	67.8	
376.5	CARBONDALE	BRERETON	LIMESTONE	5.0	69.4	
371.5	CARBONDALE	ANNA	BLACK SHALE	1.3	74.4	
370.1	CARBONDALE	HERRIN	COAL	4.7	75.8	
365.5	CARBONDALE		UNDERCLAY	0.0	80.4	T.D.

MAPID: 16501554000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701022 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.728964 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.7 **LOGGED (FT.):** 43.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.7			UNCONSOLIDATED	24.3	0.0	
382.4	CARBONDALE		SHALE	8.8	24.3	
373.7	CARBONDALE		SHALE	3.3	33.0	W/ COAL
370.4	CARBONDALE	BRERETON	LIMESTONE	2.0	36.3	
368.4	CARBONDALE	ANNA	BLACK SHALE	0.7	38.3	
367.8	CARBONDALE	HERRIN	COAL	5.0	38.9	
362.8	CARBONDALE		UNDERCLAY	0.0	43.9	

MAPID: 16501554000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701022 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728964 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 43.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	33.0	0.0	
335.0			SHALE	3.3	33.0	
331.7			LIMESTONE	2.0	36.3	
329.7			SHALE	0.7	38.3	
329.1	CARBONDALE	HERRIN	COAL	5.0	38.9	
324.1	CARBONDALE		UNDERCLAY	0.0	43.9	

MAPID: 16501555000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.702178 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.724411 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.2 **LOGGED (FT.):** 80.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.2			UNCONSOLIDATED	26.3	0.0	
435.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.3	26.3	
420.7	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	41.5	
415.2	CARBONDALE	ANVIL ROCK	SHALE	3.6	47.0	
411.6	CARBONDALE	ANVIL ROCK	SANDSTONE	2.8	50.6	
408.9	CARBONDALE		SHALE	14.6	53.3	
394.3	CARBONDALE		BLACK SHALE	1.5	67.9	W/ COAL
392.8	CARBONDALE		UNDERCLAY	2.4	69.4	
390.4	CARBONDALE	BRERETON	LIMESTONE	3.5	71.8	
386.9	CARBONDALE	HERRIN	COAL	5.0	75.3	
381.9	CARBONDALE		UNDERCLAY	0.0	80.3	T.D.

MAPID: 16501555000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.702178 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724411 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 80.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	26.3	0.0	
435.7			ROCK	24.3	26.3	
411.4			SANDSTONE	2.7	50.6	
408.7			SHALE	14.6	53.3	
394.1			BLACK SHALE	1.5	67.9	
392.6			UNDERCLAY	2.4	69.4	
390.2			LIMESTONE	3.5	71.8	
386.7	CARBONDALE	HERRIN	COAL	5.0	75.3	
381.7			UNDERCLAY	0.0	80.3	

MAPID: 16501556000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701052 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.723506 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 76.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	32.6	0.0	
427.4	CARBONDALE	ANVIL ROCK	SANDSTONE	12.8	32.6	
414.7	CARBONDALE		SHALE	20.2	45.3	
394.5	CARBONDALE		BLACK SHALE	0.5	65.5	
394.0	CARBONDALE	BRERETON	LIMESTONE	4.5	66.0	
389.5	CARBONDALE	HERRIN	COAL	5.9	70.5	
383.6	CARBONDALE		UNDERCLAY	0.0	76.4	T.D.

MAPID: 16501557000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705586 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.72075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 67.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
476.0			UNCONSOLIDATED	13.3	0.0	
462.7	CARBONDALE	ANVIL ROCK	SANDSTONE	20.3	13.3	
442.4	CARBONDALE	ANVIL ROCK	SHALE	12.7	33.6	
429.7	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	46.3	
427.2	CARBONDALE		SHALE	2.8	48.8	
424.5	CARBONDALE		BLACK SHALE	1.8	51.5	
422.7	CARBONDALE	BRERETON	LIMESTONE	7.8	53.3	
414.8	CARBONDALE	ANNA	BLACK SHALE	1.7	61.2	
413.2	CARBONDALE	HERRIN	COAL	5.0	62.8	

MAPID: 16501557000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705586 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.0 **LOGGED (FT.):** 67.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
476.0			UNCONSOLIDATED	13.3	0.0	
462.7			ROCK	29.6	13.3	
433.2			SHALE	3.4	42.8	
429.7			SANDSTONE	2.5	46.3	
427.2			SHALE	4.6	48.8	
422.7			LIMESTONE	7.8	53.3	
414.8			SHALE	1.7	61.2	
413.2	CARBONDALE	HERRIN	COAL	5.0	62.8	
408.2			UNDERCLAY	0.0	67.8	

MAPID: 16501558000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705573 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.723485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 72.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.0			UNCONSOLIDATED	31.4	0.0	
435.6	CARBONDALE	ANVIL ROCK	SANDSTONE	5.6	31.4	
430.0	CARBONDALE	ANVIL ROCK	SHALE	1.0	37.0	
429.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.6	38.0	
424.4	CARBONDALE		SHALE	16.7	42.6	
407.7	CARBONDALE		BLACK SHALE	0.8	59.3	
407.0	CARBONDALE	BRERETON	LIMESTONE	6.2	60.0	
400.8	CARBONDALE	ANNA	BLACK SHALE	1.3	66.2	
399.6	CARBONDALE	HERRIN	COAL	5.0	67.4	
394.6	CARBONDALE		UNDERCLAY	0.0	72.4	T.D.

MAPID: 16501558000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705573 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723485 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 72.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.0			UNCONSOLIDATED	31.4	0.0	
435.6			ROCK	15.6	31.4	
420.0			SHALE	13.0	47.0	
407.0			LIMESTONE	6.2	60.0	
400.8			SHALE	1.3	66.2	
399.6	CARBONDALE	HERRIN	COAL	5.0	67.4	
394.6			UNDERCLAY	0.0	72.4	

MAPID: 16501559000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704472 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.8 **LOGGED (FT.):** 27.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.8			UNCONSOLIDATED	9.3	0.0	
430.5	CARBONDALE	ANVIL ROCK	SANDSTONE	4.8	9.3	
425.7	CARBONDALE		SHALE	1.8	14.1	
424.0	CARBONDALE		BLACK SHALE	0.4	15.8	
423.5	CARBONDALE	BRERETON	LIMESTONE	5.8	16.3	
417.8	CARBONDALE	ANNA	BLACK SHALE	0.4	22.0	
417.3	CARBONDALE	HERRIN	COAL	5.5	22.5	
411.9	CARBONDALE		UNDERCLAY	0.0	27.9	T.D.

MAPID: 16501559000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704472 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 27.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	9.3	0.0	
430.7			SANDSTONE	4.8	9.3	
425.9			SHALE	1.0	14.1	
424.9			BLACK SHALE	1.2	15.1	
423.7			LIMESTONE	5.8	16.3	
418.0			SHALE	0.4	22.0	
417.6	CARBONDALE	HERRIN	COAL	5.5	22.4	
412.1			UNDERCLAY	0.0	27.9	

MAPID: 16501560000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697666 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.722613 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.2 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.2			UNCONSOLIDATED	23.8	0.0	
412.4	CARBONDALE	ANVIL ROCK	SANDSTONE	6.2	23.8	
406.3	CARBONDALE		SHALE	18.6	29.9	
387.7	CARBONDALE		BLACK SHALE	0.5	48.5	
387.2	CARBONDALE	BRERETON	LIMESTONE	5.5	49.0	
381.7	CARBONDALE	ANNA	BLACK SHALE	1.0	54.5	
380.7	CARBONDALE	HERRIN	COAL	5.5	55.5	
375.2	CARBONDALE		UNDERCLAY	0.0	61.0	T.D.

MAPID: 16501715000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691981 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.728075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.3 **LOGGED (FT.):** 34.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.3			UNCONSOLIDATED	33.0	0.0	
372.3			COAL	1.0	33.0	
371.3			LIMESTONE	0.0	34.0	T.D.

MAPID: 16501715000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691981 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 34.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	33.0	0.0	
-			ROCK	-		
372.0			COAL	1.0	33.0	
371.0			ROCK	0.0	34.0	

MAPID: 16501716000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704428 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.726224 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.4 **LOGGED (FT.):** 18.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.4			UNCONSOLIDATED	16.5	0.0	
397.9			BLACK SHALE	1.0	16.5	
396.9			COAL	1.0	17.5	
395.9			LIMESTONE	0.0	18.5	T.D.

MAPID: 16501716000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704428 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.726224 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 18.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	16.5	0.0	
380.5			ROCK	1.0	16.5	
379.5			COAL	1.0	17.5	
378.5			ROCK	0.0	18.5	

MAPID: 16501717000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.703298 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.726227 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.2 **LOGGED (FT.):** 46.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.2			UNCONSOLIDATED	26.0	0.0	
386.2			CLAY	12.9	26.0	
373.3			GRAVEL	2.4	38.9	W/ COAL
370.9			CLAY	2.5	41.3	
368.4			CLAY	3.0	43.8	

MAPID: 16501750000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.702213 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.8 **LOGGED (FT.):** 12.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.8			UNCONSOLIDATED	12.0	0.0	
421.8			LIMESTONE	0.0	12.0	

MAPID: 16501751000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SE SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.703907 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.716663 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.7 **LOGGED (FT.):** 6.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.7			UNCONSOLIDATED	6.0	0.0	
438.7			SANDSTONE	0.0	6.0	

MAPID: 16501752000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704472 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.4 **LOGGED (FT.):** 8.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.4			UNCONSOLIDATED	8.5	0.0	
432.9			SANDSTONE	0.0	8.5	

MAPID: 16501753000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.70334 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718032 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.2 **LOGGED (FT.):** 11.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.2			UNCONSOLIDATED	11.4	0.0	
433.8			SANDSTONE	0.0	11.4	

MAPID: 16501754000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704472 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717112 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.9 **LOGGED (FT.):** 11.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.9			UNCONSOLIDATED	11.4	0.0	
428.5			LIMESTONE	0.0	11.4	

MAPID: 16501755000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701081 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718049 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 432.4 **LOGGED (FT.):** 21.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.4			UNCONSOLIDATED	21.8	0.0	
410.6			LIMESTONE	0.0	21.8	

MAPID: 16501756000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE NE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.69825 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719434 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.4 **LOGGED (FT.):** 19.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.4			UNCONSOLIDATED	19.5	0.0	
408.9			SANDSTONE	0.0	19.5	

MAPID: 16501757000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697685 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718983 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.7 **LOGGED (FT.):** 26.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.7			UNCONSOLIDATED	26.3	0.0	
400.4			COAL	0.2	26.3	COAL IN BLUE MUD.

MAPID: 16501758000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696565 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717175 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.6 **LOGGED (FT.):** 16.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.6			UNCONSOLIDATED	16.0	0.0	
427.6			SANDSTONE	0.0	16.0	

MAPID: 16501759000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697695 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717167 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.1 **LOGGED (FT.):** 7.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.1			UNCONSOLIDATED	7.5	0.0	
427.6			SANDSTONE	0.0	7.5	

MAPID: 16501760000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.695433 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 447.2 **LOGGED (FT.):** 12.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
447.2			UNCONSOLIDATED	12.8	0.0	
434.4			SANDSTONE	0.0	12.8	

MAPID: 16501761000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.696553 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719897 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.2 **LOGGED (FT.):** 19.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.2			UNCONSOLIDATED	19.5	0.0	
402.7			SANDSTONE	0.0	19.5	

MAPID: 16501762000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690868 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.725364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.5 **LOGGED (FT.):** 27.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.5			UNCONSOLIDATED	27.5	0.0	
384.0			LIMESTONE	0.0	27.5	

MAPID: 16501763000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690875 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.724459 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.8 **LOGGED (FT.):** 15.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.8			UNCONSOLIDATED	15.6	0.0	
400.2			SANDSTONE	0.0	15.6	

MAPID: 16501764000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.689792 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717227 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.2 **LOGGED (FT.):** 13.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.2			UNCONSOLIDATED	8.5	0.0	
425.7			ARGILACEOUS SHALE	3.0	8.5	
422.7			BLACK SHALE	1.9	11.5	
420.8			LIMESTONE	0.0	13.4	T.D.

MAPID: 16501765000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.689792 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717227 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.1 **LOGGED (FT.):** 11.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.1			UNCONSOLIDATED	10.0	0.0	
420.1			BLACK SHALE	1.3	10.0	
418.8			LIMESTONE	0.0	11.3	

MAPID: 16501766000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.694306 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717192 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.9 **LOGGED (FT.):** 15.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.9			UNCONSOLIDATED	15.3	0.0	
435.6			SANDSTONE	0.0	15.3	T.D.

MAPID: 16501767000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.694303 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718098 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.7 **LOGGED (FT.):** 9.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.7			UNCONSOLIDATED	9.0	0.0	
441.7			SANDSTONE	0.0	9.0	T.D.

MAPID: 16501768000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697692 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718075 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.1 **LOGGED (FT.):** 26.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.1			UNCONSOLIDATED	26.0	0.0	
404.1			LIMESTONE	0.0	26.0	T.D.

MAPID: 16501769000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.69825 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.71852 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.3 **LOGGED (FT.):** 27.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.3			UNCONSOLIDATED	27.3	0.0	
399.0			LIMESTONE	0.0	27.3	

MAPID: 16501770000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693134 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.72445 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.2 **LOGGED (FT.):** 11.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.2			UNCONSOLIDATED	11.2	0.0	
415.0			SANDSTONE	0.0	11.2	T.D.

MAPID: 16501771000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.69428 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.721725 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 9.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	9.6	0.0	
409.4			SANDSTONE	0.0	9.6	T.D.

MAPID: 16501772000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.694277 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.722631 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.1 **LOGGED (FT.):** 9.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.1			UNCONSOLIDATED	9.0	0.0	
408.1			SANDSTONE	0.0	9.0	T.D.

MAPID: 16501773000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693124 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.726261 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.1 **LOGGED (FT.):** 35.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.1			UNCONSOLIDATED	35.5	0.0	
373.6			LIMESTONE	0.0	35.5	T.D.

MAPID: 16501774000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690835 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.730794 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.6 **LOGGED (FT.):** 22.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.6			UNCONSOLIDATED	22.3	0.0	
380.3			SANDSTONE	0.0	22.3	T.D.

MAPID: 16501775000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693101 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.729886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.2 **LOGGED (FT.):** 18.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.2			UNCONSOLIDATED	18.3	0.0	
394.9			SANDSTONE	0.0	18.3	T.D.

MAPID: 16501776000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.703295 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.727138 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.9 **LOGGED (FT.):** 16.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.9			UNCONSOLIDATED	16.5	0.0	
395.4			SANDSTONE	0.0	16.5	T.D.

MAPID: 16501777000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701601 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.727601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.4 **LOGGED (FT.):** 35.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.4			UNCONSOLIDATED	35.7	0.0	
375.7			LIMESTONE	0.0	35.7	T.D.

MAPID: 16501778000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.703305 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.725317 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.8 **LOGGED (FT.):** 21.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.8			UNCONSOLIDATED	21.7	0.0	
401.1			LIMESTONE	0.0	21.7	T.D.

MAPID: 16524143000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690288 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.730335 **DATE COLLECTED:** 8 / 31 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 438.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 1045-C **WELL TYPE:** Coal Test
COMMENT: NO ELEVATION. ISGS CORE# C-12610

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	299.5	0.0	TOP 299.5' NOT IN LOG. START
-	CARBONDALE	ANVIL ROCK	SANDSTONE	19.4	299.5	
-	CARBONDALE	ANNA	BLACK SHALE	3.6	318.9	
-	CARBONDALE	ENERGY	GRAY SHALE	7.4	322.5	
-	CARBONDALE	ENERGY	DARK GRAY SHALE	1.7	329.9	
-	CARBONDALE	HERRIN	COAL	6.9	331.6	
-	CARBONDALE		UNDERCLAY	4.3	338.6	
-	CARBONDALE		SILTSTONE	1.9	342.9	
-	CARBONDALE		UNCLASSIFIED	65.2	344.8	INTERVAL NOT CORED
-	CARBONDALE	DYKERSBURG	GRAY SHALE	18.9	410.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.6	428.9	
-	CARBONDALE		UNDERCLAY	3.5	434.6	

MAPID: 16524450000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** 470' N line, 115' E line of NE NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.698592 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.729944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 468.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	275.0	
112.0	CARBONDALE	SURVANT	COAL	0.7	322.0	
44.0	CARBONDALE	COLCHESTER	COAL	0.5	390.0	
-11.0	CARBONDALE	DEKOVEN	COAL	3.5	445.0	
-11.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	445.0	
-15.0	CARBONDALE	DAVIS	COAL	4.0	449.0	
-34.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	468.0	

MAPID: 165273B0040F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706116 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728497 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 10.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-PAYNE **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	6.0		
-			COAL	0.8		
-			ROCK	4.0		

MAPID: 16501541000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67945 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.720819 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.2 **LOGGED (FT.):** 28.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.2			SOIL	25.0	0.0	
373.2	CARBONDALE	HERRIN	COAL	3.0	25.0	TOP OF COAL ERODED
370.2	CARBONDALE		UNDERCLAY	0.5	28.0	

MAPID: 16501561000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679481 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717175 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.2 **LOGGED (FT.):** 14.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.2			UNCONSOLIDATED	9.8	0.0	
394.4	CARBONDALE	HERRIN	COAL	4.5	9.8	

MAPID: 16501562000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679474 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718086 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.8 **LOGGED (FT.):** 19.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.8			UNCONSOLIDATED	14.3	0.0	
391.5	CARBONDALE	HERRIN	COAL	5.0	14.3	

MAPID: 16501563000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682915 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718103 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 23.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3			UNCONSOLIDATED	18.2	0.0	
393.1	CARBONDALE	HERRIN	COAL	5.3	18.2	

MAPID: 16501564000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684068 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717203 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.8 **LOGGED (FT.):** 14.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.8			UNCONSOLIDATED	8.7	0.0	
402.1	CARBONDALE	HERRIN	COAL	5.5	8.7	

MAPID: 16501565000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68286 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.6 **LOGGED (FT.):** 26.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.6			UNCONSOLIDATED	24.9	0.0	
372.7			COAL	1.5	24.9	
371.2			LIMESTONE	0.0	26.4	T.D.

MAPID: 16501566000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686348 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719027 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.8 **LOGGED (FT.):** 20.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.8			UNCONSOLIDATED	15.3	0.0	
403.5	CARBONDALE	HERRIN	COAL	4.8	15.3	
398.8			UNDERCLAY	0.0	20.0	T.D.

MAPID: 16501567000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688645 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718132 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.1 **LOGGED (FT.):** 24.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.1			UNCONSOLIDATED	16.0	0.0	
412.1			BLACK SHALE	1.9	16.0	
410.2	CARBONDALE	HERRIN	COAL	6.7	17.9	
403.5			UNDERCLAY	0.0	24.6	T.D.

MAPID: 16501568000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686355 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718122 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.5 **LOGGED (FT.):** 17.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.5			UNCONSOLIDATED	12.3	0.0	
402.2	CARBONDALE	HERRIN	COAL	5.6	12.3	
396.7			UNDERCLAY	0.0	17.8	T.D.

MAPID: 16501569000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679464 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718997 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.8 **LOGGED (FT.):** 23.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.8			UNCONSOLIDATED	18.1	0.0	
382.7	CARBONDALE	HERRIN	COAL	5.5	18.1	
377.2			UNDERCLAY	0.0	23.6	T.D.

MAPID: 16501570000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6783 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.720816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.5 **LOGGED (FT.):** 32.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.5			UNCONSOLIDATED	27.3	0.0	
374.2	CARBONDALE	HERRIN	COAL	5.0	27.3	
369.2			UNDERCLAY	0.0	32.3	T.D.

MAPID: 16501572000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672545 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.5 **LOGGED (FT.):** 67.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. # P-6 **WELL TYPE:** Coal Test
COMMENT: J.TRAVELSTEAD FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.5			UNCONSOLIDATED	13.5	0.0	
391.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.9	13.5	
386.1	CARBONDALE	ANVIL ROCK	MUDSTONE	0.8	18.4	
385.2	CARBONDALE	ANVIL ROCK	SANDSTONE	2.3	19.3	W/ SOME GRAVEL
382.9	CARBONDALE	ANVIL ROCK	BLUE SHALE	2.5	21.6	
380.4	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	24.1	
377.9	CARBONDALE	ANVIL ROCK	BLUE SHALE	7.8	26.6	
370.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.6	34.4	
364.5	CARBONDALE		BLACK SHALE	0.7	40.0	W/ SOME COAL
363.8	CARBONDALE	BRERETON	LIMESTONE	4.8	40.7	
359.0	CARBONDALE	ANNA	BLACK SHALE	1.5	45.5	
357.5	CARBONDALE	HERRIN	COAL	5.4	47.0	ELEV. 357.5
352.1	CARBONDALE		UNDERCLAY	4.6	52.4	
347.5	CARBONDALE		SANDSTONE	1.8	57.0	
345.7	CARBONDALE		SHALY LIMESTONE	0.8	58.8	
345.0	CARBONDALE		LIMESTONE	3.0	59.5	
342.0	CARBONDALE		MUDSTONE	4.9	62.5	SOFT

MAPID: 16501572000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672545 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 67.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	13.5	0.0	
391.5			ROCK	10.6	13.5	
380.9			SANDSTONE	2.5	24.1	
378.4			SHALE	7.8	26.6	
370.6			SANDSTONE	5.6	34.4	
365.0			SHALE	0.7	40.0	
364.3			LIMESTONE	4.8	40.7	
359.5			SHALE	1.5	45.5	
358.0	CARBONDALE	HERRIN	COAL	5.4	47.0	
352.6			UNDERCLAY	4.6	52.4	
348.0			ROCK	0.0	57.0	

MAPID: 16501573000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684038 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.720833 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.8 **LOGGED (FT.):** 41.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.8			UNCONSOLIDATED	27.1	0.0	
398.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.8	27.1	
395.9	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	29.9	W/ COAL AND GRAVEL
391.9	CARBONDALE	BRERETON	LIMESTONE	4.3	33.9	
387.6	CARBONDALE	ANNA	BLACK SHALE	0.5	38.2	
387.1	CARBONDALE	HERRIN	COAL	3.3	38.7	
383.9	CARBONDALE		UNDERCLAY	0.0	41.9	

MAPID: 16501573000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684038 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720833 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 41.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.0			UNCONSOLIDATED	29.9	0.0	
396.1			SHALE	4.0	29.9	
392.1			LIMESTONE	4.3	33.9	
387.8			SHALE	0.5	38.2	
387.3	CARBONDALE	HERRIN	COAL	3.3	38.7	
384.1			UNDERCLAY	0.0	41.9	

MAPID: 16501574000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684011 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.3 **LOGGED (FT.):** 39.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-15 **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP NO. 9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.3			UNCONSOLIDATED	23.5	0.0	
367.8			SANDY CLAY	2.6	23.5	
365.2			GRAVEL	1.8	26.1	W/ SOME COAL
363.4	CARBONDALE	BRERETON	LIMESTONE	3.9	27.9	HARD
359.5	CARBONDALE	ANNA	BLACK SHALE	1.2	31.8	
358.3	CARBONDALE	HERRIN	COAL	6.3	33.0	ELEV. 358.28
352.0	CARBONDALE		UNDERCLAY	0.0	39.3	FIRECLAY; NO THICKNESS GIVEN

MAPID: 16501574000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684011 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 39.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.0			UNCONSOLIDATED	27.9	0.0	
363.1			LIMESTONE	3.9	27.9	
359.2			BLACK SHALE	1.2	31.8	
358.0	CARBONDALE	HERRIN	COAL	6.3	33.0	
351.7			UNDERCLAY	0.0	39.3	

MAPID: 16501575000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686308 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.6 **LOGGED (FT.):** 63.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-16 **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP NO. 9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.6			UNCONSOLIDATED	31.9	0.0	
390.7			SANDY CLAY	18.1	31.9	W/ SH AND GRAVEL
372.6	CARBONDALE		COAL	1.3	50.0	
371.3	CARBONDALE	BRERETON	LIMESTONE	5.3	51.3	
365.9	CARBONDALE	ANNA	BLACK SHALE	1.2	56.7	
364.8	CARBONDALE	HERRIN	COAL	5.5	57.8	ELEV. 364.79
359.3	CARBONDALE		UNDERCLAY	0.0	63.3	FIRECLAY; T.D.

MAPID: 16501576000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685137 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 66.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	34.6	0.0	
380.4			ROCK	2.1	34.6	
378.3			SHALE	15.4	36.7	
362.9			BLACK SHALE	1.8	52.1	
361.2			LIMESTONE	6.2	53.8	
355.0			SHALE	1.8	60.0	
353.2	CARBONDALE	HERRIN	COAL	5.0	61.8	
348.2			UNDERCLAY	0.0	66.8	

MAPID: 16501576000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685137 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.727187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.7	CARBONDALE	JAMESTOWN	BLACK SHALE	1.8	52.3	
360.9	CARBONDALE	BRERETON	LIMESTONE	6.2	54.1	
354.7	CARBONDALE	ANNA	BLACK SHALE	1.8	60.3	
353.0	CARBONDALE	HERRIN	COAL	5.0	62.0	

MAPID: 16501576000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685137 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.2 **LOGGED (FT.):** 66.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.2			UNCONSOLIDATED	34.6	0.0	
380.6			SANDSTONE	2.0	34.6	SOFT
378.6			MUDSTONE	15.5	36.6	W/ SH AND GRAVEL
363.1	CARBONDALE		BLACK SHALE	1.8	52.1	W/ THIN COAL STREAK
361.4	CARBONDALE	BRERETON	LIMESTONE	6.2	53.8	HARD
355.2	CARBONDALE	ANNA	BLACK SHALE	1.8	60.0	
353.4	CARBONDALE	HERRIN	COAL	5.0	61.8	ELEV. 353.45
348.4	CARBONDALE		UNDERCLAY	0.0	66.8	FIRECLAY; T.D.

MAPID: 16501577000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.687438 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727181 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.4 **LOGGED (FT.):** 69.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-18 **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.4			UNCONSOLIDATED	34.0	0.0	
386.4			SANDSTONE	6.5	34.0	
379.9			CLAYSTONE	16.7	40.5	
363.2	CARBONDALE		BLACK SHALE	0.6	57.2	W/ SOME COAL
362.6	CARBONDALE	BRERETON	LIMESTONE	6.2	57.8	
356.5	CARBONDALE		BLACK SHALE	1.3	63.9	
355.1	CARBONDALE	HERRIN	COAL	4.6	65.3	

MAPID: 16501578000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.687411 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.730803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.9 **LOGGED (FT.):** 60.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-19 **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.9			UNCONSOLIDATED	24.8	0.0	
376.1			UNCONSOLIDATED	14.8	24.8	
361.3			GRAVEL	2.9	39.6	
358.4			CLAY	5.6	42.5	W/ GRAVEL
352.8	CARBONDALE		BLACK SHALE	0.7	48.1	W/ THIN COAL
352.1	CARBONDALE	BRERETON	LIMESTONE	6.3	48.8	HARD
345.9	CARBONDALE	ANNA	BLACK SHALE	0.8	55.0	
345.1	CARBONDALE	HERRIN	COAL	5.0	55.8	ELEV. 345.02
340.1	CARBONDALE		UNDERCLAY	0.0	60.8	FIRECLAY; T.D.

MAPID: 16501578000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.687411 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 60.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.0			UNCONSOLIDATED	48.1	0.0	
352.9			SHALE	0.7	48.1	
352.2			LIMESTONE	6.3	48.8	
346.0			SHALE	0.8	55.0	
345.2	CARBONDALE	HERRIN	COAL	5.0	55.8	
340.2			UNDERCLAY	0.0	60.8	

MAPID: 16501579000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688605 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 67.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-20 **WELL TYPE:** Coal Test
COMMENT: M.CAPEL FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	36.3	0.0	
393.7	CARBONDALE		SHALE	7.9	36.3	SOFT
385.8	CARBONDALE	ANVIL ROCK	SANDSTONE	4.2	44.2	
381.7	CARBONDALE		SHALE	5.8	48.3	
375.8	CARBONDALE		BLACK SHALE	1.0	54.2	
374.8	CARBONDALE	BRERETON	LIMESTONE	4.9	55.2	
369.9	CARBONDALE	ANNA	BLACK SHALE	1.8	60.1	
368.1	CARBONDALE	HERRIN	COAL	5.5	61.9	ELEV. 368.05
362.6	CARBONDALE		UNDERCLAY	0.0	67.4	FIRECLAY; T.D.

MAPID: 16501579000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688605 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724465 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 67.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	36.3	0.0	
393.7			ROCK	5.8	36.3	
388.0			SHALE	2.2	42.0	
385.8			SANDSTONE	4.2	44.2	
381.7			SHALE	6.8	48.3	
374.8			LIMESTONE	4.9	55.2	
369.9			SHALE	1.8	60.1	
368.1	CARBONDALE	HERRIN	COAL	5.5	61.9	
362.6			UNDERCLAY	0.0	67.4	

MAPID: 16501580000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686328 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.721746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.3 **LOGGED (FT.):** 54.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-21 **WELL TYPE:** Coal Test
COMMENT: A.MILLER FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.3			UNCONSOLIDATED	27.9	0.0	
405.4			UNCONSOLIDATED	13.7	27.9	
391.7	CARBONDALE		BLACK SHALE	1.0	41.6	SLATE
390.7	CARBONDALE	BRERETON	LIMESTONE	6.2	42.6	
384.5	CARBONDALE	ANNA	BLACK SHALE	0.8	48.8	
383.7	CARBONDALE	HERRIN	COAL	4.8	49.6	ELEV. 383.75
379.0	CARBONDALE		UNDERCLAY	0.0	54.3	FIRECLAY; T.D.

MAPID: 16501580000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686328 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721746 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 53.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0			UNCONSOLIDATED	41.6	0.0	
391.4			BLACK SHALE	1.0	41.6	
390.4			LIMESTONE	6.2	42.6	
384.2			SHALE	0.8	48.8	
383.4	CARBONDALE	HERRIN	COAL	4.8	49.6	
378.7			UNDERCLAY	0.0	54.3	

MAPID: 16501581000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688635 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.719943 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 466.2 **LOGGED (FT.):** 56.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-22 **WELL TYPE:** Coal Test
COMMENT: A.MILLER FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
466.2			UNCONSOLIDATED	16.7	0.0	
449.5			SHALY SANDSTONE	4.5	16.7	SOFT
445.0			SANDY MUDSTONE	20.8	21.2	
424.3	CARBONDALE		BLACK SHALE	3.5	41.9	W/ COAL
420.8	CARBONDALE	BRERETON	LIMESTONE	5.0	45.4	
415.8	CARBONDALE	ANNA	BLACK SHALE	1.5	50.4	
414.3	CARBONDALE	HERRIN	COAL	5.0	51.9	
409.3	CARBONDALE		UNDERCLAY	0.0	56.9	T.D.

MAPID: 16501582000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685202 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.719022 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.6 **LOGGED (FT.):** 35.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. # P-23 **WELL TYPE:** Coal Test
COMMENT: A.MILLER FARM; MAP #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.6			UNCONSOLIDATED	26.4	0.0	
404.2	CARBONDALE	BRERETON	LIMESTONE	3.4	26.4	
400.8	CARBONDALE	ANNA	BLACK SHALE	1.0	29.8	
399.8	CARBONDALE	HERRIN	COAL	4.9	30.8	ELEV. 399.78
394.8	CARBONDALE		UNDERCLAY	0.2	35.8	

MAPID: 16501583000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67717 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.718986 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. # S-9 **WELL TYPE:** Coal Test
COMMENT: J.TRAVELSTEAD FARM; NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	12.0	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	6.3	12.0	
-	CARBONDALE		SHALE	17.3	18.3	
-	CARBONDALE	BRERETON	LIMESTONE	6.8	35.5	
-	CARBONDALE	ANNA	BLACK SHALE	1.7	42.3	
-	CARBONDALE	HERRIN	COAL	3.4	44.0	
-	CARBONDALE	HERRIN	PYRITE	0.0	47.4	
-	CARBONDALE	HERRIN	COAL	1.0	47.5	
-	CARBONDALE		UNDERCLAY	2.5	48.5	

MAPID: 16501583000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.67717 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718986 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: AREA HAS SINCE BEEN STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	12.0	0.0	
388.0			ROCK	8.0	12.0	
380.0			SHALE	15.5	20.0	
364.5			LIMESTONE	6.8	35.5	
357.7			SHALE	1.7	42.3	
356.0	CARBONDALE	HERRIN	COAL	4.5	44.0	
351.5			UNDERCLAY	0.0	48.5	

MAPID: 16501584000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677164 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.7199 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 48.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. # S-10 **WELL TYPE:** Coal Test
COMMENT: J.TRAVEL STEAD FARM; NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	12.0	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	12.0	
-	CARBONDALE		SHALE	17.5	15.5	
-	CARBONDALE	BRERETON	LIMESTONE	2.3	33.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.7	35.3	
-	CARBONDALE	ENERGY	SHALE	4.3	36.9	
-	CARBONDALE	HERRIN	COAL	4.8	41.3	
-	CARBONDALE		UNDERCLAY	2.4	46.1	

MAPID: 16501584000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677164 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.7199 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 48.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: AREA HAS BEEN STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	12.0	0.0	
388.0			ROCK	3.5	12.0	
384.5			SHALE	17.5	15.5	
367.0			LIMESTONE	2.3	33.0	
364.7			BLACK SHALE	1.7	35.3	
363.1			SHALE	4.3	36.9	
358.7	CARBONDALE	HERRIN	COAL	4.8	41.3	
353.9			UNDERCLAY	0.0	46.1	

MAPID: 16501585000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672545 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	21.0	0.0	
-	CARBONDALE		SHALE	15.7	21.0	
-	CARBONDALE	ANNA	BLACK SHALE	4.0	36.7	
-	CARBONDALE	ENERGY	GRAY SHALE	4.8	40.7	
-	CARBONDALE	HERRIN	COAL	5.0	45.5	
-	CARBONDALE		UNDERCLAY	2.5	50.5	

MAPID: 16501585000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672545 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	21.0	0.0	
369.0			SHALE	15.0	21.0	
354.0			BLACK SHALE	4.0	36.0	
350.0			SHALE	5.5	40.0	
344.5	CARBONDALE	HERRIN	COAL	5.0	45.5	
339.5			UNDERCLAY	0.0	50.5	

MAPID: 16501586000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674849 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.721719 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #S-12 **WELL TYPE:** Coal Test
COMMENT: J.TRAVELSTEAD FARM; NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	12.0	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	12.0	SOFT
-	CARBONDALE		SHALE	25.0	19.0	
-	CARBONDALE		SHALE	1.0	44.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.3	45.0	
-	CARBONDALE	ANNA	BLACK SHALE	1.0	49.3	
-	CARBONDALE	HERRIN	COAL	5.0	50.3	
-	CARBONDALE		CLAYSTONE	1.8	55.3	

MAPID: 16501587000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684055 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.719016 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 42.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. S-13 **WELL TYPE:** Coal Test
COMMENT: M.CAPE FARM; MAP #9L NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	33.0	0.0	
-	CARBONDALE	BRERETON	LIMESTONE	2.5	33.0	BOULDER
-	CARBONDALE	HERRIN	COAL	5.0	35.5	SOFT
-	CARBONDALE		UNDERCLAY	1.5	40.5	FIRECLAY

MAPID: 16501588000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1260' N line, 1290' W line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675474 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.727838 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.5	79.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	136.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.1	195.0	

MAPID: 16501588000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1260' N line, 1290' W line of NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675474 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.727838 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	61.5	0.0	
328.5			ROCK	8.0	61.5	
320.5			COAL	1.0	69.5	
319.5			SHALE	5.0	70.5	
314.5			LIMESTONE	2.0	75.5	
312.5			SANDSTONE	1.0	77.5	
311.5			SHALE	1.0	78.5	
310.5	CARBONDALE	HERRIN	COAL	5.5	79.5	
305.0	CARBONDALE		UNDERCLAY	4.0	85.0	
301.0	CARBONDALE		ROCK	47.0	89.0	
254.0	CARBONDALE		COAL	2.0	136.0	
252.0	CARBONDALE		ROCK	32.0	138.0	
220.0	CARBONDALE		SHALE	25.0	170.0	
195.0	CARBONDALE	SPRINGFIELD	COAL	5.1	195.0	

MAPID: 16501588000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1260' N line, 1290' W line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675474 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727838 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 200.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #S-21 **WELL TYPE:** Coal Test
COMMENT: C.E. DALLAS FARM; MAP #9; NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	61.5	0.0	CASING IN LOG
-	CARBONDALE		SHALE	8.0	61.5	
-	CARBONDALE	JAMESTOWN	COAL	1.0	69.5	
-	CARBONDALE		BLACK SHALE	5.0	70.5	BLACK SLATE
-	CARBONDALE	BRERETON	LIMESTONE	2.0	75.5	
-	CARBONDALE	ENERGY	SANDSTONE	1.0	77.5	
-	CARBONDALE	ENERGY	SHALE	1.0	78.5	
-	CARBONDALE	HERRIN	COAL	5.5	79.5	
-	CARBONDALE		UNDERCLAY	4.0	85.0	
-	CARBONDALE		SANDSTONE	42.0	89.0	
-	CARBONDALE		SHALE	5.0	131.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	136.0	
-	CARBONDALE		SHALE	8.0	138.0	
-	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	146.0	
-	CARBONDALE	DYKERSBURG	SHALE	37.5	158.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.1	195.5	

MAPID: 16501718000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679474 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718086 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.8 **LOGGED (FT.):** 13.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.8			UNCONSOLIDATED	13.2	0.0	

MAPID: 16501719000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679464 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718997 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.6 **LOGGED (FT.):** 11.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.6			UNCONSOLIDATED	11.4	0.0	
392.2			LIMESTONE	0.0	11.4	T.D.

MAPID: 16501720000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679457 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719908 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.2 **LOGGED (FT.):** 22.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.2			UNCONSOLIDATED	22.6	0.0	

MAPID: 16501721000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6783 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.720816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.8 **LOGGED (FT.):** 22.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.8			UNCONSOLIDATED	22.5	0.0	
377.3			LIMESTONE	0.0	22.5	T.D.

MAPID: 16501722000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681761 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719008 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.9 **LOGGED (FT.):** 26.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.9			UNCONSOLIDATED	26.5	0.0	
379.4			CLAY	0.0	26.5	T.D.

MAPID: 16501723000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681768 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.718097 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.7 **LOGGED (FT.):** 28.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.7			UNCONSOLIDATED	28.0	0.0	
381.7			COAL	0.4	28.0	
381.3			UNDERCLAY	0.0	28.4	T.D.

MAPID: 16501724000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680604 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.719911 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.9 **LOGGED (FT.):** 37.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.9			UNCONSOLIDATED	37.5	0.0	
370.4			LIMESTONE	0.0	37.5	T.D.

MAPID: 16501726000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680587 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.721733 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.9 **LOGGED (FT.):** 34.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.9			UNCONSOLIDATED	31.0	0.0	
339.9			COAL	0.3	31.0	
339.6			SANDSTONE	3.7	31.3	

MAPID: 16501727000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682922 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717194 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.1 **LOGGED (FT.):** 25.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.1			UNCONSOLIDATED	25.0	0.0	
386.1			LIMESTONE	0.0	25.0	T.D.

MAPID: 16501728000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682877 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.722646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.7 **LOGGED (FT.):** 24.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.7			UNCONSOLIDATED	24.2	0.0	
381.5			LIMESTONE	0.0	24.2	T.D.

MAPID: 16501729000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684017 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.723557 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.9 **LOGGED (FT.):** 27.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.9			UNCONSOLIDATED	27.0	0.0	
380.9			LIMESTONE	0.0	27.0	T.D.

MAPID: 16501730000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68287 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.723555 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 24.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	23.2	0.0	
373.8			COAL	1.3	23.2	

MAPID: 16501731000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682853 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.725374 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.1 **LOGGED (FT.):** 29.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.1			UNCONSOLIDATED	25.7	0.0	
371.4			SHALE	4.0	25.7	
367.4			LIMESTONE	0.0	29.7	T.D.

MAPID: 16501732000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681706 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.725374 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.5 **LOGGED (FT.):** 32.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.5			UNCONSOLIDATED	32.0	0.0	
365.5			LIMESTONE	0.0	32.0	T.D.

MAPID: 16501733000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685137 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.727187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.1 **LOGGED (FT.):** 17.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.1			UNCONSOLIDATED	17.5	0.0	
380.6			SANDSTONE	0.0	17.5	T.D.

MAPID: 16501734000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686288 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.727184 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.9 **LOGGED (FT.):** 20.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.9			UNCONSOLIDATED	20.4	0.0	
381.5			SANDSTONE	0.0	20.4	T.D.

MAPID: 16501735000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SE NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.686281 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.72809 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 17.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	17.6	0.0	
384.4			SANDSTONE	0.0	17.6	T.D.

MAPID: 16501736000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680573 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.723555 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.4 **LOGGED (FT.):** 34.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.4			UNCONSOLIDATED	34.6	0.0	
361.8			LIMESTONE	0.0	34.6	T.D.

MAPID: 16501737000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.687425 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.728992 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.8 **LOGGED (FT.):** 17.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.8			UNCONSOLIDATED	17.1	0.0	
384.7			SANDSTONE	0.0	17.1	T.D.

MAPID: 16501738000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685124 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.729001 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.3 **LOGGED (FT.):** 27.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.3			UNCONSOLIDATED	27.5	0.0	
371.8			SANDSTONE	0.0	27.5	T.D.

MAPID: 16501739000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688569 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.729892 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.5 **LOGGED (FT.):** 28.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.5			UNCONSOLIDATED	28.1	0.0	
372.4			SANDSTONE	0.0	28.1	T.D.

MAPID: 16501741000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685215 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.717208 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.9 **LOGGED (FT.):** 14.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.9			UNCONSOLIDATED	14.0	0.0	
394.9			SANDSTONE	0.0	14.0	

MAPID: 16501742000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679995 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.724009 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.2 **LOGGED (FT.):** 15.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.2			UNCONSOLIDATED	15.3	0.0	
387.9			LIMESTONE	0.0	15.3	T.D.

MAPID: 16501743000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SE SW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.678875 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.720365 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.7 **LOGGED (FT.):** 15.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.7			UNCONSOLIDATED	14.3	0.0	
386.4	CARBONDALE	HERRIN	COAL	1.6	14.3	TOP OF COAL ERODED
384.8			UNDERCLAY	0.0	15.9	T.D.

MAPID: 16501744000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677136 **GEOLOGIST:** A.FINLEY
CONFIDENTIAL: N **LATITUDE:** 37.722638 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.1 **LOGGED (FT.):** 16.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.1			UNCONSOLIDATED	16.5	0.0	
379.6			LIMESTONE	0.0	16.5	T.D.

MAPID: 16501745000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.678293 **GEOLOGIST:** A.FINLEY

CONFIDENTIAL: N **LATITUDE:** 37.721727 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.7 **LOGGED (FT.):** 34.8 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.7			UNCONSOLIDATED	34.8	0.0	
361.9			LIMESTONE	0.0	34.8	T.D.

MAPID: 16500417000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658669 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.730866 **DATE COLLECTED:** 8 / 2 / 1905

SURFACE ELEVATION (FT.): 390.7 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: J.HANKINS FARM; HOLE #48

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.7			UNCONSOLIDATED	37.0	0.0	
353.7			CLAY	2.5	37.0	SOFT
351.2	MODESTO		SHALE	1.0	39.5	
350.2	MODESTO	PIASA	LIMESTONE	2.2	40.5	
348.0	MODESTO		BLACK SHALE	1.0	42.7	MIXED W/ COAL
347.0	MODESTO		UNDERCLAY	0.3	43.7	
346.7	MODESTO		BLACK SHALE	4.5	44.0	
342.2	CARBONDALE	DANVILLE	COAL	1.0	48.5	
341.2	CARBONDALE		BLACK SHALE	7.5	49.5	
333.7	CARBONDALE		SANDSTONE	6.0	57.0	
327.7	CARBONDALE		BLACK SHALE	0.5	63.0	
327.2	CARBONDALE	ALLENBY	COAL	1.0	63.5	
326.2	CARBONDALE		UNDERCLAY	2.0	64.5	
324.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	66.5	
316.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	74.5	
304.7	CARBONDALE		BLACK SHALE	21.0	86.0	
283.7	CARBONDALE		SANDY SHALE	5.0	107.0	
278.7	CARBONDALE		LIMESTONE	2.0	112.0	BASTARD
276.7	CARBONDALE	BRERETON	LIMESTONE	7.0	114.0	
269.7	CARBONDALE	ANNA	BLACK SHALE	1.5	121.0	
268.2	CARBONDALE		COAL	6.0	122.5	
262.2	CARBONDALE		UNDERCLAY	3.0	128.5	
259.2	CARBONDALE		SANDSTONE	14.0	131.5	
245.2	CARBONDALE		SANDY SHALE	11.4	145.5	
233.7	CARBONDALE		SANDY SLATE	16.0	157.0	
217.7	CARBONDALE	BRIAR HILL	COAL	2.0	173.0	
215.7	CARBONDALE	DYKERSBURG	SANDY SLATE	38.0	175.0	
177.7	CARBONDALE	DYKERSBURG	BLACK SHALE	37.0	213.0	
140.7	CARBONDALE	SPRINGFIELD	COAL	4.6	250.0	
136.1	CARBONDALE		UNDERCLAY	2.4	254.6	

MAPID: 16500417000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658669 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.730866 **DATE COLLECTED:** 8 / 2 / 1905

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.0			UNCONSOLIDATED	37.0	0.0	
354.0			ROCK	5.7	37.0	
348.3			COAL	1.0	42.7	
347.3			ROCK	4.8	43.7	
342.5			COAL	1.0	48.5	
341.5			ROCK	14.0	49.5	
327.5			COAL	1.0	63.5	
326.5			ROCK	35.5	64.5	
291.0			BLACK SHALE	12.0	100.0	
279.0			LIMESTONE	9.0	112.0	
270.0			BLACK SHALE	1.5	121.0	
268.5	CARBONDALE	HERRIN	COAL	6.0	122.5	
262.5	CARBONDALE		UNDERCLAY	3.0	128.5	
259.5	CARBONDALE		ROCK	41.5	131.5	
218.0	CARBONDALE	BRIAR HILL	COAL	2.0	173.0	
216.0	CARBONDALE		SHALE	75.0	175.0	
141.0	CARBONDALE	SPRINGFIELD	COAL	4.6	250.0	
136.4	CARBONDALE		UNDERCLAY	0.0	254.6	

MAPID: 16500418000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665029 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725803 **DATE COLLECTED:** 5 / 16 / 1905
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 206.4 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: J.M.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.0			UNCONSOLIDATED	40.0	0.0	
349.0	CARBONDALE		SANDSTONE	1.5	40.0	
347.5	CARBONDALE		SHALE	26.0	41.5	
321.5	CARBONDALE	BRERETON	LIMESTONE	5.5	67.5	
316.0	CARBONDALE	ANNA	BLACK SHALE	2.0	73.0	
314.0	CARBONDALE	HERRIN	COAL	5.5	75.0	
308.5	CARBONDALE		UNDERCLAY	3.5	80.5	
305.0	CARBONDALE		SHALE	39.0	84.0	
266.0	CARBONDALE	BRIAR HILL	COAL	1.3	123.0	BONY
264.7	CARBONDALE		BLACK SHALE	4.0	124.3	
260.7	CARBONDALE		LIMESTONE	1.3	128.3	
259.5	CARBONDALE	DYKERSBURG	SHALE	68.0	129.5	SOAPSTONE
191.5	CARBONDALE	SPRINGFIELD	COAL	4.0	197.5	
187.5	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.0	201.5	
187.5	CARBONDALE	SPRINGFIELD	COAL	0.8	201.5	
186.6	CARBONDALE		UNDERCLAY	4.0	202.4	

MAPID: 16500419000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 140' S line, 20' W line of SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670731 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.724389 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 191.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	33.0	
357.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	38.0	
353.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	37.0	42.0	
297.0	CARBONDALE	BRIAR HILL	COAL	1.5	98.0	
243.0	CARBONDALE	CANTON		23.0	152.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	6.3	185.0	

MAPID: 16500419000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 140' S line, 20' W line of SW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670731 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.724389 **DATE COLLECTED:** 6 / 12 / 1905

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 191.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	25.0	0.0	
370.0			ROCK	73.5	25.0	
296.5			COAL	1.5	98.5	
295.0			ROCK	60.0	100.0	
235.0			SANDSTONE	15.0	160.0	
220.0			SHALE	10.0	175.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	6.3	185.0	
203.7			UNDERCLAY	0.0	191.3	

MAPID: 16500419000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 140' S line, 20' W line of SW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670731 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.724389 **DATE COLLECTED:** 5 / 12 / 1905

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 191.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TUST, HOLE #28 **WELL TYPE:** Coal Test

COMMENT: J.M.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	10.0	0.0	
385.0			SAND	15.0	10.0	
370.0			SHALE	8.0	25.0	
362.0	CARBONDALE		SANDSTONE	5.0	33.0	
357.0	CARBONDALE		LIMESTONE	3.0	38.0	
354.0	CARBONDALE		BLACK SHALE	0.5	41.0	
353.5	CARBONDALE		UNDERCLAY	1.0	41.5	HERRIN COAL HORIZON
352.5	CARBONDALE		SANDSTONE	7.0	42.5	
345.5	CARBONDALE		SHALE	10.0	49.5	
335.5	CARBONDALE		SANDSTONE	20.0	59.5	
315.5	CARBONDALE		SHALE	9.0	79.5	
306.5	CARBONDALE		SHALE	10.0	88.5	
296.5	CARBONDALE	BRIAR HILL	COAL	1.5	98.5	
295.0	CARBONDALE		UNDERCLAY	1.0	100.0	
294.0	CARBONDALE		SHALE	5.0	101.0	
289.0	CARBONDALE		LIMESTONE	1.0	106.0	
288.0	CARBONDALE	DYKERSBURG	SHALE	20.0	107.0	
268.0	CARBONDALE	DYKERSBURG	SHALE	10.0	127.0	
258.0	CARBONDALE	DYKERSBURG	SHALE	15.0	137.0	
243.0	CARBONDALE	DYKERSBURG	SANDSTONE	23.0	152.0	
220.0	CARBONDALE	DYKERSBURG	SHALE	10.0	175.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	6.3	185.0	
203.7	CARBONDALE		UNDERCLAY	0.0	191.3	T.D.

MAPID: 16500420000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 130' N line, 150' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661079 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.719921 **DATE COLLECTED:** 7 / 14 / 1905
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 205.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	14.0	0.0	
381.0			ROCK	33.5	14.0	
347.5			COAL	0.2	47.5	
347.3			SHALE	2.0	47.7	
345.3			LIMESTONE	4.3	49.7	
341.0			SHALE	1.0	54.0	
340.0	CARBONDALE	HERRIN	COAL	5.0	55.0	
335.0	CARBONDALE		ROCK	50.6	60.0	
284.4	CARBONDALE	BRIAR HILL	COAL	1.4	110.6	
283.0	CARBONDALE		ROCK	59.0	112.0	
224.0	CARBONDALE		SHALE	25.3	171.0	
198.7	CARBONDALE	SPRINGFIELD	COAL	6.4	196.3	
192.3	CARBONDALE		UNDERCLAY	0.0	202.7	

MAPID: 16500420000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 130' N line, 150' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661079 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.719921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0	CARBONDALE	LAWSON	SILTY SHALE	33.5	14.0	
347.5	CARBONDALE	JAMESTOWN	COAL	0.2	47.5	
347.3	CARBONDALE		DARK GRAY SHALE	2.0	47.7	
345.3	CARBONDALE	BRERETON	LIMESTONE	4.3	49.7	
341.0	CARBONDALE	ANNA	BLACK SHALE	1.0	54.0	
340.0	CARBONDALE	HERRIN	COAL	5.0	55.0	

MAPID: 16500420000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** 130' N line, 150' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661079 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.719921 **DATE COLLECTED:** 7 / 14 / 1905
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 205.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: A.RUSSEL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	14.0	0.0	
381.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	33.5	14.0	
347.5	CARBONDALE	JAMESTOWN	COAL	0.2	47.5	
347.3	CARBONDALE		SHALE	2.0	47.7	
345.3	CARBONDALE	BRERETON	LIMESTONE	4.3	49.7	
341.0	CARBONDALE	ANNA	BLACK SHALE	1.0	54.0	
340.0	CARBONDALE	HERRIN	COAL	5.0	55.0	
335.0	CARBONDALE		SHALE	2.0	60.0	
333.0	CARBONDALE		SANDSTONE	22.0	62.0	
311.0	CARBONDALE		SANDY SHALE	18.0	84.0	
293.0	CARBONDALE		SHALE	8.6	102.0	
284.4	CARBONDALE	BRIAR HILL	COAL	1.4	110.6	
283.0	CARBONDALE		SHALE	4.5	112.0	
278.5	CARBONDALE		LIMESTONE	2.5	116.5	
276.0	CARBONDALE	DYKERSBURG	SHALE	77.3	119.0	
198.7	CARBONDALE	SPRINGFIELD	COAL	6.4	196.3	
192.3	CARBONDALE		UNDERCLAY	2.3	202.7	W/ SHALE

MAPID: 16501589000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670265 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.720789 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.7 **LOGGED (FT.):** 41.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-5 **WELL TYPE:** Coal Test
COMMENT: E.MANIER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.7			UNCONSOLIDATED	12.8	0.0	
388.9			SANDSTONE	2.3	12.8	SOFT
386.7			SHALE	7.6	15.0	W/ GRAVEL
379.1			SANDSTONE	2.6	22.6	SOFT
376.5			SHALE	1.8	25.2	TOUGH
374.8	CARBONDALE	HERRIN	COAL	3.7	26.9	COAL MAY BE FAULTED-CGT
371.1			UNDERCLAY	6.2	30.6	W/ SOME SLATE
364.9	CARBONDALE	HERRIN	COAL	4.7	36.8	
360.3			UNDERCLAY	0.0	41.4	T.D.

MAPID: 16501589000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670265 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720789 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 41.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	12.8	0.0	
389.2			ROCK	2.3	12.8	
387.0			SHALE	7.6	15.0	
379.4			SANDSTONE	2.6	22.6	
376.8			SHALE	1.8	25.2	
375.1			COAL	3.7	26.9	
371.4			UNDERCLAY	6.2	30.6	
365.2			COAL	4.7	36.8	
360.6			UNDERCLAY	0.0	41.4	

MAPID: 16501590000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670223 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724457 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.6 **LOGGED (FT.):** 52.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-7 **WELL TYPE:** Coal Test
COMMENT: W.SISTERS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.6			UNCONSOLIDATED	5.0	0.0	
389.6			SAND	31.9	5.0	
357.7			GRAVEL	7.5	36.9	
350.2			SHALE	1.5	44.4	W/ BLUE MUD
348.7	CARBONDALE	BRERETON	LIMESTONE	0.5	45.9	
348.2	CARBONDALE	ANNA	BLACK SHALE	2.6	46.4	
345.6	CARBONDALE	HERRIN	COAL	3.8	49.0	INCOMPLETE THICKNESS,CORING

MAPID: 16501591000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665672 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.717089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.2 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-9 **WELL TYPE:** Coal Test
COMMENT: C.BROTHERS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.2			UNCONSOLIDATED	15.2	0.0	
416.0			SANDSTONE	3.2	15.2	
412.9			LIMESTONE	2.1	18.3	
410.8			COAL	0.3	20.4	SOFT
410.4			LIMESTONE	6.7	20.8	
403.8			SHALE	2.0	27.4	SOFT
401.8	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	29.4	HARD
397.8	CARBONDALE	ANVIL ROCK	SHALE	3.1	33.4	SOFT
394.7	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	36.5	HARD
391.2	CARBONDALE	ANVIL ROCK	MUDSTONE	4.0	40.0	STIFF
387.2	CARBONDALE	ANVIL ROCK	SANDSTONE	4.8	44.0	
382.4	CARBONDALE	ANVIL ROCK	SHALE	5.7	48.8	SOFT
376.7	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	54.5	HARD
368.7	CARBONDALE		SHALE	0.8	62.5	SOFT
367.9	CARBONDALE	BRERETON	LIMESTONE	4.1	63.3	
363.9	CARBONDALE	ANNA	BLACK SHALE	2.2	67.3	
361.7	CARBONDALE	HERRIN	COAL	5.5	69.5	ELEV. 361.67
356.2	CARBONDALE		UNDERCLAY	0.0	75.0	T.D.

MAPID: 16501591000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665672 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717089 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	15.2	0.0	
415.8			ROCK	39.3	15.2	
376.5			SANDSTONE	8.0	54.5	
368.5			SHALE	0.8	62.5	
367.7			LIMESTONE	4.1	63.3	
363.7			BLACK SHALE	2.2	67.3	
361.5	CARBONDALE	HERRIN	COAL	5.5	69.5	
356.0			UNDERCLAY	0.0	75.0	

MAPID: 16501592000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66564 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.720766 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.9 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-10 **WELL TYPE:** Coal Test
COMMENT: E.MANIER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.9			UNCONSOLIDATED	21.5	0.0	
394.4			LIMESTONE	7.1	21.5	
387.3			CLAYSTONE	1.8	28.6	SOFT
385.6			SANDSTONE	8.6	30.3	
377.0			SHALE	12.3	38.9	GRAY
364.6			SANDSTONE	3.5	51.3	
361.1			SANDY SHALE	3.7	54.8	
357.5			BLACK SHALE	2.0	58.4	
355.5			SHALE	3.1	60.4	
352.4			MUDSTONE	6.0	63.5	W/ BLUE SHALE
346.4	CARBONDALE	HERRIN	COAL	5.5	69.5	ELEV. 346.44
340.9			UNDERCLAY	0.0	75.0	T.D.

MAPID: 16501592000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66564 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720766 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.0			UNCONSOLIDATED	21.5	0.0	
394.5			ROCK	23.5	21.5	
371.0			SHALE	6.3	45.0	
364.7			SANDSTONE	3.5	51.3	
361.2			SHALE	14.8	54.8	
346.5	CARBONDALE	HERRIN	COAL	5.5	69.5	
341.0			UNDERCLAY	0.0	75.0	

MAPID: 16501593000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6564 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 78.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-65 **WELL TYPE:** Coal Test
COMMENT: A.RUSSEL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0			UNCONSOLIDATED	14.4	0.0	
418.6			SANDSTONE	2.0	14.4	
416.6			CLAYSTONE	2.4	16.4	
414.2	CARBONDALE		SHALE	3.8	18.8	
410.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	22.6	
402.9	CARBONDALE		SHALE	4.6	30.1	
398.3	CARBONDALE	ANVIL ROCK	SHALE	27.4	34.7	
370.9	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	62.1	
368.9	CARBONDALE	ANVIL ROCK	SHALE	3.0	64.1	
365.9	CARBONDALE	BRERETON	LIMESTONE	4.3	67.1	
361.7	CARBONDALE	ANNA	BLACK SHALE	1.3	71.3	
360.3	CARBONDALE	HERRIN	COAL	6.0	72.7	ELEV. 360.34
354.3	CARBONDALE		UNDERCLAY	0.0	78.7	

MAPID: 16501593000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6564 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 78.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0			UNCONSOLIDATED	14.5	0.0	
418.5			ROCK	32.5	14.5	
386.0			SHALE	15.1	47.0	
370.9			SANDSTONE	2.0	62.1	
368.9			SHALE	3.0	64.1	
365.9			LIMESTONE	4.3	67.1	
361.7			BLACK SHALE	1.3	71.3	
360.3	CARBONDALE	HERRIN	COAL	6.0	72.7	
354.3			UNDERCLAY	0.0	78.7	

MAPID: 16501594000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659853 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.722576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.5 **LOGGED (FT.):** 71.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-66 **WELL TYPE:** Coal Test
COMMENT: A.RUSSEL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.5			UNCONSOLIDATED	27.1	0.0	
365.4	CARBONDALE	ANVIL ROCK	SHALE	24.1	27.1	
341.3	CARBONDALE	ANVIL ROCK	SANDSTONE	6.8	51.2	
334.6	CARBONDALE	BRERETON	LIMESTONE	6.3	57.9	
328.2	CARBONDALE	ANNA	BLACK SHALE	1.1	64.3	
327.2	CARBONDALE	HERRIN	COAL	6.0	65.3	
321.2	CARBONDALE		UNDERCLAY	0.0	71.3	T.D.

MAPID: 16501594000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659853 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.722576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 71.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0			UNCONSOLIDATED	27.1	0.0	
364.9			ROCK	12.9	27.1	
352.0			SHALE	11.2	40.0	
340.8			SANDSTONE	6.8	51.2	
334.1			LIMESTONE	6.3	57.9	
327.7			SHALE	1.1	64.3	
326.7	CARBONDALE	HERRIN	COAL	6.0	65.3	
320.7			UNDERCLAY	0.0	71.3	

MAPID: 16501595000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662157 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.723507 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.4 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-67 **WELL TYPE:** Coal Test
COMMENT: E.MANIER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.4			UNCONSOLIDATED	19.6	0.0	
371.8	CARBONDALE	ANVIL ROCK	SANDSTONE	6.9	19.6	
364.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.4	26.5	
339.5	CARBONDALE	BRERETON	LIMESTONE	5.0	51.9	
334.5	CARBONDALE	ANNA	BLACK SHALE	1.7	56.9	
332.8	CARBONDALE	HERRIN	COAL	5.0	58.6	ELEV. 332.82
327.8	CARBONDALE		UNDERCLAY	0.0	63.6	

MAPID: 16501595000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662157 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723507 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.0			UNCONSOLIDATED	19.6	0.0	
371.4			ROCK	39.0	19.6	
332.4	CARBONDALE	HERRIN	COAL	1.7	58.6	

MAPID: 16501779000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670202 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726293 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 72.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-8 **WELL TYPE:** Coal Test
COMMENT: W.SISTERS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.0			UNCONSOLIDATED	22.8	0.0	
371.2			UNKNOWN	15.8	22.8	SANDY FORMATION, BLUE, SOFT
355.4			UNCLASSIFIED	6.2	38.6	NO RECORD
349.2			BLACK SHALE	7.3	44.8	W/ THIN COAL; BITS OF WOOD
341.9			GRAVEL	10.1	52.1	SANDY; BLUE W/ GRAVEL
331.8			SANDSTONE	10.4	62.2	
321.4			MUDSTONE	0.0	72.6	CORING PROBLEMS; T.D.

MAPID: 16500422000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1290' N line, 30' E line of NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633943 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 224.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: JNO. SHAW FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0			UNCONSOLIDATED	30.0	0.0	
353.0			SHALE	42.0	30.0	
311.0	CARBONDALE	BRERETON	LIMESTONE	3.0	72.0	
308.0	CARBONDALE	HERRIN	COAL	3.0	75.0	
305.0	CARBONDALE		UNDERCLAY	4.0	78.0	
301.0	CARBONDALE		SANDSTONE	17.0	82.0	
284.0	CARBONDALE		BLACK SHALE	42.0	99.0	
242.0	CARBONDALE		COAL	1.0	141.0	
241.0	CARBONDALE		SHALE	23.0	142.0	
218.0	CARBONDALE		LIMESTONE	1.5	165.0	
216.5	CARBONDALE		BLACK SHALE	0.5	166.5	
216.0	CARBONDALE	DYKERSBURG	SHALE	50.0	167.0	
166.0	CARBONDALE	SPRINGFIELD	COAL	7.0	217.0	

MAPID: 16500422000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1290' N line, 30' E line of NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633943 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 224.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0			UNCONSOLIDATED	30.0	0.0	
353.0			ROCK	20.0	30.0	
333.0			SHALE	22.0	50.0	
311.0			LIMESTONE	3.0	72.0	
308.0	CARBONDALE	HERRIN	COAL	3.0	75.0	
305.0	CARBONDALE		UNDERCLAY	4.0	78.0	
301.0	CARBONDALE		ROCK	59.0	82.0	
242.0	CARBONDALE		COAL	1.0	141.0	
241.0	CARBONDALE		ROCK	50.0	142.0	
191.0	CARBONDALE		SHALE	25.0	192.0	
166.0	CARBONDALE	SPRINGFIELD	COAL	7.0	217.0	

MAPID: 16500423000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650617 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 214.7 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: A.B. TROUT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	65.0	0.0	
320.0	CARBONDALE	BRERETON	LIMESTONE	5.1	65.0	
314.9	CARBONDALE	ANNA	BLACK SHALE	1.2	70.1	
313.7	CARBONDALE	HERRIN	COAL	5.1	71.3	
308.7	CARBONDALE		UNDERCLAY	3.3	76.3	
305.3	CARBONDALE		SANDSTONE	33.3	79.7	
272.1	CARBONDALE		SANDY SLATE	12.3	112.9	
259.7	CARBONDALE	BRIAR HILL	UNCLASSIFIED	1.6	125.3	
258.2	CARBONDALE		UNDERCLAY	4.4	126.8	W/ SH
253.7	CARBONDALE	DYKERSBURG	SANDY SLATE	74.9	131.3	
178.8	CARBONDALE	SPRINGFIELD	COAL	5.8	206.2	
173.1	CARBONDALE		UNDERCLAY	2.8	211.9	W/ SH

MAPID: 16500423000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650617 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.726243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 214.7 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	65.0	0.0	
320.0			LIMESTONE	5.1	65.0	
314.9			SHALE	1.2	70.1	
313.7	CARBONDALE	HERRIN	COAL	5.1	71.3	
308.7	CARBONDALE		UNDERCLAY	3.3	76.3	
305.3	CARBONDALE		ROCK	45.6	79.7	
259.7	CARBONDALE	BRIAR HILL	COAL	1.6	125.3	
258.2	CARBONDALE		ROCK	54.2	126.8	
204.0	CARBONDALE		SHALE	25.8	181.0	
178.2	CARBONDALE	SPRINGFIELD	COAL	5.3	206.8	
173.1	CARBONDALE		UNDERCLAY	0.0	211.9	

MAPID: 16500424000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 75' S line, 100' E line of NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638834 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.720487 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	12.0	
404.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	21.0	
397.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	32.0	28.0	
357.0	CARBONDALE	HERRIN	COAL	5.5	68.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	7.3	215.0	

MAPID: 16500424000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 75' S line, 100' E line of NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638834 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.720487 **DATE COLLECTED:** 7 / 23 / 1905

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 222.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	12.0	0.0	
413.0			ROCK	25.0	12.0	
388.0			SHALE	2.0	37.0	
386.0			SANDSTONE	21.0	39.0	
365.0			LIMESTONE	1.0	60.0	
364.0			BLACK SHALE	1.0	61.0	
363.0			LIMESTONE	4.0	62.0	
359.0			SANDSTONE	1.0	66.0	
358.0			SHALE	1.0	67.0	
357.0	CARBONDALE	HERRIN	COAL	5.0	68.0	
352.0	CARBONDALE		UNDERCLAY	7.0	73.0	
345.0	CARBONDALE		ROCK	110.0	80.0	
235.0	CARBONDALE		SHALE	25.2	190.0	
209.8	CARBONDALE	SPRINGFIELD	COAL	7.3	215.2	
202.5	CARBONDALE		UNDERCLAY	0.0	222.5	

MAPID: 16500424000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 75' S line, 100' E line of NW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638834 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.720487 **DATE COLLECTED:** 7 / 23 / 1905

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 222.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. HOLE #2 **WELL TYPE:** Coal Test

COMMENT: G.B. PARKS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	12.0	0.0	
413.0	CARBONDALE		SANDSTONE	5.0	12.0	
408.0	CARBONDALE		BLACK SHALE	1.0	17.0	
407.0	CARBONDALE		UNDERCLAY	3.0	18.0	
404.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	21.0	
397.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	28.0	
391.0	CARBONDALE	ANVIL ROCK	SHALE	5.0	34.0	
386.0	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	39.0	
365.0	CARBONDALE	CONANT	LIMESTONE	1.0	60.0	
364.0	CARBONDALE		BLACK SHALE	1.0	61.0	
363.0	CARBONDALE	BRERETON	LIMESTONE	4.0	62.0	
359.0	CARBONDALE		SANDSTONE	1.5	66.0	
357.5	CARBONDALE		BLACK SHALE	0.5	67.5	
357.0	CARBONDALE	HERRIN	COAL	5.5	68.0	
351.5	CARBONDALE		UNDERCLAY	6.5	73.5	
345.0	CARBONDALE		SANDY SHALE	5.0	80.0	
340.0	CARBONDALE		SHALE	10.0	85.0	
330.0	CARBONDALE		SHALE	75.0	95.0	
255.0	CARBONDALE	DYKERSBURG	SHALE	15.0	170.0	
240.0	CARBONDALE	DYKERSBURG	SANDY SHALE	30.2	185.0	
209.8	CARBONDALE	SPRINGFIELD	COAL	7.3	215.2	
202.5	CARBONDALE		UNDERCLAY	0.0	222.5	T.D.

MAPID: 16500425000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 760' S line, 20' W line of SW SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64304 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.718675 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 212.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: O.WADE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0			UNCONSOLIDATED	13.0	0.0	
394.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	13.0	
384.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	23.0	
382.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	25.0	
366.0	CARBONDALE		SHALE	2.7	41.0	
363.3	CARBONDALE	BRERETON	LIMESTONE	4.0	43.7	
359.3	CARBONDALE		SHALE	1.0	47.7	
358.3	CARBONDALE	HERRIN	COAL	5.5	48.7	
352.8	CARBONDALE		SHALE	4.0	54.2	W/ FIRECLAY
348.8	CARBONDALE		SANDY SHALE	9.3	58.2	
339.5	CARBONDALE		SANDSTONE	8.0	67.5	
331.5	CARBONDALE		SANDY SHALE	15.0	75.5	
316.5	CARBONDALE		SLATY SHALE	14.3	90.5	
302.2	CARBONDALE	BRIAR HILL	COAL	1.8	104.8	
300.4	CARBONDALE		BLACK SHALE	5.0	106.6	
295.4	CARBONDALE		LIMESTONE	1.0	111.6	"BASTARD LS"
294.4	CARBONDALE	DYKERSBURG	BLACK SHALE	12.0	112.6	
282.4	CARBONDALE	DYKERSBURG	SANDY SHALE	28.0	124.6	
254.4	CARBONDALE	DYKERSBURG	BLACK SHALE	49.9	152.6	
204.5	CARBONDALE	SPRINGFIELD	COAL	6.7	202.5	
197.8	CARBONDALE		UNDERCLAY	2.8	209.2	

MAPID: 16500425000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 760' S line, 20' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64304 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718675 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 212.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0			UNCONSOLIDATED	13.0	0.0	
394.0			ROCK	10.0	13.0	
384.0			SANDSTONE	2.0	23.0	
382.0			SHALE	18.7	25.0	
363.3			LIMESTONE	4.0	43.7	
359.3			BLACK SHALE	1.0	47.7	
358.3	CARBONDALE	HERRIN	COAL	5.5	48.7	
352.8	CARBONDALE		UNDERCLAY	4.0	54.2	
348.8	CARBONDALE		ROCK	46.7	58.2	
302.2	CARBONDALE	BRIAR HILL	COAL	1.8	104.8	
300.4	CARBONDALE		ROCK	70.9	106.6	
229.5	CARBONDALE		BLACK SHALE	25.0	177.5	
204.5	CARBONDALE	SPRINGFIELD	COAL	6.7	202.5	
197.8	CARBONDALE		UNDERCLAY	0.0	209.2	

MAPID: 16501596000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.645995 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 66.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.0			UNCONSOLIDATED	16.3	0.0	
412.7			ROCK	20.8	16.3	
392.0			SHALE	19.6	37.0	
372.4			LIMESTONE	3.8	56.6	
368.7			BLACK SHALE	1.8	60.3	
366.8	CARBONDALE	HERRIN	COAL	4.5	62.2	
362.3	CARBONDALE		UNDERCLAY	0.0	66.7	

MAPID: 16501596000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.645995 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.718871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 66.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.9	17.8	
405.3	CARBONDALE	LAWSON	CLAYSTONE	2.1	23.7	
403.2	CARBONDALE	LAWSON	GRAY SHALE	7.8	25.8	
395.5	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	1.9	33.5	
393.6	CARBONDALE	LAWSON	GRAY SHALE	21.0	35.4	
372.6	CARBONDALE	BRERETON	LIMESTONE	3.8	56.4	
368.8	CARBONDALE	ANNA	BLACK SHALE	1.8	60.2	
367.0	CARBONDALE	HERRIN	COAL	4.5	62.0	

MAPID: 16501596000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.645995 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.718871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 66.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-63 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.0			UNCONSOLIDATED	16.3	0.0	
412.7			LIMESTONE	5.9	16.3	
406.8			MUDSTONE	2.1	22.2	
404.7	CARBONDALE	ANVIL ROCK	SANDSTONE	7.8	24.3	
397.0	CARBONDALE	ANVIL ROCK	SHALE	1.7	32.0	
395.3	CARBONDALE	ANVIL ROCK	SANDSTONE	1.9	33.7	
393.4	CARBONDALE		SHALE	21.0	35.6	
372.4	CARBONDALE	BRERETON	LIMESTONE	3.8	56.6	
368.7	CARBONDALE		BLACK SHALE	1.8	60.3	
366.8	CARBONDALE	HERRIN	COAL	4.5	62.2	ELEV. 366.83
362.3	CARBONDALE		UNDERCLAY	0.0	66.7	T.D.

MAPID: 16590880000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 22 **QUARTERS/FOOTAGES:** 560' N line, 540' W line of SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636594 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.726105 **DATE COLLECTED:** 4 / 6 / 1984
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 66.8 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 80-74 **WELL TYPE:** Coal Test
COMMENT: PERMIT #92 MINE #22

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	19.5	0.0	
360.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	19.5	WEATHERED
355.2	CARBONDALE	ANVIL ROCK	SANDSTONE	2.3	24.8	
352.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.7	27.2	
338.2	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.2	41.8	
336.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.3	44.0	
329.7	CARBONDALE		SHALE	3.7	50.3	
326.0	CARBONDALE	BRERETON	LIMESTONE	5.0	54.0	
321.0	CARBONDALE	ANNA	BLACK SHALE	2.0	59.0	
319.0	CARBONDALE	HERRIN	COAL	4.8	61.0	
314.2	CARBONDALE		UNDERCLAY	1.0	65.8	

MAPID: 16500080101M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1350' N line, 550' W line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.622817 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720329 **DATE COLLECTED:** 1 / 10 / 1964
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 4.9 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GLUSKOTER, SAHARA C C, MINE16 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.9		

MAPID: 16500426000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62128 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72498 **DATE COLLECTED:** 6 / 3 / 1905
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #2 **WELL TYPE:** Coal Test
COMMENT: THOS. PATTERSON

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	12.0	0.0	
398.0			SANDSTONE	2.0	12.0	
396.0			CLAYSTONE	6.0	14.0	
390.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	20.0	
385.0	CARBONDALE		UNDERCLAY	1.5	25.0	
383.5	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	26.5	
372.5	CARBONDALE		SHALE	13.0	37.5	
359.5	CARBONDALE		SHALE	10.5	50.5	
349.0	CARBONDALE	BRERETON	LIMESTONE	4.0	61.0	
345.0	CARBONDALE	ANNA	BLACK SHALE	2.3	65.0	
342.7	CARBONDALE	HERRIN	COAL	4.4	67.3	
338.3	CARBONDALE		SHALE	41.3	71.7	
297.0	CARBONDALE		SHALE	7.0	113.0	
290.0	CARBONDALE	BRIAR HILL	COAL	1.3	120.0	
288.7	CARBONDALE		SHALE	53.8	121.3	
235.0	CARBONDALE		SHALE	34.3	175.0	
200.7	CARBONDALE		BLACK SHALE	0.8	209.3	
200.0	CARBONDALE	SPRINGFIELD	COAL	6.0	210.0	
194.0	CARBONDALE		UNDERCLAY	0.0	216.0	T.D.

MAPID: 16500426000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62128 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72498 **DATE COLLECTED:** 6 / 3 / 1905
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	12.0	0.0	
398.0			ROCK	55.3	12.0	
342.7	CARBONDALE	HERRIN	COAL	4.4	67.3	
338.2	CARBONDALE		ROCK	48.3	71.8	
290.0	CARBONDALE	BRIAR HILL	COAL	1.3	120.0	
288.7	CARBONDALE		ROCK	88.8	121.3	
200.0	CARBONDALE	SPRINGFIELD	COAL	6.0	210.0	

MAPID: 16500427000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 50' S line, 30' W line of SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624639 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.716848 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 158.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0	CARBONDALE	HERRIN	COAL	5.5	26.0	
331.0	CARBONDALE	BRIAR HILL	COAL	1.5	77.0	
258.0	CARBONDALE	SPRINGFIELD	COAL	5.0	150.0	

MAPID: 16500427000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 50' S line, 30' W line of SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624639 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.716848 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 157.9 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	22.0	0.0	
386.0			ROCK	3.7	22.0	
382.3	CARBONDALE	HERRIN	COAL	5.5	25.7	
376.8	CARBONDALE		ROCK	46.1	31.2	
330.7	CARBONDALE	BRIAR HILL	COAL	1.5	77.3	
329.2	CARBONDALE		ROCK	71.0	78.8	
258.2	CARBONDALE	SPRINGFIELD	COAL	5.0	149.8	
253.2	CARBONDALE		ROCK	3.2	154.8	

MAPID: 16500427000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 50' S line, 30' W line of SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624639 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.716848 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 157.9 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: JOHN DEAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	22.0	0.0	
386.0	CARBONDALE		SHALE	3.7	22.0	
382.3	CARBONDALE	HERRIN	COAL	5.5	25.7	
376.8	CARBONDALE		UNDERCLAY	2.0	31.2	
374.8	CARBONDALE		SANDY SHALE	2.3	33.2	
372.5	CARBONDALE		SHALE	41.8	35.5	
330.7	CARBONDALE	BRIAR HILL	COAL	1.5	77.3	
329.2	CARBONDALE		SHALE	2.0	78.8	
327.2	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	80.8	
325.2	CARBONDALE	DYKERSBURG	SHALE	14.0	82.8	
311.2	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	96.8	
302.2	CARBONDALE	DYKERSBURG	SHALE	6.0	105.8	
296.2	CARBONDALE	DYKERSBURG	SHALE	38.0	111.8	
258.2	CARBONDALE	SPRINGFIELD	COAL	5.0	149.8	
253.2	CARBONDALE		UNDERCLAY	3.2	154.8	

MAPID: 16502934000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 420' S line, 70' E line of SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620364 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.728891 **DATE COLLECTED:** 5 / 21 / 1956

SURFACE ELEVATION (FT.): 389.2 **LOGGED (FT.):** 208.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.2			UNCONSOLIDATED	11.0	0.0	
378.2	CARBONDALE		SANDSTONE	2.5	11.0	
375.7	CARBONDALE		SMUT	0.7	13.5	LOG SAYS 'SMOT - SLATE & COAL'
375.0	CARBONDALE		UNDERCLAY	5.8	14.2	WITH GRAY SHALE
369.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	20.0	
361.2	CARBONDALE		SHALE	4.0	28.0	
357.2	CARBONDALE	ANVIL ROCK	SANDSTONE	12.5	32.0	WITH SHALE SEAMS
344.7	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	11.8	44.5	
332.9	CARBONDALE	BRERETON	FOSSILIFEROUS LIMESTONE	1.3	56.3	
331.7	CARBONDALE	ANNA	BLACK SHALE	5.5	57.5	AND DK SHALE
326.2	CARBONDALE		SHALE	0.5	63.0	WITH COAL SEAMS
325.7	CARBONDALE	HERRIN	COAL	5.2	63.5	
320.5	CARBONDALE		UNDERCLAY	4.3	68.7	
316.2	CARBONDALE		SANDSTONE	17.0	73.0	GREEN WITH MICA
299.2	CARBONDALE		SANDY SHALE	24.5	90.0	
274.7	CARBONDALE	BRIAR HILL	COAL	1.7	114.5	
273.0	CARBONDALE		DARK GRAY SHALE	11.8	116.2	
261.2	CARBONDALE	ST. DAVID	SANDY SHALE	58.8	128.0	STREAKED. (15-DEGREE PITCH STRATA)
202.4	CARBONDALE	SPRINGFIELD	COAL	4.6	186.8	
197.8	CARBONDALE	SPRINGFIELD	GRAY SHALE	8.3	191.4	
189.4	CARBONDALE	SPRINGFIELD	COAL	0.5	199.8	
188.9	CARBONDALE	SPRINGFIELD	GRAY SHALE	3.0	200.3	
185.9	CARBONDALE	SPRINGFIELD	COAL	1.5	203.3	
184.4	CARBONDALE		GRAY SHALE	3.3	204.8	

MAPID: 16502934000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 420' S line, 70' E line of SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620364 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.728891 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 69.2 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.7	CARBONDALE		SANDSTONE	2.5	7.3	
379.2	CARBONDALE	ALLENBY	BONE COAL	0.7	9.8	
378.6	CARBONDALE		CLAYSTONE & SHALE	5.8	10.4	
372.7	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	16.3	
364.7	CARBONDALE	LAWSON	CLAYSTONE	4.0	24.3	
360.7	CARBONDALE	LAWSON	SHALE & SANDSTONE	12.5	28.3	
348.2	CARBONDALE		SILTY SHALE	11.8	40.8	
336.5	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	1.3	52.5	
335.2	CARBONDALE	ANNA	CARBONACEOUS SHALE	6.0	53.8	
329.2	CARBONDALE	ENERGY	GRAY SHALE	4.3	59.8	
325.0	CARBONDALE	HERRIN	COAL	5.2	64.0	

MAPID: 16502935000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 120' S line, 360' E line of SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.621375 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.728056 **DATE COLLECTED:** 5 / 23 / 1956

SURFACE ELEVATION (FT.): 383.3 **LOGGED (FT.):** 213.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.3			UNCONSOLIDATED	18.0	0.0	
365.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.0	18.0	
358.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	21.0	25.0	LOG SAYS 'GRAY SANDSTONE SHALE'
337.3	CARBONDALE	BRERETON	GRAY LIMESTONE	6.0	46.0	
331.3	CARBONDALE	ANNA	BLACK SHALE	1.0	52.0	
330.3	CARBONDALE	HERRIN	COAL	5.0	53.0	
325.3	CARBONDALE		UNDERCLAY	4.0	58.0	
321.3	CARBONDALE		SANDSTONE	18.0	62.0	WITH SHALE SEAMS
303.3	CARBONDALE		SANDY SHALE	22.0	80.0	WITH ST
281.3	CARBONDALE	BRIAR HILL	COAL	2.0	102.0	
279.3	CARBONDALE		DARK SHALE	4.0	104.0	
275.3	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.0	108.0	
274.3	CARBONDALE	DYKERSBURG	SANDY SHALE	71.6	109.0	STRIPED SANDY SHALE
202.7	CARBONDALE	SPRINGFIELD	COAL	5.4	180.6	
197.3	CARBONDALE		SHALE	4.0	186.0	
193.3	CARBONDALE		SHALE	13.5	190.0	LOG SAYS 'MIXTURE OF SHALES'
179.8	CARBONDALE		SHALE	9.5	203.5	

MAPID: 16502971000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 130' N line, 10' E line of NW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.622447 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.727361 **DATE COLLECTED:** 5 / 28 / 1956

SURFACE ELEVATION (FT.): 381.6 **LOGGED (FT.):** 217.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.6			UNCONSOLIDATED	17.0	0.0	SURFACE LAYER
364.6	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	17.0	
361.6	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	20.0	WITH SDY SH
336.6	CARBONDALE	BRERETON	LIMESTONE	7.8	45.0	
328.8	CARBONDALE	HERRIN	COAL	5.2	52.8	
323.6	CARBONDALE		UNDERCLAY	4.0	58.0	
319.6	CARBONDALE		SANDSTONE	41.7	62.0	WITH SILTY SHALE
277.9	CARBONDALE	BRIAR HILL	COAL	1.5	103.7	
276.4	CARBONDALE		SHALE	4.8	105.2	WITH NODULES
271.6	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.0	110.0	
270.6	CARBONDALE	DYKERSBURG	SANDY SHALE	59.0	111.0	LOG SAYS 'VARIATION OF SAND SHALE'
211.6	CARBONDALE	DYKERSBURG	SHALE	27.4	170.0	
184.2	CARBONDALE	SPRINGFIELD	COAL	6.8	197.4	
177.4	CARBONDALE		SHALE	2.8	204.2	
174.6	CARBONDALE		SHALE	9.5	207.0	
165.1	CARBONDALE		UNCLASSIFIED	0.5	216.5	+6" ADJUSTMENT TO MATCH LOG DEPTH

MAPID: 16502972000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 470' N line, 400' E line of NE SW NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.630665 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.726377 **DATE COLLECTED:** 6 / 4 / 1956

SURFACE ELEVATION (FT.): 396.3 **LOGGED (FT.):** 207.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.3			UNCONSOLIDATED	12.0	0.0	SURFACE LAYER
384.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	12.0	
374.3	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	22.0	
361.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	35.0	
348.3	CARBONDALE		BLACK SHALE	5.0	48.0	
343.3	CARBONDALE	BRERETON	LIMESTONE	5.0	53.0	
338.3	CARBONDALE	ANNA	DARK SHALE	1.0	58.0	
337.3	CARBONDALE	HERRIN	COAL	5.0	59.0	
332.3	CARBONDALE		UNDERCLAY	2.0	64.0	
330.3	CARBONDALE		SANDSTONE	41.5	66.0	WITH SH
288.8	CARBONDALE	BRIAR HILL	COAL	1.5	107.5	
287.3	CARBONDALE		GRAY SHALE	5.5	109.0	
281.8	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.5	114.5	
281.3	CARBONDALE	DYKERSBURG	SANDY SHALE	23.0	115.0	
258.3	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	138.0	WITH SHALE
248.3	CARBONDALE	DYKERSBURG	SILTY SHALE	39.2	148.0	
209.1	CARBONDALE	SPRINGFIELD	COAL	5.0	187.2	
204.1	CARBONDALE		SHALE	6.8	192.2	
197.3	CARBONDALE		SHALE	8.5	199.0	

MAPID: 16502973000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 90' N line, 90' E line of SE SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.625019 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.725625 **DATE COLLECTED:** 6 / 6 / 1956

SURFACE ELEVATION (FT.): 393.1 **LOGGED (FT.):** 206.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.1			CLAY	14.0	0.0	SURFACE CLAY
379.1	CARBONDALE		SANDY SHALE	6.0	14.0	
373.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	20.0	
368.1	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	11.0	25.0	
357.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	36.0	STRIPED SS
348.1	CARBONDALE		DARK GRAY SHALE	17.5	45.0	
330.6	CARBONDALE	BRERETON	BLACK LIMESTONE	5.5	62.5	
325.1	CARBONDALE	ANNA	BLACK SHALE	3.0	68.0	LOG ALSO SAYS '(SHALE)'
322.1	CARBONDALE	HERRIN	COAL	4.5	71.0	
317.6	CARBONDALE		UNDERCLAY	1.0	75.5	
316.6	CARBONDALE		SANDY SHALE	42.5	76.5	
274.1	CARBONDALE	BRIAR HILL	COAL	2.0	119.0	
272.1	CARBONDALE		GRAY SHALE	6.0	121.0	
266.1	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.5	127.0	
264.6	CARBONDALE	DYKERSBURG	SANDY SHALE	64.5	128.5	
200.1	CARBONDALE	DYKERSBURG	COAL	1.0	193.0	(OR SOFT MATERIAL - NO CORE RECOVERY)
199.1	CARBONDALE	DYKERSBURG	SANDY SHALE	5.1	194.0	FAULTY, 40DEGREE FROM VERTICAL CLEAVAGE
194.0	CARBONDALE	SPRINGFIELD	COAL	6.3	199.1	
187.8	CARBONDALE		UNDERCLAY	0.7	205.3	

MAPID: 16502974000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 170' N line, 300' E line of SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.621164 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.729087 **DATE COLLECTED:** 6 / 20 / 1956

SURFACE ELEVATION (FT.): 395.1 **LOGGED (FT.):** 215.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.1			CLAY	12.0	0.0	SURFACE CLAY
383.1	MODESTO		SANDSTONE	7.0	12.0	
376.1	CARBONDALE	DANVILLE	COAL	1.5	19.0	SLATY
374.6	CARBONDALE		SHALE	5.5	20.5	
369.1	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	26.0	
361.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	28.0	34.0	WITH SS
333.1	CARBONDALE	BRERETON	BLACK LIMESTONE	5.0	62.0	
328.1	CARBONDALE	ANNA	DARK SHALE	2.3	67.0	
325.8	CARBONDALE	HERRIN	COAL	4.7	69.3	
321.1	CARBONDALE		UNDERCLAY	1.0	74.0	
320.1	CARBONDALE		SANDSTONE	45.1	75.0	WITH SH
275.0	CARBONDALE	BRIAR HILL	COAL	1.5	120.1	
273.5	CARBONDALE		SHALE	4.4	121.6	
269.1	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.0	126.0	
268.1	CARBONDALE	DYKERSBURG	SANDY SHALE	69.3	127.0	
198.8	CARBONDALE	SPRINGFIELD	COAL	3.9	196.3	
194.8	CARBONDALE	SPRINGFIELD	SHALE	0.0	200.3	
194.8	CARBONDALE	SPRINGFIELD	COAL	0.1	200.3	
194.7	CARBONDALE	SPRINGFIELD	SHALE	0.1	200.4	
194.6	CARBONDALE	SPRINGFIELD	COAL	0.4	200.5	
194.2	CARBONDALE	SPRINGFIELD	SHALE	11.0	200.9	
183.2	CARBONDALE	SPRINGFIELD	COAL	0.2	211.9	
183.1	CARBONDALE	SPRINGFIELD	SHALE	1.7	212.0	
181.4	CARBONDALE	SPRINGFIELD	COAL	1.3	213.7	
180.1	CARBONDALE		SHALE	0.5	215.0	

MAPID: 16500428000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 920' N line, 1320' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610962 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728912 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 391.9 **LOGGED (FT.):** 188.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: S.HARRISON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.9			UNCONSOLIDATED	18.0	0.0	
373.9			SANDSTONE	6.0	18.0	
367.9			SHALE	16.0	24.0	
351.9			SHALE	5.0	40.0	
346.9	CARBONDALE	BRERETON	LIMESTONE	6.0	45.0	
340.9	CARBONDALE	ANNA	BLACK SHALE	1.0	51.0	
339.9	CARBONDALE	HERRIN	COAL	4.0	52.0	
335.9	CARBONDALE		SHALE	4.0	56.0	
331.9	CARBONDALE		SANDY SHALE	10.0	60.0	
321.9	CARBONDALE		SANDY SHALE	28.0	70.0	
293.9	CARBONDALE		SLATY SHALE	2.0	98.0	
291.9	CARBONDALE	BRIAR HILL	COAL	1.8	100.0	
290.1	CARBONDALE		SHALE	1.5	101.8	
288.6	CARBONDALE	DYKERSBURG	SANDY SHALE	21.0	103.3	
267.6	CARBONDALE	DYKERSBURG	SANDY SLATE	34.0	124.3	
233.6	CARBONDALE	DYKERSBURG	BLACK SHALE	20.0	158.3	
213.6	CARBONDALE	SPRINGFIELD	COAL	6.4	178.3	
207.2	CARBONDALE		SHALE	3.3	184.7	MIXED W/ FIRECLAY

MAPID: 16500428000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 920' N line, 1320' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610962 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728912 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 188.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0			UNCONSOLIDATED	18.0	0.0	
374.0			ROCK	34.0	18.0	
340.0	CARBONDALE	HERRIN	COAL	4.0	52.0	
336.0	CARBONDALE		ROCK	44.0	56.0	
292.0	CARBONDALE	BRIAR HILL	COAL	1.8	100.0	
290.2	CARBONDALE		ROCK	76.5	101.8	
213.7	CARBONDALE	SPRINGFIELD	COAL	6.4	178.3	
207.3	CARBONDALE		ROCK	3.4	184.7	

MAPID: 16500429000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597624 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.72566 **DATE COLLECTED:** 0 / 0 / 1905

SURFACE ELEVATION (FT.): 405.6 **LOGGED (FT.):** 209.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: MELINA WEAVER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.6			UNCONSOLIDATED	4.8	0.0	
400.8			SANDSTONE	3.0	4.8	ROTTEN
397.8	CARBONDALE		UNDERCLAY	11.0	7.8	AND GREEN SHALE
386.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	18.8	BASTARD
383.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.7	22.6	
371.3	CARBONDALE	ANVIL ROCK	SANDY SLATE	23.3	34.3	W/ SS STREAKS
348.0	CARBONDALE	BRERETON	LIMESTONE	4.3	57.6	BASTARD
343.8	CARBONDALE	ANNA	BLACK SHALE	1.5	61.8	
342.3	CARBONDALE	HERRIN	COAL	5.3	63.3	
336.9	CARBONDALE		UNDERCLAY	4.8	68.7	
332.1	CARBONDALE		SANDSTONE	21.5	73.5	
310.6	CARBONDALE		SANDY SLATE	16.8	95.0	AND SS
293.8	CARBONDALE	BRIAR HILL	COAL	1.8	111.8	
292.0	CARBONDALE	DYKERSBURG	SANDY SLATE	11.6	113.6	AND SS
280.4	CARBONDALE	DYKERSBURG	SANDY SLATE	71.8	125.2	
208.7	CARBONDALE	SPRINGFIELD	COAL	5.3	196.9	
203.4	CARBONDALE	SPRINGFIELD	SANDY SLATE	2.4	202.2	
201.0	CARBONDALE	SPRINGFIELD	COAL	1.5	204.6	LOWER SPLIT OF COAL
199.5	CARBONDALE	SPRINGFIELD	SANDY SLATE	0.3	206.1	
199.3	CARBONDALE	SPRINGFIELD	COAL	0.2	206.3	
199.1	CARBONDALE		UNDERCLAY	2.5	206.5	AND GREEN SHALE

MAPID: 16500429000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597624 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72566 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 209.0 **LOG TYPE:** Survey Core Study
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.0			UNCONSOLIDATED	4.8	0.0	
401.2			ROCK	58.5	4.8	
342.7	CARBONDALE	HERRIN	COAL	5.3	63.3	
337.3	CARBONDALE		ROCK	43.2	68.7	
294.2	CARBONDALE	BRIAR HILL	COAL	1.8	111.8	
292.4	CARBONDALE		ROCK	83.3	113.6	
209.1	CARBONDALE	SPRINGFIELD	COAL	9.6	196.9	
199.5	CARBONDALE		ROCK	2.5	206.5	

MAPID: 16500431000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602331 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.718326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	CARBONDALE	HERRIN	COAL	5.0	94.0	
323.0	CARBONDALE	BRIAR HILL	COAL	2.0	141.0	
245.0	CARBONDALE	SPRINGFIELD	COAL	6.3	219.0	

MAPID: 16500431000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602331 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.718326 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
464.0			UNCONSOLIDATED	12.0	0.0	
452.0			ROCK	16.0	12.0	
436.0			COAL	1.0	28.0	
435.0			ROCK	13.0	29.0	
422.0			COAL	1.0	42.0	
421.0			ROCK	51.0	43.0	
370.0	CARBONDALE	HERRIN	COAL	5.0	94.0	
365.0	CARBONDALE		ROCK	44.0	99.0	
321.0	CARBONDALE	BRIAR HILL	COAL	2.0	143.0	
319.0	CARBONDALE		ROCK	75.7	145.0	
243.3	CARBONDALE	SPRINGFIELD	COAL	6.3	220.7	
237.0	CARBONDALE		ROCK	1.0	227.0	

MAPID: 16500431000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602331 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.718326 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 464.3 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: R.RANN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
464.3			UNCONSOLIDATED	12.0	0.0	
452.3	MODESTO		SANDSTONE	16.0	12.0	
436.3	MODESTO		COAL	1.0	28.0	
435.3	MODESTO		UNDERCLAY	2.0	29.0	
433.3	MODESTO		SANDSTONE	10.0	31.0	
423.3	MODESTO		SHALE	1.0	41.0	
422.3	MODESTO		COAL	1.0	42.0	
421.3	MODESTO		SHALE	1.5	43.0	
419.8	MODESTO	PIASA	LIMESTONE	5.0	44.5	
414.8			SHALE	3.5	49.5	
411.3			LIMESTONE	2.0	53.0	
409.3	CARBONDALE		SHALE	4.0	55.0	
405.3	CARBONDALE		BLACK SHALE	12.0	59.0	BASTARD
393.3	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	71.0	
385.3	CARBONDALE	ANVIL ROCK	SHALE	4.0	79.0	
381.3	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	83.0	COARSE
379.3	CARBONDALE	BRERETON	LIMESTONE	8.0	85.0	BASTARD
371.3	CARBONDALE	ANNA	BLACK SHALE	1.0	93.0	
370.3	CARBONDALE	HERRIN	COAL	5.0	94.0	
365.3	CARBONDALE		SHALE	2.0	99.0	
363.3	CARBONDALE		SANDSTONE	8.0	101.0	
355.3	CARBONDALE		SANDSTONE	22.0	109.0	
333.3	CARBONDALE		SHALE	8.0	131.0	
325.3	CARBONDALE		UNDERCLAY	2.0	139.0	
323.3	CARBONDALE	BRIAR HILL	COAL	2.0	141.0	
321.3	CARBONDALE		SHALE	31.0	143.0	
290.3	CARBONDALE	DYKERSBURG	SANDSTONE	24.0	174.0	
266.3	CARBONDALE	DYKERSBURG	SANDY SHALE	20.7	198.0	
245.6	CARBONDALE	SPRINGFIELD	COAL	6.3	218.7	
239.3	CARBONDALE		SANDSTONE	1.0	225.0	

MAPID: 16500951000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59821 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.725198 **DATE COLLECTED:** 3 / 26 / 1946
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 209.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			CLAY	19.0	0.0	BR-YL AND RD CLAY
401.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	19.0	
396.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	24.0	
388.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	32.0	
379.0	CARBONDALE		BLUE SHALE	15.0	41.0	
364.0	CARBONDALE		BLACK SHALE	1.0	56.0	
363.0	CARBONDALE	BRERETON	LIMESTONE	8.5	57.0	
354.5	CARBONDALE	ANNA	BLACK SHALE	1.0	65.5	
353.5	CARBONDALE	HERRIN	COAL	2.5	66.5	
351.0	CARBONDALE		UNDERCLAY	1.0	69.0	
350.0	CARBONDALE		SANDSTONE	30.0	70.0	
320.0	CARBONDALE		SANDY SHALE	14.0	100.0	
306.0	CARBONDALE	BRIAR HILL	COAL	2.0	114.0	
304.0	CARBONDALE		SANDY SHALE	30.0	116.0	
274.0	CARBONDALE		BLUE SHALE	15.0	146.0	
259.0	CARBONDALE		GRAY SHALE	40.0	161.0	
219.0	CARBONDALE	SPRINGFIELD	COAL	5.0	201.0	
214.0	CARBONDALE		UNDERCLAY	3.0	206.0	

MAPID: 16500951000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59821 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.725198 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 68.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	18.5	
376.5	CARBONDALE	LAWSON	SANDSTONE	8.0	23.5	
368.5	CARBONDALE	LAWSON	SILTY SHALE	9.0	31.5	
359.5	CARBONDALE	LAWSON	GRAY SHALE	15.0	40.5	
344.5	CARBONDALE		BLACK SHALE	1.0	55.5	
343.5	CARBONDALE	BRERETON	LIMESTONE	8.5	56.5	
335.0	CARBONDALE	ANNA	BLACK SHALE	1.0	65.0	
334.0	CARBONDALE	HERRIN	COAL	2.5	66.0	

MAPID: 16500952000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.598165 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.728836 **DATE COLLECTED:** 4 / 6 / 1946

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 221.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT: CORE: C-2851

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.0			CLAY	13.0	0.0	
396.0	CARBONDALE		GRAY SHALE	3.0	13.0	
393.0	CARBONDALE		UNDERCLAY	2.0	16.0	AND GRAY SHALE
391.0	CARBONDALE	ALLENBY	COAL	1.0	18.0	
390.0	CARBONDALE		UNDERCLAY	3.0	19.0	
387.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	22.0	
383.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	26.0	
363.0	CARBONDALE		BLUE SHALE	15.0	46.0	
348.0	CARBONDALE		BLACK SHALE	1.0	61.0	
347.0	CARBONDALE	BRERETON	LIMESTONE	5.0	62.0	
342.0	CARBONDALE		BONE COAL	1.5	67.0	
340.5	CARBONDALE	HERRIN	COAL	5.0	68.5	WITH SLATE SEAMS AND SOME SULPHUR
335.5	CARBONDALE		UNDERCLAY	2.0	73.5	
333.5	CARBONDALE		SANDSTONE	28.5	75.5	
305.0	CARBONDALE		GRAY SHALE	15.0	104.0	
290.0	CARBONDALE	BRIAR HILL	COAL	1.5	119.0	
288.5	CARBONDALE		GRAY SHALE	19.5	120.5	
269.0	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	140.0	
261.0	CARBONDALE	DYKERSBURG	GRAY SHALE	50.5	148.0	
210.5	CARBONDALE	SPRINGFIELD	COAL	5.5	198.5	
205.0	CARBONDALE	SPRINGFIELD	GRAY SHALE	5.0	204.0	
200.0	CARBONDALE	SPRINGFIELD	COAL	1.0	209.0	
199.0	CARBONDALE		BLACK SHALE	1.5	210.0	
197.5	CARBONDALE		SANDY SHALE	9.5	211.5	

MAPID: 16526191000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 1400' N line, 100' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597369 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.727709 **DATE COLLECTED:** 6 / 29 / 1979
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 79-53 **WELL TYPE:** Water Well
COMMENT: PERMIT 90; MINE #20; FR. COLUMNAR SECT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
396.0	CARBONDALE		SHALE & SANDSTONE	2.0	14.0	
394.0	CARBONDALE	ALLENBY	COAL	0.3	16.0	
393.7	CARBONDALE		SANDY SHALE	7.3	16.3	
386.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	23.6	
383.2	CARBONDALE	ANVIL ROCK	SANDSTONE	16.9	26.8	
366.2	CARBONDALE		GRAY SHALE	20.6	43.8	
345.7	CARBONDALE	BRERETON	LIMESTONE	4.2	64.3	
341.5	CARBONDALE	ANNA	BLACK SHALE	0.5	68.5	

MAPID: 16526192000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** 100' N line, 1500' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610325 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.731182 **DATE COLLECTED:** 7 / 2 / 1979
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 79-55 **WELL TYPE:** Water Well
COMMENT: PERMIT 90; MINE #20; FR. COLUMNAR SECT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
364.0	PLEISTOCENE		MUD	10.5	18.0	BLUE
353.5	CARBONDALE		GRAY SHALE	16.7	28.5	
336.8	CARBONDALE	JAMESTOWN	COAL	1.3	45.2	
335.5	CARBONDALE		GRAY SHALE	1.2	46.5	
334.3	CARBONDALE	BRERETON	LIMESTONE	3.7	47.7	
330.7	CARBONDALE	ANNA	BLACK SHALE	1.9	51.3	
328.7	CARBONDALE	HERRIN	COAL	4.8	53.3	
324.0	CARBONDALE		UNDERCLAY	3.3	58.0	
320.7	CARBONDALE		SANDSTONE	1.7	61.3	

MAPID: 165273A0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NE NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.603431 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723779 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	-		
-			ROCK	-		

MAPID: 165273A0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602331 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718326 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			COAL	-		
-			ROCK	-		

MAPID: 165273A0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.605738 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724664 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 12.6 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	12.0		
-			COAL	0.5		
-			ROCK	0.1		

MAPID: 16500080103M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** 150' N line, 720' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.599662 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71658 **DATE COLLECTED:** 11 / 10 / 1964
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 6.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GLUSKOTER, SAHARA C C MINE 16 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	6.7		

MAPID: 165273A0009F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600137 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702739 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 31.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	13.0		
-			UNKNOWN	18.0		
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 165273A0010F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.603016 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.703179 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WELLER **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	-		
-			ROCK	-		

MAPID: 16500450000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' N line, 50' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615793 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.714978 **DATE COLLECTED:** 7 / 17 / 1906
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 121.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #11 **WELL TYPE:** Coal Test
COMMENT: O.ALLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	12.0	0.0	
383.0	CARBONDALE		SHALE	10.0	12.0	
373.0	CARBONDALE		BLACK SHALE	19.0	22.0	
354.0	CARBONDALE	BRIAR HILL	COAL	2.0	41.0	
352.0	CARBONDALE	BRIAR HILL	BLACK SHALE	0.5	43.0	
351.5	CARBONDALE	BRIAR HILL	COAL	1.5	43.5	BONE
350.0	CARBONDALE		SANDSTONE	4.0	45.0	
346.0	CARBONDALE		BLACK SHALE	26.0	49.0	
320.0	CARBONDALE	DYKERSBURG	SANDSTONE	17.0	75.0	
303.0	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	92.0	
289.0	CARBONDALE	DYKERSBURG	BLACK SHALE	9.8	106.0	
279.2	CARBONDALE	SPRINGFIELD	COAL	5.2	115.8	

MAPID: 16500450000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 660' N line, 50' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615793 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714978 **DATE COLLECTED:** 7 / 17 / 1906
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 121.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	12.0	0.0	
383.0			ROCK	29.0	12.0	
354.0	CARBONDALE	BRIAR HILL	COAL	2.0	41.0	
352.0	CARBONDALE		ROCK	72.8	43.0	
279.2	CARBONDALE	SPRINGFIELD	COAL	5.2	115.8	

MAPID: 16500451000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 980' N line, 90' E line of NE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625087 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.714 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	2.0	10.0	
402.0	CARBONDALE	HERRIN	COAL	6.0	29.0	
393.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	34.0	38.0	
348.0	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
327.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	12.0	104.0	
275.0	CARBONDALE	SPRINGFIELD	COAL	5.0	156.0	

MAPID: 16500451000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 980' N line, 90' E line of NE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625087 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.714 **DATE COLLECTED:** 7 / 25 / 1906

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	10.0	0.0	
421.0			SANDSTONE	12.0	10.0	
409.0			BLACK SHALE	6.0	22.0	
403.0			LIMESTONE	1.0	28.0	
402.0	CARBONDALE	HERRIN	COAL	6.0	29.0	
396.0	CARBONDALE		UNDERCLAY	3.0	35.0	
393.0	CARBONDALE		ROCK	45.0	38.0	
348.0	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
346.0	CARBONDALE		ROCK	46.0	85.0	
300.0	CARBONDALE		SHALE	25.0	131.0	
275.0	CARBONDALE	SPRINGFIELD	COAL	5.0	156.0	
270.0	CARBONDALE		UNDERCLAY	0.0	161.0	

MAPID: 16500451000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 980' N line, 90' E line of NE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.625087 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.714 **DATE COLLECTED:** 7 / 25 / 1906

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., HOLE #12 **WELL TYPE:** Coal Test

COMMENT: R.RUSSELL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	10.0	0.0	
421.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	10.0	
409.0	CARBONDALE		BLACK SHALE	6.0	22.0	
403.0	CARBONDALE	BRERETON	LIMESTONE	1.0	28.0	
402.0	CARBONDALE	HERRIN	COAL	6.0	29.0	
396.0	CARBONDALE		UNDERCLAY	3.0	35.0	
393.0	CARBONDALE		SANDSTONE	34.0	38.0	
359.0	CARBONDALE		SHALE	11.0	72.0	
348.0	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
346.0	CARBONDALE		UNDERCLAY	1.0	85.0	
345.0	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	86.0	
327.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	104.0	
315.0	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	116.0	
290.0	CARBONDALE	DYKERSBURG	BLACK SHALE	15.0	141.0	
275.0	CARBONDALE	SPRINGFIELD	COAL	5.0	156.0	
270.0	CARBONDALE		UNDERCLAY	1.0	161.0	

MAPID: 16500452000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627677 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.0			UNCONSOLIDATED	15.0	0.0	
419.0			SANDSTONE	10.0	15.0	
409.0			SHALE	6.0	25.0	
403.0			LIMESTONE	2.0	31.0	
401.0			BLACK SHALE	1.0	33.0	
400.0	CARBONDALE	HERRIN	COAL	3.0	34.0	
397.0	CARBONDALE		UNDERCLAY	2.0	37.0	
395.0	CARBONDALE		ROCK	46.0	39.0	
349.0	CARBONDALE		SHALE	25.0	85.0	
324.0	CARBONDALE	SPRINGFIELD	COAL	4.9	110.0	
319.1	CARBONDALE		UNDERCLAY	0.0	114.9	

MAPID: 16500452000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627677 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.710743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 37.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0	CARBONDALE	LAWSON	SANDSTONE	10.0	15.0	
409.0	CARBONDALE		COAL	6.0	25.0	
403.0	CARBONDALE	BRERETON	LIMESTONE	2.0	31.0	
401.0	CARBONDALE	ANNA	BLACK SHALE	1.0	33.0	
400.0	CARBONDALE	HERRIN	COAL	3.0	34.0	

MAPID: 16500452000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.627677 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.710743 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #9 **WELL TYPE:** Coal Test
COMMENT: R.L. RUSSELL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.0			UNCONSOLIDATED	15.0	0.0	
419.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	15.0	
409.0	CARBONDALE		BLACK SHALE	6.0	25.0	
403.0	CARBONDALE	BRERETON	LIMESTONE	2.0	31.0	
401.0	CARBONDALE	ANNA	BLACK SHALE	1.0	33.0	
400.0	CARBONDALE	HERRIN	COAL	3.0	34.0	
397.0	CARBONDALE		UNDERCLAY	2.0	37.0	
395.0	CARBONDALE		SHALE	10.0	39.0	
385.0	CARBONDALE		SANDSTONE	7.0	49.0	
378.0	CARBONDALE		SANDY SHALE	24.0	56.0	
354.0	CARBONDALE		BLACK SHALE	30.0	80.0	
324.0	CARBONDALE		COAL	4.9	110.0	
319.1	CARBONDALE		UNDERCLAY	1.1	114.9	

MAPID: 16500453000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.618571 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702607 **DATE COLLECTED:** 7 / 10 / 1906
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #10 **WELL TYPE:** Coal Test
COMMENT: A.THOMPSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	13.0	0.0	
439.0	CARBONDALE		SANDSTONE	10.0	13.0	
429.0	CARBONDALE		ROCK	8.0	23.0	
421.0	CARBONDALE		SHALE	8.0	31.0	
413.0	CARBONDALE		BLACK SHALE	14.0	39.0	
399.0	CARBONDALE	BRIAR HILL	COAL	1.0	53.0	
398.0	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	54.0	
378.0	CARBONDALE	DYKERSBURG	SANDSTONE	26.0	74.0	
352.0	CARBONDALE	DYKERSBURG	SHALE	30.0	100.0	
322.0	CARBONDALE	SPRINGFIELD	COAL	4.8	130.0	
317.2	CARBONDALE		UNDERCLAY	1.2	134.8	

MAPID: 16500453000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.618571 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702607 **DATE COLLECTED:** 7 / 10 / 1906
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	13.0	0.0	
439.0			ROCK	40.0	13.0	
399.0			COAL	1.0	53.0	
398.0			ROCK	76.0	54.0	
322.0	CARBONDALE	SPRINGFIELD	COAL	4.8	130.0	
317.2	CARBONDALE		ROCK	1.2	134.8	

MAPID: 16500714000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633498 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705205 **DATE COLLECTED:** 8 / 0 / 1906
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 114.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #14 **WELL TYPE:** Coal Test
COMMENT: W.D.NOLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	13.0	0.0	
374.0			SAND	5.0	13.0	
369.0	CARBONDALE		SHALE	6.0	18.0	
363.0	CARBONDALE		BLACK SHALE	6.0	24.0	
357.0	CARBONDALE	BRIAR HILL	COAL	2.0	30.0	
355.0	CARBONDALE		UNDERCLAY	1.0	32.0	
354.0	CARBONDALE		SANDY SHALE	5.0	33.0	
349.0	CARBONDALE		LIMESTONE	2.0	38.0	
347.0	CARBONDALE	DYKERSBURG	SHALE	20.0	40.0	
327.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	60.0	
324.0	CARBONDALE	DYKERSBURG	SHALE	41.0	63.0	
283.0	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	104.0	
278.0	CARBONDALE	SPRINGFIELD	COAL	4.9	109.0	
273.1	CARBONDALE		UNDERCLAY	1.0	113.9	

MAPID: 16500714000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633498 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705205 **DATE COLLECTED:** 8 / 0 / 1906
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 114.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	13.0	0.0	
374.0			ROCK	17.0	13.0	
357.0	CARBONDALE	HERRIN	COAL	2.0	30.0	
355.0	CARBONDALE		ROCK	52.0	32.0	
303.0	CARBONDALE		SHALE	25.0	84.0	
278.0	CARBONDALE	SPRINGFIELD	COAL	4.9	109.0	
273.1	CARBONDALE		UNDERCLAY	0.0	113.9	

MAPID: 16500715000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633545 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702467 **DATE COLLECTED:** 12 / 26 / 1895
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 42.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. MINE #15, HOLE #9 **WELL TYPE:** Coal Test
COMMENT: WHOOLERY (DRILLER)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	14.0	0.0	
371.0	CARBONDALE		SANDSTONE	5.0	14.0	
366.0	CARBONDALE		BLACK SHALE	17.3	19.0	
348.7	CARBONDALE	BRIAR HILL	COAL	2.8	36.3	
346.0	CARBONDALE		UNDERCLAY	3.0	39.0	

MAPID: 16500715000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.633545 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702467 **DATE COLLECTED:** 12 / 26 / 1895
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 42.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	14.0	0.0	
371.0			SANDSTONE	5.0	14.0	
366.0			SHALE	17.3	19.0	
348.7	CARBONDALE	HERRIN	COAL	2.8	36.3	
346.0	CARBONDALE		UNDERCLAY	0.0	39.0	

MAPID: 16500716000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.631794 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.703854 **DATE COLLECTED:** 0 / 0 / 1895
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 78.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #10 **WELL TYPE:** Coal Test
COMMENT: J.E. HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	10.0	0.0	
377.0	CARBONDALE		SANDSTONE	8.0	10.0	
369.0	CARBONDALE		SHALE	18.0	18.0	
351.0			BLACK SHALE	13.0	36.0	
338.0	CARBONDALE	SPRINGFIELD	COAL	2.0	49.0	
336.0	CARBONDALE	SPRINGFIELD	ROCK	0.8	51.0	
335.2	CARBONDALE	SPRINGFIELD	COAL	3.0	51.8	
332.2	CARBONDALE		BLACK SHALE	21.0	54.8	
311.2	CARBONDALE		COAL	0.8	75.8	UPPER SPLIT OF #5 COAL?
310.3	CARBONDALE		UNDERCLAY	1.5	76.7	

MAPID: 16500716000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.631794 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.703854 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
338.0	CARBONDALE	SPRINGFIELD	COAL	5.8	49.0	

MAPID: 16500717000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628355 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702972 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 82.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #11 **WELL TYPE:** Coal Test
COMMENT: J.E.HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	14.0	0.0	
383.0	CARBONDALE		SANDSTONE	4.0	14.0	
379.0	CARBONDALE		SANDSTONE	21.0	18.0	
358.0	CARBONDALE		BLACK SHALE	19.0	39.0	
339.0	CARBONDALE	BRIAR HILL	COAL	1.5	58.0	
337.5	CARBONDALE		BLACK SHALE	18.3	59.5	
319.2	CARBONDALE		COAL	1.6	77.8	UPPER SPLIT OF #5 SEAM?
317.7	CARBONDALE		UNDERCLAY	3.0	79.3	#5 SHOULD BE ABOUT 120' DEEP

MAPID: 16500718000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628937 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702509 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #12 **WELL TYPE:** Coal Test
COMMENT: WHOOLERY (DRILLER)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	16.0	0.0	
384.0	CARBONDALE		SANDY SHALE	23.0	16.0	
361.0	CARBONDALE		BLACK SHALE	38.0	39.0	
323.0	CARBONDALE	SPRINGFIELD	COAL	4.7	77.0	
318.3	CARBONDALE		UNDERCLAY	0.3	81.7	LOG SAYS 1.33' THICK

MAPID: 16500718000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.628937 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702509 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	16.0	0.0	
384.0			ROCK	36.0	16.0	
348.0			SHALE	25.0	52.0	
323.0	CARBONDALE	SPRINGFIELD	COAL	4.7	77.0	
318.3	CARBONDALE		UNDERCLAY	0.0	81.7	

MAPID: 16500719000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.630051 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70524 **DATE COLLECTED:** 7 / 31 / 1906
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #13 **WELL TYPE:** Coal Test
COMMENT: WHOOLERY (DRILLER)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	15.0	0.0	
380.0			SAND	5.0	15.0	
375.0			UNCONSOLIDATED	6.0	20.0	
369.0	CARBONDALE		SANDSTONE	9.0	26.0	
360.0	CARBONDALE		SHALE	11.0	35.0	
349.0	CARBONDALE		BLACK SHALE	3.0	46.0	
346.0	CARBONDALE	BRIAR HILL	COAL	1.5	49.0	
344.5	CARBONDALE		UNDERCLAY	0.5	50.5	
344.0	CARBONDALE		SANDSTONE	5.0	51.0	
339.0	CARBONDALE		SHALE	16.0	56.0	
323.0	CARBONDALE		SANDSTONE	20.0	72.0	
303.0	CARBONDALE		SHALE	25.0	92.0	
278.0	CARBONDALE		BLACK SHALE	14.4	117.0	W/ FIRECLAY STREAKS
263.6	CARBONDALE	SPRINGFIELD	COAL	4.2	131.4	
259.4	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.3	135.6	
259.2	CARBONDALE	SPRINGFIELD	COAL	1.2	135.8	
258.0	CARBONDALE		UNDERCLAY	1.0	137.0	

MAPID: 16500719000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.630051 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70524 **DATE COLLECTED:** 7 / 31 / 1906
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	15.0	0.0	
380.0			ROCK	34.0	15.0	
346.0	CARBONDALE	BRIAR HILL	COAL	1.5	49.0	
344.5	CARBONDALE		ROCK	55.5	50.5	
289.0	CARBONDALE		SHALE	11.0	106.0	
278.0	CARBONDALE		BLACK SHALE	14.4	117.0	
263.6	CARBONDALE	SPRINGFIELD	COAL	5.6	131.4	

MAPID: 16500720000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63344 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #15 **WELL TYPE:** Coal Test
COMMENT: WHOOLERY (DRILLER)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	17.0	0.0	
365.0	CARBONDALE		SHALE	4.0	17.0	
361.0	CARBONDALE	HERRIN	COAL	2.0	21.0	
359.0	CARBONDALE		SHALE	40.0	23.0	
319.0	CARBONDALE		BLACK SHALE	30.0	63.0	
289.0	CARBONDALE	SPRINGFIELD	COAL	5.1	93.0	
283.9	CARBONDALE		UNDERCLAY	1.9	98.1	LOG HAS 2.0 FT. FRO THICKNESS

MAPID: 16500720000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.63344 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70886 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	17.0	0.0	
365.0			ROCK	4.0	17.0	
361.0	CARBONDALE	HERRIN	COAL	2.0	21.0	
359.0	CARBONDALE		ROCK	55.0	23.0	
304.0	CARBONDALE		SHALE	15.0	78.0	
289.0	CARBONDALE	SPRINGFIELD	COAL	5.1	93.0	
283.9	CARBONDALE		UNDERCLAY	0.0	98.1	

MAPID: 16502622000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** 960' S line, 990' E line of NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.619098 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.708449 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2294.0 **LOG TYPE:**
SOURCE: BURY DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1082.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1498.0	
-1878.0		BASE BARLOW	LIMESTONE	-	2294.0	

MAPID: 16500420500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646159 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707893 **DATE COLLECTED:** 0 / 0 / 1957
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-HECK & KEATING C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 16500454000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.644384 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.710182 **DATE COLLECTED:** 5 / 0 / 1905

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., HOLE #1 **WELL TYPE:** Coal Test

COMMENT: W.D. NOLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	17.0	0.0	
378.0			SAND	10.0	17.0	
368.0	CARBONDALE		SHALE	28.0	27.0	
340.0	CARBONDALE	BRIAR HILL	COAL	1.0	55.0	
339.0	CARBONDALE		SANDSTONE	3.0	56.0	
336.0	CARBONDALE		SHALE	19.0	59.0	
317.0			SANDSTONE	3.0	78.0	
314.0			SHALE	4.0	81.0	
310.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	85.0	
300.0	CARBONDALE	DYKERSBURG	SHALE	55.0	95.0	
245.0	CARBONDALE	SPRINGFIELD	COAL	3.0	150.0	
242.0	CARBONDALE		UNDERCLAY	4.0	153.0	
238.0	CARBONDALE		SANDSTONE	2.0	157.0	
236.0	CARBONDALE		SHALE	5.0	159.0	
231.0	CARBONDALE		SHALE	45.0	164.0	
186.0	CARBONDALE		SHALE	1.0	209.0	
185.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	210.0	
180.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	215.0	
177.0	CARBONDALE		UNDERCLAY	1.0	218.0	

MAPID: 16500454000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.644384 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710182 **DATE COLLECTED:** 6 / 0 / 1905
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	27.0	0.0	
368.0			ROCK	28.0	27.0	
340.0			COAL	1.0	55.0	
339.0			ROCK	69.0	56.0	
270.0			BLACK SHALE	25.0	125.0	
245.0			COAL	3.0	150.0	
242.0			UNDERCLAY	4.0	153.0	
238.0			ROCK	33.0	157.0	
205.0			SHALE	20.0	190.0	
185.0			BLACK SHALE	5.0	210.0	
180.0			COAL	3.0	215.0	
177.0			UNDERCLAY	0.0	218.0	

MAPID: 16500721000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636934 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.707015 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.0	CARBONDALE	SPRINGFIELD	COAL	4.2	85.0	

MAPID: 16500721000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636934 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707015 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	18.0	0.0	
360.0			ROCK	42.0	18.0	
318.0			SHALE	25.5	60.0	
292.5	CARBONDALE	SPRINGFIELD	COAL	4.2	85.5	
288.3	CARBONDALE		UNDERCLAY	0.0	89.7	

MAPID: 16500721000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636934 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707015 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #16 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	18.0	0.0	
360.0	CARBONDALE		SHALE	25.0	18.0	
335.0	CARBONDALE		SLATY SHALE	42.5	43.0	
292.5	CARBONDALE	SPRINGFIELD	COAL	4.2	85.5	
288.3	CARBONDALE		UNDERCLAY	1.3	89.7	

MAPID: 16500722000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639277 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70518 **DATE COLLECTED:** 4 / 20 / 1911
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #17 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	23.0	0.0	
359.0	CARBONDALE		SHALE	30.0	23.0	
329.0	CARBONDALE		BLACK SHALE	27.8	53.0	
301.2	CARBONDALE	SPRINGFIELD	COAL	4.2	80.8	
297.0	CARBONDALE		UNDERCLAY	1.0	85.0	

MAPID: 16500722000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639277 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70518 **DATE COLLECTED:** 4 / 20 / 1911
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	23.0	0.0	
359.0			ROCK	32.0	23.0	
327.0			SHALE	25.8	55.0	
301.2	CARBONDALE	SPRINGFIELD	COAL	4.2	80.8	
297.0	CARBONDALE		UNDERCLAY	0.0	85.0	

MAPID: 16500723000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638166 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702444 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #19 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	20.0	0.0	
362.0	CARBONDALE		SHALE	24.6	20.0	
337.4	CARBONDALE		COAL	3.4	44.6	
334.0	CARBONDALE		BLACK SHALE	24.0	48.0	
310.0	CARBONDALE		COAL	0.4	72.0	
309.6	CARBONDALE		UNDERCLAY	1.6	72.4	

MAPID: 16500723000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638166 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702444 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	20.0	0.0	
362.0			SHALE	24.6	20.0	
337.4	CARBONDALE	HERRIN	COAL	3.4	44.6	
334.0	CARBONDALE		ROCK	24.0	48.0	
310.0	CARBONDALE		COAL	0.4	72.0	
309.6	CARBONDALE		UNDERCLAY	0.0	72.4	

MAPID: 16501597000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650884 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.7 **LOGGED (FT.):** 69.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-50 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.7			UNCONSOLIDATED	10.2	0.0	
446.5	CARBONDALE		SANDSTONE	7.3	10.2	
439.3	CARBONDALE		SHALE	10.4	17.4	W/ THIN STREAK OF BKSH
428.9	CARBONDALE	HERRIN	COAL	3.8	27.8	COAL SEAM MAY BE FAULTED
425.0	CARBONDALE		UNDERCLAY	3.7	31.7	
421.4	CARBONDALE	HERRIN	COAL	2.0	35.3	
419.4	CARBONDALE		SANDSTONE	11.1	37.3	HARD
408.3	CARBONDALE		SHALE	21.3	48.4	

MAPID: 16501597000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650884 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702396 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 69.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
457.0			UNCONSOLIDATED	17.4	0.0	
439.6			SHALE	10.4	17.4	
429.2			COAL	3.8	27.8	
425.3			UNDERCLAY	3.7	31.7	
421.7			COAL	2.0	35.3	
419.7			ROCK	0.0	37.3	

MAPID: 16501598000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.649695 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.704226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.1 **LOGGED (FT.):** 38.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-51 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.1			UNCONSOLIDATED	10.6	0.0	
438.5	CARBONDALE	ANVIL ROCK	SANDSTONE	13.1	10.6	
425.4	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	23.7	
420.4	CARBONDALE		BLACK SHALE	0.5	28.7	W/ THIN COAL
419.9	CARBONDALE	BRERETON	LIMESTONE	3.2	29.2	
416.8	CARBONDALE	ANNA	BLACK SHALE	0.8	32.3	
415.9	CARBONDALE	HERRIN	COAL	5.0	33.2	ELEV. 415.89
410.9	CARBONDALE		UNDERCLAY	0.0	38.2	T.D.

MAPID: 16501598000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.649695 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.704226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 449.0 **LOGGED (FT.):** 38.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.6	CARBONDALE	LAWSON	SANDSTONE	18.1	10.4	
420.5	CARBONDALE		CARBONACEOUS SHALE	0.5	28.5	
420.0	CARBONDALE	BRERETON	LIMESTONE	3.2	29.0	
416.8	CARBONDALE	ANNA	BLACK SHALE	0.8	32.2	
416.0	CARBONDALE	HERRIN	COAL	5.0	33.0	

MAPID: 16501599000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.65064 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 71.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-60 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	11.5	0.0	DIRT IN LOG
431.5			SAND	2.0	11.5	
429.5			SOIL	3.9	13.5	
425.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	17.4	HARD
419.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.9	23.3	
414.8	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	11.3	28.2	
403.5	CARBONDALE	ANVIL ROCK	SHALE	8.0	39.5	8
395.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.8	47.5	
388.7	CARBONDALE	ANVIL ROCK	SHALE	6.5	54.3	
382.2	CARBONDALE	BRERETON	LIMESTONE	5.9	60.8	
376.2	CARBONDALE	HERRIN	COAL	5.0	66.8	ELEV. 376.25
371.2	CARBONDALE		UNDERCLAY	0.0	71.8	T.D.

MAPID: 16501599000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.65064 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 71.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	13.5	0.0	
429.5			ROCK	28.3	13.5	
401.2			SHALE	5.8	41.8	
395.5			SANDSTONE	6.8	47.5	
388.7			SHALE	6.5	54.3	
382.2			LIMESTONE	5.9	60.8	
376.2	CARBONDALE	HERRIN	COAL	5.0	66.8	
371.2	CARBONDALE		UNDERCLAY	0.0	71.8	

MAPID: 16501600000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64716 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.716102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.6 **LOGGED (FT.):** 62.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-61 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.6			SOIL	18.0	0.0	
407.6			SAND	2.3	18.0	
405.3			SOIL	0.7	20.3	
404.7	CARBONDALE	ANVIL ROCK	SANDSTONE	6.3	20.9	
398.4	CARBONDALE	ANVIL ROCK	SHALE	3.3	27.2	
395.1	CARBONDALE	ANVIL ROCK	SANDSTONE	13.8	30.5	
381.3	CARBONDALE		SHALE	5.7	44.3	
375.7	CARBONDALE	BRERETON	LIMESTONE	5.6	49.9	
370.1	CARBONDALE	ANNA	BLACK SHALE	1.6	55.5	
368.5	CARBONDALE	HERRIN	COAL	5.0	57.1	ELEV. 368.52
363.5	CARBONDALE		UNDERCLAY	0.0	62.1	T.D.

MAPID: 16501600000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64716 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 62.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.0			UNCONSOLIDATED	20.3	0.0	
405.7			ROCK	11.8	20.3	
393.9			SANDSTONE	12.2	32.1	
381.7			SHALE	5.7	44.3	
376.1			LIMESTONE	5.6	49.9	
370.5			BLACK SHALE	1.6	55.5	
368.9	CARBONDALE	HERRIN	COAL	5.0	57.1	
363.9	CARBONDALE		UNDERCLAY	0.0	62.1	

MAPID: 16501601000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646056 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.713369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.2 **LOGGED (FT.):** 23.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-62 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.2			SOIL	12.2	0.0	
388.0	CARBONDALE	BRERETON	LIMESTONE	7.0	12.2	
381.0	CARBONDALE	HERRIN	COAL	4.5	19.2	ELEV. 381
376.5	CARBONDALE		UNDERCLAY	0.0	23.7	T.D.

MAPID: 16501601000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646056 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.713369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 23.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	12.2	0.0	
387.8			LIMESTONE	7.0	12.2	
380.8	CARBONDALE	HERRIN	COAL	4.5	19.2	
376.3	CARBONDALE		UNDERCLAY	0.0	23.7	

MAPID: 16500455000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 500' N line, 450' W line of NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.664699 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715243 **DATE COLLECTED:** 6 / 0 / 1905
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 200.1 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL HOLE #15 **WELL TYPE:** Coal Test
COMMENT: W.T. RIGGS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0			UNCONSOLIDATED	18.0	0.0	
415.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.5	18.0	
405.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.5	27.5	
385.0	CARBONDALE		BLACK SHALE	2.0	48.0	
383.0	CARBONDALE	BRERETON	LIMESTONE	6.0	50.0	
377.0	CARBONDALE	ANNA	BLACK SHALE	1.3	56.0	
375.7	CARBONDALE	HERRIN	COAL	5.5	57.3	
370.2	CARBONDALE		UNDERCLAY	3.5	62.8	
366.7	CARBONDALE		SANDSTONE	8.0	66.3	
358.7	CARBONDALE		SANDSTONE	34.7	74.3	
324.0	CARBONDALE		SANDY SHALE	3.8	109.0	
320.2	CARBONDALE	BRIAR HILL	COAL	1.3	112.8	
318.8	CARBONDALE		SLATY SHALE	32.0	114.2	
286.8	CARBONDALE	DYKERSBURG	SLATY SHALE	45.2	146.2	
241.7	CARBONDALE	SPRINGFIELD	COAL	4.8	191.3	
236.9	CARBONDALE		UNDERCLAY	4.0	196.1	W/ SHALE

MAPID: 16500456000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 100' S line, 350' E line of NE NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653627 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.713166 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	17.0	
422.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	39.0	22.0	
375.0	CARBONDALE	HERRIN	COAL	3.5	69.0	
368.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	19.0	76.0	
314.0	CARBONDALE	BRIAR HILL	COAL	0.5	130.0	
314.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	2.0	130.0	
232.0	CARBONDALE	SPRINGFIELD	COAL	6.5	212.0	

MAPID: 16500456000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 100' S line, 350' E line of NE NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653627 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.713166 **DATE COLLECTED:** 6 / 24 / 1905

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 218.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.0			UNCONSOLIDATED	17.0	0.0	
427.0			ROCK	27.0	17.0	
400.0			SANDSTONE	16.5	44.0	
383.5			BLACK SHALE	0.5	60.5	
383.0			LIMESTONE	6.0	61.0	
377.0			BLACK SHALE	2.0	67.0	
375.0	CARBONDALE	HERRIN	COAL	3.5	69.0	
371.5	CARBONDALE		UNDERCLAY	3.5	72.5	
368.0	CARBONDALE		ROCK	53.6	76.0	
314.4	CARBONDALE		COAL	0.5	129.6	
314.0	CARBONDALE		ROCK	57.0	130.0	
257.0	CARBONDALE		SHALE	25.0	187.0	
232.0	CARBONDALE	SPRINGFIELD	COAL	6.5	212.0	

MAPID: 16500456000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 100' S line, 350' E line of NE NE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653627 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.713166 **DATE COLLECTED:** 6 / 24 / 1905

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 218.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. HOLE #3 **WELL TYPE:** Coal Test

COMMENT: I.ROPER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.0			UNCONSOLIDATED	17.0	0.0	
427.0			UNKNOWN	2.0	17.0	"SHELL ROCK"
425.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	19.0	
422.5	CARBONDALE	ANVIL ROCK	SANDSTONE	39.0	21.5	
383.5	CARBONDALE		BLACK SHALE	0.5	60.5	
383.0	CARBONDALE	BRERETON	LIMESTONE	6.0	61.0	
377.0	CARBONDALE	ANNA	BLACK SHALE	2.0	67.0	
375.0	CARBONDALE	HERRIN	COAL	3.5	69.0	
371.5	CARBONDALE		UNDERCLAY	3.5	72.5	
368.0	CARBONDALE		SANDSTONE	19.0	76.0	
349.0	CARBONDALE		SANDY SHALE	5.0	95.0	
344.0	CARBONDALE		SHALE	29.5	100.0	
314.5	CARBONDALE	BRIAR HILL	COAL	0.5	129.5	
314.0	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	130.0	
312.0	CARBONDALE	DYKERSBURG	SHALE	18.0	132.0	
294.0	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	150.0	
284.0	CARBONDALE	DYKERSBURG	SHALE	52.0	160.0	
232.0	CARBONDALE	SPRINGFIELD	COAL	6.5	212.0	

MAPID: 16500457000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 500' N line, 50' E line of SE

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652689 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.707856 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log

SOURCE: SALIN COUNTY COAL HOLE #23 **WELL TYPE:** Coal Test

COMMENT: T.G. ZORGIBELS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	20.0	0.0	
398.0	CARBONDALE		SANDSTONE	5.0	20.0	
393.0	CARBONDALE		BLACK SHALE	0.5	25.0	
392.5	CARBONDALE	HERRIN	COAL	4.5	25.5	
388.0	CARBONDALE		UNDERCLAY	1.0	30.0	
387.0	CARBONDALE		SANDSTONE	32.0	31.0	SAND ROCK IN LOG
355.0	CARBONDALE		SHALE	11.0	63.0	
344.0	CARBONDALE		SHALE	9.0	74.0	
335.0	CARBONDALE	BRIAR HILL	COAL	1.5	83.0	
333.5	CARBONDALE		SHALE	5.0	84.5	
328.5	CARBONDALE		SHALE	7.0	89.5	
321.5	CARBONDALE		LIMESTONE	3.0	96.5	
318.5	CARBONDALE		BLACK SHALE	1.0	99.5	
317.5	CARBONDALE		SHALE	9.5	100.5	
308.0	CARBONDALE	DYKERSBURG	SANDSTONE	32.0	110.0	
276.0	CARBONDALE	DYKERSBURG	SHALE	34.0	142.0	
242.0	CARBONDALE	SPRINGFIELD	COAL	8.0	176.0	
234.0	CARBONDALE		UNDERCLAY	0.0	184.0	T.D.

MAPID: 16500457000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** 500' N line, 50' E line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652689 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707856 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	20.0	0.0	
398.0			SANDSTONE	5.0	20.0	
393.0			SHALE	0.5	25.0	
392.5	CARBONDALE	HERRIN	COAL	4.5	25.5	
388.0	CARBONDALE		UNDERCLAY	1.0	30.0	
387.0	CARBONDALE		ROCK	52.0	31.0	
335.0	CARBONDALE	BRIAR HILL	COAL	1.5	83.0	
333.5	CARBONDALE		ROCK	65.5	84.5	
268.0	CARBONDALE		SHALE	26.0	150.0	
242.0	CARBONDALE	SPRINGFIELD	COAL	7.0	176.0	
235.0	CARBONDALE		UNDERCLAY	0.0	183.0	

MAPID: 16501602000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669205 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705114 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.5 **LOGGED (FT.):** 21.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: K.OZMENT FARM; HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.5			UNCONSOLIDATED	15.3	0.0	
423.2	CARBONDALE		BLACK SHALE	2.0	15.3	
421.2	CARBONDALE	HERRIN	COAL	3.8	17.3	ELEV. 421.21

MAPID: 16501602000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669205 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705114 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 21.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.0			UNCONSOLIDATED	15.3	0.0	
423.7			SHALE	2.0	15.3	
421.7	CARBONDALE	HERRIN	COAL	3.8	17.3	

MAPID: 16501603000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66344 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707877 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.2 **LOGGED (FT.):** 13.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: C.MARTIN FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.2			UNCONSOLIDATED	9.5	0.0	
413.7	CARBONDALE	HERRIN	COAL	4.2	9.5	ELEV. 413.72

MAPID: 16501603000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.66344 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707877 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 13.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: MANY OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.0			UNCONSOLIDATED	9.5	0.0	
413.5	CARBONDALE	HERRIN	COAL	4.2	9.5	

MAPID: 16501604000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6623 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706958 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 428.3 **LOGGED (FT.):** 18.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: C.MARTIN FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.3			UNCONSOLIDATED	13.0	0.0	
415.3	CARBONDALE	HERRIN	COAL	5.0	13.0	ELEV. 415.29

MAPID: 16501605000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.660003 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706958 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.9 **LOGGED (FT.):** 17.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.9			UNCONSOLIDATED	14.3	0.0	
411.6	CARBONDALE	HERRIN	COAL	1.5	14.3	SOFT
410.1	CARBONDALE	HERRIN	COAL	2.0	15.8	SOLID

MAPID: 16501606000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.656539 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 16.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3			UNCONSOLIDATED	12.0	0.0	
399.3	CARBONDALE	HERRIN	COAL	4.2	12.0	ELEV. 399.26

MAPID: 16501607000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.655434 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705127 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.9 **LOGGED (FT.):** 17.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.9			UNCONSOLIDATED	13.1	0.0	
393.8	CARBONDALE	HERRIN	COAL	4.4	13.1	ELEV. 393.80
389.4	CARBONDALE		UNDERCLAY	0.0	17.5	T.D.

MAPID: 16501608000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665722 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.710643 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.7 **LOGGED (FT.):** 52.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-11 **WELL TYPE:** Coal Test
COMMENT: D.ALLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.7			UNCONSOLIDATED	11.5	0.0	SURFACE TO YELLOW SS
439.2			GRAVEL	9.3	11.5	MIXED
429.9			SHALE	19.0	20.8	W/ SAND
410.9	CARBONDALE	BRERETON	LIMESTONE	6.8	39.8	
404.2	CARBONDALE	ANNA	BLACK SHALE	0.5	46.5	
403.7	CARBONDALE	HERRIN	COAL	5.5	47.0	ELEV. 403.70
398.2	CARBONDALE		UNDERCLAY	0.0	52.5	T.D.

MAPID: 16501608000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665722 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710643 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 52.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.0			UNCONSOLIDATED	20.8	0.0	
430.2			SHALE	19.0	20.8	
411.2			LIMESTONE	6.8	39.8	
404.5			BLACK SHALE	0.5	46.5	
404.0	CARBONDALE	HERRIN	COAL	5.5	47.0	
398.5	CARBONDALE		UNDERCLAY	0.0	52.5	

MAPID: 16501609000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669212 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.703268 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.4 **LOGGED (FT.):** 31.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-48 **WELL TYPE:** Coal Test
COMMENT: R.OZMENT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.4			UNCONSOLIDATED	13.0	0.0	
446.4			SANDSTONE	5.0	13.0	SOFT
441.4			BLACK SHALE	2.0	18.0	
439.4			SHALE & MUDSTONE	7.9	20.0	
431.5	CARBONDALE	HERRIN	COAL	3.2	27.9	DRILLERS READINGS INACCURATE

MAPID: 16501610000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659968 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70971 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.2 **LOGGED (FT.):** 38.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-54 **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.2			UNCONSOLIDATED	9.8	0.0	
427.4	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	9.8	
423.6	CARBONDALE		CLAYSTONE	4.8	13.6	
418.8	CARBONDALE		SHALE	6.9	18.4	
411.9	CARBONDALE	BRERETON	LIMESTONE	6.0	25.3	
405.9	CARBONDALE	ANNA	BLACK SHALE	1.8	31.3	
404.0	CARBONDALE	HERRIN	COAL	5.3	33.2	ELEV. 404.07
398.7	CARBONDALE		UNDERCLAY	0.0	38.5	T.D.

MAPID: 16501610000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659968 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70971 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 38.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.0			UNCONSOLIDATED	13.6	0.0	
423.4			SANDSTONE	4.8	13.6	
418.6			CLAYSTONE	6.9	18.4	
411.7			LIMESTONE	6.0	25.3	
405.7			BLACK SHALE	1.8	31.3	
403.8	CARBONDALE	HERRIN	COAL	5.3	33.2	
398.5	CARBONDALE		UNDERCLAY	0.0	38.5	

MAPID: 16501611000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657664 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.709704 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.8 **LOGGED (FT.):** 34.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-55 **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.8			UNCONSOLIDATED	9.5	0.0	
418.3	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	9.5	
409.8	CARBONDALE		SHALE	3.5	18.0	
406.3	CARBONDALE		BLACK SHALE	0.5	21.5	
405.8	CARBONDALE	BRERETON	LIMESTONE	7.0	22.0	
398.8	CARBONDALE	ANNA	BLACK SHALE	1.2	29.0	
397.6	CARBONDALE	HERRIN	COAL	4.7	30.2	ELEV. 397.63
393.0	CARBONDALE		UNDERCLAY	0.0	34.8	T.D.

MAPID: 16501612000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654157 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.712436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.8 **LOGGED (FT.):** 71.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-67 **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.8			UNCONSOLIDATED	21.6	0.0	
418.2			SANDSTONE	1.3	21.6	
416.9			CLAYSTONE	0.8	22.9	
416.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	23.8	
408.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.9	31.8	
405.1	CARBONDALE	ANVIL ROCK	SANDSTONE	0.8	34.7	
404.3	CARBONDALE	ANVIL ROCK	SHALE	5.4	35.5	
398.9	CARBONDALE	ANVIL ROCK	SANDSTONE	8.4	40.9	
390.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.7	49.3	
380.8	CARBONDALE	BRERETON	LIMESTONE	5.9	59.0	
374.9	CARBONDALE	ANNA	BLACK SHALE	2.0	64.9	
372.9	CARBONDALE	HERRIN	COAL	5.0	66.9	ELEV. 372.9

MAPID: 16501612000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654157 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.712436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 71.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	21.6	0.0	
418.4			ROCK	20.3	21.6	
398.1			SANDSTONE	7.4	41.9	
390.7			SHALE	9.7	49.3	
381.0			LIMESTONE	5.9	59.0	
375.1			BLACK SHALE	2.0	64.9	
373.1	CARBONDALE	HERRIN	COAL	5.0	66.9	

MAPID: 16501613000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653035 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.710605 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.8 **LOGGED (FT.):** 45.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-58 **WELL TYPE:** Coal Test
COMMENT: H.MCCUTCHAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.8			UNCONSOLIDATED	10.8	0.0	
409.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.3	10.8	
398.6	CARBONDALE	ANVIL ROCK	SANDSTONE	3.7	21.2	
395.0	CARBONDALE		SHALE	9.0	24.8	
386.0	CARBONDALE	BRERETON	LIMESTONE	6.6	33.8	
379.4	CARBONDALE	ANNA	BLACK SHALE	0.7	40.4	
378.7	CARBONDALE	HERRIN	COAL	4.8	41.1	ELEV. 378.72
374.0	CARBONDALE		UNDERCLAY	0.0	45.8	T.D.

MAPID: 16501614000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652968 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.714257 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 67.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-59 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			UNCONSOLIDATED	11.6	0.0	
429.4	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	11.6	
425.6	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	5.8	15.4	WRITTEN IN LOG AS "SANDSTONE SHALE"
419.7	CARBONDALE	ANVIL ROCK	SANDSTONE	11.3	21.3	HARD
408.4	CARBONDALE	ANVIL ROCK	SHALE	6.8	32.6	
401.7	CARBONDALE	ANVIL ROCK	SANDSTONE	6.8	39.3	
394.9	CARBONDALE		SHALE	10.4	46.1	
384.5	CARBONDALE	BRERETON	LIMESTONE	4.7	56.5	
379.8	CARBONDALE	ANNA	BLACK SHALE	1.8	61.2	
378.1	CARBONDALE	HERRIN	COAL	5.0	62.9	ELEV. 378.07
373.1	CARBONDALE		UNDERCLAY	0.0	67.9	T.D.

MAPID: 16501614000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652968 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714257 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 67.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			UNCONSOLIDATED	11.6	0.0	
429.4			ROCK	26.3	11.6	
403.1			SHALE	1.4	37.9	
401.7			SANDSTONE	6.8	39.3	
394.9			SHALE	10.4	46.1	
384.5			LIMESTONE	4.7	56.5	
379.8			BLACK SHALE	1.8	61.2	
378.1	CARBONDALE	HERRIN	COAL	5.0	62.9	
373.1	CARBONDALE		UNDERCLAY	0.0	67.9	

MAPID: 16501615000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658853 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.7 **LOGGED (FT.):** 54.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-64 **WELL TYPE:** Coal Test
COMMENT: A.RUSSEL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.7			UNCONSOLIDATED	10.3	0.0	
420.4	CARBONDALE		SANDSTONE	5.3	10.3	
415.2	CARBONDALE		CLAYSTONE	6.8	15.5	
408.4	CARBONDALE		SHALE	1.2	22.3	
407.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.2	23.5	
402.0	CARBONDALE		SANDY SHALE	4.0	28.7	
398.0	CARBONDALE		SANDSTONE	2.6	32.7	
395.4	CARBONDALE		SHALE	3.2	35.3	
392.3	CARBONDALE		SANDSTONE	2.0	38.4	
390.3	CARBONDALE	BRERETON	LIMESTONE	1.9	40.4	
388.4	CARBONDALE	ANNA	BLACK SHALE	1.9	42.3	W/ SOME COAL
386.4	CARBONDALE	ENERGY	SHALE	5.0	44.3	
381.4	CARBONDALE	HERRIN	COAL	4.8	49.3	ELEV. 381.45
376.6	CARBONDALE		UNDERCLAY	0.0	54.1	T.D.

MAPID: 16501615000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658853 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.706957 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 54.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	10.3	0.0	
420.7			ROCK	14.0	10.3	
406.7			SANDSTONE	4.4	24.3	
402.3			SHALE	4.0	28.7	
398.3			SANDSTONE	2.6	32.7	
395.7			SHALE	3.2	35.3	
392.6			SANDSTONE	2.0	38.4	
390.6			LIMESTONE	1.9	40.4	
388.7			BLACK SHALE	1.9	42.3	
386.7			SHALE	5.0	44.3	
381.7	CARBONDALE	HERRIN	COAL	4.8	49.3	
376.9	CARBONDALE		UNDERCLAY	0.0	54.1	

MAPID: 16501616000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.664536 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71432 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 62.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	18.6	0.0	
417.4			ROCK	11.4	18.6	
406.0			SHALE	20.3	30.0	
385.7			BLACK SHALE	6.5	50.3	
379.2	CARBONDALE	HERRIN	COAL	5.5	56.8	
373.7	CARBONDALE		UNDERCLAY	0.0	62.3	

MAPID: 16501616000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.664536 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.71432 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 62.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.2	CARBONDALE	LAWSON	SANDSTONE	11.4	18.8	
369.8	CARBONDALE	LAWSON	GRAY SHALE	20.3	30.2	
349.5	CARBONDALE		BLACK SHALE	0.6	50.5	
348.9	CARBONDALE	BRERETON	LIMESTONE	4.0	51.1	
344.9	CARBONDALE	ANNA	BLACK SHALE	1.9	55.1	
343.0	CARBONDALE	HERRIN	COAL	5.5	57.0	

MAPID: 16501616000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.664536 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.71432 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.6 **LOGGED (FT.):** 62.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-81 **WELL TYPE:** Coal Test
COMMENT: L.RAMSEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.6			UNCONSOLIDATED	18.6	0.0	
417.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.3	18.6	
410.7	CARBONDALE	ANVIL ROCK	SANDSTONE	5.1	24.9	
405.6	CARBONDALE		SHALE	20.3	30.0	
385.3	CARBONDALE		BLACK SHALE	0.6	50.3	
384.7	CARBONDALE	BRERETON	LIMESTONE	4.0	50.9	
380.7	CARBONDALE	ANNA	BLACK SHALE	1.9	54.9	
378.8	CARBONDALE	HERRIN	COAL	5.5	56.8	ELEV. 378.81
373.3	CARBONDALE		UNDERCLAY	0.0	62.3	T.D.

MAPID: 16501617000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6657 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.713407 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.5 **LOGGED (FT.):** 67.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-82 **WELL TYPE:** Coal Test
COMMENT: L.RAMSEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.5			UNCONSOLIDATED	23.0	0.0	
428.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.7	23.0	
421.8	CARBONDALE	ANVIL ROCK	SHALE	1.3	29.7	
420.6	CARBONDALE	ANVIL ROCK	SANDSTONE	4.4	30.9	
416.2	CARBONDALE		SHALE	21.9	35.3	
394.2	CARBONDALE	BRERETON	LIMESTONE	3.4	57.3	
390.8	CARBONDALE	ANNA	BLACK SHALE	1.8	60.7	
389.0	CARBONDALE	HERRIN	COAL	5.0	62.5	ELEV. 389.02
384.0	CARBONDALE		UNDERCLAY	0.0	67.5	T.D.

MAPID: 16501617000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6657 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.713407 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 67.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	23.0	0.0	
429.0			ROCK	14.5	23.0	
414.5			SHALE	19.8	37.5	
394.7			LIMESTONE	3.4	57.3	
391.3			BLACK SHALE	1.8	60.7	
389.5	CARBONDALE	HERRIN	COAL	5.0	62.5	
384.5			UNDERCLAY	0.0	67.5	

MAPID: 16501618000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670329 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.71158 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.8 **LOGGED (FT.):** 64.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-83 **WELL TYPE:** Coal Test
COMMENT: W.PHILLIPS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.8			UNCONSOLIDATED	20.5	0.0	
439.3	CARBONDALE	ANVIL ROCK	SANDSTONE	2.2	20.5	
437.1	CARBONDALE	ANVIL ROCK	CLAYSTONE	2.3	22.7	
434.8	CARBONDALE	ANVIL ROCK	SANDSTONE	6.7	25.0	
428.1	CARBONDALE	ANVIL ROCK	SANDSTONE	8.6	31.7	
419.5	CARBONDALE		SHALE	13.9	40.3	
405.6	CARBONDALE	BRERETON	LIMESTONE	3.3	54.2	
402.3	CARBONDALE	ANNA	BLACK SHALE	1.8	57.5	
400.5	CARBONDALE	HERRIN	COAL	5.3	59.3	ELEV. 400.55
395.2	CARBONDALE		UNDERCLAY	0.0	64.6	T.D.

MAPID: 16501618000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670329 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71158 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 64.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	20.5	0.0	
439.5			ROCK	13.5	20.5	
426.0			SANDSTONE	6.3	34.0	
419.7			SHALE	13.9	40.3	
405.8			LIMESTONE	3.3	54.2	
402.5			BLACK SHALE	1.8	57.5	
400.7	CARBONDALE	HERRIN	COAL	5.3	59.3	
395.4	CARBONDALE		UNDERCLAY	0.0	64.6	

MAPID: 16501619000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669187 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.708808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 24.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-84 **WELL TYPE:** Coal Test
COMMENT: J.HUTSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	11.8	0.0	
413.2	CARBONDALE	BRERETON	LIMESTONE	0.7	11.8	W/ SOME COAL ON TOP
412.5	CARBONDALE	ANNA	BLACK SHALE	1.5	12.5	W/ SOME COAL
411.0	CARBONDALE	HERRIN	COAL	0.9	14.0	FAULTY
410.1	CARBONDALE	HERRIN	UNDERCLAY	4.6	14.9	
405.5	CARBONDALE	HERRIN	COAL	4.6	19.5	ELEV. 405.46
400.9	CARBONDALE		UNDERCLAY	0.0	24.1	T.D.

MAPID: 16501619000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669187 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 24.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	11.8	0.0	
413.2			LIMESTONE	0.7	11.8	
412.5			BLACK SHALE	1.5	12.5	
411.0	CARBONDALE	HERRIN	COAL	0.9	14.0	
410.1	CARBONDALE		UNDERCLAY	4.6	14.9	
405.5	CARBONDALE	HERRIN	COAL	4.6	19.5	
400.9	CARBONDALE		UNDERCLAY	0.0	24.1	

MAPID: 16501620000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659922 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.713378 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.6 **LOGGED (FT.):** 33.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-85 **WELL TYPE:** Coal Test
COMMENT: A.RUSSEL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.6			UNCONSOLIDATED	9.4	0.0	
410.2	CARBONDALE	ANVIL ROCK	SANDSTONE	4.7	9.4	
405.5	CARBONDALE	ANVIL ROCK	SHALE	1.3	14.1	
404.2	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	15.4	
399.9	CARBONDALE		BLACK SHALE	1.2	19.7	W/ SOME COAL
398.8	CARBONDALE	BRERETON	LIMESTONE	6.7	20.8	
392.1	CARBONDALE	ANNA	BLACK SHALE	0.6	27.5	
391.5	CARBONDALE	HERRIN	COAL	5.0	28.1	ELEV. 391.47
386.5	CARBONDALE		UNDERCLAY	0.0	33.1	T.D.

MAPID: 16501620000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE SW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659922 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.713378 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 33.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	9.5	0.0	
410.5			SANDSTONE	4.6	9.5	
405.9			SHALE	1.3	14.1	
404.6			SANDSTONE	4.2	15.4	
400.3			BLACK SHALE	1.2	19.7	
399.2			LIMESTONE	6.7	20.8	
392.5			BLACK SHALE	0.6	27.5	
391.9	CARBONDALE	HERRIN	COAL	5.0	28.1	
386.9	CARBONDALE		UNDERCLAY	0.0	33.1	

MAPID: 16501621000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661043 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.716139 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.7 **LOGGED (FT.):** 75.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: I.ORGAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.7			UNCONSOLIDATED	19.8	0.0	
415.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	19.8	
408.4	CARBONDALE		CLAYSTONE	7.6	27.3	
400.9	CARBONDALE		SHALE	17.8	34.8	
383.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.9	52.6	
377.2	CARBONDALE		SHALE	3.1	58.5	
374.1	CARBONDALE	BRERETON	LIMESTONE	1.1	61.6	
373.0	CARBONDALE	ANNA	BLACK SHALE	2.3	62.7	
370.8	CARBONDALE	ENERGY	UNDERCLAY	5.2	64.9	UNCERTAIN CORRELATION
365.6	CARBONDALE	HERRIN	COAL	5.0	70.1	ELEV. 365.60
360.6	CARBONDALE		UNDERCLAY	0.0	75.1	T.D.

MAPID: 16501621000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661043 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716139 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 75.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	19.8	0.0	
416.2			ROCK	25.3	19.8	
391.0			SHALE	7.6	45.0	
383.4			SANDSTONE	5.9	52.6	
377.5			SHALE	3.1	58.5	
374.4			LIMESTONE	1.1	61.6	
373.3			BLACK SHALE	2.3	62.7	
371.1			CLAYSTONE	5.2	64.9	
365.9	CARBONDALE	HERRIN	COAL	5.0	70.1	
360.9	CARBONDALE		UNDERCLAY	0.0	75.1	

MAPID: 16501622000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661129 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.708793 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #S-17 **WELL TYPE:** Coal Test
COMMENT: NO ELEVATION GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	13.0	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	13.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.5	22.0	
-	CARBONDALE	JAMESTOWN	COAL	0.2	31.5	
-	CARBONDALE		CALCAREOUS SHALE	0.5	31.7	
-	CARBONDALE	BRERETON	LIMESTONE	5.5	32.2	
-	CARBONDALE	ANNA	BLACK SHALE	2.7	37.7	
-	CARBONDALE	HERRIN	COAL	4.7	40.3	
-	CARBONDALE		CLAYSTONE	2.0	45.0	

MAPID: 16501622000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661129 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708793 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: AREA NOW STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	13.0	0.0	
427.0			ROCK	7.0	13.0	
420.0			SANDSTONE	2.0	20.0	
418.0			SHALE	9.5	22.0	
408.5			COAL	0.2	31.5	
408.3			SHALE	0.5	31.7	
407.8			LIMESTONE	5.5	32.2	
402.3			BLACK SHALE	2.7	37.7	
399.7	CARBONDALE	HERRIN	COAL	4.7	40.3	
395.0	CARBONDALE		CLAYSTONE	0.0	45.0	

MAPID: 16501623000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658828 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70879 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #S-18 **WELL TYPE:** Coal Test
COMMENT: NO ELEVATION GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	9.0	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	9.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	15.0	
-	CARBONDALE		BLACK SHALE	0.8	25.0	
-	CARBONDALE	JAMESTOWN	COAL	0.2	25.8	
-	CARBONDALE		CALCAREOUS SHALE	0.5	26.0	
-	CARBONDALE	BRERETON	LIMESTONE	6.5	26.5	
-	CARBONDALE	ANNA	BLACK SHALE	0.7	33.0	
-	CARBONDALE	HERRIN	COAL	4.8	33.7	
-	CARBONDALE		CLAYSTONE	2.5	38.5	

MAPID: 16501782000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.670348 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706037 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.1 **LOGGED (FT.):** 15.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: J.HUTSON FARM, HAND DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.1			UNCONSOLIDATED	10.4	0.0	
425.7	CARBONDALE		BLACK SHALE	4.4	10.4	
421.3	CARBONDALE	HERRIN	COAL	0.3	14.8	ELEV. 421.29

MAPID: 16501792000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665754 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706039 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.6 **LOGGED (FT.):** 75.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-12 **WELL TYPE:** Coal Test
COMMENT: C.MARTIN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.6			UNCONSOLIDATED	19.4	0.0	
411.2			SHALY SANDSTONE	5.5	19.4	
405.7			SANDSTONE	12.5	24.9	DARK GRAY OR BLUE
393.2			SHALE	28.0	37.4	
365.2			SHALE/COAL	1.4	65.4	LOG NOTES 1.42' OF BKSH/COAL
363.8			SHALE	8.6	66.8	

MAPID: 16501793000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.668073 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702348 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.7 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-13 **WELL TYPE:** Coal Test
COMMENT: R.OZMENT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.7			UNCONSOLIDATED	17.7	0.0	
433.0			SANDSTONE	17.8	17.7	W/ SHALE
415.3			SHALE	19.6	35.4	
395.7			SHALE	5.0	55.0	W/ YELLOW SANDY SHALE

MAPID: 16501794000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.666915 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.704195 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.6 **LOGGED (FT.):** 34.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-49 **WELL TYPE:** Coal Test
COMMENT: R.OZMENT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.6			UNCONSOLIDATED	15.2	0.0	
425.4			SANDSTONE	3.2	15.2	
422.3			SANDY SHALE	4.3	18.3	
418.0			SHALE	10.9	22.6	
407.1			SANDSTONE	1.4	33.5	

MAPID: 16501795000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654288 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705126 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 34.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-52 **WELL TYPE:** Coal Test
COMMENT: W. NOLAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	12.7	0.0	
405.3			SANDSTONE	4.7	12.7	
400.7			SANDY MUDSTONE	3.8	17.3	
396.8			LIMESTONE W/ SHALE	11.0	21.2	"THIN SHELL OF LS ON GRAY SH"
385.8			SHALE	2.5	32.2	

MAPID: 16500066405M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680092 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.709295 **DATE COLLECTED:** 7 / 15 / 1938
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C MINE # 5 **WELL TYPE:** Underground mine
COMMENT: SAMPLE A

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE			-		
-	CARBONDALE	SPRINGFIELD	COAL	4.5		
-	CARBONDALE		UNDERCLAY	-		

MAPID: 16500066404M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680092 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.709295 **DATE COLLECTED:** 7 / 15 / 1938
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 4.4 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C MINE # 5 **WELL TYPE:** Underground mine
COMMENT: SAMPLE B

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-				-		
-	CARBONDALE	SPRINGFIELD	COAL	4.4		
-			UNDERCLAY	-		

MAPID: 16500066400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 60' S line, 800' E line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68287 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.709467 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C MINE # 5 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	135.0	0.0	
315.0	CARBONDALE	SPRINGFIELD	COAL	4.5	135.0	

MAPID: 16501624000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681814 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708836 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 12.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	7.3	0.0	
442.7	CARBONDALE	HERRIN	COAL	5.6	7.3	

MAPID: 16501625000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681832 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705117 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.7 **LOGGED (FT.):** 16.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #2 **WELL TYPE:** Coal Test
COMMENT: 30 MORE HOLES IN SW QTR. W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.7			UNCONSOLIDATED	12.3	0.0	
442.4	CARBONDALE	HERRIN	COAL	4.7	12.3	TOP ERODED

MAPID: 16501631000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679492 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715326 **DATE COLLECTED:** 5 / 29 / 1990
SURFACE ELEVATION (FT.): 410.9 **LOGGED (FT.):** 18.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #21 **WELL TYPE:** Coal Test
COMMENT: 14 MORE HOLES IN NE QTR W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.9			UNCONSOLIDATED	14.8	0.0	
396.1	CARBONDALE	HERRIN	COAL	3.6	14.8	TOP ERODED
392.6	CARBONDALE		UNDERCLAY	0.0	18.3	

MAPID: 16501631000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679492 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 18.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.0			UNCONSOLIDATED	14.8	0.0	
396.2	CARBONDALE	HERRIN	COAL	3.6	14.8	

MAPID: 16501634000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.678342 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716248 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 15.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: 35 SIMILAR LOGS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.0			UNCONSOLIDATED	10.7	0.0	
395.3	CARBONDALE	HERRIN	COAL	5.2	10.7	

MAPID: 16501642000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.678395 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.703262 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 10.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #73 **WELL TYPE:** Coal Test
COMMENT: 2 MORE HOLES IN SE QTR. W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.0			UNCONSOLIDATED	7.3	0.0	
446.7			BLACK SHALE	1.3	7.3	
445.4			COAL	2.0	8.6	ELEV. 445.37
443.4			UNDERCLAY	0.0	10.6	T.D.

MAPID: 16501652000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.676059 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.714382 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.2 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-1 **WELL TYPE:** Coal Test
COMMENT: J.CRAIG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.2			UNCONSOLIDATED	9.8	0.0	
429.4	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	9.8	SOFT
423.9	CARBONDALE	ANVIL ROCK	SANDSTONE	3.9	15.3	FIRM
419.9	CARBONDALE	ANVIL ROCK	SANDSTONE	7.2	19.3	SOFT
412.8	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	26.4	FIRM
411.8	CARBONDALE		SHALE	4.9	27.4	
406.9	CARBONDALE	BRERETON	LIMESTONE	8.3	32.3	
398.5	CARBONDALE	ANNA	BLACK SHALE	0.7	40.7	
397.9	CARBONDALE	HERRIN	COAL	4.7	41.3	ELEV. 397.87
393.2	CARBONDALE		UNDERCLAY	0.0	46.0	T.D.

MAPID: 16501652000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.676059 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714382 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 439.0 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.0			UNCONSOLIDATED	9.8	0.0	
429.2			ROCK	6.2	9.8	
423.0			SANDSTONE	11.4	16.0	
411.6			SHALE	4.9	27.4	
406.7			LIMESTONE	8.3	32.3	
398.3			SHALE	0.7	40.7	
397.7	CARBONDALE	HERRIN	COAL	4.7	41.3	
393.0			UNDERCLAY	0.0	46.0	

MAPID: 16501653000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674923 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.710672 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.7 **LOGGED (FT.):** 56.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-2 **WELL TYPE:** Coal Test
COMMENT: C.HUTSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.7			UNCONSOLIDATED	22.1	0.0	
439.6	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	22.1	
428.6	CARBONDALE		SHALE	8.5	33.1	
420.1	CARBONDALE	JAMESTOWN	COAL	0.0	41.6	THIN VIEW
420.1	CARBONDALE		CLAYSTONE	1.8	41.6	
418.3	CARBONDALE	BRERETON	LIMESTONE	6.0	43.4	
412.3	CARBONDALE	ANNA	BLACK SHALE	1.0	49.4	
411.3	CARBONDALE	HERRIN	COAL	5.6	50.4	ELEV. 411.27
405.7	CARBONDALE		UNDERCLAY	0.0	56.0	

MAPID: 16501653000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674923 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710672 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 56.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	22.1	0.0	
439.9			ROCK	2.9	22.1	
437.0			SANDSTONE	8.1	25.0	
428.9			SHALE	8.5	33.1	
420.4			COAL	0.0	41.6	
420.4			CLAYSTONE	1.8	41.6	
418.6			LIMESTONE	6.0	43.4	
412.6			SHALE	1.0	49.4	
411.6	CARBONDALE	HERRIN	COAL	5.6	50.4	
406.0	CARBONDALE		UNDERCLAY	0.0	56.0	

MAPID: 16501654000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674945 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 480.4 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.4			UNCONSOLIDATED	19.8	0.0	
460.6			SANDSTONE	4.8	19.8	W/ CLAY, SOME GRAVEL
455.7			SAND & GRAVEL	3.0	24.7	YELLOW SS AND GRAVEL
452.7	CARBONDALE	ANVIL ROCK	SANDSTONE	2.4	27.7	FIRM
450.3	CARBONDALE	ANVIL ROCK	SHALE	2.6	30.1	SOFT
447.7	CARBONDALE	ANVIL ROCK	SANDSTONE	2.6	32.7	HARD
445.1	CARBONDALE	JAMESTOWN	COAL	0.6	35.3	"LITTLE VEIN HICKORY COAL"
444.6	CARBONDALE		SHALE	19.4	35.8	
425.1	CARBONDALE	BRERETON	LIMESTONE	6.6	55.3	
418.6	CARBONDALE	ANNA	BLACK SHALE	1.9	61.8	
416.6	CARBONDALE	HERRIN	COAL	5.3	63.8	
411.4	CARBONDALE		UNDERCLAY	0.0	69.0	T.D.

MAPID: 16501654000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.674945 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0			UNCONSOLIDATED	19.8	0.0	
460.2			ROCK	18.2	19.8	
442.0			SHALE	17.3	38.0	
424.7			LIMESTONE	6.6	55.3	
418.2			BLACK SHALE	1.9	61.8	
416.2	CARBONDALE	HERRIN	COAL	5.3	63.8	
411.0	CARBONDALE		UNDERCLAY	0.0	69.0	

MAPID: 16501655000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.676102 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702338 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 474.8 **LOGGED (FT.):** 45.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-4 **WELL TYPE:** Coal Test
COMMENT: 24.42-30.5 W/ COAL & WHITE LIME (<.33EA)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
474.8			UNCONSOLIDATED	10.6	0.0	
464.2			UNCONSOLIDATED	7.3	10.6	SOFT,SPONGY
456.9	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	17.9	SOFT
450.4	CARBONDALE		SHALE	6.1	24.4	W/ THIN HICKORY COAL & WHITE LIME
444.3	CARBONDALE		BLACK SHALE	2.7	30.5	
441.6	CARBONDALE	BRERETON	LIMESTONE	4.9	33.2	
436.7	CARBONDALE	ANNA	BLACK SHALE	2.5	38.1	
434.2	CARBONDALE	HERRIN	COAL	5.0	40.6	ELEV. 434.23
429.2	CARBONDALE		UNDERCLAY	0.0	45.6	T.D.

MAPID: 16501655000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.676102 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702338 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 45.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	17.9	0.0	
457.1			SANDSTONE	6.6	17.9	
450.5			SHALE	6.0	24.5	
444.5			BLACK SHALE	2.7	30.5	
441.8			LIMESTONE	4.9	33.2	
436.9			BLACK SHALE	2.5	38.1	
434.4	CARBONDALE	HERRIN	COAL	5.0	40.6	
429.4	CARBONDALE		UNDERCLAY	0.0	45.6	

MAPID: 16501656000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684139 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 468.3 **LOGGED (FT.):** 23.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-38 **WELL TYPE:** Coal Test
COMMENT: J.F PARKS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
468.3			UNCONSOLIDATED	11.8	0.0	
456.5			LIMESTONE	0.8	11.8	
455.6			UNCLASSIFIED	2.0	12.7	LOG HAS "HOLLOW OPEN SPACE"
453.6			LIMESTONE	1.0	14.7	
452.6			SOIL	0.5	15.7	DIRT BTWN. LIME, SOME SANDY SHALE
452.1	CARBONDALE	BRERETON	LIMESTONE	1.8	16.2	
450.3	CARBONDALE	ANNA	BLACK SHALE	1.0	18.0	
449.3	CARBONDALE	HERRIN	COAL	4.6	19.0	ELEV. 449.32
444.7	CARBONDALE		UNDERCLAY	0.0	23.6	T.D.

MAPID: 16501656000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684139 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 468.0 **LOGGED (FT.):** 23.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
468.0			UNCONSOLIDATED	11.8	0.0	
456.2			LIMESTONE	6.2	11.8	
450.0			BLACK SHALE	1.0	18.0	
449.0	CARBONDALE	HERRIN	COAL	4.6	19.0	
444.4	CARBONDALE		UNDERCLAY	0.0	23.6	

MAPID: 16501657000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680692 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.703259 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.0 **LOGGED (FT.):** 36.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.0			UNCONSOLIDATED	17.5	0.0	
454.5			SHALE	6.4	17.5	
448.1			LIMESTONE	6.2	23.9	
441.9			BLACK SHALE	1.6	30.1	
440.3	CARBONDALE	HERRIN	COAL	5.0	31.7	
435.3	CARBONDALE		UNDERCLAY	0.0	36.7	

MAPID: 16501657000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680692 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.703259 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.0 **LOGGED (FT.):** 37.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.2	CARBONDALE	LAWSON	GRAY SHALE	6.0	17.8	
448.2	CARBONDALE		BLACK SHALE	0.5	23.8	
447.7	CARBONDALE	BRERETON	LIMESTONE	6.2	24.3	
441.6	CARBONDALE	ANNA	BLACK SHALE	1.6	30.4	
440.0	CARBONDALE	HERRIN	COAL	5.0	32.0	

MAPID: 16501657000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680692 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.703259 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 472.2 **LOGGED (FT.):** 36.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-41 **WELL TYPE:** Coal Test
COMMENT: NE COR. OF NE,SE,SE,SW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
472.2			UNCONSOLIDATED	17.4	0.0	
454.8	CARBONDALE		SHALE	6.0	17.4	
448.8	CARBONDALE		BLACK SHALE	0.5	23.4	
448.3	CARBONDALE	BRERETON	LIMESTONE	6.2	23.9	
442.1	CARBONDALE	ANNA	BLACK SHALE	1.6	30.1	
440.5	CARBONDALE	HERRIN	COAL	5.0	31.7	ELEV. 440.35
435.5	CARBONDALE		UNDERCLAY	0.0	36.7	T.D.

MAPID: 16501658000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684132 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 483.5 **LOGGED (FT.):** 40.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-42 **WELL TYPE:** Coal Test
COMMENT: J.F.PARKS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
483.5			UNCONSOLIDATED	19.9	0.0	
463.6	CARBONDALE		SHALE	7.3	19.9	
456.2	CARBONDALE		BLACK SHALE	2.3	27.3	W/ SOME COAL
454.0	CARBONDALE	BRERETON	LIMESTONE	5.0	29.5	
449.0	CARBONDALE	ANNA	BLACK SHALE	1.4	34.5	
447.6	CARBONDALE	HERRIN	COAL	5.0	35.9	ELEV. 447.62
442.6	CARBONDALE		UNDERCLAY	0.0	40.9	T.D.

MAPID: 16501659000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679535 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705117 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.7 **LOGGED (FT.):** 34.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-43 **WELL TYPE:** Coal Test
COMMENT: A.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.7			UNCONSOLIDATED	18.1	0.0	
443.6	CARBONDALE		SHALE	4.3	18.1	
439.3	CARBONDALE	BRERETON	LIMESTONE	5.5	22.4	
433.8	CARBONDALE	ANNA	BLACK SHALE	2.0	27.9	
431.8	CARBONDALE	HERRIN	COAL	4.8	29.9	ELEV. 431.76
426.9	CARBONDALE		UNDERCLAY	0.0	34.8	T.D.

MAPID: 16501659000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679535 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705117 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 34.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	18.1	0.0	
443.9			SHALE	4.3	18.1	
439.6			LIMESTONE	5.5	22.4	
434.1			BLACK SHALE	2.0	27.9	
432.1	CARBONDALE	HERRIN	COAL	4.8	29.9	
427.2	CARBONDALE		UNDERCLAY	0.0	34.8	

MAPID: 16501660000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677242 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.6 **LOGGED (FT.):** 45.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-44 **WELL TYPE:** Coal Test
COMMENT: A.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.6			UNCONSOLIDATED	21.8	0.0	
412.8	CARBONDALE		SHALE	11.0	21.8	
401.8	CARBONDALE		BLACK SHALE	0.7	32.8	
401.1	CARBONDALE	BRERETON	LIMESTONE	5.3	33.5	
395.8	CARBONDALE	ANNA	BLACK SHALE	1.3	38.8	
394.4	CARBONDALE	HERRIN	COAL	5.0	40.2	ELEV. 434.62
389.4	CARBONDALE		UNDERCLAY	0.0	45.2	T.D.

MAPID: 16501660000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677242 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70419 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 45.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	21.8	0.0	
453.2			SHALE	11.0	21.8	
442.2			SHALE	0.7	32.8	
441.5			LIMESTONE	5.3	33.5	
436.2			BLACK SHALE	1.3	38.8	
434.8	CARBONDALE	HERRIN	COAL	5.0	40.2	
429.8	CARBONDALE		UNDERCLAY	0.0	45.2	

MAPID: 16501661000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672655 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.703265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 49.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-47 **WELL TYPE:** Coal Test
COMMENT: S.ALLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.0			UNCONSOLIDATED	10.1	0.0	
456.9			SAND & SHALE	4.3	10.1	IN LOG AS "SHALE SAND"
452.7	CARBONDALE		SHALE	20.9	14.3	
431.7	CARBONDALE	BRERETON	LIMESTONE	7.3	35.3	
424.5	CARBONDALE	ANNA	BLACK SHALE	1.6	42.5	
422.9	CARBONDALE	HERRIN	COAL	5.0	44.1	ELEV. 422.96

MAPID: 16501661000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672655 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.703265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 467.0 **LOGGED (FT.):** 49.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
467.0			UNCONSOLIDATED	10.1	0.0	
456.9			ROCK	8.9	10.1	
448.0			SHALE	16.3	19.0	
431.7			LIMESTONE	7.3	35.3	
424.5			SHALE	1.6	42.5	
422.9	CARBONDALE	HERRIN	COAL	5.0	44.1	

MAPID: 16501808000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681803 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.711624 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.1 **LOGGED (FT.):** 16.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #20 **WELL TYPE:** Coal Test
COMMENT: 28 MORE HOLES IN NW QTR. W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.1			UNCONSOLIDATED	12.0	0.0	
415.1	CARBONDALE	HERRIN	COAL	4.9	12.0	TOP ERODED
410.2	CARBONDALE		UNDERCLAY	0.0	16.9	T.D.

MAPID: 16501808000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW NE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681803 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.711624 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 17.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.0			UNCONSOLIDATED	16.0	0.0	
411.0			ROCK	1.0	16.0	
410.0			COAL	0.7	17.0	

MAPID: 16501836000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.685264 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.70698 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2218.0 **LOG TYPE:**
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-26.0	CARBONDALE	BRERETON	LIMESTONE	-	400.0	
-1468.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1842.0	
-1844.0			LIMESTONE	-	2218.0	

MAPID: 165273B0004F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688732 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702323 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 16.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BENSON **WELL TYPE:** Outcrop
COMMENT: SITE OF OLD MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			LIMESTONE	8.0		
-			BLACK SHALE	1.0		
-	CARBONDALE	HERRIN	COAL	5.5		
-	CARBONDALE		UNDERCLAY	2.0		

MAPID: 165273B0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688708 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.706985 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: AREA NOW STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			LIMESTONE	-		
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 165273B0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681807 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710693 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 29.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT: SITE OF SAHARA # 5 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	8.0	0.0	
422.0			ROCK	3.5	8.0	
418.5			UNKNOWN	5.5	11.5	
413.0			ROCK	2.5	17.0	
410.5			COAL	0.3	19.5	
410.2			ROCK	8.3	19.8	
401.9	CARBONDALE	HERRIN	COAL	1.0	28.1	

MAPID: 16500066403M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1250' N line, 600' W line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.705275 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705791 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 4.1 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GLUSKOTER SAHARA # 5 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	0.1		
-	CARBONDALE	SPRINGFIELD	COAL	4.0		

MAPID: 16500458000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690932 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.715369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
421.0	CARBONDALE	HERRIN	COAL	4.5	9.0	
365.0	CARBONDALE	BRIAR HILL	COAL	2.0	65.0	
297.0	CARBONDALE	SPRINGFIELD	COAL	5.5	133.0	

MAPID: 16500458000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690932 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715369 **DATE COLLECTED:** 6 / 10 / 1905
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	9.0	0.0	
421.0			SHALE	0.5	9.0	
420.5	CARBONDALE	HERRIN	COAL	4.5	9.5	
416.0	CARBONDALE		UNDERCLAY	1.0	14.0	
415.0	CARBONDALE		ROCK	15.0	15.0	
400.0	CARBONDALE		CLAYSTONE	35.0	30.0	
365.0	CARBONDALE	BRIAR HILL	COAL	2.0	65.0	
363.0	CARBONDALE		ROCK	41.0	67.0	
322.0	CARBONDALE		SHALE	25.0	108.0	
297.0	CARBONDALE	SPRINGFIELD	COAL	5.5	133.0	

MAPID: 16500458000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690932 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715369 **DATE COLLECTED:** 6 / 10 / 1905
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: NO HOLE #, H. CUMMINS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	9.0	0.0	
421.0	CARBONDALE		BLACK SHALE	0.5	9.0	
420.5	CARBONDALE	HERRIN	COAL	4.5	9.5	
416.0	CARBONDALE		UNDERCLAY	1.0	14.0	
415.0	CARBONDALE		SANDSTONE	5.0	15.0	
410.0	CARBONDALE		SANDY CLAYSTONE	25.0	20.0	
385.0	CARBONDALE		BLACK SHALE	20.0	45.0	
365.0	CARBONDALE	BRIAR HILL	COAL	2.0	65.0	
363.0	CARBONDALE	DYKERSBURG	SHALE	40.0	67.0	
323.0	CARBONDALE	DYKERSBURG	SHALE	26.5	107.0	
296.5	CARBONDALE	SPRINGFIELD	COAL	5.5	133.5	

MAPID: 16501662000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.689816 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.712578 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.6 **LOGGED (FT.):** 16.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #44 **WELL TYPE:** Coal Test
COMMENT: 6 MORE HOLES W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.6			UNCONSOLIDATED	11.8	0.0	
413.8	CARBONDALE	HERRIN	COAL	4.3	11.8	TOP OF COAL MAY BE ERODED
409.4			UNDERCLAY	0.0	16.2	T.D.

MAPID: 16501662000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.689816 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.712578 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 16.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.0			UNCONSOLIDATED	11.8	0.0	
425.2	CARBONDALE	HERRIN	COAL	4.4	11.8	
420.8			UNDERCLAY	0.0	16.2	

MAPID: 16501663000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE NW SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.692078 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.711633 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 10.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: MANY AVAILABLE LOGS IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	5.3	0.0	
429.7	CARBONDALE	HERRIN	COAL	4.8	5.3	
424.9			UNDERCLAY	0.0	10.1	

MAPID: 16501666000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.699998 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.709729 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.1 **LOGGED (FT.):** 16.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #97 **WELL TYPE:** Coal Test
COMMENT: 40 MORE HOLES W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.1			UNCONSOLIDATED	12.0	0.0	
448.1	CARBONDALE	HERRIN	COAL	2.5	12.0	TOP OF COAL MAY BE ERODED
445.6	CARBONDALE	HERRIN	ROCK	0.3	14.5	
445.3	CARBONDALE	HERRIN	COAL	1.7	14.8	

MAPID: 16501673000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SE NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.704492 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.713413 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 453.0 **LOGGED (FT.):** 21.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
453.0			UNCONSOLIDATED	16.2	0.0	
436.8	CARBONDALE	HERRIN	COAL	5.2	16.2	
431.7			UNDERCLAY	0.0	21.3	

MAPID: 16501679000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690932 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715369 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 463.3 **LOGGED (FT.):** 49.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-27 **WELL TYPE:** Coal Test
COMMENT: H.CUMMINS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
463.3			UNCONSOLIDATED	11.3	0.0	
452.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.3	11.3	
438.8	CARBONDALE		SHALE & MUDSTONE	12.8	24.5	
426.0	CARBONDALE		BLACK SHALE	0.5	37.3	
425.5	CARBONDALE	BRERETON	LIMESTONE	2.3	37.8	
423.3	CARBONDALE	ANNA	BLACK SHALE	4.8	40.0	W/ FIRECLAY BTWN BKSH & COAL
418.5	CARBONDALE	HERRIN	COAL	4.6	44.8	ELEV. 418.59
414.0			UNDERCLAY	0.0	49.3	T.D.

MAPID: 16501680000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693187 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715351 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 476.8 **LOGGED (FT.):** 62.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-28 **WELL TYPE:** Coal Test
COMMENT: H.CUMMINS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
476.8			UNCONSOLIDATED	25.8	0.0	
451.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.1	25.8	
443.9	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	32.9	
440.9	CARBONDALE		SHALE & MUDSTONE	14.0	35.9	
426.9	CARBONDALE	JAMESTOWN	COAL	1.3	49.9	BLACK SOOTY STREAK, A LITTLE COAL
425.6	CARBONDALE	BRERETON	LIMESTONE	4.6	51.2	
421.0	CARBONDALE	ANNA	BLACK SHALE	2.0	55.8	
419.0	CARBONDALE	HERRIN	COAL	4.5	57.8	ELEV. 419.02
414.5	CARBONDALE		UNDERCLAY	0.0	62.3	T.D.

MAPID: 16501680000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693187 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715351 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 62.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
477.0			UNCONSOLIDATED	25.8	0.0	
451.2			ROCK	7.1	25.8	
444.1			SANDSTONE	3.0	32.9	
441.1			SHALE	13.2	35.9	
427.9			COAL	2.1	49.1	
425.8			LIMESTONE	4.6	51.2	
421.2			BLACK SHALE	2.0	55.8	
419.2	CARBONDALE	HERRIN	COAL	4.5	57.8	
414.7			UNDERCLAY	0.0	62.3	

MAPID: 16501681000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697715 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.713459 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 484.0 **LOGGED (FT.):** 69.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
484.0			UNCONSOLIDATED	28.5	0.0	
455.5			SANDSTONE	21.1	28.5	
434.4	CARBONDALE	HERRIN	COAL	4.5	49.6	
429.9			UNDERCLAY	8.1	54.1	
421.8			SANDSTONE	0.0	62.2	

MAPID: 16501682000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697702 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.716247 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.3 **LOGGED (FT.):** 52.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-30 **WELL TYPE:** Coal Test
COMMENT: NW COR. OF NW,NW,NW,NE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.3			UNCONSOLIDATED	5.8	0.0	
450.5	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	28.5	5.8	
422.0	CARBONDALE		SHALE & MUDSTONE	13.0	34.3	LOG HAS MUD; PROB. MUDST.
409.0	CARBONDALE	ANNA	BLACK SHALE	1.2	47.3	
407.9	CARBONDALE		COAL	4.3	48.4	ELEV. 407.92
403.6	CARBONDALE		UNDERCLAY	0.0	52.7	T.D.

MAPID: 16501682000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697702 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716247 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 52.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	5.8	0.0	
450.2			ROCK	17.7	5.8	
432.5			SANDSTONE	10.8	23.5	
421.7			SHALE	13.0	34.3	
408.7			BLACK SHALE	1.2	47.3	
407.6	CARBONDALE	HERRIN	COAL	4.3	48.4	
403.3			UNDERCLAY	0.0	52.7	

MAPID: 16501683000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697722 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.712529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 496.4 **LOGGED (FT.):** 62.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., #P-32 **WELL TYPE:** Coal Test
COMMENT: N.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
496.4			UNCONSOLIDATED	19.2	0.0	
477.2	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	5.8	19.2	
471.5	CARBONDALE	ANVIL ROCK	SANDSTONE	9.1	24.9	
462.4	CARBONDALE		SHALE & MUDSTONE	17.7	34.0	
444.7	CARBONDALE	BRERETON	LIMESTONE	5.1	51.7	
439.6	CARBONDALE		BLACK SHALE & LIMESTONE	0.5	56.8	LOG HAS BLACK SLATE OVER LIMESTONE
439.1	CARBONDALE	ANNA	BLACK SHALE	0.5	57.3	
438.6	CARBONDALE	HERRIN	COAL	4.8	57.8	ELEV. 438.69
433.8	CARBONDALE		UNDERCLAY	0.0	62.6	T.D.

MAPID: 16501683000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NW SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.697722 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.712529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 496.0 **LOGGED (FT.):** 62.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
496.0			UNCONSOLIDATED	19.2	0.0	
476.8			ROCK	13.6	19.2	
463.2			SANDSTONE	1.3	32.8	
462.0			SHALE	17.7	34.0	
444.3			LIMESTONE	5.1	51.7	
439.2			BLACK SHALE	1.0	56.8	
438.2	CARBONDALE	HERRIN	COAL	4.8	57.8	
433.4			UNDERCLAY	0.0	62.6	

MAPID: 16501684000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.702223 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 474.8 **LOGGED (FT.):** 35.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-33 **WELL TYPE:** Coal Test
COMMENT: N.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
474.8			UNCONSOLIDATED	30.6	0.0	
444.2	CARBONDALE	HERRIN	COAL	5.3	30.6	TOP OF COAL MAY BE ERODED
438.9	CARBONDALE		UNDERCLAY	0.0	35.9	T.D.

MAPID: 16501684000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.702223 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 35.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	30.6	0.0	
444.4	CARBONDALE	HERRIN	COAL	5.3	30.6	
439.1			UNDERCLAY	0.0	35.9	

MAPID: 16501685000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690966 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.708843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.5 **LOGGED (FT.):** 22.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-35 **WELL TYPE:** Coal Test
COMMENT: S.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.5			UNCONSOLIDATED	18.0	0.0	
440.5	CARBONDALE	HERRIN	COAL	4.0	18.0	TOP OF COAL PROBABLY ERODED
436.5	CARBONDALE		UNDERCLAY	0.0	22.0	T.D.

MAPID: 16501685000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.690966 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708843 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.0 **LOGGED (FT.):** 22.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.0			UNCONSOLIDATED	18.0	0.0	
441.0	CARBONDALE	HERRIN	COAL	4.0	18.0	
437.0			UNDERCLAY	0.0	22.0	

MAPID: 16501686000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693229 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707901 **DATE COLLECTED:** 4 / 27 / 1982
SURFACE ELEVATION (FT.): 483.0 **LOGGED (FT.):** 45.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
483.0			UNCONSOLIDATED	8.8	0.0	
474.2			ROCK	7.1	8.8	
467.1			SHALE	18.1	15.9	
449.0			SANDSTONE	5.4	34.0	
443.6			BLACK SHALE	1.3	39.4	
442.2	CARBONDALE	HERRIN	COAL	5.0	40.8	
437.2			UNDERCLAY	0.0	45.8	

MAPID: 16501686000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693229 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.707901 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 483.0 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
473.9	CARBONDALE	LAWSON	SANDSTONE	7.1	9.1	
466.8	CARBONDALE	LAWSON	GRAY SHALE	18.1	16.2	
448.7	CARBONDALE	BRERETON	LIMESTONE	5.4	34.3	
443.3	CARBONDALE	ANNA	BLACK SHALE	1.3	39.7	
442.0	CARBONDALE	HERRIN	COAL	5.0	41.0	

MAPID: 16501686000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.693229 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707901 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 483.4 **LOGGED (FT.):** 45.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-36 **WELL TYPE:** Coal Test
COMMENT: S.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
483.4			UNCONSOLIDATED	8.8	0.0	
474.6			SANDSTONE	7.1	8.8	
467.5			SHALE & MUDSTONE	18.2	15.9	
449.4	CARBONDALE	BRERETON	LIMESTONE	5.4	34.0	
444.0	CARBONDALE	ANNA	BLACK SHALE	1.3	39.4	
442.6	CARBONDALE	HERRIN	COAL	5.0	40.8	ELEV. 465.36
437.6	CARBONDALE		UNDERCLAY	0.0	45.8	T.D.

MAPID: 16501879000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68983 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.709782 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 46.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-34 **WELL TYPE:** Coal Test
COMMENT: N.MILLER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			UNCONSOLIDATED	11.1	0.0	
430.9			SANDSTONE	10.2	11.1	
420.7			SANDSTONE	6.3	21.3	
414.5			MUDSTONE	12.5	27.5	
402.0			SANDY SHALE	6.7	40.0	

MAPID: 165273B0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706761 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.711546 **DATE COLLECTED:** 7 / 0 / 1932
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 77.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT: TRAVERSE ALONG ICRR CUTOFF N TO SOUTH

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	5.5	0.0	
-			ROCK	23.0		
-	CARBONDALE	JAMESTOWN	COAL	0.2		
-	CARBONDALE		ROCK	4.6		
-	CARBONDALE		UNKNOWN	-		
-	CARBONDALE		SHALE	1.0		
-	CARBONDALE		LIMESTONE	5.6		
-	CARBONDALE		SHALE	0.7		
-	CARBONDALE	HERRIN	COAL	5.3		
-	CARBONDALE		UNDERCLAY	0.2		
-	CARBONDALE		ROCK	31.4		

MAPID: 165273B0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706778 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708769 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 32.9 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: ICRR CUTOFF OTHER FLD NOTES FOR LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		SANDSTONE	10.0		
-	CARBONDALE		BLACK SHALE	1.5		
-	CARBONDALE		LIMESTONE	6.0		
-	CARBONDALE		BLACK SHALE	0.3		
-	CARBONDALE	HERRIN	COAL	5.2		
-	CARBONDALE		SANDSTONE	10.0		

MAPID: 165273B0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW SW NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.70227 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.706935 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 14.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	-		
-			BLACK SHALE	9.0		
-	CARBONDALE	HERRIN	COAL	5.5		

MAPID: 165273B0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.706226 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.706457 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 24.9 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-PARKS **WELL TYPE:** Roadcut
COMMENT: SAHARA # 5 MINE. ICRR CUTTOFF.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	10.0	0.0	
420.0			LIMESTONE	14.3	10.0	
405.7			SHALE	0.6	24.3	
405.1	CARBONDALE	HERRIN	COAL	-	24.9	

MAPID: 16500326300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1020' N line, 600' E line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.691593 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691682 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 114.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BLUEBIRD C C MINE # 6 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNKNOWN	110.0	0.0	
340.0	CARBONDALE	SPRINGFIELD	COAL	4.7	110.0	

MAPID: 16500420600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.692953 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688053 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 34.0 **LOG TYPE:**
SOURCE: FLD NOTES-BENSON BLUEBIRD MINE **WELL TYPE:** Strip Mine
COMMENT: STRIP PIT # 3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	10.0	0.0	
420.0	CARBONDALE		SHALE	20.0	10.0	
400.0	CARBONDALE	SPRINGFIELD	COAL	4.0	30.0	

MAPID: 16502468000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701944 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687997 **DATE COLLECTED:** 0 / 0 / 1945
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: WELDON WELL CO, IL CENTRAL R R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
313.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	87.0	
265.0	CARBONDALE	SURVANT	COAL	0.0	135.0	
180.0	CARBONDALE	COLCHESTER	COAL	2.0	220.0	
135.0	CARBONDALE	DEKOVEN	COAL	3.7	265.0	
135.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	265.0	
125.0	CARBONDALE	DAVIS	COAL	3.7	275.0	
61.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	339.0	
50.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	350.0	
10.0	TRADEWATER	MT. RORAH	COAL	0.0	390.0	

MAPID: 16502468000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.701944 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.687997 **DATE COLLECTED:** 0 / 0 / 1945
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 276.0 **LOG TYPE:** Electric Log
SOURCE: WELDON WELL CO **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	218.0	
-	SPOON	DAVIS	UNCLASSIFIED	-	276.0	

MAPID: 16500252800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671742 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.692285 **DATE COLLECTED:** 0 / 0 / 1946
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-KNICKERBOCKER C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNKNOWN	75.0	0.0	
345.0	CARBONDALE	SPRINGFIELD	COAL	5.0	75.0	

MAPID: 16500460000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 150' S line, 400' W line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6882 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.687578 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	CARBONDALE	SPRINGFIELD	COAL	4.1	58.0	

MAPID: 16500460000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 150' S line, 400' W line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6882 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687578 **DATE COLLECTED:** 6 / 28 / 1905
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	10.0	0.0	
428.0			ROCK	27.6	10.0	
400.4			SHALE	20.9	37.6	
379.5	CARBONDALE	SPRINGFIELD	COAL	4.1	58.5	
375.4	CARBONDALE		UNDERCLAY	0.0	62.6	

MAPID: 16500460000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 150' S line, 400' W line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6882 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.687578 **DATE COLLECTED:** 6 / 28 / 1905
SURFACE ELEVATION (FT.): 438.0 **LOGGED (FT.):** 63.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #6 **WELL TYPE:** Coal Test
COMMENT: J.A.TURNER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
438.0			UNCONSOLIDATED	10.0	0.0	
428.0	CARBONDALE	DYKERSBURG	SHALE	5.0	10.0	
423.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	15.0	
417.0	CARBONDALE	DYKERSBURG	SHALE	27.0	21.0	
390.0	CARBONDALE	DYKERSBURG	BLACK SHALE	10.5	48.0	
379.5	CARBONDALE	SPRINGFIELD	COAL	4.0	58.5	
375.4	CARBONDALE		UNDERCLAY	1.0	62.6	

MAPID: 16501687000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68417 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.700488 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 455.8 **LOGGED (FT.):** 12.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #59 **WELL TYPE:** Coal Test
COMMENT: 17 MORE HOLES W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.8			UNCONSOLIDATED	7.8	0.0	
448.0			COAL	2.0	7.8	ELEV. 448.03
446.0			COAL	2.3	9.8	

MAPID: 16501687000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.68417 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.700488 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 12.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	7.8	0.0	
448.2	CARBONDALE	HERRIN	COAL	2.0	7.8	
446.2	CARBONDALE	HERRIN	COAL	2.3	9.8	

MAPID: 16501691000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.688743 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701398 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 459.0 **LOGGED (FT.):** 12.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.0			UNCONSOLIDATED	10.0	0.0	
449.0	CARBONDALE	HERRIN	COAL	2.0	10.0	

MAPID: 16501695000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.684153 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701404 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 448.0 **LOGGED (FT.):** 9.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
448.0			UNCONSOLIDATED	8.2	0.0	
439.8	CARBONDALE	HERRIN	COAL	0.9	8.2	
438.9			SANDSTONE	0.0	9.1	

MAPID: 16501697000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.675008 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699588 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 11.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	6.5	0.0	
436.5	CARBONDALE	HERRIN	COAL	4.5	6.5	

MAPID: 16501705000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW NE NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681873 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.700491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 454.4 **LOGGED (FT.):** 28.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., #P-39 **WELL TYPE:** Coal Test
COMMENT: NW COR. OF QUARTERS; J.F.PARKS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.4			UNCONSOLIDATED	13.9	0.0	
440.5			SAND & GRAVEL	6.0	13.9	YELLOW SAND AND GRAVEL MIXED
434.5			SANDSTONE	5.5	19.9	THIN COAL AT 23.25; W/ THIN WHITE SS
429.0			MUDSTONE	3.1	25.4	DRILLING STOPPED IN MUD

MAPID: 16501706000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW SE NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.681915 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.698658 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.4 **LOGGED (FT.):** 25.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. #P-40 **WELL TYPE:** Coal Test
COMMENT: J.F.PARKS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.4			UNCONSOLIDATED	10.8	0.0	COAL CROPPINGS AT 10.83
434.6			SAND & GRAVEL	3.6	10.8	YELLOW SS & GRAVEL MIXED
431.0			SANDSTONE	7.0	14.4	
424.0			ARGILLACEOUS SANDSTONE	4.0	21.4	THIN LAYER WHITE SS, THEN INTO MUD

MAPID: 16501707000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672711 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699591 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 33.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., #P-45 **WELL TYPE:** Coal Test
COMMENT: C.WROTEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
464.0			UNCONSOLIDATED	19.4	0.0	
444.6			UNCLASSIFIED	2.8	19.4	HOLLOW SPACE
441.8	CARBONDALE	BRERETON	LIMESTONE	3.8	22.2	
438.1	CARBONDALE	ANNA	BLACK SHALE	2.2	25.9	
435.9	CARBONDALE	HERRIN	COAL	5.0	28.1	ELEV. 435.87

MAPID: 16501707000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672711 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699591 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 464.0 **LOGGED (FT.):** 33.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
464.0			UNCONSOLIDATED	22.2	0.0	
441.8			LIMESTONE	3.8	22.2	
438.1			BLACK SHALE	2.2	25.9	
435.9	CARBONDALE	HERRIN	COAL	5.0	28.1	

MAPID: 16501708000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SE SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671586 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69868 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.9 **LOGGED (FT.):** 24.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., #P-46 **WELL TYPE:** Coal Test
COMMENT: C.WROTEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.9			UNCONSOLIDATED	17.3	0.0	
444.6	CARBONDALE	HERRIN	COAL	3.8	17.3	ERODED TOP
440.9	CARBONDALE		UNDERCLAY	3.2	21.0	

MAPID: 16501708000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** SE SE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.671586 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69868 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 24.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	17.3	0.0	
444.7	CARBONDALE	HERRIN	COAL	3.8	17.3	
441.0	CARBONDALE		UNDERCLAY	0.0	21.0	

MAPID: 165273B0009F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679719 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694084 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 3.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BENSON **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	-	0.0	
-			COAL	0.7		
-			UNDERCLAY	2.5		

MAPID: 16500013000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661469 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.690507 **DATE COLLECTED:** 0 / 0 / 1921
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 45.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WASSON C C **WELL TYPE:** Underground mine
COMMENT: SECTION AT SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.0			UNCONSOLIDATED	12.0	0.0	
389.0			SHALE	25.0	12.0	
364.0	CARBONDALE	SPRINGFIELD	COAL	4.8	37.0	
359.2	CARBONDALE		UNDERCLAY	4.0	41.8	

MAPID: 16500326700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SE SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.667244 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688655 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-BLUEBIRD C C MINE # 4 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500326600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658531 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.693712 **DATE COLLECTED:** 0 / 0 / 1946
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 39.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-RUSSELL C C **WELL TYPE:** Underground mine
COMMENT: DATA FROM COAL REPORT 1946

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNKNOWN	35.0	0.0	
395.0	CARBONDALE	SPRINGFIELD	COAL	4.7	35.0	

MAPID: 16500326500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658654 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688242 **DATE COLLECTED:** 0 / 0 / 1946
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-PRODUCERS C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500461000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1980' S line, 660' E line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.655116 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.692812 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 67.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #4 **WELL TYPE:** Coal Test
COMMENT: H.HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	5.0	0.0	
407.0			CLAY	11.0	5.0	
396.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	16.0	
388.0	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	24.0	
363.0	CARBONDALE	DYKERSBURG	BLACK SHALE	13.3	49.0	
349.7	CARBONDALE	SPRINGFIELD	COAL	4.8	62.3	
344.8	CARBONDALE		UNDERCLAY	0.3	67.2	

MAPID: 16500461000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1980' S line, 660' E line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.655116 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.692812 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 67.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	16.0	0.0	
396.0			SANDSTONE	21.0	16.0	
375.0			SHALE	25.3	37.0	
349.7	CARBONDALE	SPRINGFIELD	COAL	4.8	62.3	
344.8	CARBONDALE		UNDERCLAY	0.0	67.2	

MAPID: 16500726000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659779 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.689144 **DATE COLLECTED:** 6 / 10 / 1914
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 30.4 **LOG TYPE:** Drillers Log
SOURCE: FRANK LANCASTER (DRILLER) HOLE #23 **WELL TYPE:** Coal Test
COMMENT: W.L.MILLER FARM; M.E.WILLSON COLLECTOR

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	16.0	0.0	
386.0	CARBONDALE	DYKERSBURG	SHALE	9.8	16.0	
376.2	CARBONDALE	SPRINGFIELD	COAL	4.4	25.8	
371.8	CARBONDALE		UNDERCLAY	0.3	30.2	

MAPID: 16500726000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.659779 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.689144 **DATE COLLECTED:** 6 / 10 / 1914
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 30.4 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	16.0	0.0	
386.0			SHALE	9.8	16.0	
376.2	CARBONDALE	SPRINGFIELD	COAL	4.4	25.8	
371.8	CARBONDALE		UNDERCLAY	0.0	30.2	

MAPID: 16500727000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1321' S line, 1020' W line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658487 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.690976 **DATE COLLECTED:** 6 / 9 / 1914
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 46.3 **LOG TYPE:** Drillers Log
SOURCE: FRANK LANCASTER (DRILLER) HOLE #22 **WELL TYPE:** Coal Test
COMMENT: 1/2 QTR LNE, 300'E OF CTR ON SL OF NW SE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	15.0	0.0	
403.0	CARBONDALE	DYKERSBURG	SHALE	26.6	15.0	
376.4	CARBONDALE	SPRINGFIELD	COAL	4.4	41.6	
372.0	CARBONDALE		UNDERCLAY	0.3	46.0	

MAPID: 16500727000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1321' S line, 1020' W line of SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.658487 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.690976 **DATE COLLECTED:** 6 / 19 / 1914
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 46.3 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	15.0	0.0	
403.0			SHALE	26.6	15.0	
376.4	CARBONDALE	SPRINGFIELD	COAL	4.4	41.6	
372.0	CARBONDALE		UNDERCLAY	0.0	46.0	

MAPID: 16500728000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662595 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.691415 **DATE COLLECTED:** 4 / 18 / 1914
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 36.5 **LOG TYPE:** Drillers Log
SOURCE: FRANK LANCASTER (DRILLER) HOLE #10 **WELL TYPE:** Coal Test
COMMENT: H.E.WILLSON COLLECTOR

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	16.0	0.0	
406.0	CARBONDALE	DYKERSBURG	SHALE	15.7	16.0	
390.3	CARBONDALE	SPRINGFIELD	COAL	4.4	31.7	
385.9	CARBONDALE		UNDERCLAY	0.4	36.1	

MAPID: 16500728000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662595 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691415 **DATE COLLECTED:** 4 / 18 / 1914
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 36.5 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	16.0	0.0	
406.0			SHALE	15.7	16.0	
390.3	CARBONDALE	SPRINGFIELD	COAL	4.4	31.7	
385.9	CARBONDALE		UNDERCLAY	0.0	36.1	

MAPID: 16500729000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662532 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69415 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 77.2 **LOG TYPE:** Drillers Log
SOURCE: F.LANCASTER DRILLER, HOLE #12 **WELL TYPE:** Coal Test
COMMENT: M.E.WILLSON COLLECTOR; B.D. ODUM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	16.0	0.0	
402.0	CARBONDALE	DYKERSBURG	SANDY SHALE	44.0	16.0	
358.0	CARBONDALE	DYKERSBURG	SHALE	12.0	60.0	
346.0	CARBONDALE	SPRINGFIELD	COAL	5.0	72.0	
341.0	CARBONDALE		UNDERCLAY	0.2	77.0	

MAPID: 16500729000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.662532 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69415 **DATE COLLECTED:** 4 / 22 / 1914
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 77.2 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	16.0	0.0	
402.0			ROCK	31.0	16.0	
371.0			SHALE	25.0	47.0	
346.0	CARBONDALE	SPRINGFIELD	COAL	5.0	72.0	
341.0	CARBONDALE		UNDERCLAY	0.0	77.0	

MAPID: 16500730000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657928 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69508 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 97.5 **LOG TYPE:** Drillers Log
SOURCE: F.LANCASTER DRILLER HOLE #14 **WELL TYPE:** Coal Test
COMMENT: H.E.WILLSON COLLECTOR; B.D. ODUM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	14.0	0.0	
421.0	CARBONDALE	BRIAR HILL	COAL	1.5	14.0	
419.5	CARBONDALE	DYKERSBURG	SHALE	77.2	15.5	
342.3	CARBONDALE	SPRINGFIELD	COAL	4.4	92.7	
337.9	CARBONDALE		UNDERCLAY	0.4	97.1	

MAPID: 16500730000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657928 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69508 **DATE COLLECTED:** 4 / 25 / 1914
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 97.5 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0			UNCONSOLIDATED	14.0	0.0	
421.0	CARBONDALE	BRIAR HILL	COAL	1.5	14.0	
419.5	CARBONDALE		ROCK	51.5	15.5	
368.0	CARBONDALE		SHALE	25.7	67.0	
342.3	CARBONDALE	SPRINGFIELD	COAL	4.4	92.7	
337.9	CARBONDALE		UNDERCLAY	0.0	97.1	

MAPID: 16500731000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657286 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.698275 **DATE COLLECTED:** 4 / 21 / 1914
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 130.8 **LOG TYPE:** Drillers Log
SOURCE: C.DOOLEY (DRILLER) HOLE #11 **WELL TYPE:** Coal Test
COMMENT: H.E.WILLSON COLLECTOR; B.D.ODUM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	7.5	0.0	
437.5	CARBONDALE		SANDY SHALE	12.0	7.5	
425.5	CARBONDALE		SHALE	31.3	19.5	
394.2	CARBONDALE	BRIAR HILL	COAL	1.3	50.8	
392.9	CARBONDALE	DYKERSBURG	SHALE	73.9	52.1	
319.0	CARBONDALE	SPRINGFIELD	COAL	4.5	126.0	
314.5	CARBONDALE		UNDERCLAY	0.3	130.5	

MAPID: 16500731000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657286 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698275 **DATE COLLECTED:** 4 / 21 / 1914
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 130.8 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	7.5	0.0	
437.5			ROCK	43.3	7.5	
394.2	CARBONDALE	BRIAR HILL	COAL	1.3	50.8	
392.9	CARBONDALE		ROCK	48.9	52.1	
344.0	CARBONDALE		SHALE	25.0	101.0	
319.0	CARBONDALE	SPRINGFIELD	COAL	4.5	126.0	
314.5	CARBONDALE		UNDERCLAY	0.0	130.5	

MAPID: 16500732000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654355 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.701472 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: NO COMPANY **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.0	CARBONDALE	BRIAR HILL	COAL	1.5	43.0	
301.0	CARBONDALE	SPRINGFIELD	COAL	4.6	119.0	

MAPID: 16500732000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654355 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701472 **DATE COLLECTED:** 5 / 7 / 1914
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 123.2 **LOG TYPE:** Drillers Log
SOURCE: WILLSON H. E. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	15.0	0.0	
405.0			ROCK	28.5	15.0	
376.5	CARBONDALE	BRIAR HILL	COAL	1.5	43.5	
375.0	CARBONDALE		ROCK	48.0	45.0	
327.0	CARBONDALE		SHALE	25.6	93.0	
301.4	CARBONDALE	SPRINGFIELD	COAL	4.6	118.6	

MAPID: 16500732000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654355 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.701472 **DATE COLLECTED:** 5 / 7 / 1914
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 123.2 **LOG TYPE:** Drillers Log
SOURCE: F.LANCASTER DRILLER HOLE #19 **WELL TYPE:** Coal Test
COMMENT: H.E.WILLSON COLL; 1/2 QTR LINE NE NE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	15.0	0.0	
405.0	CARBONDALE		SHALE	28.5	15.0	
376.5	CARBONDALE	BRIAR HILL	COAL	1.5	43.5	
375.0	CARBONDALE		SANDY SHALE	8.0	45.0	
367.0	CARBONDALE		LIMESTONE	1.4	53.0	
365.6	CARBONDALE	DYKERSBURG	SHALE	8.8	54.4	
356.8	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	63.2	
338.8	CARBONDALE	DYKERSBURG	SHALE	37.4	81.2	
301.4	CARBONDALE	SPRINGFIELD	COAL	4.6	118.6	

MAPID: 16500088800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.650922 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.700574 **DATE COLLECTED:** 0 / 0 / 1970
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 28.8 **LOG TYPE:**
SOURCE: MINE NOTES-HOUSTON C C **WELL TYPE:** Strip Mine
COMMENT: DATA FROM COAL REPORT 1970

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	24.0	0.0	
376.0	CARBONDALE	HERRIN	COAL	4.8	24.0	

MAPID: 16500326400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652058 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70148 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 30.0 **LOG TYPE:**
SOURCE: MINE NOTES-JOHNSON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	25.0	0.0	
425.0	CARBONDALE	HERRIN	COAL	5.0	25.0	

MAPID: 16500326800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634911 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687874 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 49.4 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-LONE STAR C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNKNOWN	45.0	0.0	
370.0	CARBONDALE	SPRINGFIELD	COAL	4.4	45.0	

MAPID: 16500326900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.642937 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694226 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 55.2 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DODDS C C **WELL TYPE:** Underground mine
COMMENT: DATA FROM QUADE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	50.0	0.0	
350.0	CARBONDALE	SPRINGFIELD	COAL	5.2	50.0	

MAPID: 16500327100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW SE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.647071 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69011 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 15.0 **LOG TYPE:**
SOURCE: FLD NOTES-WANLESS BLUEBIRD MINE # 2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		SHALE	10.0		
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16500327000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.652617 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69829 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 91.6 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-LANHAM C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	87.0	0.0	
318.0	CARBONDALE	SPRINGFIELD	COAL	4.6	87.0	

MAPID: 16500331600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.644619 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697408 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 54.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BLUEBLAZE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	50.0	0.0	
360.0	CARBONDALE	SPRINGFIELD	COAL	4.7	50.0	

MAPID: 16500462000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646276 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.701503 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.0	CARBONDALE	HERRIN	COAL	3.7	43.0	
310.0	CARBONDALE	SPRINGFIELD	COAL	4.8	121.0	

MAPID: 16500462000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NE NW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646276 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.701503 **DATE COLLECTED:** 8 / 20 / 1905

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 127.2 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	12.0	0.0	
419.0			ROCK	6.0	12.0	
413.0			CLAYSTONE	8.0	18.0	
405.0			BLACK SHALE	17.0	26.0	
388.0	CARBONDALE	HERRIN	COAL	3.7	43.0	
384.3	CARBONDALE		UNDERCLAY	2.0	46.7	
382.3	CARBONDALE		ROCK	47.3	48.7	
335.0	CARBONDALE		SHALE	7.3	96.0	
327.7	CARBONDALE		BLACK SHALE	18.0	103.3	
309.7	CARBONDALE	SPRINGFIELD	COAL	4.8	121.3	
304.8	CARBONDALE		UNDERCLAY	0.0	126.2	

MAPID: 16500462000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.646276 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.701503 **DATE COLLECTED:** 8 / 20 / 1905
SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 127.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #3 **WELL TYPE:** Coal Test
COMMENT: A.L.ALLEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.0			UNCONSOLIDATED	12.0	0.0	
419.0			SANDSTONE	5.0	12.0	
414.0			UNDERCLAY	9.0	17.0	
405.0	CARBONDALE		BLACK SHALE	17.0	26.0	
388.0	CARBONDALE	BRIAR HILL	COAL	3.7	43.0	
384.3	CARBONDALE		UNDERCLAY	2.0	46.7	
382.3	CARBONDALE		LIMESTONE	1.7	48.7	
380.7	CARBONDALE		UNDERCLAY	3.0	50.3	
377.7	CARBONDALE	DYKERSBURG	BLACK SHALE	8.0	53.3	
369.7	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	61.3	
362.7	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	68.3	
357.7	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	73.3	
349.7	CARBONDALE	DYKERSBURG	SHALE	22.0	81.3	
327.7	CARBONDALE	DYKERSBURG	BLACK SHALE	18.0	103.3	
309.7	CARBONDALE	SPRINGFIELD	COAL	4.8	121.3	
304.8	CARBONDALE		UNDERCLAY	1.0	126.2	

MAPID: 16500640000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1340' S line, 60' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634389 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69841 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 50.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #1 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	13.0	0.0	
387.0	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	13.0	
376.0	CARBONDALE	DYKERSBURG	SHALE	9.0	24.0	
367.0	CARBONDALE	DYKERSBURG	BLACK SHALE	12.0	33.0	
355.0	CARBONDALE	SPRINGFIELD	COAL	1.8	45.0	
353.2	CARBONDALE		UNDERCLAY	3.0	46.8	
350.2	CARBONDALE		SANDSTONE	1.0	49.8	

MAPID: 16500640000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1340' S line, 60' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634389 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69841 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	13.0	0.0	
387.0			ROCK	32.0	13.0	
355.0	CARBONDALE	SPRINGFIELD	COAL	1.8	45.0	
353.2	CARBONDALE		UNDERCLAY	3.0	46.8	
350.2	CARBONDALE		ROCK	0.0	49.8	

MAPID: 16500733000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1295' N line, 160' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634736 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.698426 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 48.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #2 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	12.0	0.0	
385.0	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	12.0	
374.0	CARBONDALE	DYKERSBURG	SHALE	20.5	23.0	
353.5	CARBONDALE	SPRINGFIELD	COAL	2.6	43.5	
350.9	CARBONDALE		UNDERCLAY	2.0	46.1	

MAPID: 16500733000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1295' N line, 160' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634736 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698426 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 48.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	12.0	0.0	
385.0			ROCK	31.5	12.0	
353.5	CARBONDALE	SPRINGFIELD	COAL	2.6	43.5	
350.9	CARBONDALE		UNDERCLAY	0.0	46.1	

MAPID: 16500734000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1220' N line, 260' E line of NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.635081 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.698633 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	12.0	0.0	
383.0	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	12.0	
374.0	CARBONDALE	DYKERSBURG	SHALE	21.3	21.0	
352.7	CARBONDALE	SPRINGFIELD	COAL	3.4	42.3	
349.2	CARBONDALE		UNDERCLAY	1.3	45.8	

MAPID: 16500735000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 920' N line, 60' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634373 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699464 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 50.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #4 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	11.0	0.0	
384.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	11.0	
372.0	CARBONDALE	DYKERSBURG	BLACK SHALE	21.0	23.0	
351.0	CARBONDALE	SPRINGFIELD	COAL	2.7	44.0	
348.3	CARBONDALE		UNDERCLAY	3.5	46.7	

MAPID: 16500735000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 920' N line, 60' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.634373 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699464 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 50.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	11.0	0.0	
384.0			ROCK	33.0	11.0	
351.0	CARBONDALE	SPRINGFIELD	COAL	2.7	44.0	
348.3			UNDERCLAY	0.0	46.7	

MAPID: 16500736000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1650' N line, 250' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.635061 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.697446 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #5 **WELL TYPE:** Coal Test
COMMENT: JAMES W. QUICK FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	11.0	0.0	
394.0	CARBONDALE	DYKERSBURG	SANDSTONE	14.0	11.0	
380.0	CARBONDALE	DYKERSBURG	SHALE	18.0	25.0	
362.0	CARBONDALE	DYKERSBURG	BLACK SHALE	24.4	43.0	
337.6	CARBONDALE	SPRINGFIELD	COAL	4.6	67.4	
333.0	CARBONDALE		UNDERCLAY	2.0	72.0	

MAPID: 16500737000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1650' N line, 1240' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6385 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.697433 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #6 **WELL TYPE:** Coal Test
COMMENT: JAMES W. QUICK FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	10.0	0.0	
412.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	10.0	
400.0	CARBONDALE	DYKERSBURG	SHALE	16.0	22.0	
384.0	CARBONDALE	DYKERSBURG	BLACK SHALE	28.3	38.0	
355.7	CARBONDALE	SPRINGFIELD	COAL	3.1	66.3	
352.7	CARBONDALE	SPRINGFIELD	COAL	1.7	69.3	LOG HAS DIRT AND COAL

MAPID: 16500737000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1650' N line, 1240' E line of NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.6385 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697433 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	10.0	0.0	
412.0			ROCK	31.0	10.0	
381.0			SHALE	25.3	41.0	
355.7	CARBONDALE	SPRINGFIELD	COAL	4.8	66.3	

MAPID: 16500738000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.635884 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70063 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #7 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	8.0	0.0	
377.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	8.0	
371.0	CARBONDALE	DYKERSBURG	SHALE	12.0	14.0	
359.0	CARBONDALE	DYKERSBURG	BLACK SHALE	15.3	26.0	
343.7	CARBONDALE	SPRINGFIELD	COAL	3.7	41.3	

MAPID: 16500738000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.635884 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70063 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	8.0	0.0	
377.0			ROCK	8.0	8.0	
369.0			SHALE	25.3	16.0	
343.7	CARBONDALE	SPRINGFIELD	COAL	3.7	41.3	

MAPID: 16500739000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** 260' N line, 660' E line
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.636432 **GEOLOGIST:** S. SROKA
CONFIDENTIAL: N **LATITUDE:** 37.701277 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #8 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	18.0	0.0	
367.0	CARBONDALE	DYKERSBURG	SHALE	11.0	18.0	
356.0	CARBONDALE	DYKERSBURG	BLACK SHALE	13.0	29.0	
343.0	CARBONDALE	SPRINGFIELD	COAL	2.3	42.0	
340.7	CARBONDALE		UNDERCLAY	1.1	44.3	

MAPID: 16500740000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.641652 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.701521 **DATE COLLECTED:** 4 / 24 / 1911
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 93.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #18 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.0	0.0	
372.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	18.0	
364.0	CARBONDALE	DYKERSBURG	SHALE	21.0	26.0	
343.0	CARBONDALE	DYKERSBURG	BLACK SHALE	40.0	47.0	
303.0	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	4.6	87.0	"W/ SLATE"
298.4	CARBONDALE		UNDERCLAY	1.4	91.6	

MAPID: 16500740000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.641652 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701521 **DATE COLLECTED:** 4 / 24 / 1911
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 93.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.0	0.0	
372.0			ROCK	44.0	18.0	
328.0			SHALE	25.0	62.0	
303.0			COAL	4.6	87.0	
298.4			UNDERCLAY	0.0	91.6	

MAPID: 16500741000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638227 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.698798 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 83.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #20 **WELL TYPE:** Coal Test
COMMENT: JASPER HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	21.0	0.0	
379.0	CARBONDALE		SANDSTONE	8.0	21.0	
371.0	CARBONDALE		SANDY SHALE	24.0	29.0	
347.0	CARBONDALE		BLACK SHALE	8.0	53.0	
339.0	CARBONDALE	SPRINGFIELD	COAL	2.7	61.0	CORRELATION UNCERTAIN, SPLIT OF SEAM?
336.3	CARBONDALE		BLACK SHALE	19.0	63.7	
317.3	CARBONDALE		COAL	0.7	82.7	SPLIT OF #5 COAL

MAPID: 16500741000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.638227 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698798 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 83.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	21.0	0.0	
379.0			ROCK	40.0	21.0	
339.0	CARBONDALE	SPRINGFIELD	COAL	2.8	61.0	
336.3			ROCK	19.7	63.7	
316.7			COAL	0.8	83.3	

MAPID: 16500742000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639441 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.695149 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #21 **WELL TYPE:** Coal Test
COMMENT: J.ENOCH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.0			UNCONSOLIDATED	18.0	0.0	
414.0	CARBONDALE	DYKERSBURG	SANDY SHALE	25.0	18.0	
389.0	CARBONDALE	DYKERSBURG	BLACK SHALE	15.5	43.0	
373.5	CARBONDALE	SPRINGFIELD	COAL	4.5	58.5	
369.0	CARBONDALE		UNDERCLAY	1.0	63.0	

MAPID: 16500742000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.639441 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.695149 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	18.0	0.0	
392.0			ROCK	15.0	18.0	
377.0			SHALE	25.5	33.0	
351.5	CARBONDALE	SPRINGFIELD	COAL	4.5	58.5	
347.0	CARBONDALE		UNDERCLAY	0.0	63.0	

MAPID: 16502469000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.641098 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.700156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #23 **WELL TYPE:** Coal Test
COMMENT: MINE #15; NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	14.0	0.0	
-	CARBONDALE	DYKERSBURG	SHALE	12.0	14.0	
-	CARBONDALE	DYKERSBURG	BLACK SHALE	24.0	26.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.8	50.0	W/ GRAY ROCK; CORRELATION UNCERTAIN
-	CARBONDALE		UNDERCLAY	1.2	53.8	

MAPID: 16502469000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.641098 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.700156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: MINE # 15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	14.0	0.0	
396.0			ROCK	12.0	14.0	
384.0			SHALE	24.0	26.0	
360.0	CARBONDALE	HERRIN	COAL	3.8	50.0	CORRELATION UNCERTAIN; MAY BE #5
356.2	CARBONDALE		UNDERCLAY	0.0	53.8	

MAPID: 16500327200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616471 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687954 **DATE COLLECTED:** 0 / 0 / 1928
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 10.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SIMON, SALINE VALLEY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	5.0	0.0	
395.0	CARBONDALE	SPRINGFIELD	COAL	5.0	5.0	

MAPID: 16500327300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1170' N line, 800' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.631393 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698801 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 64.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C MINE # 5 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.0			UNCONSOLIDATED	60.0	0.0	
349.0	CARBONDALE	SPRINGFIELD	COAL	4.0	60.0	

MAPID: 16500327301M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 950' N line, 800' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.631386 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699409 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 65.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.0			UNCONSOLIDATED	60.0	0.0	
-			SHALE	-		
341.0	CARBONDALE		COAL	0.9	60.0	
340.1	CARBONDALE		SHALE	0.5	60.9	
339.6	CARBONDALE	SPRINGFIELD	COAL	4.3	61.4	

MAPID: 16500463000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617495 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.697119 **DATE COLLECTED:** 6 / 28 / 1906
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #8 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			UNCONSOLIDATED	5.0	0.0	
437.0	CARBONDALE		SANDSTONE	6.0	5.0	
431.0	CARBONDALE		SHALE	20.0	11.0	
411.0	CARBONDALE	DYKERSBURG	SANDSTONE	26.0	31.0	
385.0	CARBONDALE	DYKERSBURG	SANDY SHALE	31.0	57.0	
354.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.5	88.0	
352.5	CARBONDALE	SPRINGFIELD	COAL	5.5	89.5	
347.0	CARBONDALE		UNDERCLAY	1.0	95.0	

MAPID: 16500463000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617495 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697119 **DATE COLLECTED:** 6 / 28 / 1906
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			UNCONSOLIDATED	5.0	0.0	
437.0			ROCK	59.0	5.0	
378.0			SHALE	24.0	64.0	
354.0			SHALE	1.5	88.0	
352.5	CARBONDALE	SPRINGFIELD	COAL	5.5	89.5	
347.0	CARBONDALE		UNDERCLAY	0.0	95.0	

MAPID: 16500464000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 20' N line, 1400' W line of SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629368 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.694689 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 83.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. HOLE #9 **WELL TYPE:** Coal Test
COMMENT: J.W. HARRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.0			UNCONSOLIDATED	12.0	0.0	
414.0	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	12.0	
407.0	CARBONDALE	DYKERSBURG	SHALE	11.0	19.0	
396.0	CARBONDALE	DYKERSBURG	SANDSTONE	23.0	30.0	
373.0	CARBONDALE	DYKERSBURG	SHALE	21.0	53.0	
352.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	74.0	
349.0	CARBONDALE	SPRINGFIELD	COAL	5.7	77.0	
343.3	CARBONDALE		UNDERCLAY	0.5	82.7	

MAPID: 16500464000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 20' N line, 1400' W line of SW

QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.629368 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.694689 **DATE COLLECTED:** 7 / 3 / 1906

SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 83.2 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.0			UNCONSOLIDATED	12.0	0.0	
414.0			ROCK	40.0	12.0	
374.0			SANDSTONE	1.0	52.0	
373.0			SHALE	24.0	53.0	
349.0	CARBONDALE	SPRINGFIELD	COAL	5.7	77.0	
344.0			UNDERCLAY	0.0	82.0	

MAPID: 16500743000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62438 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.698894 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 92.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #15, HOLE #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			NO RECORD	14.0	0.0	
406.0	CARBONDALE		SANDY SHALE	6.0	14.0	
400.0	CARBONDALE		SANDSTONE	30.0	20.0	
370.0	CARBONDALE		SANDY SHALE	30.0	50.0	
340.0	CARBONDALE		BLACK SHALE	3.0	80.0	
337.0	CARBONDALE		COAL	0.7	83.0	
336.3	CARBONDALE		SLATY SHALE	4.0	83.7	
332.3	CARBONDALE		UNDERCLAY	1.0	87.7	
331.3	CARBONDALE		UNCLASSIFIED	3.8	88.7	

MAPID: 16500743000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW SW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62438 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698894 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 92.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	14.0	0.0	
406.0			ROCK	69.0	14.0	
337.0			COAL	0.7	83.0	
336.3			ROCK	0.0	83.7	

MAPID: 16500744000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 900' N line, 100' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624598 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699611 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 93.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			NO RECORD	17.0	0.0	
405.0	CARBONDALE	DYKERSBURG	SANDSTONE	31.0	17.0	
374.0	CARBONDALE	DYKERSBURG	SHALE	18.0	48.0	
356.0	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	66.0	
336.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.8	86.0	
335.2	CARBONDALE	SPRINGFIELD	COAL	1.8	86.8	
333.3	CARBONDALE		SANDSTONE	5.0	88.7	

MAPID: 16500744000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** 900' N line, 100' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624598 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699611 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 93.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	17.0	0.0	
405.0			ROCK	69.8	17.0	
335.2			COAL	1.8	86.8	
333.3			ROCK	0.0	88.7	

MAPID: 16500745000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624369 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.699811 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 109.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
339.0	CARBONDALE	SPRINGFIELD	COAL	6.4	101.0	

MAPID: 16500745000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624369 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.699811 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 108.6 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	24.0	0.0	
416.0			ROCK	51.0	24.0	
365.0			SHALE	15.0	75.0	
350.0			SANDSTONE	5.0	90.0	
345.0			CLAYSTONE & SHALE	5.0	95.0	
340.0			SHALE	0.8	100.0	
339.2	CARBONDALE	SPRINGFIELD	COAL	4.0	100.8	
335.2	CARBONDALE		ROCK	0.7	104.8	
334.5	CARBONDALE	SPRINGFIELD	COAL	1.8	105.5	
332.7	CARBONDALE		UNDERCLAY	0.2	107.3	
332.6	CARBONDALE		ROCK	0.0	107.4	

MAPID: 16500745000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624369 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.699811 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 108.6 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #15, HOLE #3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			NO RECORD	24.0	0.0	
416.0	CARBONDALE		SANDSTONE	6.0	24.0	
410.0	CARBONDALE		SHALE	8.0	30.0	
402.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	38.0	
390.0	CARBONDALE	DYKERSBURG	SHALE	22.0	50.0	
368.0	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	72.0	
350.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	90.0	
345.0	CARBONDALE	DYKERSBURG	UNDERCLAY	5.0	95.0	W/ SOAPST
340.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.8	100.0	
339.2	CARBONDALE	SPRINGFIELD	COAL	4.0	100.8	
335.2	CARBONDALE	SPRINGFIELD	ROCK	0.7	104.8	
334.5	CARBONDALE	SPRINGFIELD	COAL	1.8	105.5	
332.7	CARBONDALE		UNDERCLAY	0.3	107.3	
332.5	CARBONDALE		SANDSTONE	1.1	107.5	

MAPID: 16500746000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.623798 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.699356 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 111.1 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #15, HOLE #4 **WELL TYPE:** Coal Test

COMMENT: CTR SW,NW,NE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			NO RECORD	22.0	0.0	
418.0	CARBONDALE		SANDSTONE	10.0	22.0	
408.0	CARBONDALE		SHALE	6.0	32.0	
402.0	CARBONDALE	DYKERSBURG	SANDSTONE	26.0	38.0	
376.0	CARBONDALE	DYKERSBURG	SHALE	16.0	64.0	
360.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	80.0	
354.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	86.0	
352.0	CARBONDALE	SPRINGFIELD	COAL	2.0	88.0	UPPER BENCH
350.0	CARBONDALE		UNDERCLAY	1.0	90.0	
349.0	CARBONDALE	DYKERSBURG	SHALE	8.0	91.0	
341.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	99.0	
339.0	CARBONDALE	SPRINGFIELD	COAL	3.0	101.0	
336.0	CARBONDALE	SPRINGFIELD	UNDERCLAY	4.0	104.0	W/ SOAPST
332.0	CARBONDALE	SPRINGFIELD	COAL	0.5	108.0	
331.5	CARBONDALE	SPRINGFIELD	ROCK	0.3	108.5	
331.2	CARBONDALE	SPRINGFIELD	COAL	0.3	108.8	
330.9	CARBONDALE		SANDSTONE	2.0	109.1	

MAPID: 16500747000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.623216 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699818 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 122.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			NO RECORD	6.7	0.0	
435.3	CARBONDALE		SANDSTONE	18.0	6.7	
417.3	CARBONDALE		SHALE	8.0	24.7	
409.3	CARBONDALE		BLACK SHALE	1.0	32.7	
408.3	CARBONDALE	BRIAR HILL	COAL	1.8	33.7	
406.6	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	35.4	
394.6	CARBONDALE	DYKERSBURG	SHALE	14.0	47.4	
380.6	CARBONDALE	DYKERSBURG	SANDY SHALE	12.3	61.4	
368.3	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	73.7	
348.3	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	93.7	
347.3	CARBONDALE	SPRINGFIELD	COAL	1.8	94.7	UPPER BENCH
345.5	CARBONDALE	DYKERSBURG	SLATY SHALE	18.0	96.5	
327.5	CARBONDALE	DYKERSBURG	BLACK SHALE	0.8	114.5	
326.7	CARBONDALE	SPRINGFIELD	COAL	4.0	115.3	
322.7	CARBONDALE		UNDERCLAY	0.7	119.3	
322.1	CARBONDALE		SANDSTONE	2.5	119.9	

MAPID: 16500747000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.623216 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699818 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 122.4 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.0			UNCONSOLIDATED	6.7	0.0	
435.3			ROCK	27.0	6.7	
408.3			COAL	1.8	33.7	
406.6			ROCK	59.2	35.4	
347.3			COAL	1.8	94.7	
345.5			SHALE	18.8	96.5	
326.7			COAL	4.0	115.3	
322.7			UNDERCLAY	0.7	119.3	
322.1			ROCK	0.0	119.9	

MAPID: 16500748000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620912 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.699839 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 116.2 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #5, HOLE #7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
457.0	CARBONDALE		NO RECORD	7.0	0.0	
450.0	CARBONDALE		SANDSTONE	6.0	7.0	
444.0	CARBONDALE		SHALE	7.0	13.0	
437.0	CARBONDALE	BRIAR HILL	COAL	1.5	20.0	
435.5	CARBONDALE	DYKERSBURG	SANDSTONE	12.0	21.5	
423.5	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	33.5	
408.5	CARBONDALE	DYKERSBURG	SANDSTONE	10.0	48.5	
398.5	CARBONDALE	DYKERSBURG	SANDY SHALE	28.0	58.5	
370.5	CARBONDALE	DYKERSBURG	SHALE	3.0	86.5	
367.5	CARBONDALE	DYKERSBURG	UNDERCLAY	0.5	89.5	
367.0	CARBONDALE	SPRINGFIELD	COAL	0.7	90.0	UPPER BENCH
366.3	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	90.7	
348.3	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	108.7	
347.8	CARBONDALE	SPRINGFIELD	COAL	5.0	109.2	
342.8	CARBONDALE		SANDSTONE	2.0	114.2	

MAPID: 16500749000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE NE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620886 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.701672 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 131.9 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #15, HOLE #8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			NO RECORD	8.0	0.0	
404.0	CARBONDALE		SANDSTONE	12.0	8.0	
392.0	CARBONDALE		SHALE	11.0	20.0	
381.0	CARBONDALE		BLACK SHALE	0.3	31.0	
380.7	CARBONDALE	BRIAR HILL	COAL	3.0	31.3	
377.7	CARBONDALE		UNDERCLAY	0.3	34.3	
377.3	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	34.7	
371.3	CARBONDALE	DYKERSBURG	SHALE	9.0	40.7	
362.3	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	49.7	
355.3	CARBONDALE	DYKERSBURG	SHALE	20.0	56.7	
335.3	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	76.7	
320.3	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	91.7	
313.3	CARBONDALE	DYKERSBURG	SANDY SHALE	18.0	98.7	
295.3	CARBONDALE	DYKERSBURG	SHALE	7.0	116.7	
288.3	CARBONDALE	DYKERSBURG	BLACK SHALE	0.6	123.7	
287.7	CARBONDALE	SPRINGFIELD	COAL	5.4	124.3	
282.3	CARBONDALE		UNDERCLAY	0.3	129.7	
282.1	CARBONDALE		SANDSTONE	3.0	129.9	

MAPID: 16500749000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE NE NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620886 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701672 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 131.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	8.0	0.0	
404.0			SANDSTONE	12.0	8.0	
392.0			SHALE	11.3	20.0	
380.7			COAL	3.0	31.3	
377.7			UNDERCLAY	0.3	34.3	
377.3			ROCK	64.0	34.7	
313.3			SHALE	25.6	98.7	
287.7			COAL	5.5	124.3	
282.3			UNDERCLAY	0.3	129.7	
282.1			SANDSTONE	0.0	129.9	

MAPID: 16500750000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62434 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.701638 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 104.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE #15, HOLE #9 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			NO RECORD	10.0	0.0	
408.0	CARBONDALE		SANDY SHALE	13.0	10.0	
395.0	CARBONDALE		SHALE	12.0	23.0	
383.0	CARBONDALE		SANDY SHALE	14.0	35.0	
369.0	CARBONDALE		SHALE	37.4	49.0	
331.6	CARBONDALE	SPRINGFIELD	COAL	2.6	86.4	POSSIBLY A SPLIT OF THE #5
329.0	CARBONDALE		SANDY SHALE	3.0	89.0	
326.0	CARBONDALE		SHALE	8.0	92.0	
318.0	CARBONDALE	SPRINGFIELD	COAL	1.8	100.0	POSSIBLY A SPLIT OF THE #5 COAL
316.2	CARBONDALE		UNDERCLAY	0.5	101.8	
315.7	CARBONDALE		SANDSTONE	2.5	102.3	

MAPID: 16500750000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.62434 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.701638 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 94.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	10.0	0.0	
408.0			ROCK	41.0	10.0	
367.0			SHALE	25.0	51.0	
342.0	CARBONDALE	SPRINGFIELD	COAL	2.6	76.0	
339.0			SHALE	11.0	79.0	
328.0			COAL	1.8	90.0	
326.2			UNDERCLAY	0.5	91.8	
325.7			SANDSTONE	0.0	92.3	

MAPID: 16500004800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.607806 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69028 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 90.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C, MINE # 7 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.0			UNCONSOLIDATED	17.0	0.0	
386.0			ROCK	64.8	17.0	
321.2			ROCK	1.2	81.8	
320.0	CARBONDALE	SPRINGFIELD	COAL	7.3	83.0	
312.7			ROCK	-	90.3	

MAPID: 16500045000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 210' N line, 660' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.599675 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694332 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 33.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SALINE COUNTY C C, MINE # 2 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	20.0		
-	CARBONDALE	SPRINGFIELD	COAL	7.0		
-	CARBONDALE		ROCK	6.0		

MAPID: 16500334000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597958 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.694459 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 416.2 **LOGGED (FT.):** 104.6 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #176 **WELL TYPE:** Coal Test
COMMENT: DAVENPORT COAL CO.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.2			SOIL	13.0	0.0	
403.2	CARBONDALE		CLAYSTONE & SHALE	19.0	13.0	
384.2	CARBONDALE	DYKERSBURG	SANDY SHALE	65.4	32.0	
318.8	CARBONDALE	SPRINGFIELD	COAL	6.8	97.4	
311.9	CARBONDALE		UNDERCLAY	0.3	104.3	

MAPID: 16500334000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597958 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694459 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 104.7 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS FOR THIS LOCATION.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.0			UNCONSOLIDATED	13.0	0.0	
403.0			ROCK	84.4	13.0	
318.6	CARBONDALE	SPRINGFIELD	COAL	6.8	97.4	
311.7	CARBONDALE		ROCK	0.3	104.3	

MAPID: 16500335000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602035 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69122 **DATE COLLECTED:** 0 / 0 / 1910
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 92.2 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. HOLE #175 **WELL TYPE:** Coal Test
COMMENT: DAVENPORT COAL CO., QTR. LOCAT. UNCERT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			SOIL	15.0	0.0	
350.0	CARBONDALE		CLAYSTONE & SHALE	7.0	15.0	
343.0	CARBONDALE		SANDY SHALE	62.0	22.0	
281.0	CARBONDALE	SPRINGFIELD	COAL	6.6	84.0	
274.4	CARBONDALE		UNDERCLAY	1.6	90.6	

MAPID: 16500469000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60824 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.699929 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 126.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.0	CARBONDALE	BRIAR HILL	COAL	1.0	50.0	
321.0	CARBONDALE	SPRINGFIELD	COAL	2.3	123.0	

MAPID: 16500469000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60824 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699929 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 126.4 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.0			UNCONSOLIDATED	10.0	0.0	
434.0			ROCK	40.5	10.0	
393.5	CARBONDALE	BRIAR HILL	COAL	1.0	50.5	
392.5	CARBONDALE		ROCK	71.4	51.5	
321.1	CARBONDALE	SPRINGFIELD	COAL	2.3	122.9	
318.7	CARBONDALE		ROCK	1.0	125.3	

MAPID: 16500469000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60824 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699929 **DATE COLLECTED:** 0 / 0 / 1910
SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 126.3 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #152 **WELL TYPE:** Coal Test
COMMENT: SECOND DRILLING; DATE OF DATA IS < 1910

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.0			UNCONSOLIDATED	10.0	0.0	
434.0	CARBONDALE		SANDSTONE	23.0	10.0	
411.0	CARBONDALE		SHALE	16.0	33.0	
395.0	CARBONDALE		BLACK SHALE	1.5	49.0	
393.5	CARBONDALE	BRIAR HILL	COAL	1.0	50.5	
392.5	CARBONDALE		UNDERCLAY	1.5	51.5	
391.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	53.0	
387.0	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	57.0	
374.0	CARBONDALE	DYKERSBURG	SHALE	11.0	70.0	
363.0	CARBONDALE	DYKERSBURG	SANDSTONE	16.0	81.0	
347.0	CARBONDALE	DYKERSBURG	SHALE	23.0	97.0	
324.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	120.0	
321.0	CARBONDALE	SPRINGFIELD	COAL	2.3	123.0	
318.7	CARBONDALE		UNDERCLAY	1.0	125.3	

MAPID: 16500474000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE SE NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602606 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.691677 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. HOLE #173 **WELL TYPE:** Coal Test
COMMENT: DAVENPORT COAL CO. (FARM)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	19.0	0.0	
398.0	CARBONDALE		SHALE	20.0	19.0	
378.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	39.0	
375.0	CARBONDALE	DYKERSBURG	SANDY SHALE	57.5	42.0	
317.5	CARBONDALE	SPRINGFIELD	COAL	7.5	99.5	
310.0	CARBONDALE		UNDERCLAY	1.0	107.0	

MAPID: 16500474000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE SE NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.602606 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691677 **DATE COLLECTED:** 0 / 0 / 1909
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	19.0	0.0	
398.0			ROCK	80.5	19.0	
317.5	CARBONDALE	SPRINGFIELD	COAL	7.5	99.5	
310.0	CARBONDALE		ROCK	1.0	107.0	

MAPID: 16500475000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600844 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.693988 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 416.1 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #178 **WELL TYPE:** Coal Test
COMMENT: DAVENPORT COAL CO.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.1			UNCONSOLIDATED	14.0	0.0	
402.1	CARBONDALE		SHALE	5.0	14.0	
397.1	CARBONDALE		SHALE	1.0	19.0	
396.1	CARBONDALE		SHALE	21.0	20.0	
375.1	CARBONDALE	DYKERSBURG	SANDY SHALE	29.0	41.0	
346.1	CARBONDALE	DYKERSBURG	SHALE	27.8	70.0	
318.3	CARBONDALE	SPRINGFIELD	COAL	6.4	97.8	W/ BKSH
311.8	CARBONDALE		UNDERCLAY	5.0	104.3	
306.8	CARBONDALE		SHALE	37.8	109.3	
269.0	CARBONDALE	EXCELLO	BLACK SHALE	4.0	147.1	
265.0	CARBONDALE	HOUCHIN CREEK	COAL	1.7	151.1	
263.3	CARBONDALE		LIMESTONE	11.0	152.8	
252.3	CARBONDALE		SHALE	5.0	163.8	
247.3	CARBONDALE		SHALE	5.3	168.8	
242.1	CARBONDALE		SANDSTONE	25.0	174.0	
217.1	CARBONDALE	SURVANT	COAL	0.5	199.0	LOG HAS SLATE COAL
216.6	CARBONDALE		SANDSTONE	0.5	199.5	

MAPID: 16500811000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.61347 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.696684 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 93.5 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO. HOLE #174 **WELL TYPE:** Coal Test

COMMENT: DAVENPORT COAL CO.; DATE OF DATA < 1910

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			SOIL	15.5	0.0	
349.5	CARBONDALE		CLAYSTONE & SHALE	1.5	15.5	
348.0	CARBONDALE	DYKERSBURG	SANDY SHALE	69.0	17.0	
279.0	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	86.0	
278.5	CARBONDALE	SPRINGFIELD	COAL	6.5	86.5	SLATE #5, BITUMINOUS
272.0	CARBONDALE		UNDERCLAY	0.5	93.0	

MAPID: 16526585000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 5E **SECTION:** 36 **QUARTERS/FOOTAGES:** 530' N, 530' W, SE/c NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.60834 **GEOLOGIST:** BARRET

CONFIDENTIAL: N **LATITUDE:** 37.700006 **DATE COLLECTED:** 6 / 6 / 2000

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 791.3 **LOG TYPE:** Other Core Study

SOURCE: MID-CONTINENT METHANE INC. DDH-2 **WELL TYPE:** Coal Test

COMMENT: LOGGED BY STRAAYER/KOROSE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			LIMESTONE	1.0	72.0	BEGIN CORE, DK HARD, SOFT SHALE AT BASE
377.0	SHELBURN	JAMESTOWN	CLAYSTONE & SILTSTONE	0.2	73.0	INTERLAYED, SOME SULFUR
376.8	SHELBURN		LIMESTONE	0.8	73.2	DK, HARD
376.0	SHELBURN		SHALE	1.8	74.0	DK GRY TO BLK, MICA + PLANT FRAGS
374.2	SHELBURN	BRERETON	LIMESTONE	6.6	75.8	V DK
367.6	CARBONDALE	ANNA	BLACK SHALE	1.5	82.4	PLANT FRAGS
366.1	CARBONDALE	HERRIN	COAL	4.1	83.9	MINOR CLYST AT TOP
362.0	CARBONDALE		UNDERCLAY	1.1	88.0	
360.9			UNKNOWN	105.9	89.1	NO CORE
255.0			GRAY SHALE	4.3	195.0	NO. 5 MISSING
250.7			UNKNOWN	86.7	199.3	NO CORE
164.0			CLAYSTONE & SILTSTONE	3.0	286.0	HARD W/ MICA & SULFUR
161.0			UNKNOWN	35.0	289.0	NO CORE
126.0			SILTY SHALE	3.0	324.0	
123.0			UNKNOWN	61.0	327.0	NO CORE
62.0			GRAY SHALE	5.9	388.0	
56.1			COAL	0.4	393.9	FRAGS, SULFUR
55.7			UNDERCLAY	2.8	394.3	
52.9			SILTSTONE	6.9	397.1	
46.0			UNKNOWN	46.0	404.0	
0.0			SHALE	3.0	450.0	
-3.0			UNKNOWN	172.8	453.0	
-175.8			SILTSTONE	5.9	625.8	
-181.7			UNKNOWN	3.6	631.7	
-185.3			SILTSTONE	2.0	635.3	

MAPID: 16590688000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.517825 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.775266 **DATE COLLECTED:** 5 / 1 / 1979

SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map

SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test

COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16590711000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.539077 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760887 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.9		

MAPID: 16590712000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549342 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763524 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.2		

MAPID: 16590713000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.548357 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768623 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590739000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.571592 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774815 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.8		

MAPID: 16590740000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.5622 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.774388 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16590741000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.58867 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.763181 **DATE COLLECTED:** 5 / 1 / 1979
SURFACE ELEVATION (FT.): **LOGGED (FT.):** **LOG TYPE:** Company map
SOURCE: KERR-MCGEE COAL CO. **WELL TYPE:** Coal Test
COMMENT: MAP OF DATA PTS, ISGS COAL SECTION FILES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.5		

MAPID: 16500218000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.487238 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.766174 **DATE COLLECTED:** 6 / 24 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 328.8 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., DANFORTH #3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	9.0	0.0	
361.0	MODESTO		SHALE	42.0	9.0	
319.0	MODESTO		COAL	0.5	51.0	
318.5	MODESTO		UNDERCLAY	1.0	51.5	
317.5	MODESTO		SANDSTONE	6.0	52.5	
311.5	MODESTO		SANDY SHALE	40.0	58.5	
271.5	MODESTO		UNDERCLAY	2.0	98.5	
269.5	MODESTO		SANDSTONE	4.0	100.5	
265.5	MODESTO		SANDY SHALE	19.0	104.5	
246.5	CARBONDALE	DANVILLE	COAL	0.5	123.5	
246.0	CARBONDALE		SANDY SHALE	8.0	124.0	
238.0	CARBONDALE		SANDSTONE	16.0	132.0	
222.0	CARBONDALE	ALLENBY	COAL	2.4	148.0	
219.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	150.4	
213.6	CARBONDALE		SHALE	16.0	156.4	
197.6	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	172.4	
177.6	CARBONDALE		BLACK SHALE	3.5	192.4	
174.1	CARBONDALE	BRERETON	LIMESTONE	4.5	195.9	
169.6	CARBONDALE	ANNA	BLACK SHALE	2.4	200.4	
167.2	CARBONDALE	HERRIN	COAL	5.1	202.8	
162.1	CARBONDALE		SANDSTONE	27.0	207.9	
135.1	CARBONDALE		SANDY SHALE	29.0	234.9	
106.1	CARBONDALE	BRIAR HILL	COAL	2.0	263.9	
104.1	CARBONDALE	DYKERSBURG	SHALE	24.2	265.9	
79.9	CARBONDALE	DYKERSBURG	SANDY SHALE	34.0	290.1	
45.9	CARBONDALE	SPRINGFIELD	COAL	4.7	324.1	
41.2	CARBONDALE		UNDERCLAY	0.0	328.8	T.D.

MAPID: 16500218000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.487238 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.766174 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 329.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
246.0	CARBONDALE	DANVILLE	COAL	0.5	124.0	
238.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	16.0	132.0	
220.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	150.0	
198.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	20.0	172.0	
167.0	CARBONDALE	HERRIN	COAL	5.1	203.0	
72.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	27.0	298.0	
106.0	CARBONDALE	BRIAR HILL	COAL	2.0	264.0	
46.0	CARBONDALE	SPRINGFIELD	COAL	4.7	324.0	

MAPID: 16500806000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.501241 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.766046 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 336.3 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #1, HOLE #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	58.0	0.0	
304.0	MODESTO		SHALE	22.0	58.0	
282.0	MODESTO		SANDY SHALE	6.7	80.0	
275.3	MODESTO		BLACK SHALE	1.7	86.7	
273.7	MODESTO		COAL	1.3	88.3	
272.3	MODESTO		UNDERCLAY	1.3	89.7	
271.0	MODESTO		SANDSTONE	8.0	91.0	
263.0	MODESTO		LIMESTONE	2.0	99.0	
261.0	MODESTO		SANDSTONE	3.4	101.0	
257.6	MODESTO	PIASA	LIMESTONE	2.0	104.4	
255.6	MODESTO		SANDSTONE	8.1	106.4	
247.5			SHALE	15.3	114.5	
232.3	CARBONDALE		SANDSTONE	12.0	129.7	
220.3	CARBONDALE		SHALE	18.0	141.7	
202.3	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	159.7	
193.3	CARBONDALE	ANVIL ROCK	SANDSTONE	24.7	168.7	
168.7	CARBONDALE		SANDY SHALE	10.9	193.3	
157.7	CARBONDALE	BRERETON	LIMESTONE	2.4	204.3	
155.3	CARBONDALE	ANNA	BLACK SHALE	2.3	206.7	
153.0	CARBONDALE	HERRIN	COAL	4.3	209.0	
148.7	CARBONDALE		UNDERCLAY	1.3	213.3	
147.3	CARBONDALE		SANDSTONE	34.0	214.7	
113.3	CARBONDALE		SHALE	18.0	248.7	
95.3	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	266.7	
78.3	CARBONDALE	DYKERSBURG	SANDSTONE	24.0	283.7	
54.3	CARBONDALE	DYKERSBURG	SANDY SHALE	20.0	307.7	
34.3	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	327.7	
32.3	CARBONDALE	SPRINGFIELD	COAL	5.4	329.7	
26.9	CARBONDALE		UNDERCLAY	1.2	335.1	

MAPID: 16500221000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.51947 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.765858 **DATE COLLECTED:** 5 / 0 / 1903

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 435.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: LOCATION, ELEVATION IMPRECISE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	33.0	0.0	
342.0			UNCLASSIFIED	77.0	33.0	
265.0			LIMESTONE	3.0	110.0	
262.0			UNCLASSIFIED	44.0	113.0	
218.0			COAL	1.0	157.0	
217.0			UNCLASSIFIED	52.0	158.0	
165.0			SHALE	2.0	210.0	
163.0			LIMESTONE	3.0	212.0	
160.0			UNCLASSIFIED	2.0	215.0	
158.0			BLACK SHALE	1.0	217.0	
157.0			UNCLASSIFIED	11.0	218.0	
146.0			COAL	1.0	229.0	
145.0			UNCLASSIFIED	12.0	230.0	
133.0			COAL	1.0	242.0	
132.0			UNCLASSIFIED	5.0	243.0	
127.0			LIMESTONE	5.0	248.0	
122.0			SANDSTONE	10.0	253.0	
112.0			UNCLASSIFIED	20.0	263.0	
92.0	CARBONDALE	BRERETON	LIMESTONE	7.0	283.0	
85.0	CARBONDALE	HERRIN	COAL	4.0	290.0	
81.0	CARBONDALE		UNDERCLAY	8.0	294.0	
73.0	CARBONDALE		SANDSTONE	21.0	302.0	
52.0	CARBONDALE		SHALE	24.0	323.0	
28.0	CARBONDALE	BRIAR HILL	COAL	1.9	347.0	
26.1	CARBONDALE		SHALE	1.0	348.9	
25.1	CARBONDALE		SANDSTONE	1.4	349.9	
23.7	CARBONDALE		SHALE	14.7	351.3	
9.0	CARBONDALE		LIMESTONE	1.0	366.0	
8.0	CARBONDALE		SHALE	49.6	367.0	
-41.6	CARBONDALE	SPRINGFIELD	COAL	5.5	416.6	
-47.1	CARBONDALE		UNDERCLAY	4.0	422.1	
-51.1	CARBONDALE		SANDSTONE	9.3	426.1	

MAPID: 16500221000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.51947 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.765858 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 294.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
158.0	MODESTO	PIASA	LIMESTONE	3.0	212.0	
155.0	CARBONDALE		SHALE	27.0	215.0	
128.0	CARBONDALE	ALLENBY	COAL	1.0	242.0	
127.0	CARBONDALE		GRAY SHALE	5.0	243.0	
122.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	248.0	
117.0	CARBONDALE	LAWSON	SANDSTONE	10.0	253.0	
107.0	CARBONDALE	LAWSON	GRAY SHALE	18.0	263.0	
89.0	CARBONDALE	JAMESTOWN	BONE COAL	2.0	281.0	
87.0	CARBONDALE	BRERETON	LIMESTONE	7.0	283.0	
80.0	CARBONDALE	HERRIN	COAL	4.7	290.0	

MAPID: 16500221000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.51947 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.765858 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 435.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	1.0	229.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	248.0	
-	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	253.0	
-	CARBONDALE	HERRIN	COAL	4.0	290.0	
-	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	21.0	302.0	
-	CARBONDALE	BRIAR HILL	COAL	1.9	347.0	
-	CARBONDALE	CANTON		-	350.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.5	417.0	

MAPID: 16500221000C **VERSION:** 4 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.51947 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.765858 **DATE COLLECTED:** 5 / 0 / 1903

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 435.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: PATTERSON FARM, NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	33.0	0.0	
-	MODESTO		SHALE	32.0	33.0	
-	MODESTO		SANDSTONE	7.0	65.0	
-	MODESTO		SHALE	38.0	72.0	
-	MODESTO		LIMESTONE	3.0	110.0	
-	MODESTO		SHALE	44.0	113.0	
-	MODESTO		COAL	1.0	157.0	
-	MODESTO		SHALE	21.0	158.0	
-	MODESTO		SANDSTONE	13.0	179.0	
-	MODESTO		SHALE	18.0	192.0	
-	MODESTO		BLACK SHALE	2.0	210.0	
-	MODESTO	PIASA	LIMESTONE	3.0	212.0	
-	MODESTO		SHALE	2.0	215.0	
-	MODESTO		BLACK SHALE	1.0	217.0	
-	MODESTO		SHALE	11.0	218.0	
-	CARBONDALE	DANVILLE	COAL	1.0	229.0	
-	CARBONDALE		SHALE	12.0	230.0	
-	CARBONDALE	ALLENBY	COAL	1.0	242.0	
-	CARBONDALE		SHALE	5.0	243.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	248.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	253.0	
-	CARBONDALE		SHALE	18.0	263.0	
-	CARBONDALE	JAMESTOWN	COAL	2.0	281.0	
-	CARBONDALE	BRERETON	LIMESTONE	7.0	283.0	
-	CARBONDALE	HERRIN	COAL	4.0	290.0	
-	CARBONDALE		UNDERCLAY	8.0	294.0	
-	CARBONDALE		SANDSTONE	21.0	302.0	
-	CARBONDALE		SANDY SHALE	11.0	323.0	
-	CARBONDALE		BLACK SHALE	13.0	334.0	
-	CARBONDALE	BRIAR HILL	COAL	1.9	347.0	
-	CARBONDALE		BLACK SHALE	1.0	348.9	
-	CARBONDALE		SANDSTONE	1.4	349.9	
-	CARBONDALE		SANDY SHALE	1.2	351.3	
-	CARBONDALE		BLACK SHALE	9.5	352.5	
-	CARBONDALE		SANDY SHALE	4.0	362.0	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.0	366.0	
-	CARBONDALE		BLACK SHALE	6.3	367.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	373.3	
-	CARBONDALE	DYKERSBURG	BLACK SHALE	40.3	376.3	

-	CARBONDALE	SPRINGFIELD	COAL	5.5	416.6
-	CARBONDALE		UNDERCLAY	4.0	422.1
-	CARBONDALE		SANDSTONE	9.3	426.1

MAPID: 16500819000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505842 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.766 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 327.1 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., MINE #1, HOLE #2 **WELL TYPE:** Coal Test

COMMENT: M.LEDFORD FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	78.0	0.0	
284.0			SANDSTONE	14.0	78.0	
270.0			BLACK SHALE	16.0	92.0	
254.0			COAL	1.0	108.0	
253.0			BLACK SHALE	15.0	109.0	
238.0			SANDSTONE	7.0	124.0	
231.0			BLACK SHALE	10.0	131.0	
221.0			SANDSTONE	10.0	141.0	
211.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	151.0	
205.0	CARBONDALE		BLACK SHALE	25.0	157.0	
180.0	CARBONDALE		BLACK SHALE	1.0	182.0	
179.0	CARBONDALE	JAMESTOWN	COAL	2.0	183.0	
177.0	CARBONDALE	BRERETON	LIMESTONE	2.0	185.0	
175.0	CARBONDALE	HERRIN	COAL	4.0	187.0	
171.0	CARBONDALE		UNDERCLAY	3.0	191.0	
168.0	CARBONDALE		BLACK SHALE	55.0	194.0	
113.0	CARBONDALE	BRIAR HILL	COAL	2.0	249.0	
111.0	CARBONDALE	DYKERSBURG	BLACK SHALE	70.4	251.0	
40.6	CARBONDALE	SPRINGFIELD	COAL	0.6	321.4	
40.0	CARBONDALE	SPRINGFIELD	BLACK SHALE	1.3	322.0	
38.7	CARBONDALE	SPRINGFIELD	COAL	2.8	323.3	
35.9	CARBONDALE		UNDERCLAY	1.0	326.1	

MAPID: 16524644000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 345' S line, 400' E line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.509198 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.772597 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 599.5 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-14.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	385.0	
-54.0	CARBONDALE	SURVANT	COAL	0.5	425.0	
-132.0	CARBONDALE	COLCHESTER	COAL	0.5	503.0	
-194.0	CARBONDALE	DEKOVEN	COAL	3.0	565.0	
-194.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	565.0	
-217.0	CARBONDALE	DAVIS	COAL	3.5	588.0	
-228.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	599.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-234.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	605.0	

MAPID: 16524907000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511239 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.771996 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 595.5 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-16.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	378.0	
-58.0	CARBONDALE	SURVANT	COAL	0.5	420.0	
-134.0	CARBONDALE	COLCHESTER	COAL	0.5	496.0	
-176.0	CARBONDALE	DEKOVEN	COAL	2.8	538.0	
-176.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	538.0	
-214.0	CARBONDALE	DAVIS	COAL	3.5	576.0	
-233.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	595.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16524907000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.511239 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.771996 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1500.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-133.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	495.0	
-216.0	SPOON	DAVIS	UNCLASSIFIED	-	578.0	
-1138.0	BASE OF PENN.		UNCLASSIFIED	-	1500.0	

MAPID: 16500222000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 0' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.540287 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.760353 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	3.0	82.0	
271.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	89.0	
266.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	9.0	94.0	
230.0	CARBONDALE	HERRIN	COAL	4.2	130.0	
222.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	11.0	138.0	
177.0	CARBONDALE	BRIAR HILL	COAL	1.5	183.0	
92.0	CARBONDALE	SPRINGFIELD	COAL	5.9	268.0	

MAPID: 16500222000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: GALATIA **LONGITUDE:** -88.540287 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760353 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 134.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.1	CARBONDALE		SHALE & SANDSTONE	4.0	81.9	
274.1	CARBONDALE	ALLENBY	COAL	1.3	85.9	
272.7	CARBONDALE		SHALE	1.8	87.3	
271.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	89.0	
266.0	CARBONDALE	LAWSON	SANDSTONE	9.0	94.0	
257.0	CARBONDALE	LAWSON	SILTY SHALE	12.0	103.0	
245.0	CARBONDALE		BLACK SHALE	8.0	115.0	
237.0	CARBONDALE	BRERETON	LIMESTONE	6.0	123.0	
231.0	CARBONDALE	ANNA	BLACK SHALE	1.0	129.0	
230.0	CARBONDALE	HERRIN	COAL	4.2	130.0	

MAPID: 16500222000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 0' W line
QUADRANGLE: GALATIA **LONGITUDE:** -88.540287 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.760353 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANATY TRUST CO., HOLE #185 **WELL TYPE:** Coal Test
COMMENT: FRED PATTERSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	81.9	0.0	
278.1	CARBONDALE		SANDSTONE	3.0	81.9	
275.1	CARBONDALE		SHALE	1.0	84.9	
274.1	CARBONDALE	ALLENBY	COAL	1.3	85.9	
272.7	CARBONDALE		SHALE	1.8	87.3	
271.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	89.0	
266.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	94.0	
257.0	CARBONDALE		SANDY SHALE	12.0	103.0	
245.0	CARBONDALE		BLACK SHALE	8.0	115.0	
237.0	CARBONDALE	BRERETON	LIMESTONE	6.0	123.0	
231.0	CARBONDALE	ANNA	BLACK SHALE	1.0	129.0	
230.0	CARBONDALE	HERRIN	COAL	4.2	130.0	
225.8	CARBONDALE		UNDERCLAY	3.5	134.2	
222.3	CARBONDALE		SANDSTONE	11.3	137.7	
211.0	CARBONDALE		SANDY SLATE	16.0	149.0	
195.0	CARBONDALE		BLACK SHALE	18.3	165.0	
176.7	CARBONDALE	BRIAR HILL	COAL	1.5	183.3	
175.2	CARBONDALE	DYKERSBURG	BLACK SHALE	16.0	184.8	
159.2	CARBONDALE	DYKERSBURG	SANDY SLATE	30.0	200.8	
129.2	CARBONDALE	DYKERSBURG	BLACK SHALE	37.3	230.8	
91.9	CARBONDALE	SPRINGFIELD	COAL	5.9	268.1	
86.0	CARBONDALE		UNDERCLAY	3.0	274.0	

MAPID: 16502736000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534515 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.763168 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 1528.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-147.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	500.0	
-218.0	SPOON	DAVIS	UNCLASSIFIED	-	571.0	
-1175.0	BASE OF PENN.		UNCLASSIFIED	-	1528.0	

MAPID: 16502736000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534515 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.763168 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2424.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1319.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1672.0	
-1686.0			LIMESTONE	-	2039.0	
-2071.0		BASE BARLOW	LIMESTONE	-	2424.0	

MAPID: 16502736000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534515 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.763168 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2955.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., CAPEL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-25.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	378.0	
-70.0	CARBONDALE	SURVANT	COAL	1.8	423.0	
-106.0	CARBONDALE	COLCHESTER	COAL	0.5	459.0	
-187.0	CARBONDALE	DEKOVEN	COAL	3.0	540.0	
-202.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	555.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-217.0	CARBONDALE	DAVIS	COAL	4.0	570.0	
-237.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	590.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-270.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	623.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16524479000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.53907 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.774671 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 20.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-11.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	375.0	
-51.0	CARBONDALE	SURVANT	COAL	0.5	415.0	
-126.0	CARBONDALE	COLCHESTER	COAL	0.5	490.0	
-168.0	CARBONDALE	DEKOVEN	COAL	3.0	532.0	
-191.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	555.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-211.0	CARBONDALE	DAVIS	COAL	4.0	575.0	
-228.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	592.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-255.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	619.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590060000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.540203 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.767991 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.4 **LOGGED (FT.):** 145.8 **LOG TYPE:** Company map
SOURCE: AMAX W-517 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.4	CARBONDALE	HERRIN	COAL	4.8	141.0	

MAPID: 16500223000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.549468 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.768185 **DATE COLLECTED:** 5 / 11 / 1906

SURFACE ELEVATION (FT.): 365.5 **LOGGED (FT.):** 312.4 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.5			UNCONSOLIDATED	45.0	0.0	
320.5	MODESTO		SHALE	10.0	45.0	
310.5	MODESTO		BLACK SHALE	5.0	55.0	
305.5	MODESTO		COAL	1.0	60.0	
304.5	MODESTO		UNDERCLAY	5.0	61.0	
299.5	MODESTO		SHALE	10.0	66.0	
289.5	MODESTO		LIMESTONE	3.0	76.0	
286.5	MODESTO		SHALE	15.0	79.0	
271.5	MODESTO	PIASA	LIMESTONE	3.0	94.0	
268.5	MODESTO		BLACK SHALE	8.0	97.0	
260.5	CARBONDALE	DANVILLE	COAL	3.0	105.0	
257.5	CARBONDALE		UNDERCLAY	2.0	108.0	
255.5	CARBONDALE		SANDSTONE	7.0	110.0	
248.5	CARBONDALE		SHALE	22.0	117.0	
226.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	139.0	
219.5	CARBONDALE		SHALE	5.0	146.0	
214.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	151.0	
206.5	CARBONDALE		SHALE	18.0	159.0	
188.5	CARBONDALE	BRERETON	LIMESTONE	7.0	177.0	
181.5	CARBONDALE	HERRIN	COAL	5.0	184.0	
176.5	CARBONDALE		UNDERCLAY	3.0	189.0	
173.5	CARBONDALE		SANDSTONE	29.0	192.0	
144.5	CARBONDALE		SHALE	15.0	221.0	
129.5	CARBONDALE	BRIAR HILL	COAL	1.5	236.0	
128.0	CARBONDALE		UNDERCLAY	1.0	237.5	
127.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	238.5	
124.0	CARBONDALE	DYKERSBURG	BONE COAL	4.5	241.5	
119.5	CARBONDALE	DYKERSBURG	SHALE	5.0	246.0	
114.5	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	251.0	
108.5	CARBONDALE	DYKERSBURG	SANDY SHALE	34.0	257.0	
74.5	CARBONDALE	DYKERSBURG	BLACK SHALE	16.6	291.0	
57.9	CARBONDALE	SPRINGFIELD	COAL	4.8	307.6	

MAPID: 16500224000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.548338 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.763477 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.0	CARBONDALE	DANVILLE	COAL	2.0	78.0	
259.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	97.0	
251.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	105.0	
215.0	CARBONDALE	HERRIN	COAL	4.5	141.0	
208.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	25.0	148.0	
162.0	CARBONDALE	BRIAR HILL	COAL	1.8	194.0	
161.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	26.0	195.0	
85.0	CARBONDALE	SPRINGFIELD	COAL	5.2	271.0	

MAPID: 16500224000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.548338 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763477 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 145.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.2	MODESTO	PIASA	LIMESTONE	2.0	59.8	
294.2	MODESTO		SHALE	16.0	61.8	
278.2	CARBONDALE	DANVILLE	COAL	2.0	77.8	
276.2	CARBONDALE		SHALE	13.3	79.8	
262.9	CARBONDALE	ALLENBY	COAL	0.2	93.1	
262.7	CARBONDALE		BLACK SHALE	3.5	93.3	
259.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	96.8	
251.2	CARBONDALE	LAWSON	SANDSTONE	7.0	104.8	
244.2	CARBONDALE	LAWSON	SILTY SHALE	10.0	111.8	
234.2	CARBONDALE		BLACK SHALE	11.5	121.8	
222.7	CARBONDALE	BRERETON	LIMESTONE	6.5	133.3	
216.2	CARBONDALE	ANNA	BLACK SHALE	1.3	139.8	
215.0	CARBONDALE	HERRIN	COAL	4.5	141.0	

MAPID: 16500224000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.548338 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.763477 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 279.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: DISCREP. IN THICK & DEPTH FROM ORIG. LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.0			UNCONSOLIDATED	41.3	0.0	
314.7	MODESTO		SHALE	16.8	41.3	
298.0	MODESTO		COAL	0.2	58.0	
297.8	MODESTO		BLACK SHALE	1.8	58.2	
296.0	MODESTO	PIASA	LIMESTONE	2.0	60.0	
294.0	MODESTO		BLACK SHALE	16.0	62.0	
278.0	CARBONDALE	DANVILLE	COAL	2.0	78.0	
276.0	CARBONDALE		BLACK SHALE	3.0	80.0	
273.0	CARBONDALE		SANDY SLATE	10.3	83.0	
262.7	CARBONDALE	ALLENBY	COAL	0.2	93.3	
262.5	CARBONDALE		BLACK SHALE	3.5	93.5	
259.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	97.0	
251.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	105.0	
244.0	CARBONDALE		SANDY SLATE	10.0	112.0	
234.0	CARBONDALE		BLACK SHALE	11.5	122.0	
222.5	CARBONDALE	BRERETON	LIMESTONE	6.5	133.5	
216.0	CARBONDALE		BLACK SHALE	1.3	140.0	
214.7	CARBONDALE	HERRIN	COAL	3.5	141.3	
210.2	CARBONDALE		UNDERCLAY	2.3	145.8	
208.0	CARBONDALE		SANDSTONE	25.0	148.0	
183.0	CARBONDALE		SANDY SLATE	7.0	173.0	
176.0	CARBONDALE		BLACK SHALE	13.5	180.0	
162.5	CARBONDALE	BRIAR HILL	COAL	1.8	193.5	
160.7	CARBONDALE	DYKERSBURG	SANDSTONE	25.7	195.3	
135.0	CARBONDALE	DYKERSBURG	SANDY SLATE	23.0	221.0	
112.0	CARBONDALE	DYKERSBURG	BLACK SHALE	27.0	244.0	
85.0	CARBONDALE	SPRINGFIELD	COAL	5.2	271.0	
79.8	CARBONDALE		UNDERCLAY	3.5	276.2	

MAPID: 16502695000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552943 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.765467 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2941.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, MATTHEWS JOE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
18.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	344.0	
-28.0	CARBONDALE	SURVANT	COAL	0.8	390.0	
-108.0	CARBONDALE	COLCHESTER	COAL	0.5	470.0	
-153.0	CARBONDALE	DEKOVEN	COAL	1.8	515.0	
-170.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	532.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-189.0	CARBONDALE	DAVIS	COAL	4.0	551.0	
-228.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	590.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-247.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	609.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502695000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.552943 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.765467 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2410.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1286.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1648.0	
-1646.0			LIMESTONE	-	2008.0	
-2048.0		BASE BARLOW	LIMESTONE	-	2410.0	

MAPID: 16503501000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SW NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.545999 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.770955 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2047.0 **LOG TYPE:**
SOURCE: SHIPLEY, J. E. DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1335.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1701.0	
-1681.0			LIMESTONE	-	2047.0	

MAPID: 16590049000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.550917 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.7757 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.5 **LOGGED (FT.):** 151.0 **LOG TYPE:** Company map
SOURCE: AMAX X-12N **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
214.5	CARBONDALE	HERRIN	COAL	5.0	146.0	

MAPID: 16590050000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.558366 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775803 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.7 **LOGGED (FT.):** 139.9 **LOG TYPE:** Company map
SOURCE: AMAX W-609 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.7	CARBONDALE	DANVILLE	COAL	1.5	77.0	
227.7	CARBONDALE	HERRIN	COAL	4.9	135.0	

MAPID: 16590059000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.54932 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771806 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Company map
SOURCE: AMAX W-563 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
282.0	CARBONDALE	DANVILLE	COAL	1.0	81.0	

MAPID: 16590061000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549395 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768698 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.4 **LOGGED (FT.):** 191.1 **LOG TYPE:** Company map
SOURCE: AMAX W-513JC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
299.4	CARBONDALE	DANVILLE	COAL	1.0	63.0	
241.4	CARBONDALE	ALLENBY	COAL	1.7	121.0	
177.4	CARBONDALE	HERRIN	COAL	6.1	185.0	

MAPID: 16590076000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.558576 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764511 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.6 **LOGGED (FT.):** 146.6 **LOG TYPE:** Company map
SOURCE: AMAX W-459 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.6	CARBONDALE	DANVILLE	COAL	2.0	74.0	
228.6	CARBONDALE	HERRIN	COAL	4.6	142.0	

MAPID: 16590077000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.553964 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764528 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.6 **LOGGED (FT.):** 143.7 **LOG TYPE:** Company map
SOURCE: AMAX W-461 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
232.6	CARBONDALE	HERRIN	COAL	4.7	139.0	

MAPID: 16590078000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549434 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764449 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.2 **LOGGED (FT.):** 150.0 **LOG TYPE:** Company map
SOURCE: AMAX W-463 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
282.2	CARBONDALE	DANVILLE	COAL	2.0	79.0	
266.2	CARBONDALE	ALLENBY	COAL	1.0	95.0	
216.2	CARBONDALE	HERRIN	COAL	5.0	145.0	

MAPID: 16590092000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.556359 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759079 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.8 **LOGGED (FT.):** 105.1 **LOG TYPE:** Company map
SOURCE: AMAX W-385 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
271.8	CARBONDALE	HERRIN	COAL	5.1	100.0	

MAPID: 16500226000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.559843 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.774811 **DATE COLLECTED:** 11 / 1 / 1905

SURFACE ELEVATION (FT.): 362.9 **LOGGED (FT.):** 270.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., LANCASTER A#12 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.9			UNCONSOLIDATED	20.0	0.0	
342.9			UNCONSOLIDATED	10.0	20.0	
332.9			SAND	11.0	30.0	
321.9	MODESTO		SANDSTONE	3.0	41.0	
318.9	MODESTO		SHALE	15.0	44.0	
303.9	MODESTO		BLACK SHALE	2.0	59.0	
301.9	MODESTO		SHALE	9.0	61.0	
292.9	CARBONDALE	DANVILLE	COAL	1.0	70.0	
291.9	CARBONDALE		SHALE	16.0	71.0	
275.9	CARBONDALE		SANDSTONE	3.0	87.0	
272.9	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	90.0	
269.9	CARBONDALE		BLACK SHALE	17.0	93.0	
252.9	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	110.0	
237.9	CARBONDALE		SHALE	7.0	125.0	
230.9	CARBONDALE	BRERETON	LIMESTONE	6.5	132.0	
224.4	CARBONDALE	ANNA	BLACK SHALE	1.5	138.5	
222.9	CARBONDALE	HERRIN	COAL	4.5	140.0	
218.4	CARBONDALE		UNDERCLAY	3.5	144.5	
214.9	CARBONDALE		SANDY SHALE	27.0	148.0	
187.9	CARBONDALE		SHALE	14.0	175.0	
173.9	CARBONDALE	BRIAR HILL	COAL	0.5	189.0	
173.4	CARBONDALE		UNDERCLAY	2.5	189.5	
170.9	CARBONDALE		SHALE	6.0	192.0	
164.9	CARBONDALE	DYKERSBURG	SANDSTONE	22.0	198.0	
142.9	CARBONDALE	DYKERSBURG	SHALE	44.5	220.0	
98.4	CARBONDALE	SPRINGFIELD	COAL	4.5	264.5	
93.9	CARBONDALE		UNDERCLAY	1.0	269.0	

MAPID: 16500227000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.570323 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.773922 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 295.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
285.0	CARBONDALE	DANVILLE	COAL	0.5	84.0	
261.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	108.0	
254.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	5.0	115.0	
219.0	CARBONDALE	HERRIN	COAL	4.5	150.0	
211.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	32.0	158.0	
165.0	CARBONDALE	BRIAR HILL	COAL	0.5	204.0	
153.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	24.0	216.0	
80.0	CARBONDALE	SPRINGFIELD	COAL	5.8	289.0	

MAPID: 16500227000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.570323 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.773922 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 154.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	MODESTO	PIASA	LIMESTONE	3.5	62.0	
294.5	CARBONDALE		SHALE	18.5	65.5	
276.0	CARBONDALE	ALLENBY	COAL	0.5	84.0	
275.5	CARBONDALE		SILTY SHALE	23.5	84.5	
252.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	108.0	
245.0	CARBONDALE	LAWSON	SANDSTONE	5.0	115.0	
240.0	CARBONDALE	LAWSON	SANDSTONE	5.0	120.0	
235.0	CARBONDALE		SHALE	21.0	125.0	
214.0	CARBONDALE	BRERETON	LIMESTONE	7.0	146.0	
207.0	CARBONDALE	ANNA	BLACK SHALE	2.0	153.0	
210.0	CARBONDALE	HERRIN	COAL	4.5	150.0	

MAPID: 16500227000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.570323 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.773922 **DATE COLLECTED:** 10 / 6 / 1905

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 295.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: LANCASTER "A"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	28.0	0.0	
341.0	MODESTO		BLACK SHALE	14.0	28.0	
327.0	MODESTO		SANDSTONE	18.0	42.0	
309.0	MODESTO		SHALE	2.0	60.0	
307.0	MODESTO	PIASA	LIMESTONE	3.5	62.0	
303.5	MODESTO		BLACK SHALE	18.5	65.5	
285.0	CARBONDALE	DANVILLE	COAL	0.5	84.0	
284.5	CARBONDALE		SANDY SHALE	23.5	84.5	
261.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	108.0	
254.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	115.0	
249.0	CARBONDALE		SHALE	21.0	120.0	
228.0	CARBONDALE	BRERETON	LIMESTONE	7.0	141.0	
221.0	CARBONDALE	ANNA	BLACK SHALE	2.0	148.0	
219.0	CARBONDALE	HERRIN	COAL	4.5	150.0	
214.5	CARBONDALE		UNDERCLAY	3.5	154.5	
211.0	CARBONDALE		SANDSTONE	32.0	158.0	
179.0	CARBONDALE		SHALE	14.5	190.0	
164.5	CARBONDALE	BRIAR HILL	COAL	0.5	204.5	
164.0	CARBONDALE		UNDERCLAY	1.0	205.0	
163.0	CARBONDALE		SHALE	10.0	206.0	
153.0	CARBONDALE	DYKERSBURG	SANDSTONE	24.0	216.0	
129.0	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	240.0	
114.0	CARBONDALE	DYKERSBURG	SHALE	5.0	255.0	
109.0	CARBONDALE	DYKERSBURG	SHALE	5.0	260.0	
104.0	CARBONDALE	DYKERSBURG	SHALE	24.2	265.0	
79.8	CARBONDALE	SPRINGFIELD	COAL	5.8	289.2	

MAPID: 16502376000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.570346 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.766474 **DATE COLLECTED:** 5 / 23 / 1905

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 292.7 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	22.0	0.0	
-			SHALE	6.0	22.0	
-			SANDSTONE	8.0	28.0	
-			SHALE	5.0	36.0	
-			SANDSTONE	14.0	41.0	
-			SHALE	1.0	55.0	
-			LIMESTONE	16.0	56.0	
-			SHALE	5.5	72.0	
-			SHALE	10.5	77.5	
-			LIMESTONE	49.0	88.0	
-			SHALE	2.0	137.0	
-			SHALE	20.0	139.0	
-			UNKNOWN	1.0	159.0	LOG HAS "SPAR"
-			SANDY SHALE	3.0	160.0	
-			SHALE	5.0	163.0	
-			SANDY SHALE	12.0	168.0	
-			SHALE	5.0	180.0	
-	CARBONDALE	HERRIN	COAL	1.5	185.0	CORRELATION UNCERTAIN
-			SHALE	28.5	186.5	AND FIRECLAY
-			LIMESTONE	8.0	215.0	
-	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	223.0	
-	CARBONDALE	DYKERSBURG	SHALE	60.0	224.0	
-	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	284.0	
-	CARBONDALE	SPRINGFIELD	COAL	2.7	289.0	
-			UNDERCLAY	1.0	291.7	

MAPID: 16503153000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566867 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.767442 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1492.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	465.0	
-164.0	SPOON	DAVIS	UNCLASSIFIED	-	530.0	
-1126.0	BASE OF PENN.		UNCLASSIFIED	-	1492.0	

MAPID: 16503153000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566867 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.767442 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2384.0 **LOG TYPE:**
SOURCE: GEORGE, T. W. TRUST **WELL TYPE:** Producer-Oil
COMMENT: WELL FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
159.0	CARBONDALE	BRERETON	LIMESTONE	-	207.0	
-1299.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1665.0	
-1647.0			LIMESTONE	-	2013.0	
-2018.0		BASE BARLOW	LIMESTONE	-	2384.0	

MAPID: 16503153000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.566867 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.767442 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2881.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST, WOOTEN FRANK A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
21.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	345.0	
-23.0	CARBONDALE	SURVANT	COAL	0.8	389.0	
-99.0	CARBONDALE	COLCHESTER	COAL	0.5	465.0	
-139.0	CARBONDALE	DEKOVEN	COAL	3.0	505.0	
-154.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	520.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-166.0	CARBONDALE	DAVIS	COAL	4.0	532.0	
-199.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	565.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-204.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	570.0	
-254.0	TRADEWATER	MT. RORAH	COAL	0.8	620.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590051000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.562977 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.4 **LOGGED (FT.):** 138.0 **LOG TYPE:** Company map
SOURCE: AMAX W-607 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
232.4	CARBONDALE	HERRIN	COAL	5.0	133.0	

MAPID: 16590052000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568135 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.5 **LOGGED (FT.):** 134.2 **LOG TYPE:** Company map
SOURCE: AMAX X-4P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
238.5	CARBONDALE	HERRIN	COAL	5.2	129.0	

MAPID: 16590053000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.77576 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.6 **LOGGED (FT.):** 147.3 **LOG TYPE:** Company map
SOURCE: AMAX W-603 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
225.6	CARBONDALE	HERRIN	COAL	5.3	142.0	

MAPID: 16590057000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572417 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.1 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX W-553 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
277.1	CARBONDALE	DANVILLE	COAL	1.0	96.0	
216.1	CARBONDALE	HERRIN	COAL	1.0	157.0	

MAPID: 16590058000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563073 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.771936 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.3 **LOGGED (FT.):** 149.7 **LOG TYPE:** Company map
SOURCE: AMAX N-557 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
288.3	CARBONDALE	DANVILLE	COAL	1.0	80.0	
220.3	CARBONDALE	HERRIN	COAL	1.7	148.0	

MAPID: 16590062000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.560036 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.769313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.7 **LOGGED (FT.):** 178.0 **LOG TYPE:** Company map
SOURCE: AMAX W-508HC **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
237.7	CARBONDALE	HERRIN	COAL	5.0	173.0	

MAPID: 16590063000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567879 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768187 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.5 **LOGGED (FT.):** 153.8 **LOG TYPE:** Company map
SOURCE: AMAX W-505 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.5	CARBONDALE	DANVILLE	COAL	1.5	81.0	
212.5	CARBONDALE	HERRIN	COAL	1.8	152.0	

MAPID: 16590064000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.570118 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768239 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.9 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX W-504 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
259.9	CARBONDALE	DANVILLE	COAL	1.0	103.0	
204.9	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590065000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572375 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768254 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.9 **LOGGED (FT.):** 178.0 **LOG TYPE:** Company map
SOURCE: AMAX W-503 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
249.9	CARBONDALE	DANVILLE	COAL	1.0	113.0	
184.9	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	178.0	

MAPID: 16590066000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572465 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766422 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.1 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX W-478 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.1	CARBONDALE	DANVILLE	COAL	0.8	97.0	
204.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590067000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.570166 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766417 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.2 **LOGGED (FT.):** 110.2 **LOG TYPE:** Company map
SOURCE: AMAX W-479 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
324.2	CARBONDALE	DANVILLE	COAL	2.0	39.0	
258.2	CARBONDALE	HERRIN	COAL	5.2	105.0	

MAPID: 16590068000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567791 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.9 **LOGGED (FT.):** 122.1 **LOG TYPE:** Company map
SOURCE: AMAX W-480 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.9	CARBONDALE	DANVILLE	COAL	1.7	51.0	
245.9	CARBONDALE	HERRIN	COAL	5.1	117.0	

MAPID: 16590069000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572488 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764605 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.3 **LOGGED (FT.):** 97.8 **LOG TYPE:** Company map
SOURCE: AMAX W-453 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
269.3	CARBONDALE	HERRIN	COAL	4.8	93.0	

MAPID: 16590070000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.570242 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764579 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.6 **LOGGED (FT.):** 91.1 **LOG TYPE:** Company map
SOURCE: AMAX W-454 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.6	CARBONDALE	HERRIN	COAL	5.1	86.0	

MAPID: 16590071000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567936 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764602 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.9 **LOGGED (FT.):** 97.6 **LOG TYPE:** Company map
SOURCE: AMAX W-455 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
267.9	CARBONDALE	HERRIN	COAL	4.6	93.0	

MAPID: 16590072000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.57247 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762791 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.9 **LOGGED (FT.):** 91.0 **LOG TYPE:** Company map
SOURCE: AMAX W-428 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.9	CARBONDALE	HERRIN	COAL	5.0	86.0	

MAPID: 16590073000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.570171 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762795 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.8 **LOGGED (FT.):** 91.8 **LOG TYPE:** Company map
SOURCE: AMAX W-429 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.8	CARBONDALE	HERRIN	COAL	4.8	87.0	

MAPID: 16590074000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: GALATIA **LONGITUDE:** -88.567876 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.76282 **DATE COLLECTED:** 7 / 22 / 1987

SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO. I-7-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.0	PLEISTOCENE		CLAY	8.0	0.0	
415.0	PLEISTOCENE		SAND	15.0	8.0	CLAY
400.0	PLEISTOCENE		SAND	12.0	23.0	
388.0	CARBONDALE		SANDY SHALE	33.0	35.0	
355.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	68.0	
352.0	CARBONDALE	COLCHESTER	COAL	0.3	71.0	
351.7	CARBONDALE		UNDERCLAY	4.7	71.3	
347.0	CARBONDALE		SANDSTONE	21.0	76.0	
326.0	CARBONDALE		SANDY SHALE	22.0	97.0	
304.0	CARBONDALE	DEKOVEN	COAL	2.2	119.0	
301.8	CARBONDALE		SANDY SHALE	18.3	121.2	
283.5	CARBONDALE		BLACK SHALE	1.5	139.5	
282.0	CARBONDALE	DAVIS	COAL	4.3	141.0	
277.7	TRADEWATER		SANDY SHALE	2.7	145.3	
275.0	TRADEWATER		SANDSTONE	33.0	148.0	
242.0	TRADEWATER		GRAY SHALE & SANDSTONE	2.0	181.0	
240.0	TRADEWATER		BLACK SHALE	2.0	183.0	
238.0	TRADEWATER		COAL	0.6	185.0	
237.4	TRADEWATER		UNDERCLAY	1.4	185.6	
236.0	TRADEWATER		SANDSTONE	8.0	187.0	
228.0	TRADEWATER		SANDY SHALE	9.5	195.0	
218.5	TRADEWATER		COAL	0.2	204.5	
218.3	TRADEWATER		SANDY SHALE	0.8	204.7	
217.5	TRADEWATER		GRAY SHALE	16.5	205.5	
201.0	TRADEWATER		SANDY SHALE	7.0	222.0	
194.0	TRADEWATER		COAL	0.4	229.0	
193.6	TRADEWATER		UNDERCLAY	0.6	229.4	
193.0	TRADEWATER		SANDSTONE	46.0	230.0	

MAPID: 16590074000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567876 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76282 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.6 **LOGGED (FT.):** 84.5 **LOG TYPE:** Company map
SOURCE: AMAX W-430 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.6	CARBONDALE	HERRIN	COAL	0.5	84.0	

MAPID: 16590075000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563227 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.764406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: SUGAR CAMP COAL CO. I-25-87 **WELL TYPE:** Coal Test
COMMENT: PERMIT #127 EAGLE VALLEY M INE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.0	PLEISTOCENE		CLAY	4.0	0.0	
486.0	PLEISTOCENE		SAND	8.0	4.0	
478.0	CARBONDALE		SANDY SHALE	27.0	12.0	
451.0	CARBONDALE		GRAY SHALE	8.0	39.0	
443.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	47.0	
439.0	CARBONDALE	COLCHESTER	COAL	0.5	51.0	
438.5	CARBONDALE		UNDERCLAY	7.5	51.5	
431.0	CARBONDALE		SANDSTONE	8.0	59.0	
423.0	CARBONDALE		SANDY SHALE	13.0	67.0	
410.0	CARBONDALE		DARK SHALE	16.0	80.0	
394.0	CARBONDALE		BLACK SHALE	4.0	96.0	
390.0	CARBONDALE	DEKOVEN	COAL	1.8	100.0	
388.2	CARBONDALE		SANDY SHALE	23.2	101.8	
365.0	CARBONDALE		BLACK SHALE	0.5	125.0	
364.5	CARBONDALE	DAVIS	COAL	3.3	125.5	
361.2	TRADEWATER		SHALE	6.3	128.8	

MAPID: 16590075000C **VERSION:** 2 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563227 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 135.8 **LOG TYPE:** Company map
SOURCE: AMAX W-457 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	HERRIN	COAL	4.8	131.0	

MAPID: 16590121000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 5 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.5748 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762777 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.2 **LOGGED (FT.):** 90.1 **LOG TYPE:** Company map
SOURCE: AMAX W-427 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
301.2	CARBONDALE	HERRIN	COAL	5.1	85.0	

MAPID: 16500229000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.588286 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.774856 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 368.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	HERRIN	COAL	4.0	170.0	
166.0	CARBONDALE	BRIAR HILL	COAL	1.0	208.0	

MAPID: 16500229000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.588286 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.774856 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 174.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
338.0	MODESTO		SHALE & SANDSTONE	74.0	36.0	
264.0	CARBONDALE	DANVILLE	COAL	1.0	110.0	
263.0	CARBONDALE		SHALE & SANDSTONE	18.0	111.0	
245.0	CARBONDALE	GALUM	LIMESTONE	1.0	129.0	
244.0	CARBONDALE		BLACK SHALE	0.5	130.0	
243.5	CARBONDALE	ALLENBY	COAL	1.5	130.5	
242.0	CARBONDALE		CLAYSTONE	4.0	132.0	
238.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	136.0	
230.0	CARBONDALE	LAWSON	COAL	0.5	144.0	
229.5	CARBONDALE	LAWSON	CLAYSTONE	3.5	144.5	
226.0	CARBONDALE	LAWSON	SANDSTONE	2.0	148.0	
224.0	CARBONDALE	LAWSON	SHALE	11.0	150.0	
213.0	CARBONDALE	JAMESTOWN	COAL	1.0	161.0	
212.0	CARBONDALE	BRERETON	LIMESTONE	6.0	162.0	
206.0	CARBONDALE	ANNA	BLACK SHALE	2.0	168.0	
204.0	CARBONDALE	HERRIN	COAL	4.0	170.0	

MAPID: 16500229000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.588286 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.774856 **DATE COLLECTED:** 9 / 20 / 1905

SURFACE ELEVATION (FT.): 373.3 **LOGGED (FT.):** 368.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., LANCASTER A#10 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.3			UNCONSOLIDATED	36.0	0.0	
337.3	MODESTO		BLACK SHALE	24.0	36.0	
313.3	MODESTO		SANDSTONE	40.0	60.0	
273.3	MODESTO		SHALE	10.0	100.0	
263.3	CARBONDALE	DANVILLE	COAL	1.0	110.0	
262.3	CARBONDALE		UNDERCLAY	3.0	111.0	
259.3	CARBONDALE		SHALE	11.0	114.0	
248.3	CARBONDALE		SANDSTONE	4.0	125.0	
244.3	CARBONDALE	GALUM	LIMESTONE	1.0	129.0	
243.3	CARBONDALE		BLACK SHALE	0.5	130.0	
242.8	CARBONDALE	ALLENBY	COAL	1.5	130.5	
241.3	CARBONDALE		UNDERCLAY	4.0	132.0	
237.3	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	136.0	
229.3	CARBONDALE		COAL	0.5	144.0	
228.8	CARBONDALE		UNDERCLAY	3.5	144.5	
225.3	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	148.0	
223.3	CARBONDALE		SHALE	11.0	150.0	
212.3	CARBONDALE	JAMESTOWN	COAL	1.0	161.0	
211.3	CARBONDALE	BRERETON	LIMESTONE	6.0	162.0	
205.3	CARBONDALE	ANNA	BLACK SHALE	2.0	168.0	
203.3	CARBONDALE	HERRIN	COAL	4.0	170.0	
199.3	CARBONDALE		UNDERCLAY	4.0	174.0	
195.3	CARBONDALE		BLACK SHALE	22.0	178.0	
173.3	CARBONDALE		SHALE	8.0	200.0	
165.3	CARBONDALE	BRIAR HILL	COAL	1.0	208.0	
164.3	CARBONDALE		UNDERCLAY	1.0	209.0	
163.3	CARBONDALE		SHALE	10.0	210.0	
153.3	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	220.0	
133.3	CARBONDALE	DYKERSBURG	SHALE	80.0	240.0	
53.3	CARBONDALE	DYKERSBURG	SHALE	20.0	320.0	
33.3	CARBONDALE		BLACK SHALE	13.0	340.0	
20.3	CARBONDALE		SANDSTONE	12.0	353.0	
8.3	CARBONDALE		SHALE	3.0	365.0	

MAPID: 16500230000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.588336 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.763695 **DATE COLLECTED:** 6 / 2 / 1905
SURFACE ELEVATION (FT.): 404.4 **LOGGED (FT.):** 310.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER B#2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.4			UNCONSOLIDATED	15.0	0.0	
389.4			SANDSTONE	40.0	15.0	
349.4			SANDY SHALE	43.0	55.0	
306.4	CARBONDALE		SHALE	9.5	98.0	
296.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	107.5	
290.9	CARBONDALE		SHALE	6.5	113.5	
284.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	120.0	
269.4	CARBONDALE		SHALE	6.0	135.0	
263.4	CARBONDALE		BLACK SHALE	1.0	141.0	
262.4	CARBONDALE	BRERETON	LIMESTONE	5.0	142.0	
257.4	CARBONDALE	HERRIN	COAL	4.5	147.0	
252.9	CARBONDALE		SANDSTONE	28.5	151.5	
224.4	CARBONDALE		SHALE	41.0	180.0	
183.4	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	221.0	
161.4	CARBONDALE	DYKERSBURG	SHALE	61.0	243.0	
100.4	CARBONDALE	SPRINGFIELD	COAL	6.5	304.0	

MAPID: 16502546000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578496 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.763632 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1604.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.0	CARBONDALE	BRERETON	LIMESTONE	-	105.0	
-1196.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1604.0	

MAPID: 16502546000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.578496 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.763632 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1935.0 **LOG TYPE:** Electric Log

SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	HERRIN	COAL	6.0	110.0	
246.0	CARBONDALE	BRIAR HILL	COAL	-	162.0	
161.0	CARBONDALE	SPRINGFIELD	COAL	6.0	247.0	
98.0	CARBONDALE	HOUCHIN CREEK	COAL	-	310.0	

MAPID: 16502546000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.578496 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763632 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1486.0 **LOG TYPE:** Electric Log

SOURCE: PLEDGER ROY **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-33.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	441.0	
-97.0	SPOON	DAVIS	UNCLASSIFIED	-	505.0	
-1078.0	BASE OF PENN.		UNCLASSIFIED	-	1486.0	

MAPID: 16502546000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578496 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.763632 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1935.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, TUTTLE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	304.0	
46.0	CARBONDALE	SURVANT	COAL	0.8	362.0	
-32.0	CARBONDALE	COLCHESTER	COAL	0.5	440.0	
-72.0	CARBONDALE	DEKOVEN	COAL	3.3	480.0	
-83.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	491.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-97.0	CARBONDALE	DAVIS	COAL	4.0	505.0	
-132.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	540.0	
-149.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	557.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590054000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.581303 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.775857 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.7 **LOGGED (FT.):** 181.2 **LOG TYPE:** Company map
SOURCE: AMAX Q-23 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
202.7	CARBONDALE	HERRIN	COAL	5.2	176.0	

MAPID: 16590056000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.586459 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.772163 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 161.3 **LOG TYPE:** Company map
SOURCE: AMAX P-571 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
214.0	CARBONDALE	HERRIN	COAL	5.3	156.0	

MAPID: 16590112000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.586461 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.768406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.1 **LOGGED (FT.):** 166.3 **LOG TYPE:** Company map
SOURCE: AMAX P-521 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.1	CARBONDALE	HERRIN	COAL	5.3	161.0	

MAPID: 16590113000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.579465 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.766431 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.6 **LOGGED (FT.):** 101.0 **LOG TYPE:** Company map
SOURCE: AMAX P-449 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.6	CARBONDALE	DANVILLE	COAL	1.5	27.0	
293.6	CARBONDALE	HERRIN	COAL	5.0	96.0	

MAPID: 16590115000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.581769 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.764686 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.5 **LOGGED (FT.):** 106.2 **LOG TYPE:** Company map
SOURCE: AMAX P-473 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
279.5	CARBONDALE	HERRIN	COAL	5.2	101.0	

MAPID: 16590116000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.59717 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761421 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.4 **LOGGED (FT.):** 90.8 **LOG TYPE:** Company map
SOURCE: AMAX P-417 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
335.4	CARBONDALE	DANVILLE	COAL	0.8	37.0	
287.4	CARBONDALE	HERRIN	COAL	5.8	85.0	

MAPID: 16590119000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.57942 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.762845 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.6 **LOGGED (FT.):** 101.0 **LOG TYPE:** Company map
SOURCE: AMAX P-449 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.6	CARBONDALE	HERRIN	COAL	5.0	96.0	

MAPID: 16500231000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.579824 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.751656 **DATE COLLECTED:** 8 / 0 / 1905
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER A#7 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			CLAY	20.0	0.0	
340.0			UNCONSOLIDATED	15.0	20.0	
325.0			SAND	15.0	35.0	
310.0			UNCONSOLIDATED	6.0	50.0	
304.0	CARBONDALE		SHALE	25.5	56.0	
278.5	CARBONDALE	BRIAR HILL	COAL	0.5	81.5	
278.0	CARBONDALE		SANDSTONE	68.0	82.0	
210.0	CARBONDALE	DYKERSBURG	SHALE	32.6	150.0	
177.4	CARBONDALE	SPRINGFIELD	COAL	6.4	182.6	
171.0	CARBONDALE		UNDERCLAY	0.0	189.0	T.D.

MAPID: 16500231000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.579824 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.751656 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	LAWSON	SANDSTONE	68.0		

MAPID: 16500232000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5877 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.746645 **DATE COLLECTED:** 7 / 0 / 1905

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 302.3 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #37 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	44.7	0.0	
317.3	CARBONDALE		SHALE	4.6	44.7	
312.7	CARBONDALE		SANDY SLATE	8.7	49.3	
304.1	CARBONDALE	HERRIN	COAL	1.5	57.9	
302.6	CARBONDALE		UNDERCLAY	2.2	59.4	AND SHALE
300.4	CARBONDALE		SANDSTONE	1.0	61.6	
299.4	CARBONDALE		SANDY SLATE	2.0	62.6	
297.4	CARBONDALE		LIMESTONE	1.0	64.6	
296.4	CARBONDALE		SANDY SLATE	10.8	65.6	
285.7	CARBONDALE	BRIAR HILL	COAL	0.3	76.3	
285.4	CARBONDALE		UNDERCLAY	2.4	76.6	
283.0	CARBONDALE		SHALE	6.2	79.0	
276.8	CARBONDALE		SHALE	9.3	85.2	
267.5	CARBONDALE			2.0	94.5	
265.5	CARBONDALE		SHALE	7.0	96.5	
258.5	CARBONDALE		SANDY SHALE	12.5	103.5	
246.0	CARBONDALE		SANDY SLATE	6.8	116.0	
239.2	CARBONDALE		SANDY SHALE	19.2	122.8	
220.1	CARBONDALE		SANDSTONE	2.5	141.9	
217.6	CARBONDALE		SANDSTONE	5.3	144.4	
212.2	CARBONDALE		SANDY SHALE	2.7	149.8	
209.6	CARBONDALE		SHALE	5.1	152.4	
204.5	CARBONDALE		SANDSTONE	1.3	157.5	
203.2	CARBONDALE		SHALE	3.3	158.8	
200.0	CARBONDALE		SANDSTONE	2.0	162.0	
198.0	CARBONDALE		SHALE	17.5	164.0	
180.5	CARBONDALE		SANDSTONE	39.5	181.5	
141.0	CARBONDALE	SPRINGFIELD	SANDSTONE	0.0	221.0	COAL REPLACED BY CHANNEL
141.0			SANDSTONE	3.3	221.0	
137.7	CARBONDALE		SHALE	2.8	224.3	
134.8	CARBONDALE		SANDSTONE	2.0	227.2	
132.8	CARBONDALE		SHALE	3.0	229.2	
129.8	CARBONDALE		SANDSTONE	0.7	232.2	
129.2			SANDY SHALE	5.3	232.8	
123.8			SANDSTONE	15.2	238.2	
108.7			SANDSTONE	11.3	253.3	
97.4			COAL	0.2	264.6	
97.2			SANDSTONE	9.0	264.8	
88.2			SANDSTONE	5.3	273.8	

83.0	COAL	0.1	279.0
82.8	SANDSTONE	2.1	279.2
80.7	COAL	1.1	281.3
79.7	SANDY SHALE	5.6	282.3
74.1	SANDY SLATE	6.0	287.9
68.1	BLACK SHALE	0.8	293.9
67.3	SANDY SHALE	1.3	294.7
66.0	UNDERCLAY	2.9	296.0
63.1	SANDY SLATE	3.3	298.9

MAPID: 16500232000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5877 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.746645 **DATE COLLECTED:** 7 / 0 / 1905

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 302.2 **LOG TYPE:** Survey Core Study

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	44.7	0.0	
317.3			ROCK	13.3	44.7	
304.1			COAL	1.5	57.9	
302.6			ROCK	16.9	59.4	
285.7			COAL	0.3	76.3	
285.4			ROCK	188.0	76.6	
97.4			COAL	0.2	264.6	
97.3			ROCK	14.4	264.7	
82.9			COAL	0.1	279.1	
82.7			ROCK	2.1	279.3	
80.7			COAL	1.1	281.3	
79.6			ROCK	10.6	282.4	
69.0			COAL	1.0	293.0	
68.0			ROCK	8.3	294.0	

MAPID: 16500233000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SW SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58528 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.74664 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	19.0	
316.0	CARBONDALE	HERRIN	COAL	3.5	66.0	
262.0	CARBONDALE	BRIAR HILL	COAL	0.5	120.0	
150.0	CARBONDALE	CANTON		24.0	232.0	

MAPID: 16500233000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SW SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58528 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.74664 **DATE COLLECTED:** 5 / 22 / 1905
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	19.0	0.0	
363.0			ROCK	47.0	19.0	
316.0	CARBONDALE	HERRIN	COAL	3.5	66.0	
312.5	CARBONDALE		ROCK	50.5	69.5	
262.0	CARBONDALE	BRIAR HILL	COAL	0.5	120.0	
261.5			ROCK	135.5	120.5	

MAPID: 16500233000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SW SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58528 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.74664 **DATE COLLECTED:** 5 / 22 / 1905
SURFACE ELEVATION (FT.): 382.3 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER A#1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.3			UNCONSOLIDATED	19.0	0.0	
363.3	CARBONDALE		LIMESTONE	3.0	19.0	
360.3	CARBONDALE		SHALE	8.0	22.0	
352.3	CARBONDALE		SANDY SHALE	15.0	30.0	
337.3	CARBONDALE		SHALE	13.5	45.0	
323.8	CARBONDALE		BLACK SHALE	0.5	58.5	
323.3	CARBONDALE	BRERETON	LIMESTONE	4.5	59.0	
318.8	CARBONDALE		BLACK SHALE	2.5	63.5	
316.3	CARBONDALE	HERRIN	COAL	3.5	66.0	
312.8	CARBONDALE		SANDY SHALE	20.5	69.5	
292.3	CARBONDALE		BLACK SHALE	30.0	90.0	
262.3	CARBONDALE	BRIAR HILL	COAL	0.5	120.0	
261.8	CARBONDALE		SHALE	35.5	120.5	
226.3	CARBONDALE	DYKERSBURG	BLACK SHALE	19.0	156.0	
207.3	CARBONDALE	DYKERSBURG	SANDY SHALE	57.0	175.0	
150.3	CARBONDALE	DYKERSBURG	SANDSTONE	24.0	232.0	SPRINGFIELD COAL REP. BY GALATIA CHANNEL
126.3	CARBONDALE	SPRINGFIELD	SANDSTONE	0.0	256.0	

MAPID: 16502377000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578524 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.75622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2300.0 **LOG TYPE:**
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1179.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1546.0	
-1517.0			LIMESTONE	-	1884.0	
-1933.0		BASE BARLOW	LIMESTONE	-	2300.0	

MAPID: 16502377000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578524 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.75622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2884.0 **LOG TYPE:** Electric Log
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	CARBONDALE	SPRINGFIELD	COAL	7.0	196.0	
131.0	CARBONDALE	HOUCHIN CREEK	COAL	-	236.0	

MAPID: 16502377000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578524 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.75622 **DATE COLLECTED:** 6 / 0 / 1944
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2884.0 **LOG TYPE:** Electric Log
SOURCE: MAGNOLIA PETROLEUM, PRUETT ESTATE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	243.0	
77.0	CARBONDALE	SURVANT	COAL	0.7	290.0	
-3.0	CARBONDALE	COLCHESTER	COAL	0.5	370.0	
-56.0	CARBONDALE	DEKOVEN	COAL	5.0	423.0	
-56.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	423.0	
-70.0	CARBONDALE	DAVIS	COAL	4.5	437.0	
-97.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	464.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-111.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	478.0	

MAPID: 16502629000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 960' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590443 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.750789 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2347.0 **LOG TYPE:** Electric Log
SOURCE: TURNER, J. D., LOCKWOOD J W 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
143.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	222.0	
87.0	CARBONDALE	SURVANT	COAL	1.2	278.0	
15.0	CARBONDALE	COLCHESTER	COAL	0.5	350.0	
-45.0	CARBONDALE	DEKOVEN	COAL	3.0	410.0	
-45.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	410.0	
-71.0	CARBONDALE	DAVIS	COAL	4.0	436.0	
-87.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	452.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502629000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 960' E line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.590443 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.750789 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2280.0 **LOG TYPE:**
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1159.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1524.0	
-1523.0			LIMESTONE	-	1888.0	
-1915.0		BASE BARLOW	LIMESTONE	-	2280.0	

MAPID: 16503023000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578546 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.750732 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1370.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	369.0	
-72.0	SPOON	DAVIS	UNCLASSIFIED	-	440.0	
-1002.0	BASE OF PENN.		UNCLASSIFIED	-	1370.0	

MAPID: 16503023000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578546 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.750732 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2276.0 **LOG TYPE:**
SOURCE: INLAND PRODUCERS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1161.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1529.0	
-1517.0			LIMESTONE	-	1885.0	
-1908.0		BASE BARLOW	LIMESTONE	-	2276.0	

MAPID: 16503023000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: GALATIA **LONGITUDE:** -88.578546 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.750732 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2330.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, EVANS VIRGIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	228.0	
88.0	CARBONDALE	SURVANT	COAL	0.8	280.0	
3.0	CARBONDALE	COLCHESTER	COAL	0.5	365.0	
-40.0	CARBONDALE	DEKOVEN	COAL	3.5	408.0	
-47.0	CARBONDALE	LOWER DEKOVEN	COAL	2.3	415.0	
-70.0	CARBONDALE	DAVIS	COAL	5.0	438.0	
-82.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	450.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-92.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	460.0	
-122.0	TRADEWATER	MT. RORAH	COAL	0.8	490.0	

MAPID: 16523868000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 10' E line of SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577439 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.748904 **DATE COLLECTED:** 9 / 0 / 1974
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2011.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO., CHICAGO & HRSBG COALSWD **WELL TYPE:** Service Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	236.0	
81.0	CARBONDALE	SURVANT	COAL	0.8	284.0	
-9.0	CARBONDALE	COLCHESTER	COAL	0.5	374.0	
-54.0	CARBONDALE	DEKOVEN	COAL	2.5	419.0	
-54.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	419.0	
-84.0	CARBONDALE	DAVIS	COAL	5.0	449.0	
-107.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.7	472.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-137.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	502.0	
-175.0	TRADEWATER	MT. RORAH	COAL	1.4	540.0	

MAPID: 16590117000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.591826 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.761081 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.3 **LOGGED (FT.):** 100.0 **LOG TYPE:** Company map
SOURCE: AMAX P-419 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.3	CARBONDALE	HERRIN	COAL	5.0	95.0	

MAPID: 16590118000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.581816 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 96.3 **LOG TYPE:** Company map
SOURCE: AMAX P-423 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.0	CARBONDALE	DANVILLE	COAL	1.5	24.0	
355.0	CARBONDALE	ALLENBY	COAL	1.0	43.0	
306.0	CARBONDALE	HERRIN	COAL	4.3	92.0	

MAPID: 16590129000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.58659 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX P-321 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590130000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.591847 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753616 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.5 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX P-319 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
212.5	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590131000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59187 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749831 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.9 **LOGGED (FT.):** 81.8 **LOG TYPE:** Company map
SOURCE: AMAX P-269 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.9	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	79.0	
286.9	CARBONDALE	BRIAR HILL	COAL	2.8	79.0	

MAPID: 16590133000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59706 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.74627 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.7 **LOGGED (FT.):** 73.0 **LOG TYPE:** Company map
SOURCE: AMAX P-217 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.7	CARBONDALE	HERRIN	COAL	5.0	68.0	

MAPID: 16590134000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.597054 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.750154 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.7 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX P-267 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
209.7	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590135000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.597072 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753966 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.3 **LOGGED (FT.):** 158.0 **LOG TYPE:** Company map
SOURCE: AMAX P-317 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.3	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	158.0	

MAPID: 16590807000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 650' S line, 490' W line of SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.595085 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748021 **DATE COLLECTED:** 6 / 10 / 1992

SURFACE ELEVATION (FT.): 370.1 **LOGGED (FT.):** 83.5 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P242PI **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.1	PLEISTOCENE		CLAY	9.0	0.0	BROWN
361.1	PLEISTOCENE		UNCONSOLIDATED	14.0	9.0	BROWN
347.1	PLEISTOCENE		UNCONSOLIDATED	17.8	23.0	GRAY
329.3	PLEISTOCENE		SAND & GRAVEL	2.0	40.8	
327.3	CARBONDALE		SANDY SHALE	1.2	42.8	
326.1	CARBONDALE		UNKNOWN	5.5	44.0	CORE LOSS
320.6	CARBONDALE		SANDSTONE	5.3	49.5	DARK GRAY
315.3	CARBONDALE		UNKNOWN	3.9	54.8	CORE LOSS
311.4	CARBONDALE		GRAY SHALE	0.9	58.7	
310.5	CARBONDALE	BRERETON	LIMESTONE	0.3	59.6	DARK GRAY
310.2	CARBONDALE	ANNA	BLACK SHALE	2.4	59.9	
307.8	CARBONDALE	ENERGY	DARK GRAY SHALE	4.7	62.3	
303.1	CARBONDALE	HERRIN	COAL	4.8	67.0	
298.3	CARBONDALE		UNDERCLAY	0.3	71.8	
298.0	CARBONDALE		GRAY SHALE	1.4	72.1	
296.6	CARBONDALE		SILTY SHALE	9.3	73.5	
287.3	CARBONDALE		UNKNOWN	0.7	82.8	CORE LOSS

MAPID: 16590840000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 620' S line, 70' E line of SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577242 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747978 **DATE COLLECTED:** 7 / 16 / 1992

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 72.5 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W201DH **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0	PLEISTOCENE		CLAY	7.5	0.0	BROWN
356.5	PLEISTOCENE		UNCONSOLIDATED	6.0	7.5	BROWN
350.5	CARBONDALE	ALLENBY	COAL	0.3	13.5	
350.2	CARBONDALE		UNKNOWN	2.6	13.8	CORE LOSS
347.6	CARBONDALE		GRAY SHALE	2.6	16.4	WEATHERED
345.0	CARBONDALE		UNKNOWN	0.7	19.0	CORE LOSS
344.3	CARBONDALE		SHALE	0.2	19.7	
344.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.2	19.9	LIGHT-GRAY-BROWN
340.9	CARBONDALE		CLAYSTONE	0.1	23.1	LIGHT GRAY
340.8	CARBONDALE		SILTY SHALE	2.9	23.2	
337.9	CARBONDALE		DARK GRAY SHALE	1.9	26.1	
336.0	CARBONDALE		SILTY SHALE	3.0	28.0	
333.0	CARBONDALE		SANDSTONE	4.6	31.0	LIGHT GRAY
328.4	CARBONDALE		SILTY SHALE	14.2	35.6	
314.2	CARBONDALE	CONANT	LIMESTONE	0.1	49.8	GRAY
314.1	CARBONDALE		BLACK SHALE	0.1	49.9	
314.0	CARBONDALE	JAMESTOWN	COAL	0.1	50.0	
313.9	CARBONDALE		BLACK SHALE	0.2	50.1	
313.7	CARBONDALE	BRERETON	LIMESTONE	1.5	50.3	DARK GRAY
312.2	CARBONDALE	ANNA	CALCAREOUS BLACK SHALE	2.1	51.8	
310.1	CARBONDALE	ENERGY	DARK GRAY SHALE	0.2	53.9	
309.9	CARBONDALE	HERRIN	COAL	4.9	54.1	
305.0	CARBONDALE		UNDERCLAY	2.8	59.0	
302.2	CARBONDALE		SANDY SHALE	2.7	61.8	
299.5	CARBONDALE		SILTY SHALE	7.7	64.5	
291.7	CARBONDALE		UNKNOWN	0.3	72.3	CORE LOSS

MAPID: 16590841000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 675' S line, 665' E line of SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579585 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.748049 **DATE COLLECTED:** 10 / 14 / 1983
SURFACE ELEVATION (FT.): 364.2 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P249 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO EAST

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.2	PLEISTOCENE		CLAY	22.0	0.0	
342.2	PLEISTOCENE		UNCONSOLIDATED	23.0	22.0	GRAY
319.2	CARBONDALE		DARK GRAY SHALE	4.1	45.0	
315.1	CARBONDALE		BLACK SHALE	1.5	49.1	
313.6	CARBONDALE	BRERETON	LIMESTONE	5.3	50.6	DARK GRAY
308.3	CARBONDALE	ANNA	BLACK SHALE	1.1	55.9	
307.2	CARBONDALE	HERRIN	COAL	4.9	57.0	
302.3	CARBONDALE		UNDERCLAY	2.6	61.9	
299.7	CARBONDALE		SHALY SANDSTONE	5.5	64.5	GRAY

MAPID: 16590842000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 651' S line, 369' E line of SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58323 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.747959 **DATE COLLECTED:** 3 / 14 / 1983
SURFACE ELEVATION (FT.): 368.1 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P247NP **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.1	PLEISTOCENE		CLAY	11.0	0.0	
357.1	CARBONDALE		SHALE	2.0	11.0	
355.1	CARBONDALE		SANDSTONE	6.0	13.0	
349.1	CARBONDALE		GRAY SHALE	17.5	19.0	
331.6	CARBONDALE		DARK SHALE	1.0	36.5	
330.6	CARBONDALE		GRAY SHALE	3.5	37.5	
327.1	CARBONDALE	HERRIN	COAL	5.2	41.0	
321.9	CARBONDALE		UNDERCLAY	1.8	46.2	
320.1	CARBONDALE		SHALE	9.0	48.0	

MAPID: 16590843000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 630' S line, 150' W line of SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586139 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748049 **DATE COLLECTED:** 7 / 13 / 1992

SURFACE ELEVATION (FT.): 385.1 **LOGGED (FT.):** 65.5 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P246Y **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA, W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.1	PLEISTOCENE		CLAY	7.0	0.0	BROWN
378.1	PLEISTOCENE		UNCONSOLIDATED	5.0	7.0	BROWN
373.1	CARBONDALE		SANDSTONE	1.2	12.0	
371.9	CARBONDALE		SHALE	4.0	13.2	
367.9	CARBONDALE		SANDSTONE	9.8	17.2	BROWN-GRAY
358.1	CARBONDALE		UNKNOWN	0.4	27.0	CORE LOSS
357.7	CARBONDALE		SANDSTONE	5.6	27.4	BROWN-GRAY
352.1	CARBONDALE		SILTY SHALE	11.1	33.0	
341.0	CARBONDALE	CONANT	LIMESTONE	0.3	44.1	DARK GRAY
340.7	CARBONDALE		CALCAREOUS BLACK SHALE	0.2	44.4	
340.5	CARBONDALE	JAMESTOWN	COAL	0.1	44.6	
340.4	CARBONDALE		CALCAREOUS BLACK SHALE	0.3	44.7	
340.1	CARBONDALE		CALCAREOUS SHALE	0.5	45.0	
339.6	CARBONDALE	BRERETON	LIMESTONE	5.3	45.5	DARK GRAY
334.3	CARBONDALE	ANNA	BLACK SHALE	0.7	50.8	
333.6	CARBONDALE	HERRIN	COAL	4.6	51.5	
329.0	CARBONDALE		UNDERCLAY	2.0	56.1	
327.0	CARBONDALE	HIGGINSVILLE	NODULAR LIMESTONE	1.0	58.1	GRAY
326.0	CARBONDALE		SILTY SHALE	6.4	59.1	

MAPID: 16590844000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 662' S line, 711' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588993 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.748055 **DATE COLLECTED:** 12 / 6 / 1982
SURFACE ELEVATION (FT.): 373.9 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO. P245YY **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA, HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.9	PLEISTOCENE		SILT	1.0	0.0	
372.9	PLEISTOCENE		CLAY	11.0	1.0	
361.9	CARBONDALE		SANDSTONE	13.0	12.0	BROWN
348.9	CARBONDALE		SANDY SHALE	6.0	25.0	
342.9	CARBONDALE		GRAY SHALE	9.0	31.0	
333.9	CARBONDALE	JAMESTOWN	COAL	1.0	40.0	
332.9	CARBONDALE	BRERETON	LIMESTONE	4.5	41.0	
328.4	CARBONDALE	ANNA	BLACK SHALE	1.5	45.5	
326.9	CARBONDALE	HERRIN	COAL	4.6	47.0	
322.3	CARBONDALE		UNDERCLAY	1.4	51.6	
320.9	CARBONDALE		GRAY SHALE	4.0	53.0	

MAPID: 16590845000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591948 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.748037 **DATE COLLECTED:** 5 / 9 / 1974
SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 128.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P244 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA NW HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SILT	2.0	0.0	
366.9	PLEISTOCENE		CLAY	21.0	2.0	
345.9	PLEISTOCENE		GLACIAL DRIFT	15.0	23.0	
330.9	CARBONDALE		GRAY SHALE	4.0	38.0	
326.9	CARBONDALE	BRERETON	LIMESTONE	3.0	42.0	
323.9	CARBONDALE	HERRIN	COAL	5.1	45.0	
318.8	CARBONDALE		UNDERCLAY	1.9	50.1	
316.9	CARBONDALE		SANDY SHALE	76.0	52.0	

MAPID: 16500234000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2000' S line, 150' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568571 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759096 **DATE COLLECTED:** 8 / 31 / 1906
SURFACE ELEVATION (FT.): 363.2 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER A#9 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.2			CLAY	18.0	0.0	
345.2			UNCONSOLIDATED	25.0	18.0	
320.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	43.0	
309.2	CARBONDALE	ANVIL ROCK	SHALE	5.0	54.0	
304.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	59.0	
299.2	CARBONDALE		SHALE	15.0	64.0	
284.2	CARBONDALE	BRERETON	LIMESTONE	5.0	79.0	
279.2	CARBONDALE	ANNA	BLACK SHALE	3.0	84.0	
276.2	CARBONDALE	HERRIN	COAL	3.0	87.0	
273.2	CARBONDALE		UNDERCLAY	3.5	90.0	
269.7	CARBONDALE		SANDSTONE	4.0	93.5	
265.7	CARBONDALE		BLACK SHALE	24.5	97.5	
241.2	CARBONDALE		SHALE	19.5	122.0	
221.7	CARBONDALE	BRIAR HILL	COAL	0.5	141.5	
221.2	CARBONDALE		SHALE	3.0	142.0	
218.2	CARBONDALE	DYKERSBURG	SANDSTONE	37.0	145.0	
181.2	CARBONDALE	DYKERSBURG	SHALE	19.5	182.0	
161.7	CARBONDALE	SPRINGFIELD	COAL	5.5	201.5	
156.2	CARBONDALE		UNDERCLAY	0.0	207.0	T.D.

MAPID: 16500234000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2000' S line, 150' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.568571 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.759096 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	21.0	43.0	
276.0	CARBONDALE	HERRIN	COAL	3.0	87.0	
269.0	CARBONDALE	VERMILIONVILLE		4.0	94.0	
221.0	CARBONDALE	BRIAR HILL	COAL	0.5	142.0	
218.0	CARBONDALE	CANTON		37.0	145.0	
161.0	CARBONDALE	SPRINGFIELD	COAL	5.5	202.0	

MAPID: 16500235000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.572742 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753526 **DATE COLLECTED:** 8 / 3 / 1906
SURFACE ELEVATION (FT.): 365.1 **LOGGED (FT.):** 167.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.1			UNCONSOLIDATED	20.0	0.0	
345.1			UNCONSOLIDATED	10.0	20.0	
335.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	30.0	
330.1	CARBONDALE	BRERETON	LIMESTONE	4.0	35.0	
326.1	CARBONDALE	HERRIN	COAL	2.5	39.0	
323.6	CARBONDALE		UNDERCLAY	4.0	41.5	
319.6	CARBONDALE		SANDSTONE	9.0	45.5	
310.6	CARBONDALE		SHALE	30.0	54.5	
280.6	CARBONDALE	BRIAR HILL	COAL	0.5	84.5	
280.1	CARBONDALE		UNDERCLAY	1.5	85.0	
278.6	CARBONDALE		SANDSTONE	2.0	86.5	
276.6	CARBONDALE		SHALE	6.0	88.5	
270.6	CARBONDALE		LIMESTONE	1.0	94.5	
269.6	CARBONDALE		SHALE	12.0	95.5	
257.6	CARBONDALE	DYKERSBURG	SANDSTONE	27.0	107.5	
230.6	CARBONDALE	DYKERSBURG	SHALE	28.0	134.5	
202.6	CARBONDALE	SPRINGFIELD	COAL	4.0	162.5	
198.6	CARBONDALE		UNDERCLAY	0.5	166.5	

MAPID: 16500235000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.572742 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.753526 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 41.5 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
335.0	CARBONDALE	LAWSON	SANDSTONE	5.0	30.0	
330.0	CARBONDALE	BRERETON	LIMESTONE	4.0	35.0	
326.0	CARBONDALE	HERRIN	COAL	2.5	39.0	

MAPID: 16500236000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572765 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.749866 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 214.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., LANCASTER A#8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	16.0	0.0	
386.0			SANDSTONE	2.0	16.0	
384.0			SHALE	6.0	18.0	
378.0			LIMESTONE	6.0	24.0	
372.0			COAL	1.0	30.0	
371.0			SHALE	8.0	31.0	
363.0			SANDSTONE	2.0	39.0	
361.0	CARBONDALE		SHALE	23.0	41.0	
338.0	CARBONDALE	BRERETON	LIMESTONE	1.5	64.0	
336.5	CARBONDALE	ANNA	BLACK SHALE	5.5	65.5	
331.0	CARBONDALE	HERRIN	COAL	1.0	71.0	
330.0	CARBONDALE		UNDERCLAY	3.0	72.0	
327.0	CARBONDALE		SANDSTONE	4.0	75.0	
323.0	CARBONDALE		SANDY SHALE	19.0	79.0	
304.0	CARBONDALE		SHALE	19.5	98.0	
284.5	CARBONDALE	BRIAR HILL	COAL	0.5	117.5	
284.0	CARBONDALE		SHALE	24.0	118.0	
260.0	CARBONDALE	DYKERSBURG	SANDSTONE	14.0	142.0	
246.0	CARBONDALE	DYKERSBURG	SHALE	3.0	156.0	
243.0	CARBONDALE	DYKERSBURG	SANDSTONE	15.0	159.0	
228.0	CARBONDALE	DYKERSBURG	SHALE	33.5	174.0	
194.5	CARBONDALE	SPRINGFIELD	COAL	6.5	207.5	
188.0	CARBONDALE		UNDERCLAY	0.0	214.0	T.D.

MAPID: 16500236000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572765 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.749866 **DATE COLLECTED:** 8 / 24 / 1905

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 214.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	16.0	0.0	
386.0			ROCK	14.0	16.0	
372.0			COAL	1.0	30.0	
371.0			ROCK	40.0	31.0	
331.0	CARBONDALE	HERRIN	COAL	1.0	71.0	
330.0	CARBONDALE		ROCK	45.5	72.0	
284.5	CARBONDALE	BRIAR HILL	COAL	0.5	117.5	
284.0	CARBONDALE		ROCK	89.0	118.0	
195.0	CARBONDALE	SPRINGFIELD	COAL	6.5	207.0	

MAPID: 16500237000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE SE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568734 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.746699 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.4 **LOGGED (FT.):** 299.8 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #25 **WELL TYPE:** Coal Test

COMMENT: UNCERTAINITY IN LOG BELOW 180.83

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.4			UNCONSOLIDATED	11.0	0.0	
396.4			SANDSTONE	44.0	11.0	
352.4	CARBONDALE		BLACK SHALE	7.0	55.0	
345.4	CARBONDALE		SHALE	2.0	62.0	
343.4	CARBONDALE	ALLENBY	COAL	2.5	64.0	
340.9	CARBONDALE		SHALE	10.0	66.5	
330.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.5	76.5	
329.4	CARBONDALE		SHALE	6.5	78.0	
322.9	CARBONDALE	JAMESTOWN	COAL	1.0	84.5	
321.9	CARBONDALE		SHALE	5.0	85.5	
316.9	CARBONDALE	HERRIN	COAL	4.8	90.5	
312.1	CARBONDALE		SHALE	2.0	95.3	
310.1	CARBONDALE		LIMESTONE	6.0	97.3	
304.1	CARBONDALE		SANDSTONE	4.0	103.3	
300.1	CARBONDALE		SHALE	11.0	107.3	
289.1	CARBONDALE		LIMESTONE	4.0	118.3	
285.1	CARBONDALE		SHALE	11.0	122.3	
274.1	CARBONDALE		SANDY SHALE	15.0	133.3	
259.1	CARBONDALE		SANDSTONE	17.0	148.3	
242.1	CARBONDALE		SHALE	1.0	165.3	
241.1	CARBONDALE	BRIAR HILL	COAL	1.5	166.3	
239.6	CARBONDALE		SHALE	2.0	167.8	
237.6	CARBONDALE		SANDSTONE	8.0	169.8	
229.6	CARBONDALE		LIMESTONE	3.0	177.8	
226.6	CARBONDALE		BLACK SHALE	4.0	180.8	UNCERTAINITY BELOW HERE
222.6	CARBONDALE		LIMESTONE	2.0	184.8	
220.6	CARBONDALE		SHALE	14.0	186.8	
206.6	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	200.8	
205.6	CARBONDALE	DYKERSBURG	SHALE	32.0	201.8	
173.6	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	233.8	
167.6	CARBONDALE	DYKERSBURG	SHALE	52.0	239.8	
115.6	CARBONDALE	SPRINGFIELD	COAL	7.0	291.8	
108.6	CARBONDALE		SANDSTONE	1.0	298.8	

MAPID: 16500237000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE SE SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568734 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746699 **DATE COLLECTED:** 7 / 0 / 1905
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0			UNCONSOLIDATED	11.0	0.0	
396.0			ROCK	53.0	11.0	
343.0			COAL	2.5	64.0	
340.5			ROCK	18.0	66.5	
322.5			COAL	1.0	84.5	
321.5			ROCK	5.0	85.5	
316.5	CARBONDALE	HERRIN	COAL	4.8	90.5	
311.7	CARBONDALE		ROCK	71.0	95.3	
240.7	CARBONDALE	BRIAR HILL	COAL	1.5	166.3	
239.2	CARBONDALE		ROCK	124.0	167.8	
115.2	CARBONDALE	SPRINGFIELD	COAL	7.0	291.8	
108.2	CARBONDALE		ROCK	1.0	298.8	

MAPID: 16501412000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.569239 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.75448 **DATE COLLECTED:** 3 / 0 / 1949
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2643.0 **LOG TYPE:** Electric Log
SOURCE: DEAN & HOLLOWELL, ETAL, TAYLOR OSCAR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
111.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	303.0	
64.0	CARBONDALE	SURVANT	COAL	0.8	350.0	
-20.0	CARBONDALE	COLCHESTER	COAL	0.5	434.0	
-64.0	CARBONDALE	DEKOVEN	COAL	3.0	478.0	
-76.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	490.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-90.0	CARBONDALE	DAVIS	COAL	5.0	504.0	
-120.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	534.0	32% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-141.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	555.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16501412000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.569239 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.75448 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2307.0 **LOG TYPE:**
SOURCE: DEAN & HOLLOWELL, ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1180.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1594.0	
-1534.0			LIMESTONE	-	1948.0	
-1893.0		BASE BARLOW	LIMESTONE	-	2307.0	

MAPID: 16502418000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.576214 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.759882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2305.0 **LOG TYPE:**
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1184.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1550.0	
-1524.0			LIMESTONE	-	1890.0	
-1939.0		BASE BARLOW	LIMESTONE	-	2305.0	

MAPID: 16502418000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.576214 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.759882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2730.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
155.0	CARBONDALE	SPRINGFIELD	COAL	8.0	211.0	
114.0	CARBONDALE	HOUCHIN CREEK	COAL	-	252.0	

MAPID: 16502418000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.576214 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.759882 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1400.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-24.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	390.0	
-80.0	SPOON	DAVIS	UNCLASSIFIED	-	446.0	
-1034.0	BASE OF PENN.		UNCLASSIFIED	-	1400.0	

MAPID: 16502418000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.576214 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.759882 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2730.0 **LOG TYPE:** Electric Log
SOURCE: FOOTE DONALD L, ABNEY GROVER 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	258.0	
61.0	CARBONDALE	SURVANT	COAL	0.5	305.0	
-23.0	CARBONDALE	COLCHESTER	COAL	0.5	389.0	
-68.0	CARBONDALE	DEKOVEN	COAL	3.0	434.0	
-82.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	448.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-96.0	CARBONDALE	DAVIS	COAL	6.0	462.0	
-114.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	480.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-129.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	495.0	
-169.0	TRADEWATER	MT. RORAH	COAL	3.0	535.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16502482000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571553 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.759954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1558.0 **LOG TYPE:**
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1193.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1558.0	

MAPID: 16502482000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571553 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.759954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1865.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
168.0	CARBONDALE	SPRINGFIELD	COAL	6.0	197.0	
99.0	CARBONDALE	HOUCHIN CREEK	COAL	-	266.0	

MAPID: 16502482000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.571553 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.759954 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1865.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE & WRATHER OIL, HARNED **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	270.0	
45.0	CARBONDALE	SURVANT	COAL	1.0	320.0	
-34.0	CARBONDALE	COLCHESTER	COAL	0.5	399.0	
-80.0	CARBONDALE	DEKOVEN	COAL	2.8	445.0	
-95.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	460.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-108.0	CARBONDALE	DAVIS	COAL	6.0	473.0	
-145.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	510.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-180.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	545.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16523851000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 150' S line, 330' E line of SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573933 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.746609 **DATE COLLECTED:** 3 / 0 / 1974

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2905.0 **LOG TYPE:** Electric Log

SOURCE: SANTORO OIL CO., CHICAGO & HRSBG COAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	286.0	
44.0	CARBONDALE	SURVANT	COAL	0.8	335.0	
-41.0	CARBONDALE	COLCHESTER	COAL	0.5	420.0	
-77.0	CARBONDALE	DEKOVEN	COAL	3.5	456.0	
-77.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	456.0	
-105.0	CARBONDALE	DAVIS	COAL	4.2	484.0	
-151.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	530.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-176.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	555.0	
-211.0	TRADEWATER	MT. RORAH	COAL	2.0	590.0	

MAPID: 16526193000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 36' S line, 87' W line of SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.576986 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.746278 **DATE COLLECTED:** 10 / 12 / 1983

SURFACE ELEVATION (FT.): 363.4 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. W201YC **WELL TYPE:** Coal Test

COMMENT: PERMIT 208; DELTA MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.4	PLEISTOCENE		CLAY	23.1	0.0	
340.3	PLEISTOCENE		SAND	6.8	23.1	BROWN; CORING BEGAN
333.5	PLEISTOCENE		CLAY	0.3	29.9	
333.2			GRAY SHALE	0.6	30.2	DARK
332.6	CARBONDALE	ALLENBY	COAL	1.0	30.8	
331.6	CARBONDALE		UNDERCLAY	4.2	31.8	
327.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	36.0	
321.8	CARBONDALE		CLAYSTONE	0.1	41.6	GREEN
321.7	CARBONDALE		BLACK SHALE	0.1	41.7	
321.6	CARBONDALE		SHALE	0.3	41.8	SOFT; GREENISH GRAY
321.3	CARBONDALE		SANDY SHALE	5.3	42.1	GRAY
316.0	CARBONDALE		SANDSTONE	2.4	47.4	
313.6	CARBONDALE		SHALY SANDSTONE	4.0	49.8	DARK
309.6	CARBONDALE		SANDY SHALE	3.2	53.8	
306.4	CARBONDALE		SHALE	14.0	57.0	DARK
292.4	CARBONDALE		CALCAREOUS SHALE	0.5	71.0	
291.9	CARBONDALE		SHALE	0.1	71.5	DARK
291.8	CARBONDALE	JAMESTOWN	COAL	0.3	71.6	
291.5	CARBONDALE		SHALE	0.7	71.9	DARK
290.8	CARBONDALE		CALCAREOUS SHALE	0.9	72.6	
289.9	CARBONDALE	BRERETON	LIMESTONE	4.1	73.5	
285.8	CARBONDALE	ANNA	BLACK SHALE	1.0	77.6	
284.8	CARBONDALE	HERRIN	COAL	5.0	78.6	
279.8	CARBONDALE		UNDERCLAY	2.0	83.6	
277.8	CARBONDALE		SHALE	2.2	85.6	DARK
275.6	CARBONDALE		SANDSTONE	3.7	87.8	
271.9	CARBONDALE		CALCAREOUS SHALE	2.5	91.5	

MAPID: 16540813000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 661' S line, 37' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.572464 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.751633 **DATE COLLECTED:** 6 / 15 / 1982
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO W278YY **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0	PLEISTOCENE		CLAY	7.0	0.0	
372.0	PLEISTOCENE		SANDSTONE	2.0	7.0	BROWN
370.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	9.0	BROWN
365.0	CARBONDALE		GRAY SHALE	2.0	14.0	
363.0	CARBONDALE		SANDSTONE	9.0	16.0	GRAY
354.0	CARBONDALE		SANDY SHALE	17.2	25.0	
336.8	CARBONDALE		BLACK SHALE	2.3	42.2	
334.5	CARBONDALE	BRERETON	LIMESTONE	5.5	44.5	BLACK
329.0	CARBONDALE	ANNA	BLACK SHALE	0.6	50.0	
328.4	CARBONDALE	HERRIN	COAL	4.8	50.6	
323.6	CARBONDALE		UNDERCLAY	4.1	55.4	
319.5	CARBONDALE		CALCAREOUS SHALE	2.5	59.5	
317.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	2.5	62.0	GRAY
314.5	CARBONDALE		CALCAREOUS SHALE	2.5	64.5	

MAPID: 16590082000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563314 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760922 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.2 **LOGGED (FT.):** 88.8 **LOG TYPE:** Company map
SOURCE: AMAX W-407 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.2	CARBONDALE	HERRIN	COAL	4.8	84.0	

MAPID: 16590083000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.565685 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760958 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.5 **LOGGED (FT.):** 84.5 **LOG TYPE:** Company map
SOURCE: AMAX W-406 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.5	CARBONDALE	HERRIN	COAL	4.5	80.0	

MAPID: 16590084000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567931 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760974 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.9 **LOGGED (FT.):** 83.0 **LOG TYPE:** Company map
SOURCE: AMAX W-405 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.9	CARBONDALE	HERRIN	COAL	5.0	78.0	

MAPID: 16590085000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.570108 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760975 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Company map
SOURCE: AMAX W-404 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	HERRIN	COAL	5.0	81.0	

MAPID: 16590086000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.57243 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760983 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.5 **LOGGED (FT.):** 72.8 **LOG TYPE:** Company map
SOURCE: AMAX W-403 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
294.5	CARBONDALE	HERRIN	COAL	4.8	68.0	

MAPID: 16590087000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572524 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759117 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.1 **LOGGED (FT.):** 118.0 **LOG TYPE:** Company map
SOURCE: AMAX W-378 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	118.0	

MAPID: 16590088000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.572552 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757204 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 118.0 **LOG TYPE:** Company map
SOURCE: AMAX W-353 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.0	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	118.0	

MAPID: 16590089000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.568108 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75806 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.4 **LOGGED (FT.):** 79.1 **LOG TYPE:** Company map
SOURCE: AMAX W-355C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
290.4	CARBONDALE	HERRIN	COAL	5.1	74.0	

MAPID: 16590090000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.565658 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.758954 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 75.8 **LOG TYPE:** Company map
SOURCE: AMAX W-381 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.9	CARBONDALE	HERRIN	COAL	4.8	71.0	

MAPID: 16590091000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.561042 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759151 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.9 **LOGGED (FT.):** 74.8 **LOG TYPE:** Company map
SOURCE: AMAX W-383 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
299.9	CARBONDALE	HERRIN	COAL	4.8	70.0	

MAPID: 16590102000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.561033 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757124 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 99.2 **LOG TYPE:** Company map
SOURCE: AMAX W-358 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
276.7	CARBONDALE	HERRIN	COAL	5.2	94.0	

MAPID: 16590103000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563331 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757127 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 320.7 **LOGGED (FT.):** 67.8 **LOG TYPE:** Company map
SOURCE: AMAX W-357 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.7	CARBONDALE	HERRIN	COAL	4.8	63.0	

MAPID: 16590104000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.567832 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.754323 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.6 **LOGGED (FT.):** 98.6 **LOG TYPE:** Company map
SOURCE: AMAX W-305C **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.6	CARBONDALE	HERRIN	COAL	4.6	94.0	

MAPID: 16590105000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.565703 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755263 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.8 **LOGGED (FT.):** 72.9 **LOG TYPE:** Company map
SOURCE: AMAX W-331 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.8	CARBONDALE	HERRIN	COAL	4.9	68.0	

MAPID: 16590106000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563356 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755252 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.1 **LOGGED (FT.):** 128.0 **LOG TYPE:** Company map
SOURCE: AMAX W-332 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
247.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	128.0	

MAPID: 16590107000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.561621 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755235 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.4 **LOGGED (FT.):** 128.0 **LOG TYPE:** Company map
SOURCE: AMAX W-332P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
244.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	128.0	

MAPID: 16590108000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.563359 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753427 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 71.8 **LOG TYPE:** Company map
SOURCE: AMAX W-307 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.5	CARBONDALE	HERRIN	COAL	4.8	67.0	

MAPID: 16590109000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.567979 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749183 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 402.7 **LOGGED (FT.):** 120.1 **LOG TYPE:** Company map
SOURCE: AMAX W-230D **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.7	CARBONDALE	HERRIN	COAL	5.1	115.0	

MAPID: 16590120000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577129 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760952 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.3 **LOGGED (FT.):** 74.1 **LOG TYPE:** Company map
SOURCE: AMAX W-401 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
302.3	CARBONDALE	HERRIN	COAL	5.1	69.0	

MAPID: 16590122000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.574747 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760963 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.3 **LOGGED (FT.):** 76.5 **LOG TYPE:** Company map
SOURCE: AMAX W-402 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
292.3	CARBONDALE	HERRIN	COAL	4.5	72.0	

MAPID: 16590123000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.574822 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759155 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.6 **LOGGED (FT.):** 118.0 **LOG TYPE:** Company map
SOURCE: AMAX W-377 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
262.6	CARBONDALE	ALLENBY	COAL	1.4	101.0	
245.6	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	118.0	

MAPID: 16590124000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577138 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.759133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.7 **LOGGED (FT.):** 118.0 **LOG TYPE:** Company map
SOURCE: AMAX W-376 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
265.7	CARBONDALE	ALLENBY	COAL	2.1	97.0	
244.7	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	118.0	

MAPID: 16590125000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577163 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757217 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.1 **LOGGED (FT.):** 118.0 **LOG TYPE:** Company map
SOURCE: AMAX W-351 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
272.1	CARBONDALE	ALLENBY	COAL	1.4	93.0	
247.1	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	118.0	

MAPID: 16590126000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.574825 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755409 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.2 **LOGGED (FT.):** 108.0 **LOG TYPE:** Company map
SOURCE: AMAX W-357 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
271.2	CARBONDALE	ALLENBY	COAL	0.5	93.0	
256.2	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	108.0	

MAPID: 16590127000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577211 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.755329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.4 **LOGGED (FT.):** 98.0 **LOG TYPE:** Company map
SOURCE: AMAX W-326 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
274.4	CARBONDALE	ALLENBY	COAL	1.0	91.0	
267.4	CARBONDALE	HERRIN	UNCLASSIFIED	0.0	98.0	

MAPID: 16590128000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.577242 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753477 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.9 **LOGGED (FT.):** 43.8 **LOG TYPE:** Company map
SOURCE: AMAX W-301 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
328.9	CARBONDALE	HERRIN	COAL	4.8	39.0	

MAPID: 16590801000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 740' N line, 1302' W line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.568173 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.75167 **DATE COLLECTED:** 5 / 19 / 1993

SURFACE ELEVATION (FT.): 412.9 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W279PM1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.9	PLEISTOCENE		CLAY	10.5	0.0	BROWN
402.4	MODESTO		SHALE	7.0	10.5	
395.4	CARBONDALE	DANVILLE	COAL	1.3	17.5	
394.1	CARBONDALE		UNDERCLAY	1.4	18.8	
392.7	CARBONDALE		SANDSTONE	7.5	20.2	GRAY
385.2	CARBONDALE		SANDY SHALE	1.3	27.7	
383.9	CARBONDALE	ALLENBY	COAL	0.6	29.0	
383.3	CARBONDALE		GRAY SHALE	0.9	29.6	
382.4	CARBONDALE		SANDSTONE	6.3	30.5	GRAY
376.1	CARBONDALE	ALLENBY	COAL	1.4	36.8	
374.7	CARBONDALE		GRAY SHALE	3.3	38.2	
371.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	41.5	BROWN
364.1	CARBONDALE		GRAY SHALE	1.6	48.8	
362.5	CARBONDALE		SANDSTONE	2.1	50.4	GRAY
360.4	CARBONDALE		CALCAREOUS SANDSTONE	6.0	52.5	GRAY
354.4	CARBONDALE		SANDSTONE	3.5	58.5	GRAY
350.9	CARBONDALE		SANDY SHALE	16.8	62.0	
334.1	CARBONDALE		BLACK SHALE	0.6	78.8	
333.5	CARBONDALE	JAMESTOWN	COAL	0.3	79.4	
333.2	CARBONDALE		BLACK SHALE	0.8	79.7	
332.4	CARBONDALE		DARK GRAY SHALE	1.4	80.5	
331.0	CARBONDALE	BRERETON	LIMESTONE	4.6	81.9	DARK GRAY
326.4	CARBONDALE	ANNA	BLACK SHALE	0.8	86.5	
325.6	CARBONDALE	HERRIN	COAL	4.7	87.3	
320.9	CARBONDALE		GRAY SHALE	2.5	92.0	
318.4	CARBONDALE		CALCAREOUS SANDSTONE	2.5	94.5	GRAY

MAPID: 16590802000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 750' N line, 1301' W line of NE SW

QUADRANGLE: GALATIA **LONGITUDE:** -88.568234 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.751513 **DATE COLLECTED:** 5 / 18 / 1993

SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 225.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W279PM **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.3	PLEISTOCENE		CLAY	6.0	0.0	BROWN
406.3	PLEISTOCENE		UNCONSOLIDATED	6.0	6.0	BROWN
400.3	MODESTO		BROWN SHALE	0.5	12.0	WEATHERED
399.8	MODESTO		SHALE	4.0	12.5	
395.8	CARBONDALE	DANVILLE	COAL	1.4	16.5	
394.4	CARBONDALE		UNDERCLAY	1.1	17.9	
393.3	CARBONDALE		SANDY SHALE	1.7	19.0	
391.6	CARBONDALE		SANDSTONE	5.9	20.7	GRAY
385.7	CARBONDALE		SANDY SHALE	2.3	26.6	
383.4	CARBONDALE	ALLENBY	COAL	0.3	28.9	
383.1	CARBONDALE		SANDY SHALE	0.6	29.2	
382.5	CARBONDALE		SANDSTONE	5.2	29.8	GRAY
377.3	CARBONDALE		SANDY SHALE	0.7	35.0	
376.6	CARBONDALE	ALLENBY	COAL	0.9	35.7	
375.7	CARBONDALE	ALLENBY	DARK GRAY SHALE	0.5	36.6	
375.2	CARBONDALE	ALLENBY	COAL	0.4	37.1	
374.8	CARBONDALE		SANDY SHALE	2.5	37.5	
372.3	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	40.0	BROWN
364.3	CARBONDALE		GRAY SHALE	1.5	48.0	
362.8	CARBONDALE		SANDSTONE/LIMESTONE	10.5	49.5	GRAY
352.3	CARBONDALE		SANDY SHALE	18.3	60.0	
334.0	CARBONDALE		BLACK SHALE	0.1	78.3	
333.9	CARBONDALE	JAMESTOWN	COAL	0.3	78.4	
333.6	CARBONDALE		CALCAREOUS SHALE	0.6	78.7	
333.0	CARBONDALE		BLACK SHALE	1.4	79.3	BONEY
331.6	CARBONDALE	BRERETON	LIMESTONE	5.0	80.7	DARK GRAY
326.6	CARBONDALE	ANNA	BLACK SHALE	0.6	85.7	
326.0	CARBONDALE	HERRIN	COAL	4.9	86.3	
321.1	CARBONDALE		GRAY SHALE	2.6	91.2	
318.5	CARBONDALE		SANDSTONE/LIMESTONE	7.9	93.8	GRAY
310.6	CARBONDALE	HIGGINSVILLE	LIMESTONE	0.3	101.7	GRAY
310.3	CARBONDALE		SANDY SHALE	5.0	102.0	LIMEY
305.3	CARBONDALE		SANDY SHALE	28.8	107.0	
276.5	CARBONDALE		BLACK SHALE	0.5	135.8	
276.0	CARBONDALE	BRIAR HILL	COAL	1.9	136.3	
274.1	CARBONDALE	DYKERSBURG	SANDY SHALE	7.1	138.2	
267.0	CARBONDALE	DYKERSBURG	SANDSTONE/LIMESTONE	4.7	145.3	GRAY
262.3	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	150.0	
253.3	CARBONDALE	DYKERSBURG	SANDSTONE/LIMESTONE	23.0	159.0	GRAY

230.3	CARBONDALE	DYKERSBURG	SANDY SHALE	23.8	182.0	
206.5	CARBONDALE	DYKERSBURG	SANDY SHALE	1.7	205.8	
204.8	CARBONDALE	DYKERSBURG	CAVITY	2.0	207.5	
202.8	CARBONDALE	DYKERSBURG	SHALE	4.5	209.5	
198.3	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	8.0	214.0	
190.3	CARBONDALE		UNDERCLAY	3.0	222.0	

MAPID: 16590811000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 348' N line, 9' W line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572575 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748898 **DATE COLLECTED:** 4 / 29 / 1982

SURFACE ELEVATION (FT.): 382.6 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W228C **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO PALLISTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.6	PLEISTOCENE		CLAY	14.0	0.0	
368.6	PLEISTOCENE		CLAY	5.0	14.0	GRAY
363.6	MODESTO		GRAY SHALE	2.0	19.0	
361.6	CARBONDALE	DANVILLE	COAL	1.4	21.0	
360.2	CARBONDALE		GRAY SHALE	2.6	22.4	
357.6	CARBONDALE		SANDSTONE	7.0	25.0	GRAY
350.6	CARBONDALE		GRAY SHALE	4.5	32.0	
346.1	CARBONDALE		SANDSTONE	3.5	36.5	GRAY
342.6	CARBONDALE		GRAY SHALE	1.7	40.0	
340.9	CARBONDALE	ALLENBY	COAL	2.3	41.7	
338.6	CARBONDALE		GRAY SHALE	4.5	44.0	
334.1	CARBONDALE		SANDSTONE	5.0	48.5	GRAY
329.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	53.5	
328.0	CARBONDALE		GRAY SHALE	13.9	54.6	
314.1	CARBONDALE		BLACK SHALE	0.5	68.5	
313.6	CARBONDALE	BRERETON	LIMESTONE	5.0	69.0	BLACK
308.6	CARBONDALE	ANNA	BLACK SHALE	2.2	74.0	
306.4	CARBONDALE	HERRIN	COAL	4.5	76.2	
301.9	CARBONDALE		UNDERCLAY	1.3	80.7	
300.6	CARBONDALE		CALCAREOUS SHALE	15.0	82.0	

MAPID: 16590812000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 19' N line, 11' W line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572564 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.749784 **DATE COLLECTED:** 4 / 26 / 1982

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W253 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO PALLLISTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	10.0	0.0	BROWN
-	CARBONDALE		BROWN SHALE	3.0	10.0	
-	CARBONDALE		GRAY SHALE	3.0	13.0	
-	CARBONDALE		SANDSTONE	1.5	16.0	GRAY
-	CARBONDALE		SANDSTONE	4.0	17.5	BROWN
-	CARBONDALE		GRAY SHALE	1.5	21.5	
-	CARBONDALE	ALLENBY	COAL	1.1	23.0	
-	CARBONDALE		GRAY SHALE	2.1	24.1	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	8.1	26.2	LIGHT GRAY
-	CARBONDALE		GRAY SHALE	4.2	34.3	
-	CARBONDALE		SANDSTONE	4.9	38.5	GRAY
-	CARBONDALE		GRAY SHALE	2.6	43.4	
-	CARBONDALE		SILTY SHALE	17.6	46.0	
-	CARBONDALE		BLACK SHALE	0.4	63.6	
-	CARBONDALE	BRERETON	LIMESTONE	5.0	64.0	DARK GRAY
-	CARBONDALE	ANNA	BLACK SHALE	1.2	69.0	
-	CARBONDALE	HERRIN	COAL	4.8	70.2	
-	CARBONDALE		UNDERCLAY	1.5	75.0	
-	CARBONDALE		SILTY SHALE	10.5	76.5	

MAPID: 16590814000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2' N line, 5' W line of NE SW
QUADRANGLE: GALATIA **LONGITUDE:** -88.572562 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753478 **DATE COLLECTED:** 6 / 17 / 1982
SURFACE ELEVATION (FT.): 365.2 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO W303 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.2	PLEISTOCENE		CLAY	3.0	0.0	
362.2	PLEISTOCENE		UNCONSOLIDATED	13.0	3.0	
349.2	PLEISTOCENE		UNCONSOLIDATED	10.0	16.0	
339.2	CARBONDALE		GRAY SHALE	6.4	26.0	
332.8	CARBONDALE		BLACK SHALE	3.4	32.4	
329.4	CARBONDALE	BRERETON	LIMESTONE	4.7	35.8	BLACK
324.7	CARBONDALE	ANNA	BLACK SHALE	1.0	40.5	
323.7	CARBONDALE	HERRIN	COAL	4.8	41.5	
318.9	CARBONDALE		UNDERCLAY	3.7	46.3	
315.2	CARBONDALE		SANDY SHALE	2.0	50.0	
313.2	CARBONDALE		SANDSTONE	8.0	52.0	LIGHT GRAY

MAPID: 16590815000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 646' S line, 4' W line of SW NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.572549 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.755236 **DATE COLLECTED:** 6 / 21 / 1982
SURFACE ELEVATION (FT.): 365.4 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO W328 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.4	PLEISTOCENE		CLAY	15.0	0.0	BROWN
350.4	PLEISTOCENE		UNCONSOLIDATED	17.7	15.0	GRAY
332.7	CARBONDALE	BRERETON	LIMESTONE	5.5	32.7	DARK GRAY
327.2	CARBONDALE	ANNA	BLACK SHALE	0.4	38.2	
326.8	CARBONDALE	HERRIN	COAL	4.6	38.6	
322.2	CARBONDALE		UNDERCLAY	1.8	43.2	
320.4	CARBONDALE		GRAY SHALE	12.0	45.0	

MAPID: 16590838000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 666' S line, 29' E line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568119 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748 **DATE COLLECTED:** 4 / 29 / 1982

SURFACE ELEVATION (FT.): 404.9 **LOGGED (FT.):** 130.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO 229PP **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO PALLISTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.9	PLEISTOCENE		CLAY	12.0	0.0	BROWN
392.9	MODESTO		SANDSTONE	1.0	12.0	BROWN
391.9	MODESTO		GRAY SHALE	7.5	13.0	
384.4	MODESTO		SANDY SHALE	2.5	20.5	
381.9	MODESTO		GRAY SHALE	16.0	23.0	
365.9	MODESTO	PIASA	LIMESTONE	3.4	39.0	LIGHT GRAY
362.5	MODESTO		GRAY SHALE	3.6	42.4	
358.9	MODESTO		BLACK SHALE	1.3	46.0	
357.6	MODESTO		GRAY SHALE	8.5	47.3	
349.1	CARBONDALE	DANVILLE	COAL	2.0	55.8	
347.1	CARBONDALE		GRAY SHALE	2.7	57.8	
344.4	CARBONDALE		SANDSTONE	10.5	60.5	GRAY
333.9	CARBONDALE		GRAY SHALE	4.0	71.0	
329.9	CARBONDALE		SANDSTONE	2.4	75.0	GRAY
327.5	CARBONDALE		GRAY SHALE	1.7	77.4	
325.8	CARBONDALE	ALLENBY	COAL	1.9	79.1	
323.9	CARBONDALE		GRAY SHALE	1.4	81.0	
322.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.6	82.4	LIGHT GRAY
319.9	CARBONDALE		GRAY SHALE	2.0	85.0	
317.9	CARBONDALE		SANDSTONE	2.0	87.0	GRAY
315.9	CARBONDALE		SILTY SHALE	17.2	89.0	
298.7	CARBONDALE	CONANT	LIMESTONE	0.7	106.2	DARK GRAY
298.0	CARBONDALE		BLACK SHALE	1.4	106.9	
296.6	CARBONDALE	BRERETON	LIMESTONE	5.4	108.3	DARK GRAY
291.2	CARBONDALE	ANNA	BLACK SHALE	0.5	113.7	
290.7	CARBONDALE	HERRIN	COAL	4.5	114.2	
286.2	CARBONDALE		UNDERCLAY	1.3	118.7	
284.9	CARBONDALE		GRAY SHALE	1.7	120.0	
283.2	CARBONDALE		SANDY SHALE	8.3	121.7	

MAPID: 16590839000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** 651' S line, 672' E line of SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.570348 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747991 **DATE COLLECTED:** 4 / 29 / 1982

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 117.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W229 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO PALLISTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0	PLEISTOCENE		CLAY	11.7	0.0	BROWN
384.3	MODESTO		BROWN SHALE	3.3	11.7	
381.0	MODESTO		GRAY SHALE	3.4	15.0	
377.6	MODESTO	PIASA	LIMESTONE	0.6	18.4	BROWN
377.0	MODESTO	PIASA	LIMESTONE	3.4	19.0	LIGHT GRAY
373.6	MODESTO		GRAY SHALE	3.6	22.4	
370.0	MODESTO		BLACK SHALE	1.6	26.0	
368.4	MODESTO		GRAY SHALE	6.8	27.6	
361.6	CARBONDALE	DANVILLE	COAL	1.6	34.4	
360.0	CARBONDALE		GRAY SHALE	1.0	36.0	
359.0	CARBONDALE		SANDSTONE	6.7	37.0	GRAY
352.3	CARBONDALE		GRAY SHALE	4.3	43.7	
348.0	CARBONDALE		SANDSTONE	3.3	48.0	GRAY
344.7	CARBONDALE		GRAY SHALE	1.9	51.3	
342.8	CARBONDALE	ALLENBY	COAL	1.0	53.2	
341.8	CARBONDALE		GRAY SHALE	4.5	54.2	
337.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	58.7	LIGHT GRAY
330.0	CARBONDALE		GRAY SHALE	0.5	66.0	
329.5	CARBONDALE		SANDSTONE	1.5	66.5	GRAY
328.0	CARBONDALE		GRAY SHALE	3.5	68.0	
324.5	CARBONDALE		SANDSTONE	4.2	71.5	GRAY
320.3	CARBONDALE		GRAY SHALE	13.8	75.7	
306.5	CARBONDALE	CONANT	LIMESTONE	1.1	89.5	DARK GRAY
305.4	CARBONDALE		BLACK SHALE	1.2	90.6	
304.2	CARBONDALE	BRERETON	LIMESTONE	4.2	91.8	DARK GRAY
300.0	CARBONDALE	ANNA	BLACK SHALE	1.2	96.0	
298.8	CARBONDALE	HERRIN	COAL	4.5	97.2	
294.3	CARBONDALE		UNDERCLAY	1.3	101.7	
293.0	CARBONDALE		GRAY SHALE	2.0	103.0	
291.0	CARBONDALE		SANDY SHALE	12.0	105.0	

MAPID: 16500244000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of NW NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.549546 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.753349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	14.0	43.0	
305.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	88.0	
298.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	95.0	
263.0	CARBONDALE	HERRIN	COAL	4.9	130.0	
259.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	6.0	134.0	
211.0	CARBONDALE	BRIAR HILL	COAL	0.3	182.0	
211.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.7	182.0	
133.0	CARBONDALE	SPRINGFIELD	COAL	5.7	260.0	

MAPID: 16500244000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of NW NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.549546 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.753349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 134.9 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.7	MODESTO		SANDSTONE	17.0	20.3	
354.7	CARBONDALE	DANVILLE	BLACK SHALE	6.0	37.3	
348.7	CARBONDALE		SHALE & SANDSTONE	45.3	43.3	
303.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	88.5	
296.7	CARBONDALE	LAWSON	SANDSTONE	10.2	95.3	
286.5	CARBONDALE	LAWSON	SILTY SHALE	18.5	105.5	
268.0	CARBONDALE	BRERETON	LIMESTONE	5.5	124.0	
262.5	CARBONDALE	ANNA	BLACK SHALE	0.5	129.5	
262.0	CARBONDALE	HERRIN	COAL	4.9	130.0	

MAPID: 16500244000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of NW NW SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.549546 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.753349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.7 **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: B.WILMOTH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.7			SOIL	19.0	0.0	
373.7			SANDSTONE	17.8	19.0	
355.9			BLACK SHALE	6.0	36.8	
349.9			SANDSTONE	14.3	42.8	
335.7			CLAYSTONE & SHALE	19.0	57.0	
316.7	CARBONDALE		SANDY SHALE	12.0	76.0	
304.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	88.0	
297.9	CARBONDALE	ANVIL ROCK	SANDSTONE	10.2	94.8	
287.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.5	105.0	
269.2	CARBONDALE	BRERETON	LIMESTONE	5.5	123.5	
263.7	CARBONDALE		BLACK SHALE	0.5	129.0	
263.2	CARBONDALE	HERRIN	COAL	4.9	129.5	
258.3	CARBONDALE		SANDSTONE	6.1	134.4	
252.2	CARBONDALE		SANDY SHALE	14.0	140.5	
238.2	CARBONDALE		SHALE	27.0	154.5	
211.2	CARBONDALE	BRIAR HILL	COAL	0.3	181.5	
210.9	CARBONDALE		CARBONACEOUS SANDSTONE	6.7	181.8	
204.2	CARBONDALE		SHALE	10.0	188.5	
194.2	CARBONDALE		SANDY SHALE	14.3	198.5	
179.9	CARBONDALE		SHALE	5.0	212.8	
174.9	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	217.8	
172.9	CARBONDALE	DYKERSBURG	SHALE	15.0	219.8	
157.9	CARBONDALE	DYKERSBURG	SANDY SHALE	22.0	234.8	
135.9	CARBONDALE	DYKERSBURG	BLACK SHALE	3.5	256.8	
132.4	CARBONDALE	SPRINGFIELD	COAL	5.7	260.3	
126.7	CARBONDALE		UNDERCLAY	1.0	266.0	

MAPID: 16500245000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.557731 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.747203 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 257.8 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #183 **WELL TYPE:** Coal Test

COMMENT: JOHN SHAW FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.0			UNCONSOLIDATED	15.0	0.0	
378.0	MODESTO		SANDSTONE	31.0	15.0	
347.0	MODESTO		BLACK SHALE	14.0	46.0	
333.0	MODESTO		COAL	2.0	60.0	
331.0	MODESTO		SANDSTONE	8.0	62.0	
323.0	MODESTO		BLACK SHALE	10.0	70.0	
313.0	CARBONDALE	DANVILLE	COAL	0.5	80.0	
312.5	CARBONDALE		BLACK SHALE	35.5	80.5	
277.0	CARBONDALE	BRERETON	LIMESTONE	6.0	116.0	
271.0	CARBONDALE	ANNA	BLACK SHALE	1.5	122.0	
269.5	CARBONDALE	HERRIN	COAL	4.2	123.5	
265.3	CARBONDALE		UNDERCLAY	2.3	127.7	
263.0	CARBONDALE		SANDSTONE	27.0	130.0	
236.0	CARBONDALE		BLACK SHALE	21.0	157.0	
215.0	CARBONDALE	BRIAR HILL	COAL	2.0	178.0	
213.0	CARBONDALE		BLACK SHALE	7.0	180.0	
206.0	CARBONDALE		SANDY SLATE	33.0	187.0	
173.0	CARBONDALE	DYKERSBURG	BLACK SHALE	30.0	220.0	
143.0	CARBONDALE	SPRINGFIELD	COAL	5.3	250.0	
137.7	CARBONDALE		UNDERCLAY	2.5	255.3	

MAPID: 16500245000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.557731 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.747203 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 257.8 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.0			UNCONSOLIDATED	15.0	0.0	
378.0			ROCK	45.0	15.0	
333.0			COAL	2.0	60.0	
331.0			ROCK	18.0	62.0	
313.0			COAL	0.5	80.0	
312.5			ROCK	43.0	80.5	
269.5	CARBONDALE	HERRIN	COAL	4.2	123.5	
265.3	CARBONDALE		ROCK	50.3	127.7	
215.0	CARBONDALE	BRIAR HILL	COAL	2.0	178.0	
213.0	CARBONDALE		ROCK	70.0	180.0	
143.0	CARBONDALE	SPRINGFIELD	COAL	5.3	250.0	
137.7	CARBONDALE		ROCK	2.5	255.3	

MAPID: 16590079000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549462 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760747 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 119.5 **LOG TYPE:** Company map
SOURCE: AMAX W-413 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.0	CARBONDALE	HERRIN	COAL	4.5	115.0	

MAPID: 16590080000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.554048 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.76081 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.1 **LOGGED (FT.):** 120.8 **LOG TYPE:** Company map
SOURCE: AMAX W-411 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.1	CARBONDALE	HERRIN	COAL	4.8	116.0	

MAPID: 16590081000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.558657 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.760948 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.5 **LOGGED (FT.):** 120.7 **LOG TYPE:** Company map
SOURCE: AMAX W-409 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
254.5	CARBONDALE	HERRIN	COAL	4.7	116.0	

MAPID: 16590094000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549466 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757018 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.9 **LOGGED (FT.):** 114.3 **LOG TYPE:** Company map
SOURCE: AMAX W-363 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
254.9	CARBONDALE	HERRIN	COAL	5.3	109.0	

MAPID: 16590095000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.544811 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.4 **LOGGED (FT.):** 111.5 **LOG TYPE:** Company map
SOURCE: AMAX W-365 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.4	CARBONDALE	DANVILLE	COAL	1.8	42.0	
255.4	CARBONDALE	HERRIN	COAL	4.5	107.0	

MAPID: 16590099000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.54486 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.75323 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.2 **LOGGED (FT.):** 94.8 **LOG TYPE:** Company map
SOURCE: AMAX W-315 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
271.2	CARBONDALE	HERRIN	COAL	4.8	90.0	

MAPID: 16590100000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.549497 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.753299 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.6 **LOGGED (FT.):** 90.0 **LOG TYPE:** Company map
SOURCE: AMAX W-313 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.6	CARBONDALE	DANVILLE	COAL	2.0	16.0	
331.6	CARBONDALE	ALLENBY	COAL	1.0	34.0	
280.6	CARBONDALE	HERRIN	COAL	5.0	85.0	

MAPID: 16590101000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.558669 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.757102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.2 **LOGGED (FT.):** 74.0 **LOG TYPE:** Company map
SOURCE: AMAX W-359 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.2	CARBONDALE	HERRIN	COAL	5.0	69.0	

MAPID: 16500246000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.531116 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.752938 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.0	CARBONDALE	DANVILLE	COAL	2.0	84.0	
260.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	4.0	99.0	
249.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	110.0	
240.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	4.5	119.0	
209.0	CARBONDALE	HERRIN	COAL	6.1	150.0	
198.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	20.0	161.0	
155.0	CARBONDALE	BRIAR HILL	COAL	1.8	204.0	
153.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	4.0	206.0	
90.0	CARBONDALE	SPRINGFIELD	COAL	5.2	269.0	

MAPID: 16500246000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.531116 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.752938 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.4	CARBONDALE	DANVILLE	BLACK SHALE	2.0	62.6	
294.4	CARBONDALE		SHALE & SANDSTONE	19.2	64.6	
275.2	CARBONDALE	ALLENBY	COAL	0.8	83.8	
274.4	CARBONDALE		SHALE	4.7	84.6	
269.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	89.3	
263.4	CARBONDALE	LAWSON	SHALE	3.1	95.6	
260.3	CARBONDALE	LAWSON	SANDSTONE	4.5	98.7	
255.8	CARBONDALE	LAWSON	SILTY SHALE	8.0	103.2	
247.8	CARBONDALE	LAWSON	SHALE	10.5	111.2	
237.2	CARBONDALE		BONE COAL	2.1	121.8	
235.2	CARBONDALE	BRERETON	LIMESTONE	3.3	123.8	
231.9	CARBONDALE	ANNA	BLACK SHALE	2.9	127.1	
229.0	CARBONDALE	HERRIN	COAL	9.0	130.0	

MAPID: 16500246000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SE NW

QUADRANGLE: GALATIA **LONGITUDE:** -88.531116 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.752938 **DATE COLLECTED:** 9 / 27 / 1905

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 277.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: J.B.BLACKMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.0			UNCONSOLIDATED	79.0	0.0	
280.0	MODESTO		BLACK SHALE	4.8	79.0	LOG HAS MUSH SLATE
275.2	CARBONDALE	DANVILLE	COAL	2.0	83.8	
273.2	CARBONDALE		BLACK SHALE	0.6	85.8	
272.6	CARBONDALE		BLACK SHALE	4.2	86.4	
268.5	CARBONDALE		BLACK SHALE	8.1	90.5	
260.3	CARBONDALE		SANDSTONE	4.3	98.7	
256.0	CARBONDALE		BLACK SHALE	1.0	103.0	
255.0	CARBONDALE	ALLENBY	COAL	0.8	104.0	
254.2	CARBONDALE		BLACK SHALE	0.4	104.8	
253.8	CARBONDALE		BLACK SHALE	4.3	105.2	
249.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	109.5	
243.2	CARBONDALE		BLACK SHALE	3.1	115.8	
240.1	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	118.9	
235.6	CARBONDALE	ANVIL ROCK	BLACK SHALE	8.0	123.4	W/ SS STREAK
227.6	CARBONDALE		BLACK SHALE	10.6	131.4	
217.1	CARBONDALE		BLACK SHALE	2.0	141.9	W/ STREAK OF BONE
215.0	CARBONDALE	BRERETON	LIMESTONE	3.3	144.0	BASTARD
211.7	CARBONDALE	ANNA	BLACK SHALE	2.7	147.3	
209.1	CARBONDALE	ANNA	LIMESTONE	0.1	149.9	
209.0	CARBONDALE	ANNA	BLACK SHALE	0.1	150.0	
208.9	CARBONDALE	HERRIN	COAL	2.3	150.1	
206.6	CARBONDALE	HERRIN	COAL	2.5	152.4	W/ LS STREAK
204.1	CARBONDALE	HERRIN	LIMESTONE	0.7	154.9	W/ COAL STREAK
203.4	CARBONDALE	HERRIN	COAL	0.7	155.6	
202.7	CARBONDALE		BLACK SHALE	4.9	156.3	ROTTEN
197.8	CARBONDALE		SANDSTONE	20.5	161.2	W/ SLATE STREAK
177.4	CARBONDALE		BLACK SHALE	2.6	181.6	
174.8	CARBONDALE		BLACK SHALE	14.9	184.2	
160.0	CARBONDALE		BLACK SHALE	5.0	199.0	
155.0	CARBONDALE	BRIAR HILL	COAL	1.8	204.0	
153.2	CARBONDALE		BLACK SHALE	0.3	205.8	
152.8	CARBONDALE		SANDSTONE	3.7	206.2	
149.2	CARBONDALE		BLACK SHALE	8.5	209.8	W/ SS STREAK
140.7	CARBONDALE		BLACK SHALE	1.5	218.3	W/ SLATE STREAK
139.2	CARBONDALE	DYKERSBURG	BLACK SHALE	13.0	219.8	
126.2	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	232.8	W/ SS STREAK
121.2	CARBONDALE	DYKERSBURG	BLACK SHALE	31.9	237.8	
89.3	CARBONDALE	SPRINGFIELD	COAL	5.2	269.7	

84.1	CARBONDALE	UNDERCLAY	0.6	274.9	
83.5	CARBONDALE	BLACK SHALE	2.0	275.5	FIRECLY

MAPID: 16500248000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 760' S line, 1425' W line of SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.535323 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.747764 **DATE COLLECTED:** 9 / 0 / 1905

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 258.7 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: J.B.BLACKMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	69.0	0.0	
296.0	CARBONDALE		SANDSTONE/SHALE	2.0	69.0	
294.0	CARBONDALE		SHALE	1.7	71.0	
292.3	CARBONDALE	ALLENBY	COAL	0.7	72.7	
291.7	CARBONDALE		UNDERCLAY	1.7	73.3	
290.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	75.0	BASTARD
286.2	CARBONDALE	ANVIL ROCK	SANDSTONE	8.6	78.8	
277.6	CARBONDALE	ANVIL ROCK	SANDY SLATE	19.9	87.4	
257.7	CARBONDALE		BLACK SHALE	0.7	107.3	
257.0	CARBONDALE	BRERETON	LIMESTONE	5.4	108.0	BASTARD
251.6	CARBONDALE	ANNA	BLACK SHALE	1.0	113.4	
250.6	CARBONDALE	HERRIN	COAL	4.8	114.4	
245.8	CARBONDALE		UNDERCLAY	4.2	119.2	
241.7	CARBONDALE		SHALE & SANDSTONE	10.4	123.3	
231.2	CARBONDALE		SANDSTONE/SHALE	13.9	133.8	
217.3	CARBONDALE		SANDY SLATE	21.3	147.7	
196.1	CARBONDALE	BRIAR HILL	COAL	1.3	168.9	
194.8	CARBONDALE		SLATY SHALE	25.1	170.2	SANDY SLATE
169.7	CARBONDALE	DYKERSBURG	SANDY SLATE	54.7	195.3	
115.0	CARBONDALE	SPRINGFIELD	COAL	5.6	250.0	
109.4	CARBONDALE		UNDERCLAY	3.1	255.6	W/ GREEN SHALE

MAPID: 16500248000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 760' S line, 1425' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.535323 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.747764 **DATE COLLECTED:** 9 / 0 / 1905
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 258.8 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	69.0	0.0	
296.0			ROCK	3.7	69.0	
292.3			COAL	0.7	72.7	
291.7			ROCK	41.1	73.3	
250.6	CARBONDALE	HERRIN	COAL	4.8	114.4	
245.8	CARBONDALE		ROCK	49.8	119.2	
196.1	CARBONDALE	BRIAR HILL	COAL	1.3	168.9	
194.8	CARBONDALE		ROCK	79.7	170.2	
115.1	CARBONDALE	SPRINGFIELD	COAL	5.6	249.9	
109.5	CARBONDALE		ROCK	3.1	255.5	

MAPID: 16500420000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW SE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532838 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.749769 **DATE COLLECTED:** 0 / 0 / 1966
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE INDEX-R & F C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16502683000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534549 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.753873 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1455.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-91.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	450.0	
-161.0	SPOON	DAVIS	UNCLASSIFIED	-	520.0	
-1096.0	BASE OF PENN.		UNCLASSIFIED	-	1455.0	

MAPID: 16502683000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534549 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.753873 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2310.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.0	CARBONDALE	BRERETON	LIMESTONE	-	106.0	
-1235.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1594.0	
-1570.0			LIMESTONE	-	1929.0	
-1951.0		BASE BARLOW	LIMESTONE	-	2310.0	

MAPID: 16502683000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: GALATIA **LONGITUDE:** -88.534549 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.753873 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2766.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., CHICAGO-HRSBRG COAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	315.0	
-6.0	CARBONDALE	SURVANT	COAL	2.0	365.0	
-90.0	CARBONDALE	COLCHESTER	COAL	0.5	449.0	
-125.0	CARBONDALE	DEKOVEN	COAL	3.0	484.0	
-125.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	484.0	
-155.0	CARBONDALE	DAVIS	COAL	4.5	514.0	
-211.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	570.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-256.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	615.0	

MAPID: 16523856000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 515' N line, 430' W line of SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.538784 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.747898 **DATE COLLECTED:** 5 / 0 / 1974
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2822.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO., CHICAGO-HRSBRG COAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	325.0	
-3.0	CARBONDALE	SURVANT	COAL	1.2	372.0	
-85.0	CARBONDALE	COLCHESTER	COAL	0.5	454.0	
-135.0	CARBONDALE	DEKOVEN	COAL	3.5	504.0	
-135.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	504.0	
-161.0	CARBONDALE	DAVIS	COAL	3.5	530.0	
-183.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	552.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-220.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	589.0	
-269.0	TRADEWATER	MT. RORAH	COAL	2.0	638.0	

MAPID: 16590096000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: GALATIA **LONGITUDE:** -88.540184 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.756849 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.9 **LOGGED (FT.):** 101.5 **LOG TYPE:** Company map
SOURCE: AMAX W-367 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
264.9	CARBONDALE	HERRIN	COAL	4.5	97.0	

MAPID: 16590097000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531729 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.749512 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.7 **LOGGED (FT.):** 131.7 **LOG TYPE:** Company map
SOURCE: AMAX W-270P **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
281.7	CARBONDALE	DANVILLE	COAL	1.3	80.0	
234.7	CARBONDALE	HERRIN	COAL	4.7	127.0	

MAPID: 16590098000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:**

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53548 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.749521 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.7 **LOGGED (FT.):** 128.9 **LOG TYPE:** Company map

SOURCE: AMAX W-269 **WELL TYPE:** Coal Test

COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
300.7	CARBONDALE	DANVILLE	COAL	1.0	60.0	
279.7	CARBONDALE	ALLENBY	COAL	1.0	81.0	
236.7	CARBONDALE	HERRIN	COAL	4.9	124.0	

MAPID: 16500249000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: GALATIA **LONGITUDE:** -88.506139 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.751299 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 310.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
353.0			UNCONSOLIDATED	53.0	0.0	
300.0	MODESTO		SANDSTONE	30.0	53.0	
270.0	MODESTO		SHALE	12.0	83.0	
258.0	MODESTO	PIASA	LIMESTONE	3.0	95.0	
255.0	MODESTO		SHALE	5.0	98.0	
250.0	MODESTO		BLACK SHALE	4.0	103.0	
246.0	MODESTO		SHALE	5.0	107.0	
241.0	CARBONDALE	DANVILLE	COAL	2.0	112.0	
239.0	CARBONDALE		UNDERCLAY	1.0	114.0	
238.0	CARBONDALE		SANDY SHALE	4.0	115.0	
234.0	CARBONDALE		BLACK SHALE	7.0	119.0	
227.0	CARBONDALE		COAL	1.0	126.0	
226.0	CARBONDALE		UNDERCLAY	3.0	127.0	
223.0	CARBONDALE		BLACK SHALE	4.0	130.0	
219.0	CARBONDALE	GALUM	LIMESTONE	1.0	134.0	
218.0	CARBONDALE	ALLENBY	COAL	0.8	135.0	
217.2	CARBONDALE		UNDERCLAY	3.2	135.8	
214.0	CARBONDALE		BLACK SHALE	2.0	139.0	
212.0	CARBONDALE		LIMESTONE	6.5	141.0	
205.5	CARBONDALE		UNDERCLAY	1.5	147.5	
204.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	149.0	
197.0	CARBONDALE		SHALE	18.0	156.0	
179.0	CARBONDALE		BLACK SHALE	4.0	174.0	
175.0	CARBONDALE	BRERETON	LIMESTONE	5.0	178.0	
170.0	CARBONDALE	HERRIN	COAL	5.5	183.0	
164.5	CARBONDALE		UNDERCLAY	4.5	188.5	
160.0	CARBONDALE		SANDSTONE	10.0	193.0	
150.0	CARBONDALE		SANDY SHALE	8.0	203.0	
142.0	CARBONDALE		BLACK SHALE	28.0	211.0	
114.0	CARBONDALE	BRIAR HILL	COAL	1.3	239.0	
112.7	CARBONDALE		UNDERCLAY	0.7	240.3	
112.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	241.0	
109.0	CARBONDALE	DYKERSBURG	SHALE	15.0	244.0	
94.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	259.0	
92.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	261.0	
84.0	CARBONDALE	DYKERSBURG	SANDY SHALE	36.5	269.0	
47.5	CARBONDALE	SPRINGFIELD	COAL	5.0	305.5	

MAPID: 16500250000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.515191 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.747587 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 297.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	DANVILLE	COAL	1.8	96.0	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	123.0	
190.0	CARBONDALE	HERRIN	COAL	4.7	163.0	
131.0	CARBONDALE	BRIAR HILL	COAL	2.0	222.0	
62.0	CARBONDALE	SPRINGFIELD	COAL	4.3	291.0	

MAPID: 16500250000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.515191 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.747587 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 167.7 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.0	MODESTO	PIASA	LIMESTONE	5.0	75.0	
273.0	MODESTO		SHALE	16.0	80.0	
257.0	CARBONDALE	DANVILLE	BLACK SHALE	1.8	96.0	
255.2	CARBONDALE		SILTY SHALE	18.0	97.8	
237.2	CARBONDALE	ALLENBY	COAL	0.2	115.8	
237.0	CARBONDALE		SILTY SHALE	7.0	116.0	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	123.0	
223.5	CARBONDALE	LAWSON	SILTY SHALE	10.0	129.5	
213.5	CARBONDALE	LAWSON	GRAY SHALE	16.5	139.5	
197.0	CARBONDALE		BLACK SHALE	1.0	156.0	
196.0	CARBONDALE	BRERETON	LIMESTONE	5.0	157.0	
191.0	CARBONDALE	ANNA	BLACK SHALE	1.0	162.0	
190.0	CARBONDALE	HERRIN	COAL	4.7	163.0	

MAPID: 16500250000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.515191 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.747587 **DATE COLLECTED:** 9 / 0 / 1905

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 297.3 **LOG TYPE:** Drillers Log

SOURCE: GUARANATY TRUST CO., HOLE #70 **WELL TYPE:** Coal Test

COMMENT: J.B.BLACKMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
353.0			CLAY	28.0	0.0	
325.0			SAND	10.0	28.0	
315.0			SAND	12.0	38.0	QUICK SAND
303.0			SANDY CLAY	10.0	50.0	SOFT
293.0			CLAY	1.0	60.0	
292.0			SAND	14.0	61.0	
278.0	MODESTO	PIASA	LIMESTONE	5.0	75.0	
273.0	MODESTO		SHALE	2.0	80.0	
271.0	MODESTO		BLACK SHALE	1.0	82.0	
270.0	MODESTO		SHALE	11.0	83.0	
259.0	MODESTO		BLACK SHALE	2.0	94.0	
257.0	CARBONDALE	DANVILLE	COAL	1.8	96.0	
255.2	CARBONDALE		SHALE	10.0	97.8	
245.2	CARBONDALE		SANDY SHALE	8.0	107.8	
237.2	CARBONDALE	ALLENBY	COAL	0.2	115.8	TRACE, "BLACK BAND"
237.0	CARBONDALE		SANDY SHALE	7.0	116.0	
230.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	123.0	
223.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	129.5	
213.5	CARBONDALE		SHALE	16.5	139.5	
197.0	CARBONDALE		BLACK SHALE	1.0	156.0	
196.0	CARBONDALE	BRERETON	LIMESTONE	5.0	157.0	DARK BLUE
191.0	CARBONDALE	ANNA	BLACK SHALE	1.0	162.0	
190.0	CARBONDALE	HERRIN	COAL	4.7	163.0	
185.3	CARBONDALE		CLAYSTONE	3.3	167.7	
182.0	CARBONDALE		SANDY SHALE	16.0	171.0	
166.0	CARBONDALE		LIMESTONE	6.0	187.0	
160.0	CARBONDALE		SANDY SHALE	8.0	193.0	
152.0	CARBONDALE		SHALE	21.0	201.0	
131.0	CARBONDALE	BRIAR HILL	COAL	2.0	222.0	
129.0	CARBONDALE		SANDY SHALE	22.0	224.0	
107.0	CARBONDALE		BLACK SHALE	1.0	246.0	
106.0	CARBONDALE		SHALE	7.0	247.0	
99.0	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	254.0	
87.0	CARBONDALE		SHALE	2.0	266.0	
85.0	CARBONDALE		SANDY SHALE	20.0	268.0	
65.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	288.0	DARK BLUE
62.0	CARBONDALE	SPRINGFIELD	COAL	4.3	291.0	
57.7	CARBONDALE		UNDERCLAY	2.0	295.3	

MAPID: 16502841000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505018 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.757664 **DATE COLLECTED:** 3 / 0 / 1956

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 1612.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-219.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	572.0	
-312.0	SPOON	DAVIS	UNCLASSIFIED	-	665.0	
-1259.0	BASE OF PENN.		UNCLASSIFIED	-	1612.0	

MAPID: 16502841000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505018 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.757664 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2460.0 **LOG TYPE:**

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	BRERETON	LIMESTONE	-	240.0	
-1404.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1757.0	
-2107.0		BASE BARLOW	LIMESTONE	-	2460.0	

MAPID: 16502841000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: GALATIA **LONGITUDE:** -88.505018 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.757664 **DATE COLLECTED:** 3 / 0 / 1956

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 3011.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., SETEN CHAS SR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-145.0	CARBONDALE	SURVANT	COAL	1.8	498.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	574.0	
-272.0	CARBONDALE	DEKOVEN	COAL	2.8	625.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	664.0	
-327.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-367.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	720.0	
-416.0	TRADEWATER	MT. RORAH	COAL	1.2	769.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500251000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.495633 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.754153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
200.0	CARBONDALE	DANVILLE	COAL	-	160.0	
193.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	14.0	167.0	
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	185.0	
168.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	26.0	192.0	
133.0	CARBONDALE	HERRIN	COAL	6.5	227.0	
124.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	23.0	236.0	
68.0	CARBONDALE	BRIAR HILL	COAL	1.0	292.0	
67.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	21.0	293.0	
12.0	CARBONDALE	SPRINGFIELD	COAL	4.6	348.0	

MAPID: 16500251000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.495633 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.754153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 237.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
270.1	MODESTO		SHALE & SANDSTONE	76.0	89.9	
194.1	CARBONDALE	DANVILLE	BLACK SHALE	4.0	165.9	
190.1	CARBONDALE		CLAYSTONE	3.0	169.9	
187.1	CARBONDALE		SANDSTONE	14.0	172.9	
173.1	CARBONDALE	ALLENBY	COAL	1.8	186.9	
171.3	CARBONDALE		CLAYSTONE	2.0	188.7	
169.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	190.7	
162.3	CARBONDALE	LAWSON	SANDSTONE	26.0	197.7	
136.3	CARBONDALE		BLACK SHALE	3.3	223.7	
133.0	CARBONDALE	BRERETON	LIMESTONE	6.0	227.0	
127.0	CARBONDALE	HERRIN	COAL	4.4	233.0	

MAPID: 16500251000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.495633 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.754153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., DANFORTH #4 **WELL TYPE:** Coal Test

COMMENT: THOMPSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	84.0	0.0	
276.0	MODESTO		SANDY SHALE	19.0	84.0	
257.0	MODESTO		SHALE	23.0	103.0	
234.0	MODESTO		UNCLASSIFIED	34.0	126.0	"ROCK"
200.0	MODESTO		BLACK SHALE	4.0	160.0	
196.0	CARBONDALE		UNDERCLAY	3.0	164.0	
193.0	CARBONDALE		SANDSTONE	14.0	167.0	
179.0	CARBONDALE	ALLENBY	COAL	1.8	181.0	
177.2	CARBONDALE		UNDERCLAY	2.0	182.8	
175.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	184.8	
168.2	CARBONDALE	ANVIL ROCK	SANDSTONE	26.0	191.8	
142.2			BLACK SHALE	4.0	217.8	
138.2	CARBONDALE	BRERETON	LIMESTONE	5.3	221.8	
132.9	CARBONDALE	HERRIN	COAL	4.4	227.1	UPPER BENCH
128.5	CARBONDALE	HERRIN	BLACK SHALE	1.3	231.5	
127.2	CARBONDALE	HERRIN	COAL	0.8	232.8	LOWER BENCH
126.4	CARBONDALE		UNDERCLAY	2.0	233.6	
124.4	CARBONDALE		SANDSTONE	23.0	235.6	
101.4	CARBONDALE		SANDY SHALE	33.0	258.6	
68.4	CARBONDALE	BRIAR HILL	COAL	1.0	291.6	
67.4	CARBONDALE	DYKERSBURG	SANDSTONE	21.0	292.6	
46.4	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	313.6	
43.4	CARBONDALE	DYKERSBURG	SANDY SLATE	31.0	316.6	
12.4	CARBONDALE	DYKERSBURG	BLACK SHALE	0.8	347.6	
11.6	CARBONDALE	SPRINGFIELD	COAL	4.6	348.4	
7.0	CARBONDALE		UNDERCLAY	0.0	353.0	

MAPID: 16500252000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SE SE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.486909 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.746514 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 277.9 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., HOLE #19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	8.0	0.0	
352.0			UNCONSOLIDATED	64.0	8.0	
288.0			SAND & GRAVEL	3.0	72.0	GRAVEL AND SAND
285.0	MODESTO		SANDY SHALE	5.0	75.0	
280.0	CARBONDALE	DANVILLE	COAL	1.0	80.0	
279.0	CARBONDALE		SANDY SHALE	15.0	81.0	
264.0	CARBONDALE		SHALE	10.0	96.0	
254.0	CARBONDALE		BLACK SHALE	4.0	106.0	
250.0	CARBONDALE	GALUM	LIMESTONE	2.0	110.0	
248.0	CARBONDALE		SHALE	2.0	112.0	
246.0	CARBONDALE		BLACK SHALE	1.0	114.0	
245.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	115.0	
239.0	CARBONDALE		UNDERCLAY	3.0	121.0	
236.0	CARBONDALE		SANDSTONE	6.0	124.0	
230.0	CARBONDALE		BLACK SHALE	15.0	130.0	
215.0	CARBONDALE	CONANT	LIMESTONE	1.0	145.0	
214.0	CARBONDALE		BLACK SHALE	2.0	146.0	
212.0	CARBONDALE	BRERETON	LIMESTONE	7.0	148.0	
205.0	CARBONDALE	ANNA	BLACK SHALE	2.3	155.0	
202.7	CARBONDALE	HERRIN	COAL	4.8	157.3	
198.0	CARBONDALE		UNDERCLAY	3.0	162.0	
195.0	CARBONDALE		SANDSTONE	8.0	165.0	
187.0	CARBONDALE		SHALE	18.0	173.0	
169.0	CARBONDALE		SANDSTONE	5.0	191.0	
164.0	CARBONDALE		SHALE	10.0	196.0	
154.0	CARBONDALE		BLACK SHALE	15.3	206.0	
138.7	CARBONDALE	BRIAR HILL	COAL	1.7	221.3	
137.0	CARBONDALE		UNDERCLAY	2.0	223.0	
135.0	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	225.0	
126.0	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	234.0	
109.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	251.0	
106.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	254.0	
105.0	CARBONDALE	DYKERSBURG	SHALE	2.0	255.0	
103.0	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	257.0	
100.0	CARBONDALE	DYKERSBURG	BLACK SHALE	13.2	260.0	
86.8	CARBONDALE	SPRINGFIELD	COAL	4.8	273.2	
82.1	CARBONDALE		UNDERCLAY	0.0	277.9	T.D.

MAPID: 16500252000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SE SE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.486909 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.746514 **DATE COLLECTED:** 9 / 7 / 1905

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 278.0 **LOG TYPE:** Survey Core Study

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	75.0	0.0	
285.0			ROCK	5.0	75.0	
280.0			COAL	1.0	80.0	
279.0			ROCK	76.3	81.0	
202.7	CARBONDALE	HERRIN	COAL	4.8	157.3	
198.0	CARBONDALE		ROCK	59.3	162.0	
138.7	CARBONDALE	BRIAR HILL	COAL	1.7	221.3	
137.0	CARBONDALE		ROCK	50.2	223.0	
86.9	CARBONDALE	SPRINGFIELD	COAL	4.8	273.1	

MAPID: 16526070000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.484919 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.756756 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 361.6 **LOGGED (FT.):** 323.7 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-5-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.6	PLEISTOCENE		SOIL	4.0	0.0	
357.6	PLEISTOCENE		CLAY	14.0	4.0	
343.6	MODESTO		SANDY SHALE	30.0	18.0	
313.6	MODESTO		COAL	1.0	48.0	
312.6	MODESTO		CLAYSTONE	3.0	49.0	
309.6	MODESTO		GRAY SHALE	4.0	52.0	
305.6	MODESTO		SANDSTONE	6.0	56.0	
299.6	MODESTO		SANDY SHALE	23.0	62.0	
276.6	MODESTO		SANDY SHALE	9.0	85.0	
267.6	MODESTO		CLAYSTONE	1.0	94.0	
266.6	MODESTO		SANDSTONE	2.0	95.0	
264.6	MODESTO		SANDY SHALE	5.0	97.0	
259.6	MODESTO		BLACK SHALE	4.0	102.0	
255.6	MODESTO		SILTY SHALE	2.0	106.0	
253.6	MODESTO		CLAYSTONE	6.0	108.0	
247.6	CARBONDALE	DANVILLE	COAL	1.0	114.0	
246.6	CARBONDALE		SILTY SHALE	5.0	115.0	
241.6	CARBONDALE		SANDSTONE	13.0	120.0	
228.6	CARBONDALE		CALCAREOUS SANDSTONE	1.5	133.0	
227.1	CARBONDALE		SILTY SHALE	2.5	134.5	
224.6	CARBONDALE	ALLENBY	COAL	1.0	137.0	
223.6	CARBONDALE		UNDERCLAY	2.0	138.0	
221.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	140.0	BUFF TO BROWN
217.1	CARBONDALE		SHALEY CLAYSTONE	2.5	144.5	GREEN
214.6	CARBONDALE	ANVIL ROCK	SANDSTONE	39.5	147.0	
175.1	CARBONDALE		SILTY SHALE	1.5	186.5	
173.6	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	7.0	188.0	FOSSILIFEROUS
166.6	CARBONDALE	ANNA	BLACK SHALE & COAL	1.1	195.0	
165.5	CARBONDALE	HERRIN	COAL	4.5	196.1	
161.0	CARBONDALE		UNDERCLAY	1.0	200.6	
160.1	CARBONDALE		CLAYSTONE	1.0	201.5	SILTY; SLICKENSIDES
159.1	CARBONDALE		CALCAREOUS CLAYSTONE	1.5	202.5	LS NODS; ROOTED
157.6	CARBONDALE		SANDY SHALE	7.0	204.0	GRAY, GREEN; ROOTED
150.6	CARBONDALE		SANDY SHALE	44.5	211.0	WITH SANDSTONE STREAKS, DARK GRAY
106.1	CARBONDALE	BRIAR HILL	COAL	1.5	255.5	
104.6	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	257.0	
98.6	CARBONDALE	DYKERSBURG	SANDY SHALE	24.0	263.0	

74.6	CARBONDALE	DYKERSBURG	SILTY SHALE	2.0	287.0	
72.6	CARBONDALE	DYKERSBURG	SILTY SHALE	2.2	289.0	BLACK
70.4	CARBONDALE	DYKERSBURG	SANDY SHALE	8.8	291.2	
61.6	CARBONDALE	DYKERSBURG	SILTY SHALE	7.6	300.0	
54.0	CARBONDALE	DYKERSBURG	CLAYSTONE	0.2	307.6	
53.8	CARBONDALE	SPRINGFIELD	COAL	4.8	307.8	
49.0	CARBONDALE		CLAYSTONE	1.5	312.6	SLICKENSIDES
47.6	CARBONDALE		SANDY SHALE	9.7	314.0	WITH LIMESTONE NODULES; GREEN

MAPID: 16526194000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1360' N line, 1440' E line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.489844 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.756865 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 359.9 **LOGGED (FT.):** 357.2 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-03 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.9	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	CLAY
351.9	PLEISTOCENE		CLAY	9.1	8.0	
342.8	MODESTO		SILTSTONE	2.1	17.1	
340.7	MODESTO		SHALE	11.7	19.2	
329.0	MODESTO		LIMESTONE	2.0	30.9	
327.0	MODESTO		SANDY SHALE	18.1	32.9	MEDIUM GRAY
308.9	MODESTO		SHALE	5.8	51.0	WITH SANDSTONE STREAKS, DARK GRAY
303.1	MODESTO		COAL	0.3	56.8	
302.8	MODESTO		GRAY SHALE	11.9	57.1	
290.9	MODESTO		SHALE	13.1	69.0	DARK GRAY
277.8	MODESTO		BLACK SHALE	1.3	82.1	SLATEY
276.5	MODESTO		COAL	1.7	83.4	WITH SHALE STREAKS
274.8	MODESTO		SHALE	3.9	85.1	
270.9	MODESTO		GRAY SHALE	23.0	89.0	WITH SANDSTONE BEDS
247.9	MODESTO		GRAY SHALE	14.8	112.0	
233.1	MODESTO		LIMESTONE	0.4	126.8	
232.7	MODESTO		SANDY SHALE	23.4	127.2	GRAY
209.3	MODESTO		SHALY SANDSTONE	9.1	150.6	
200.2	CARBONDALE	DANVILLE	COAL	1.1	159.7	
199.1	CARBONDALE		SANDY SHALE	13.2	160.8	
185.9	CARBONDALE		SHALY SANDSTONE	6.4	174.0	
179.5	CARBONDALE	ALLENBY	COAL	2.4	180.4	
177.1	CARBONDALE		GRAY SHALE	2.1	182.8	
175.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	184.9	
168.3	CARBONDALE		SANDY SHALE	2.4	191.6	
165.9	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	194.0	
158.9	CARBONDALE		SHALE	19.4	201.0	
139.5	CARBONDALE		BLACK SHALE	2.4	220.4	
137.1	CARBONDALE	BRERETON	LIMESTONE	3.6	222.8	DARK GRAY TO BLACK
133.5	CARBONDALE	ANNA	BLACK SHALE	2.3	226.4	
131.2	CARBONDALE	HERRIN	COAL	3.4	228.7	
127.8	CARBONDALE		SHALE	4.0	232.1	
123.9	CARBONDALE		SANDY SHALE	19.0	236.0	
104.9	CARBONDALE		SHALE	35.9	255.0	
69.0	CARBONDALE	BRIAR HILL	COAL	1.6	290.9	
67.4	CARBONDALE		SHALE	23.6	292.5	
43.9	CARBONDALE		SHALE	5.5	316.0	DARK GRAY TO BLACK; SLATEY
38.4	CARBONDALE		CALCAREOUS SHALE	21.3	321.5	
17.2	CARBONDALE	SPRINGFIELD	COAL	4.5	342.7	

12.7	CARBONDALE	CLAYSTONE	10.0	347.2

MAPID: 16526195000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.489514 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.751625 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.5 **LOGGED (FT.):** 312.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY WG-3-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.5	PLEISTOCENE		CLAY	70.0	0.0	
296.5	PLEISTOCENE		SAND	10.0	70.0	SILTY
286.5	PLEISTOCENE		SAND	10.0	80.0	
276.5	MODESTO		SANDY SHALE	24.0	90.0	
252.5	CARBONDALE	DANVILLE	COAL	1.0	114.0	
251.5	CARBONDALE		SANDSTONE	10.0	115.0	FRIABLE
241.5	CARBONDALE		SHALEY CLAYSTONE	7.0	125.0	
234.5	CARBONDALE		SANDSTONE	5.0	132.0	WATER BEARING
229.5	CARBONDALE	ALLENBY	COAL	1.0	137.0	
228.5	CARBONDALE		SILTY SHALE	2.5	138.0	SOFT, GRAY-GREEN
226.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	140.5	XTLN; BUFF-BROWN
221.0	CARBONDALE		SILTY SHALE	2.5	145.5	SLIGHTLY SANDY
218.5	CARBONDALE		SANDY SHALE	12.0	148.0	WITH SANDSTONE STREAKS
206.5	CARBONDALE		SILTY SHALE	5.0	160.0	
201.5	CARBONDALE		SHALE	8.7	165.0	
192.8	CARBONDALE		CALCAREOUS BLACK SHALE	0.5	173.7	HARD FOSSILIFEROUS
192.3	CARBONDALE	CONANT	LIMESTONE	6.6	174.2	FOSSILIFEROUS
185.7	CARBONDALE	JAMESTOWN	CALCAREOUS BLACK SHALE	2.5	180.8	FOSSILIFEROUS
183.2	CARBONDALE	BRERETON	LIMESTONE	1.1	183.3	FOSSILIFEROUS
182.1	CARBONDALE	ANNA	BLACK SHALE & COAL	0.8	184.4	
181.3	CARBONDALE	HERRIN	COAL	4.8	185.2	
176.6	CARBONDALE		CLAYSTONE	0.9	189.9	BLACK; SILTY TO SANDY
175.7	CARBONDALE		SANDSTONE	1.2	190.8	
174.5	CARBONDALE		GRAY SHALE	0.7	192.0	
173.9	CARBONDALE		CALCAREOUS SHALE	1.4	192.6	GRAY GREEN; LS NODS
172.5	CARBONDALE		SANDY SHALE	21.0	194.0	WITH SANDSTONE STREAKS, GRAY-GREEN
151.5	CARBONDALE		SILTY SHALE	29.5	215.0	WITH SANDSTONE STREAKS
122.0	CARBONDALE	BRIAR HILL	COAL	1.5	244.5	
120.5	CARBONDALE		SILTY SHALE	4.0	246.0	WITH SANDSTONE STREAKS
116.5	CARBONDALE		SANDY SHALE	10.0	250.0	WITH SANDSTONE STREAKS
106.5	CARBONDALE		SILTY SHALE	15.0	260.0	OCCASIONAL SANDSTONE STREAKS,BEGIN CORE
91.5	CARBONDALE	ST. DAVID	CALCAREOUS BLACK SHALE	1.0	275.0	WITH LIMESTONE BANDS FOSSILIFEROUS
90.5	CARBONDALE	TURNER MINE	BLACK SHALE & COAL	3.7	276.0	WITH LIMESTONE BANDS; SLICKENSIDES
86.9	CARBONDALE		CORE LOSS	1.1	279.6	
85.8	CARBONDALE	DYKERSBURG	SILTY SHALE	16.3	280.7	
69.5	CARBONDALE	SPRINGFIELD	COAL	4.8	297.0	

64.7	CARBONDALE	CLAYSTONE	2.9	301.8	
61.9	CARBONDALE	SILTY SHALE	7.4	304.6	WITH SANDSTONE STREAKS, GRAY-GREEN

MAPID: 16500253000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50101 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.736245 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
263.0	CARBONDALE	HERRIN	COAL	5.0	87.0	
200.0	CARBONDALE	BRIAR HILL	COAL	2.0	150.0	
141.0	CARBONDALE	SPRINGFIELD	COAL	5.8	209.0	

MAPID: 16500253000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50101 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.736245 **DATE COLLECTED:** 7 / 24 / 1905
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0			UNCONSOLIDATED	73.0	0.0	
277.0			ROCK	1.0	73.0	
276.0			COAL	1.5	74.0	
274.5			ROCK	11.7	75.5	
262.8	CARBONDALE	HERRIN	COAL	5.0	87.2	
257.8	CARBONDALE		ROCK	58.0	92.2	
199.8	CARBONDALE	BRIAR HILL	COAL	2.0	150.2	
197.8	CARBONDALE		ROCK	57.0	152.2	
140.8	CARBONDALE	SPRINGFIELD	COAL	5.7	209.2	
135.2	CARBONDALE		ROCK	0.3	214.8	

MAPID: 16500253000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE NW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50101 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.736245 **DATE COLLECTED:** 7 / 24 / 1905

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #10 **WELL TYPE:** Coal Test

COMMENT: LINDLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0			UNCONSOLIDATED	19.0	0.0	
331.0			SAND & GRAVEL	5.0	19.0	SAND AND GRAVEL
326.0			UNCONSOLIDATED	10.0	24.0	
316.0			CLAY	39.0	34.0	"GUMBO"
277.0	CARBONDALE		SANDY SHALE	1.0	73.0	W/ WATER
276.0	CARBONDALE	JAMESTOWN	COAL	1.5	74.0	
274.5	CARBONDALE		UNDERCLAY	2.0	75.5	
272.5	CARBONDALE		BLACK SHALE	3.0	77.5	
269.5	CARBONDALE	BRERETON	LIMESTONE	5.0	80.5	
264.5	CARBONDALE	ANNA	BLACK SHALE	1.7	85.5	
262.8	CARBONDALE	HERRIN	COAL	5.0	87.2	
257.8	CARBONDALE		UNDERCLAY	2.0	92.2	
255.8	CARBONDALE		SHALE	10.0	94.2	
245.8	CARBONDALE		SANDSTONE	14.0	104.2	
231.8	CARBONDALE		UNDERCLAY	3.0	118.2	
228.8	CARBONDALE		BLACK SHALE	29.0	121.2	
199.8	CARBONDALE	BRIAR HILL	COAL	2.0	150.2	
197.8	CARBONDALE		UNDERCLAY	1.0	152.2	
196.8	CARBONDALE	DYKERSBURG	SANDSTONE	11.0	153.2	
185.8	CARBONDALE	DYKERSBURG	SHALE	21.0	164.2	
164.8	CARBONDALE	DYKERSBURG	BLACK SHALE	5.0	185.2	
159.8	CARBONDALE	DYKERSBURG	SHALE	19.0	190.2	
140.8	CARBONDALE	SPRINGFIELD	COAL	5.7	209.2	
135.2	CARBONDALE		UNDERCLAY	0.2	214.8	

MAPID: 16500254000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49224 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.733186 **DATE COLLECTED:** 7 / 24 / 1905
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #5 **WELL TYPE:** Coal Test
COMMENT: EVANS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0			UNCONSOLIDATED	97.0	0.0	
260.0	CARBONDALE		SANDSTONE	16.0	97.0	
244.0	CARBONDALE		SHALE	25.0	113.0	
219.0	CARBONDALE	BRIAR HILL	COAL	2.2	138.0	
216.8	CARBONDALE	DYKERSBURG	SANDSTONE	23.0	140.2	
193.8	CARBONDALE	DYKERSBURG	SHALE	13.0	163.2	
180.8	CARBONDALE	DYKERSBURG	BLACK SHALE	6.0	176.2	
174.8	CARBONDALE	DYKERSBURG	UNKNOWN	4.0	182.2	"HARD PAN?"
170.8	CARBONDALE	DYKERSBURG	SHALE	10.0	186.2	
160.8	CARBONDALE	SPRINGFIELD	COAL	4.8	196.2	
156.0	CARBONDALE		UNDERCLAY	0.0	201.0	T.D.

MAPID: 16500254000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49224 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.733186 **DATE COLLECTED:** 7 / 24 / 1905
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Survey Core Study
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0			UNCONSOLIDATED	97.0	0.0	
260.0			ROCK	41.0	97.0	
219.0			COAL	2.2	138.0	
216.8			ROCK	56.0	140.2	
160.8	CARBONDALE	SPRINGFIELD	COAL	4.8	196.2	
156.0	CARBONDALE		ROCK	-	201.0	

MAPID: 16526196000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:** 120' N line, 1200' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.499555 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.745916 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 361.1 **LOGGED (FT.):** 257.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-15 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.1	PLEISTOCENE		SOIL	4.0	0.0	
357.1	PLEISTOCENE		CLAY	23.0	4.0	
334.1	PLEISTOCENE		SANDY CLAY	3.0	27.0	
331.1	PLEISTOCENE		CLAY	50.0	30.0	
281.1	PLEISTOCENE		SANDY CLAY	4.0	80.0	
277.1	CARBONDALE	DANVILLE	COAL	0.5	84.0	
276.6	CARBONDALE		SANDSTONE	7.0	84.5	
269.6	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	91.5	
267.6	CARBONDALE		SANDY SHALE	2.0	93.5	
265.6	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	95.5	
261.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	99.5	
258.6	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	102.5	
252.6	CARBONDALE		SANDY SHALE	13.0	108.5	
239.6	CARBONDALE	CONANT	LIMESTONE	4.0	121.5	WITH SHALE
235.6	CARBONDALE	JAMESTOWN	SHALE	1.0	125.5	DARK
234.6	CARBONDALE	BRERETON	LIMESTONE	5.5	126.5	DARK
229.1	CARBONDALE	ANNA	SHALE	1.0	132.0	DARK
228.1	CARBONDALE	HERRIN	COAL	4.5	133.0	
223.6	CARBONDALE		SHALE	3.0	137.5	
220.6	CARBONDALE		SANDSTONE	6.0	140.5	
214.6	CARBONDALE		SANDY SHALE	7.0	146.5	
207.6	CARBONDALE		SANDSTONE	6.0	153.5	
201.6	CARBONDALE		SANDY SHALE	15.0	159.5	
186.6	CARBONDALE		SHALE	19.0	174.5	
167.6	CARBONDALE	BRIAR HILL	COAL	1.0	193.5	
166.6	CARBONDALE		SHALE	2.0	194.5	
164.6	CARBONDALE		SANDSTONE	4.0	196.5	
160.6	CARBONDALE		CALCAREOUS SANDSTONE	4.0	200.5	
156.6	CARBONDALE		SANDY SHALE	7.0	204.5	
149.6	CARBONDALE		SHALE	12.0	211.5	
137.6	CARBONDALE		SHALE	3.5	223.5	DARK
134.1	CARBONDALE	ST. DAVID	LIMESTONE	1.5	227.0	
132.6	CARBONDALE	TURNER MINE	SHALE	2.0	228.5	DARK
130.6	CARBONDALE	DYKERSBURG	GRAY SHALE	14.0	230.5	
116.6	CARBONDALE	DYKERSBURG	UNKNOWN	3.2	244.5	UNKNOWN; CORED 245-258
113.4	CARBONDALE	SPRINGFIELD	COAL	4.5	247.7	
108.9	CARBONDALE		UNKNOWN	5.9	252.2	

MAPID: 16526197000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.494477 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738042 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.2 **LOGGED (FT.):** 225.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-15-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.2	PLEISTOCENE		SOIL	3.0	0.0	SILTY CLAY
357.2	PLEISTOCENE		CLAY	17.0	3.0	
340.2	PLEISTOCENE		SILT	75.0	20.0	
265.2	PLEISTOCENE		CLAY	2.0	95.0	
263.2	CARBONDALE		GRAY SHALE	3.0	97.0	SOFT
260.2	CARBONDALE	HERRIN	COAL	4.0	100.0	
256.2	CARBONDALE		UNDERCLAY	4.0	104.0	
252.2	CARBONDALE		SANDY SHALE	22.0	108.0	GRAY
230.2	CARBONDALE		SHALE	32.5	130.0	DARK GRAY
197.7	CARBONDALE	BRIAR HILL	COAL	1.5	162.5	
196.2	CARBONDALE	DYKERSBURG	SANDSTONE	16.0	164.0	GRAY
180.2	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	180.0	GRAY
175.2	CARBONDALE	DYKERSBURG	SHALE	8.0	185.0	DARK GRAY
167.2	CARBONDALE	DYKERSBURG	BLACK SHALE	4.0	193.0	
163.2	CARBONDALE	DYKERSBURG	GRAY SHALE	9.0	197.0	
154.2	CARBONDALE	DYKERSBURG	GRAY SHALE	4.1	206.0	WITH LIMESTONE STREAKS
150.1	CARBONDALE	SPRINGFIELD	COAL	4.8	210.1	
145.3	CARBONDALE		SHALY SANDSTONE	10.1	214.9	GRAY

MAPID: 16526198000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485263 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.734485 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.3 **LOGGED (FT.):** 214.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-16-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.3	PLEISTOCENE		CLAY	21.0	0.0	
336.3	PLEISTOCENE		SILTY CLAYSTONE	25.0	21.0	
311.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	46.0	GRAY, FRACTURED
306.3	CARBONDALE		SANDY SHALE	24.0	51.0	
282.3	CARBONDALE		SHALE	8.0	75.0	WITH LIMESTONE STREAKS
274.3	CARBONDALE	ANNA	BLACK SHALE	2.3	83.0	
272.0	CARBONDALE	HERRIN	COAL	4.0	85.3	
268.0	CARBONDALE		SANDY SHALE	60.7	89.3	
207.3	CARBONDALE	BRIAR HILL	COAL	1.5	150.0	
205.8	CARBONDALE		GRAY SHALE	31.0	151.5	
174.8	CARBONDALE	ST. DAVID	LIMESTONE	1.5	182.5	
173.3	CARBONDALE	DYKERSBURG	SHALE	15.0	184.0	DARK GRAY; HARD
158.3	CARBONDALE	SPRINGFIELD	COAL	4.5	199.0	
153.8	CARBONDALE		SHALE	3.0	203.5	
150.8	CARBONDALE		LIMESTONE	3.5	206.5	
147.3	CARBONDALE		SANDY SHALE	4.0	210.0	

MAPID: 16526199000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 13 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.491272 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.74575 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.5 **LOGGED (FT.):** 258.3 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO./WILLARD G. CORP. WG-22-88 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.5	PLEISTOCENE		SOIL	4.0	0.0	SILTY CALY
358.5	PLEISTOCENE		CLAY	42.0	4.0	
316.5	PLEISTOCENE		SANDY CLAY	24.0	46.0	
292.5	PLEISTOCENE		SAND	18.0	70.0	WITH GRAVEL STREAKS
274.5	PLEISTOCENE		GRAVEL	3.0	88.0	
271.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	91.0	
268.5	CARBONDALE		SANDY SHALE	6.0	94.0	
262.5	CARBONDALE		BLACK SHALE	15.0	100.0	
247.5	CARBONDALE		SHALE	7.0	115.0	
240.5	CARBONDALE		BLACK SHALE	8.0	122.0	
232.5	CARBONDALE	HERRIN	COAL	4.5	130.0	
228.0	CARBONDALE		UNDERCLAY	4.5	134.5	
223.5	CARBONDALE		SHALE	26.0	139.0	WITH SANDSTONE STREAKS
197.5	CARBONDALE		SHALE	28.5	165.0	
169.0	CARBONDALE	BRIAR HILL	COAL	1.5	193.5	
167.5	CARBONDALE		SHALE	22.0	195.0	
145.5	CARBONDALE	TURNER MINE	BLACK SHALE	10.1	217.0	
135.4	CARBONDALE	DYKERSBURG	SANDY SHALE	16.4	227.1	
119.0	CARBONDALE	SPRINGFIELD	COAL	4.8	243.5	
114.2	CARBONDALE		SHALE	10.0	248.3	WITH LIMESTONE STREAKS

MAPID: 16500060801M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505623 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735252 **DATE COLLECTED:** 8 / 24 / 1933
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 5.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C, MINE # 3 **WELL TYPE:** Underground mine
COMMENT: OTHER SAMPLED AREAS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16500060802M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.52529 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735568 **DATE COLLECTED:** 8 / 24 / 1933
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C, MINE # 3 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16500060800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1300' N line, 1100' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534849 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734796 **DATE COLLECTED:** 0 / 0 / 1931
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 235.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C, MINE # 3 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			ROCK	230.0	0.0	
130.0	CARBONDALE	SPRINGFIELD	COAL	5.7	230.0	

MAPID: 16500327500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NE SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.527083 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.741566 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			ROCK	245.0	0.0	
115.0	CARBONDALE	SPRINGFIELD	COAL	5.0	245.0	

MAPID: 16502812000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 315' S line, 360' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532249 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.73193 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1444.0 **LOG TYPE:** Electric Log
SOURCE: GOAD E E **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-54.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	415.0	
-129.0	SPOON	DAVIS	UNCLASSIFIED	-	490.0	
-1083.0	BASE OF PENN.		UNCLASSIFIED	-	1444.0	

MAPID: 16502812000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 315' S line, 360' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532249 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.73193 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2302.0 **LOG TYPE:**
SOURCE: GOAD E E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1229.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1590.0	
-1570.0			LIMESTONE	-	1931.0	
-1941.0		BASE BARLOW	LIMESTONE	-	2302.0	

MAPID: 16502812000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 315' S line, 360' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532249 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.73193 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2352.0 **LOG TYPE:** Electric Log
SOURCE: GOAD E E, PARKER F P 2 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
81.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	280.0	
31.0	CARBONDALE	SURVANT	COAL	0.8	330.0	
-54.0	CARBONDALE	COLCHESTER	COAL	0.5	415.0	
-96.0	CARBONDALE	DEKOVEN	COAL	1.3	457.0	
-104.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	465.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-129.0	CARBONDALE	DAVIS	COAL	4.0	490.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-184.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	545.0	
-224.0	TRADEWATER	MT. RORAH	COAL	1.8	585.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16500255000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NE SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.55134 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.741921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 268.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
312.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	51.0	
304.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	59.0	
295.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	9.0	68.0	
260.0	CARBONDALE	HERRIN	COAL	5.4	103.0	
254.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	12.0	109.0	
207.0	CARBONDALE	BRIAR HILL	COAL	1.5	156.0	
102.0	CARBONDALE	SPRINGFIELD	COAL	6.3	261.0	

MAPID: 16500255000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NE SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.55134 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.741921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 268.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0			UNCONSOLIDATED	40.0	0.0	
323.0			ROCK	62.8	40.0	
260.2	CARBONDALE	HERRIN	COAL	5.4	102.8	
254.7	CARBONDALE		ROCK	47.6	108.3	
207.2	CARBONDALE	BRIAR HILL	COAL	1.5	155.8	
205.7	CARBONDALE		ROCK	103.4	157.3	
102.2	CARBONDALE	SPRINGFIELD	COAL	6.3	260.8	
95.9	CARBONDALE		ROCK	1.0	267.1	

MAPID: 16500255000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NE SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.55134 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.741921 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.8 **LOGGED (FT.):** 268.1 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: J.W.SHAW FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.8			SOIL	40.0	0.0	
322.8			CLAYSTONE & SHALE	11.0	40.0	
311.8	CARBONDALE		SANDSTONE	8.0	51.0	
303.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	59.0	
297.3	CARBONDALE		SHALE	2.5	65.5	
294.8	CARBONDALE	ANVIL ROCK	SANDSTONE	8.8	68.0	
286.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.5	76.8	
265.5	CARBONDALE	BRERETON	LIMESTONE	5.5	97.3	
260.0	CARBONDALE	HERRIN	COAL	5.4	102.8	
254.5	CARBONDALE		UNDERCLAY	0.5	108.3	
254.0	CARBONDALE		SANDSTONE	11.5	108.8	
242.5	CARBONDALE		SANDY SHALE	35.6	120.3	
207.0	CARBONDALE	BRIAR HILL	COAL	1.5	155.8	
205.5	CARBONDALE		SANDY SHALE	15.5	157.3	
190.0	CARBONDALE		LIMESTONE	2.0	172.8	
188.0	CARBONDALE	DYKERSBURG	SANDY SHALE	85.9	174.8	
102.0	CARBONDALE	SPRINGFIELD	COAL	6.3	260.8	
95.7	CARBONDALE		UNDERCLAY	0.2	267.1	
95.5	CARBONDALE		SANDY SHALE	0.8	267.3	

MAPID: 16500256000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.551928 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.736891 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 249.5 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #180 **WELL TYPE:** Coal Test
COMMENT: JOHN PARISH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0			UNCONSOLIDATED	45.0	0.0	
322.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.5	45.0	
311.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	55.5	
305.5	CARBONDALE		SHALE	22.7	61.5	
282.8	CARBONDALE	BRERETON	LIMESTONE	4.5	84.2	LOG HAS BLACK LIME
278.3	CARBONDALE	ANNA	BLACK SHALE	2.0	88.7	
276.3	CARBONDALE	HERRIN	COAL	4.3	90.7	
272.0	CARBONDALE		UNDERCLAY	0.5	95.0	
271.5	CARBONDALE		CALCAREOUS SHALE	11.0	95.5	
260.5	CARBONDALE		SANDY SHALE	21.5	106.5	
239.0	CARBONDALE		SHALE	28.5	128.0	
210.5	CARBONDALE	DYKERSBURG	SANDY SHALE	17.0	156.5	
193.5	CARBONDALE	DYKERSBURG	SHALE	11.0	173.5	
182.5	CARBONDALE	DYKERSBURG	SANDY SHALE	55.0	184.5	
127.5	CARBONDALE		SHALE	2.5	239.5	
125.0	CARBONDALE	SPRINGFIELD	COAL	5.5	242.0	
119.5	CARBONDALE		UNDERCLAY	2.0	247.5	

MAPID: 16500256000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.551928 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.736891 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 94.8 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
283.0	MODESTO	PIASA	CARBONACEOUS LIMESTONE	4.5	84.0	
278.5	MODESTO		BLACK SHALE	2.0	88.5	
276.5	CARBONDALE	DANVILLE	COAL	4.3	90.5	

MAPID: 16500257000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE NE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550173 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.735474 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 244.6 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #181 **WELL TYPE:** Coal Test

COMMENT: J.PARISH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	56.0	0.0	
310.0	CARBONDALE	ANVIL ROCK	SANDY SLATE	1.8	56.0	
308.2	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	57.8	
304.0	CARBONDALE		BLACK SHALE	18.0	62.0	
286.0	CARBONDALE	BRERETON	LIMESTONE	5.5	80.0	
280.5	CARBONDALE	ANNA	BLACK SHALE	1.3	85.5	
279.2	CARBONDALE	HERRIN	COAL	3.3	86.8	
275.9	CARBONDALE	HERRIN	UNKNOWN	0.1	90.1	LOG HAS "SULPHUR BINDER" MAY BE PYRITE
275.9	CARBONDALE	HERRIN	COAL	1.0	90.1	
274.9	CARBONDALE		UNDERCLAY	2.6	91.1	
272.3	CARBONDALE		SANDY SLATE	12.0	93.7	
260.3			BLACK SHALE	33.3	105.7	
227.0	CARBONDALE	BRIAR HILL	COAL	1.3	139.0	
225.7	CARBONDALE	BRIAR HILL	UNKNOWN	0.1	140.3	LOG HAS "SULPHUR BINDER" MAY BE PYRITE
225.7	CARBONDALE	BRIAR HILL	COAL	0.3	140.3	
225.3	CARBONDALE	DYKERSBURG	SANDY SLATE	4.3	140.7	
221.0	CARBONDALE	DYKERSBURG	BLACK SHALE	4.0	145.0	
217.0	CARBONDALE	DYKERSBURG	BLACK SHALE	10.0	149.0	
207.0	CARBONDALE	DYKERSBURG	SANDY SLATE	21.0	159.0	
186.0	CARBONDALE	DYKERSBURG	BLACK SHALE	54.0	180.0	
132.0	CARBONDALE	SPRINGFIELD	COAL	6.8	234.0	
125.2	CARBONDALE	SPRINGFIELD	BONE COAL	0.2	240.8	
125.0	CARBONDALE		UNDERCLAY	3.6	241.0	

MAPID: 16500257000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550173 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735474 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 244.6 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	56.0	0.0	
310.0			ROCK	30.8	56.0	
279.2	CARBONDALE	HERRIN	COAL	4.3	86.8	
274.9	CARBONDALE		ROCK	47.9	91.1	
227.0	CARBONDALE	BRIAR HILL	COAL	1.7	139.0	
225.4	CARBONDALE		ROCK	93.3	140.6	
132.0	CARBONDALE	SPRINGFIELD	COAL	6.8	234.0	
125.3	CARBONDALE		ROCK	3.8	240.7	

MAPID: 16500258000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 220' S line, 750' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.552194 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.731995 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: J.PARISH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	35.0	0.0	
336.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	35.0	
320.0	CARBONDALE		SHALE	16.5	51.0	
303.5	CARBONDALE	BRERETON	LIMESTONE	4.5	67.5	LOG HAS BLACK LIME
299.0	CARBONDALE	ANNA	BLACK SHALE	1.5	72.0	
297.5	CARBONDALE	HERRIN	COAL	4.5	73.5	
293.0	CARBONDALE		UNDERCLAY	4.0	78.0	
289.0	CARBONDALE		SHALE	13.0	82.0	
276.0	CARBONDALE		SANDY SHALE	16.0	95.0	
260.0	CARBONDALE		SANDY SHALE	38.0	111.0	
222.0	CARBONDALE		SANDY SHALE	10.0	149.0	
212.0	CARBONDALE		BLACK SHALE	2.0	159.0	
210.0	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	161.0	
197.0	CARBONDALE	DYKERSBURG	SHALE	43.5	174.0	
153.5	CARBONDALE	SPRINGFIELD	COAL	6.5	217.5	
147.0	CARBONDALE		UNDERCLAY	3.0	224.0	

MAPID: 16500258000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 220' S line, 750' E line of SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.552194 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.731995 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	35.0	0.0	
336.0			ROCK	38.5	35.0	
297.5	CARBONDALE	HERRIN	COAL	4.5	73.5	
293.0	CARBONDALE		ROCK	139.5	78.0	
153.5	CARBONDALE	SPRINGFIELD	COAL	6.5	217.5	
147.0	CARBONDALE		ROCK	3.0	224.0	

MAPID: 16500004400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2520' S line, 300' E line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.559949 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.745857 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 274.3 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-PEABODY C C, MINE "OLD 43" **WELL TYPE:** Underground mine

COMMENT: SEVERAL SAMPLE DESCRIPTIONS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			ROCK	267.0	0.0	
93.0	CARBONDALE	SPRINGFIELD	COAL	7.3	267.0	

MAPID: 16500259000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.559487 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.745856 **DATE COLLECTED:** 5 / 20 / 1905

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	12.0	0.0	
363.0			SAND	8.0	12.0	
355.0	MODESTO		SHALE	7.0	20.0	
348.0	MODESTO		BLACK SHALE	5.0	27.0	
343.0	MODESTO	PIASA	LIMESTONE	5.0	32.0	
338.0	MODESTO		BLACK SHALE	3.0	37.0	
335.0	MODESTO		UNDERCLAY	4.0	40.0	
331.0	MODESTO		BLACK SHALE	2.0	44.0	
329.0	CARBONDALE	DANVILLE	COAL	3.0	46.0	
326.0	CARBONDALE		UNDERCLAY	7.0	49.0	
319.0	CARBONDALE		SANDY SHALE	9.0	56.0	
310.0	CARBONDALE	ALLENBY	COAL	2.3	65.0	
307.7	CARBONDALE		UNDERCLAY	6.0	67.3	
301.7	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	73.3	
292.7	CARBONDALE		UNDERCLAY	1.0	82.3	
291.7	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	83.3	
285.7	CARBONDALE		SHALE	9.0	89.3	
276.7	CARBONDALE		SANDY SLATE	3.0	98.3	
273.7	CARBONDALE		BLACK SHALE	6.0	101.3	
267.7	CARBONDALE	JAMESTOWN	COAL W/ BLACK SHALE	1.0	107.3	
266.7	CARBONDALE	BRERETON	LIMESTONE	6.0	108.3	
260.7	CARBONDALE	ANNA	BLACK SHALE	0.8	114.3	
259.8	CARBONDALE	HERRIN	COAL	6.2	115.2	
253.7	CARBONDALE		UNDERCLAY	3.0	121.3	
250.7	CARBONDALE		SHALE	4.0	124.3	
246.7	CARBONDALE		SANDSTONE	20.0	128.3	
226.7	CARBONDALE		SANDY SLATE	5.0	148.3	
221.7	CARBONDALE		BLACK SHALE	17.0	153.3	
204.7	CARBONDALE	BRIAR HILL	COAL	1.7	170.3	
203.0	CARBONDALE		UNDERCLAY	1.0	172.0	
202.0	CARBONDALE		SANDSTONE	6.0	173.0	
196.0	CARBONDALE		SHALE	3.0	179.0	
193.0	CARBONDALE		LIMESTONE	1.0	182.0	
192.0	CARBONDALE		BLACK SHALE	1.0	183.0	
191.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	184.0	
186.0	CARBONDALE	DYKERSBURG	SHALE	3.0	189.0	
183.0	CARBONDALE	DYKERSBURG	BLACK SHALE	6.0	192.0	
177.0	CARBONDALE	DYKERSBURG	SANDSTONE	26.0	198.0	
151.0	CARBONDALE	DYKERSBURG	SANDY SLATE	38.0	224.0	

113.0	CARBONDALE	DYKERSBURG	BLACK SHALE	5.8	262.0
107.2	CARBONDALE	SPRINGFIELD	COAL	7.3	267.8

MAPID: 16500259000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.559487 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.745856 **DATE COLLECTED:** 5 / 20 / 1905

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	20.0	0.0	
355.0			ROCK	26.0	20.0	
329.0			COAL	3.0	46.0	
326.0			ROCK	16.0	49.0	
310.0			COAL	2.3	65.0	
307.7			ROCK	40.0	67.3	
267.7			COAL	1.0	107.3	
266.7			ROCK	6.8	108.3	
259.8	CARBONDALE	HERRIN	COAL	6.2	115.2	
253.7	CARBONDALE		ROCK	49.0	121.3	
204.7	CARBONDALE	BRIAR HILL	COAL	1.7	170.3	
203.0	CARBONDALE		ROCK	95.8	172.0	
107.3	CARBONDALE	SPRINGFIELD	COAL	7.3	267.7	

MAPID: 16500260000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SE SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.564131 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.740249 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 289.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: JOHN SHAW FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	17.0	0.0	
378.0	CARBONDALE		SANDSTONE	32.0	17.0	
346.0	CARBONDALE		SHALE	61.0	49.0	
285.0	CARBONDALE	HERRIN	COAL	6.0	110.0	
279.0	CARBONDALE		SHALE	166.0	116.0	
113.0	CARBONDALE	SPRINGFIELD	COAL	7.8	282.0	

MAPID: 16500260000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SE SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.564131 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.740249 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 289.8 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	17.0	0.0	
378.0			ROCK	93.0	17.0	
285.0	CARBONDALE	HERRIN	COAL	6.0	110.0	
279.0	CARBONDALE		ROCK	166.0	116.0	
113.0	CARBONDALE	SPRINGFIELD	COAL	7.8	282.0	

MAPID: 16500261000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573954 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734098 **DATE COLLECTED:** 5 / 3 / 1906
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0			UNCONSOLIDATED	27.0	0.0	
356.0			ROCK	2.0	27.0	
354.0			COAL	2.0	29.0	
352.0			ROCK	13.7	31.0	
338.3			COAL	1.0	44.7	
337.3			ROCK	50.3	45.7	
287.1	CARBONDALE	HERRIN	COAL	4.8	95.9	
282.3	CARBONDALE		ROCK	48.2	100.7	
234.2	CARBONDALE	BRIAR HILL	COAL	1.5	148.8	
232.7	CARBONDALE		ROCK	93.7	150.3	
139.0	CARBONDALE	SPRINGFIELD	COAL	5.8	244.0	
133.2	CARBONDALE		ROCK	1.3	249.8	

MAPID: 16500261000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573954 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.734098 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 100.8 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.9	MODESTO		SANDSTONE	2.0	27.1	
353.9	CARBONDALE	DANVILLE	COAL	2.0	29.1	
351.9	CARBONDALE		CLAYSTONE	1.5	31.1	
350.4	CARBONDALE		SHALE & SANDSTONE	12.2	32.6	
338.2	CARBONDALE	ALLENBY	COAL	1.0	44.8	
337.2	CARBONDALE		CLAYSTONE & SHALE	4.3	45.8	
332.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	50.1	
326.4	CARBONDALE	LAWSON	SHALE & SANDSTONE	22.5	56.6	
303.9	CARBONDALE		DARK GRAY SHALE	10.0	79.1	
293.9	CARBONDALE	BRERETON	LIMESTONE	5.0	89.1	
288.9	CARBONDALE	ANNA	BLACK SHALE	1.9	94.1	
287.0	CARBONDALE	HERRIN	COAL	4.8	96.0	

MAPID: 16500261000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573954 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.734098 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.0	CARBONDALE	DANVILLE	COAL	2.0	29.0	
348.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	35.0	
333.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	50.0	
325.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	21.0	58.0	
287.0	CARBONDALE	HERRIN	COAL	4.8	96.0	
277.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	20.0	106.0	
234.0	CARBONDALE	BRIAR HILL	COAL	1.5	149.0	
139.0	CARBONDALE	SPRINGFIELD	COAL	5.8	244.0	

MAPID: 16500261000C **VERSION:** 4 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573954 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.734098 **DATE COLLECTED:** 5 / 3 / 1906

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: HEATHERINGTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0			SOIL	1.0	0.0	
382.0			SANDY CLAY	6.0	1.0	
376.0			CLAY	13.0	7.0	
363.0			CLAY & GRAVEL	7.0	20.0	
356.0	MODESTO		SANDSTONE	2.0	27.0	
354.0	CARBONDALE	DANVILLE	COAL	2.0	29.0	
352.0	CARBONDALE		UNDERCLAY	1.5	31.0	
350.5	CARBONDALE		SHALE	2.5	32.5	
348.0	CARBONDALE		SANDSTONE	9.7	35.0	
338.3	CARBONDALE	ALLENBY	COAL	1.0	44.7	
337.3	CARBONDALE		UNDERCLAY	2.0	45.7	
335.3			SHALE	2.3	47.7	
333.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	50.0	
326.5			SHALE	1.5	56.5	
325.0	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	58.0	
304.0			SHALE	10.0	79.0	
294.0	CARBONDALE	BRERETON	LIMESTONE	5.0	89.0	
289.0	CARBONDALE	ANNA	BLACK SHALE	1.9	94.0	
287.1	CARBONDALE	HERRIN	COAL	4.8	95.9	
282.3	CARBONDALE		UNDERCLAY	1.3	100.7	
281.0	CARBONDALE		SHALE	4.0	102.0	
277.0	CARBONDALE		SANDSTONE/SHALE	20.0	106.0	
257.0	CARBONDALE		SANDY SHALE	16.0	126.0	
241.0	CARBONDALE		SHALE	6.8	142.0	
234.2	CARBONDALE	BRIAR HILL	COAL	1.5	148.8	
232.7	CARBONDALE		UNDERCLAY	1.5	150.3	
231.2	CARBONDALE		SANDY SHALE	21.7	151.8	
209.5	CARBONDALE		LIMESTONE	1.5	173.5	
208.0	CARBONDALE	DYKERSBURG	SANDY SHALE	55.0	175.0	
153.0	CARBONDALE	DYKERSBURG	SHALE	14.0	230.0	
139.0	CARBONDALE	SPRINGFIELD	COAL	5.8	244.0	
133.2	CARBONDALE		SHALE	1.3	249.8	

MAPID: 16500262000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5607 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.731944 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 261.5 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: J.PARISH FARM; ELEV. LISTED AS 395. BAR.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	22.0	0.0	
373.0	MODESTO		SANDY SLATE	20.0	22.0	
353.0	MODESTO		SHALE	10.0	42.0	
343.0	MODESTO		COAL	0.5	52.0	
342.5	MODESTO		SHALE	9.5	52.5	
333.0	CARBONDALE	DANVILLE	COAL	1.0	62.0	
332.0	CARBONDALE		LIMESTONE	2.0	63.0	
330.0	CARBONDALE		SANDSTONE	6.0	65.0	
324.0	CARBONDALE		BLACK SHALE	2.0	71.0	
322.0	CARBONDALE	ALLENBY	COAL	1.0	73.0	
321.0	CARBONDALE		SANDY SLATE	2.0	74.0	
319.0	CARBONDALE		CALCAREOUS SHALE	9.0	76.0	
310.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	85.0	
304.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	91.0	
297.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	98.0	
291.0	CARBONDALE		BLACK SHALE	11.5	104.0	
279.5	CARBONDALE	BRERETON	LIMESTONE	5.5	115.5	
274.0	CARBONDALE	ANNA	BLACK SHALE	1.8	121.0	
272.2	CARBONDALE	HERRIN	COAL	0.9	122.8	
271.2	CARBONDALE	HERRIN	UNKNOWN	0.0	123.8	LOG HAS "SULPHUR BINDER", POSS. PYRITE
271.2	CARBONDALE	HERRIN	COAL	2.5	123.8	
268.7	CARBONDALE	HERRIN	BONE COAL	1.5	126.3	
267.2	CARBONDALE		UNDERCLAY	3.2	127.8	
264.0	CARBONDALE		SANDY SLATE	37.0	131.0	
227.0	CARBONDALE		BLACK SHALE	19.0	168.0	
208.0	CARBONDALE	BRIAR HILL	COAL	2.0	187.0	
206.0	CARBONDALE		SANDY SLATE	7.0	189.0	
199.0	CARBONDALE		BLACK SHALE	10.0	196.0	
189.0	CARBONDALE		LIMESTONE	2.0	206.0	
187.0	CARBONDALE	DYKERSBURG	BLACK SHALE	46.5	208.0	
140.5	CARBONDALE	SPRINGFIELD	BONE COAL	4.0	254.5	
136.5	CARBONDALE		UNDERCLAY	3.0	258.5	

MAPID: 16500262000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5607 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731944 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 261.5 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	22.0	0.0	
373.0			ROCK	32.0	22.0	
341.0			COAL	0.5	54.0	
340.5			ROCK	9.5	54.5	
331.0			COAL	1.0	64.0	
330.0			ROCK	10.0	65.0	
320.0			COAL	1.0	75.0	
319.0			ROCK	48.8	76.0	
270.2	CARBONDALE	HERRIN	COAL	5.0	124.8	
265.2	CARBONDALE		ROCK	59.2	129.8	
206.0	CARBONDALE	BRIAR HILL	COAL	2.0	189.0	
204.0	CARBONDALE		ROCK	65.5	191.0	
138.5	CARBONDALE	SPRINGFIELD	COAL	4.0	256.5	
134.5	CARBONDALE		ROCK	3.0	260.5	

MAPID: 16500263000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573379 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.731777 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
321.0	CARBONDALE	HERRIN	COAL	4.7	66.0	
275.0	CARBONDALE	BRIAR HILL	COAL	1.6	112.0	
90.0	CARBONDALE	HOUCHIN CREEK	COAL	-	297.0	

MAPID: 16500263000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573379 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.731777 **DATE COLLECTED:** 4 / 13 / 1906

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 399.1 **LOG TYPE:** Survey Core Study

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	17.5	0.0	
369.5			ROCK	48.5	17.5	
321.0	CARBONDALE	HERRIN	COAL	4.7	66.0	
316.3	CARBONDALE		ROCK	41.3	70.7	
275.0	CARBONDALE	BRIAR HILL	COAL	1.6	112.0	
273.4	CARBONDALE		ROCK	178.3	113.6	
95.2	CARBONDALE	HOUCHIN CREEK	COAL	2.0	291.8	
93.2			ROCK	45.5	293.8	
47.7			COAL	0.6	339.3	
47.1			ROCK	50.4	339.9	

MAPID: 16500263000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573379 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.731777 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 399.8 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	17.5	0.0	
369.5	CARBONDALE		SANDSTONE	7.5	17.5	
362.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	25.0	
355.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	32.0	
350.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.0	37.0	
325.0	CARBONDALE	BRERETON	LIMESTONE	2.0	62.0	
323.0	CARBONDALE	ANNA	BLACK SHALE	2.0	64.0	
321.0	CARBONDALE	HERRIN	COAL	4.7	66.0	
316.3	CARBONDALE		UNDERCLAY	0.5	70.7	
315.8	CARBONDALE		LIMESTONE	5.0	71.2	
310.8	CARBONDALE		SANDSTONE	6.0	76.2	
304.8	CARBONDALE		SHALE	29.8	82.2	
275.0	CARBONDALE	BRIAR HILL	COAL	1.6	112.0	
273.4	CARBONDALE		SHALE	14.8	113.6	
258.7	CARBONDALE		LIMESTONE	1.5	128.3	
257.2	CARBONDALE	DYKERSBURG	SANDSTONE/SHALE	40.0	129.8	
217.2	CARBONDALE	DYKERSBURG	SANDY SHALE	52.0	169.8	
165.2	CARBONDALE	DYKERSBURG	SANDSTONE	30.0	221.8	SPRINGFIELD COAL REP. BY GALATIA CHANNEL
135.2	CARBONDALE	DYKERSBURG	SANDSTONE	35.0	251.8	W/ SHALE PARTINGS
100.2	CARBONDALE	EXCELLO	BLACK SHALE	5.0	286.8	
95.2	CARBONDALE	HOUCHIN CREEK	COAL	2.0	291.8	
93.2	CARBONDALE		UNDERCLAY	3.0	293.8	
90.2	CARBONDALE		LIMESTONE	8.0	296.8	
82.2	CARBONDALE		SHALE	34.5	304.8	
47.7	CARBONDALE	SURVANT - UPPER	COAL	1.3	339.3	
46.4	CARBONDALE		SANDSTONE	8.3	340.6	W/ SHALE PARTINGS
38.2	CARBONDALE	SURVANT - LOWER	COAL	0.6	348.8	
37.6	CARBONDALE		SHALE	26.9	349.4	
10.7	CARBONDALE		LIMESTONE	2.5	376.3	
8.2	CARBONDALE		SHALE	8.0	378.8	
0.2	CARBONDALE		SANDSTONE/SHALE	13.0	386.8	

MAPID: 16523888000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 467' S line, 330' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.567028 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.740115 **DATE COLLECTED:** 2 / 0 / 1975
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2125.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO., CHICAGO-HRSBG COAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	312.0	
35.0	CARBONDALE	SURVANT	COAL	0.8	365.0	
-50.0	CARBONDALE	COLCHESTER	COAL	0.5	450.0	
-78.0	CARBONDALE	DEKOVEN	COAL	3.0	478.0	
-85.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	485.0	
-110.0	CARBONDALE	DAVIS	COAL	4.0	510.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-165.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	565.0	
-215.0	TRADEWATER	MT. RORAH	COAL	2.5	615.0	

MAPID: 16523888000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 467' S line, 330' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.567028 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.740115 **DATE COLLECTED:** 2 / 0 / 1975
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1490.0 **LOG TYPE:** Electric Log
SOURCE: SANTORO OIL CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	449.0	
-110.0	SPOON	DAVIS	UNCLASSIFIED	-	510.0	
-1090.0	BASE OF PENN.		UNCLASSIFIED	-	1490.0	

MAPID: 16590110000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568133 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746101 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 396.8 **LOGGED (FT.):** 110.0 **LOG TYPE:** Company map
SOURCE: AMAX W-205 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.8	CARBONDALE	HERRIN	COAL	5.0	105.0	

MAPID: 16590245000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.565971 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.742583 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.7 **LOGGED (FT.):** 0.0 **LOG TYPE:** Company map
SOURCE: AMAX W-156 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.7	CARBONDALE	HERRIN	COAL	5.0	128.0	

MAPID: 16590808000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 37' S line, 12' E line of NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572709 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.74256 **DATE COLLECTED:** 11 / 19 / 1982
SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 103.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO W153ZZ **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.5	PLEISTOCENE		CLAY	2.0	0.0	
373.5	PLEISTOCENE		UNCONSOLIDATED	14.0	2.0	BROWN
359.5	MODESTO		DARK SHALE	6.5	16.0	
353.0	CARBONDALE	DANVILLE	COAL	2.0	22.5	
351.0	CARBONDALE		UNDERCLAY	1.5	24.5	
349.5	CARBONDALE		SANDSTONE	13.0	26.0	
336.5	CARBONDALE	ALLENBY	COAL	1.0	39.0	
335.5	CARBONDALE		UNDERCLAY	1.0	40.0	
334.5	CARBONDALE		GRAY SHALE	3.5	41.0	
331.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	44.5	
327.5	CARBONDALE		SANDSTONE	17.0	48.0	
310.5	CARBONDALE		SANDY SHALE	15.0	65.0	
295.5	CARBONDALE	CONANT	LIMESTONE	1.5	80.0	
294.0	CARBONDALE		GRAY SHALE	1.0	81.5	
293.0	CARBONDALE	BRERETON	LIMESTONE	6.0	82.5	
287.0	CARBONDALE		BLACK SHALE	1.0	88.5	
286.0	CARBONDALE	HERRIN	COAL	5.0	89.5	
281.0	CARBONDALE		UNDERCLAY	1.5	94.5	
279.5	CARBONDALE		SANDY SHALE	7.0	96.0	

MAPID: 16590809000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 663' S line, 1' W line of NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572659 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744285 **DATE COLLECTED:** 11 / 22 / 1982

SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W178 **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.7	PLEISTOCENE		CLAY	14.0	0.0	
356.7	MODESTO		BROWN SHALE	2.0	14.0	
354.7	MODESTO		GRAY SHALE	7.0	16.0	
347.7	CARBONDALE	DANVILLE	COAL	2.0	23.0	
345.7	CARBONDALE		UNDERCLAY	1.0	25.0	
344.7	CARBONDALE		SANDY SHALE	9.0	26.0	
335.7	CARBONDALE		SANDSTONE	5.5	35.0	GRAY
330.2	CARBONDALE		GRAY SHALE	0.9	40.5	
329.3	CARBONDALE	ALLENBY	COAL	0.6	41.4	
328.7	CARBONDALE		UNDERCLAY	1.0	42.0	
327.7	CARBONDALE		GRAY SHALE	1.5	43.0	
326.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	44.5	
322.7	CARBONDALE		GRAY SHALE	1.5	48.0	
321.2	CARBONDALE		SANDSTONE	16.5	49.5	GRAY
304.7	CARBONDALE		GRAY SHALE	12.2	66.0	
292.5	CARBONDALE	CONANT	LIMESTONE	0.6	78.2	DARK GRAY
291.9	CARBONDALE		BLACK SHALE	1.6	78.8	
290.3	CARBONDALE	BRERETON	LIMESTONE	5.2	80.4	DARK GRAY
285.1	CARBONDALE	ANNA	BLACK SHALE	0.5	85.6	
284.6	CARBONDALE	HERRIN	COAL	4.7	86.1	
279.9	CARBONDALE		UNDERCLAY	1.2	90.8	
278.7	CARBONDALE		GRAY SHALE	4.0	92.0	
274.7	CARBONDALE		SANDSTONE	4.0	96.0	GRAY

MAPID: 16590810000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 71' N line, 3' W line of NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572644 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.745994 **DATE COLLECTED:** 11 / 23 / 1982

SURFACE ELEVATION (FT.): 379.9 **LOGGED (FT.):** 107.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W178DC **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.9	PLEISTOCENE		CLAY	11.0	0.0	BROWN
368.9	PLEISTOCENE		UNCONSOLIDATED	7.0	11.0	BROWN
361.9	PLEISTOCENE		GRAY SHALE	5.1	18.0	
356.8	CARBONDALE	DANVILLE	COAL	1.6	23.1	
355.2	CARBONDALE		UNDERCLAY	1.3	24.7	
353.9	CARBONDALE		SANDSTONE	2.0	26.0	GRAY
351.9	CARBONDALE		SANDY SHALE	4.0	28.0	
347.9	CARBONDALE		SANDY SHALE	5.0	32.0	
342.9	CARBONDALE		SANDSTONE	2.0	37.0	GRAY
340.9	CARBONDALE	ALLENBY	COAL	1.1	39.0	
339.8	CARBONDALE		UNDERCLAY	2.6	40.1	
337.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	42.7	
332.0	CARBONDALE		GRAY SHALE	1.1	47.9	
330.9	CARBONDALE		SANDSTONE	16.0	49.0	GRAY
314.9	CARBONDALE		GRAY SHALE	17.0	65.0	
297.9	CARBONDALE	BRERETON	LIMESTONE	5.0	82.0	DARK GRAY
292.9	CARBONDALE	ANNA	BLACK SHALE	1.2	87.0	
291.7	CARBONDALE	HERRIN	COAL	3.3	88.2	
288.4	CARBONDALE		UNDERCLAY	2.5	91.5	
285.9	CARBONDALE		SANDY SHALE	13.0	94.0	

MAPID: 16590823000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 6' S line, 31' E line of NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568221 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742521 **DATE COLLECTED:** 11 / 18 / 1982

SURFACE ELEVATION (FT.): 395.5 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO. W154PP **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.5	PLEISTOCENE		SILT	1.0	0.0	
394.5	PLEISTOCENE		CLAY	3.0	1.0	
391.5	MODESTO		BROWN SHALE	20.0	4.0	SANDY
371.5	MODESTO		GRAY SHALE	5.5	24.0	
366.0	MODESTO		BLACK SHALE	0.5	29.5	
365.5	MODESTO		GRAY SHALE	2.0	30.0	
363.5	MODESTO	PIASA	LIMESTONE	3.5	32.0	
360.0	MODESTO		GRAY SHALE	1.5	35.5	
358.5	MODESTO		DARK SHALE	3.0	37.0	
355.5	MODESTO		GRAY SHALE	6.0	40.0	
349.5	CARBONDALE	DANVILLE	COAL	1.5	46.0	
348.0	CARBONDALE		UNDERCLAY	0.5	47.5	
347.5	CARBONDALE		SANDSTONE	12.0	48.0	
335.5	CARBONDALE		SANDY SHALE	2.0	60.0	
333.5	CARBONDALE	ALLENBY	COAL	0.4	62.0	
333.1	CARBONDALE		UNDERCLAY	0.6	62.4	
332.5	CARBONDALE		GRAY SHALE	4.5	63.0	
328.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	67.5	
323.0	CARBONDALE		GRAY SHALE	1.5	72.5	
321.5	CARBONDALE		SANDSTONE	13.0	74.0	
308.5	CARBONDALE		SANDY SHALE	11.0	87.0	
297.5	CARBONDALE		GRAY SHALE	8.0	98.0	
289.5	CARBONDALE	BRERETON	LIMESTONE	5.0	106.0	
284.5	CARBONDALE	ANNA	BLACK SHALE	0.8	111.0	
283.7	CARBONDALE	HERRIN	COAL	4.8	111.8	
278.9	CARBONDALE		UNDERCLAY	1.4	116.6	
277.5	CARBONDALE		SANDY SHALE	9.0	118.0	

MAPID: 16590824000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** 40' S line, 670' E line of NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.570424 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742589 **DATE COLLECTED:** 11 / 19 / 1982

SURFACE ELEVATION (FT.): 379.4 **LOGGED (FT.):** 117.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO W154ZZ **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.4	PLEISTOCENE		CLAY	2.0	0.0	
377.4	PLEISTOCENE		UNCONSOLIDATED	13.0	2.0	BROWN
364.4	MODESTO		GRAY SHALE	4.0	15.0	
360.4	MODESTO	PIASA	LIMESTONE	2.0	19.0	
358.4	MODESTO		DARK SHALE	5.0	21.0	
353.4	MODESTO		GRAY SHALE	4.0	26.0	
349.4	MODESTO		DARK SHALE	4.0	30.0	
345.4	CARBONDALE	DANVILLE	COAL	1.5	34.0	
343.9	CARBONDALE		UNDERCLAY	1.0	35.5	
342.9	CARBONDALE		SANDSTONE	8.5	36.5	
334.4	CARBONDALE		SANDY SHALE	3.0	45.0	
331.4	CARBONDALE		SANDSTONE	4.0	48.0	
327.4	CARBONDALE	ALLENBY	COAL	1.0	52.0	
326.4	CARBONDALE		UNDERCLAY	1.0	53.0	
325.4	CARBONDALE		GRAY SHALE	2.5	54.0	
322.9	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	56.5	
321.4	CARBONDALE		SANDSTONE	14.0	58.0	
307.4	CARBONDALE		SANDY SHALE	11.0	72.0	
296.4	CARBONDALE		GRAY SHALE	8.0	83.0	
288.4	CARBONDALE	BRERETON	LIMESTONE	5.0	91.0	
283.4	CARBONDALE	ANNA	BLACK SHALE	1.0	96.0	
282.4	CARBONDALE	HERRIN	COAL	4.8	97.0	
277.6	CARBONDALE		UNDERCLAY	1.2	101.8	
276.4	CARBONDALE		SANDY SHALE	14.0	103.0	

MAPID: 16500264000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.578023 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.745701 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 285.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. LANCASTER #2A **WELL TYPE:** Coal Test

COMMENT: W.D.MCILRATH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	20.5	0.0	
341.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	20.5	
336.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	25.5	
318.5	CARBONDALE		SHALE	15.5	43.5	
303.0	CARBONDALE	BRERETON	LIMESTONE	5.0	59.0	
298.0	CARBONDALE	HERRIN	COAL	3.5	64.0	
294.5	CARBONDALE		UNDERCLAY	1.5	67.5	
293.0	CARBONDALE		SHALE	3.0	69.0	
290.0	CARBONDALE		SANDY SHALE	30.0	72.0	
260.0	CARBONDALE		SHALE	13.0	102.0	
247.0	CARBONDALE	BRIAR HILL	COAL	1.5	115.0	
245.5	CARBONDALE		SHALE	14.5	116.5	
231.0	CARBONDALE		BLACK SHALE	0.5	131.0	
230.5	CARBONDALE		SANDY SHALE	102.5	131.5	
128.0	CARBONDALE		SHALE	8.0	234.0	
120.0	CARBONDALE		SANDY SHALE	15.0	242.0	
105.0	CARBONDALE		SANDSTONE	16.0	257.0	
89.0	CARBONDALE		SHALE	3.0	273.0	
86.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	276.0	
81.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	281.0	
78.0	CARBONDALE		UNDERCLAY	1.0	284.0	

MAPID: 16500264000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.578023 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.745701 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 285.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	20.5	0.0	
341.5			ROCK	43.5	20.5	
298.0	CARBONDALE	HERRIN	COAL	3.5	64.0	
294.5	CARBONDALE		ROCK	47.5	67.5	
247.0	CARBONDALE	BRIAR HILL	COAL	1.5	115.0	
245.5	CARBONDALE		ROCK	164.5	116.5	
81.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	281.0	
78.0			ROCK	1.0	284.0	

MAPID: 16500265000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.578023 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.742907 **DATE COLLECTED:** 7 / 0 / 1905

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 207.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO., HOLE #3 **WELL TYPE:** Coal Test

COMMENT: W.D.MCILRATH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0			SAND/CLAY	25.0	0.0	
338.0	CARBONDALE		SANDSTONE	4.0	25.0	
334.0	CARBONDALE	ALLENBY	COAL	0.8	29.0	
333.2	CARBONDALE		SHALE	6.0	29.8	
327.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	35.8	
322.2	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	40.8	
305.2	CARBONDALE		BLACK SHALE	15.0	57.8	
290.2	CARBONDALE	BRERETON	LIMESTONE	4.0	72.8	
286.2	CARBONDALE	HERRIN	COAL	5.7	76.8	
280.6	CARBONDALE		UNDERCLAY	1.0	82.4	
279.6	CARBONDALE		BLACK SHALE	4.0	83.4	
275.6	CARBONDALE		SANDSTONE	40.0	87.4	
235.6	CARBONDALE		BLACK SHALE	6.0	127.4	
229.6	CARBONDALE	BRIAR HILL	COAL	1.4	133.4	
228.2	CARBONDALE		SANDY SLATE	5.0	134.8	
223.2	CARBONDALE		LIMESTONE	3.0	139.8	
220.2	CARBONDALE		SANDY SLATE	12.0	142.8	
208.2	CARBONDALE		BLACK SHALE	14.0	154.8	
194.2	CARBONDALE		COAL	1.1	168.8	
193.1	CARBONDALE		UNDERCLAY	0.6	169.9	
192.5	CARBONDALE		BLACK SHALE	16.0	170.5	
176.5	CARBONDALE		BLACK SHALE	14.0	186.5	
162.5	CARBONDALE	SPRINGFIELD	COAL	6.1	200.5	
156.4	CARBONDALE		UNDERCLAY	0.7	206.6	
155.7	CARBONDALE		SANDSTONE	0.3	207.3	

MAPID: 16500265000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE NE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.578023 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.742907 **DATE COLLECTED:** 7 / 0 / 1905

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 207.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY C C **WELL TYPE:** Coal Test

COMMENT: OTHER LOGS AVAILABLE AT THIS LOCATION.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0			UNCONSOLIDATED	25.0	0.0	
338.0			ROCK	4.0	25.0	
334.0			COAL	0.8	29.0	
333.2			ROCK	47.0	29.8	
286.2	CARBONDALE	HERRIN	COAL	5.7	76.8	
280.6	CARBONDALE		ROCK	51.0	82.4	
229.6	CARBONDALE	BRIAR HILL	COAL	1.4	133.4	
228.2			ROCK	34.0	134.8	
194.2			COAL	1.1	168.8	
193.1			ROCK	30.6	169.9	
162.5			COAL	6.1	200.5	
156.4			ROCK	0.9	206.6	

MAPID: 16500266000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579843 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.740592 **DATE COLLECTED:** 11 / 0 / 1905

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 253.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. HOLE #5 **WELL TYPE:** Coal Test

COMMENT: W.D.MCILRATH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			CLAY	8.0	0.0	
358.0			SAND	6.5	8.0	
351.5	CARBONDALE		SANDSTONE	1.3	14.5	
350.2	CARBONDALE	ALLENBY	COAL	0.7	15.8	
349.5	CARBONDALE		BLACK SHALE	4.6	16.5	
344.9	CARBONDALE	BANKSTON FORK	LIMESTONE	8.3	21.1	
336.6	CARBONDALE	ANVIL ROCK	SANDSTONE	11.7	29.4	
324.9	CARBONDALE		BLACK SHALE	8.8	41.1	
316.2	CARBONDALE	BRERETON	LIMESTONE	7.3	49.8	
308.9	CARBONDALE	HERRIN	COAL	5.3	57.1	
303.7	CARBONDALE		UNDERCLAY	0.5	62.3	
303.2	CARBONDALE		SANDSTONE	9.0	62.8	
294.2	CARBONDALE		LIMESTONE	1.8	71.8	
292.4	CARBONDALE		SANDSTONE	36.0	73.6	
256.4	CARBONDALE		SANDY SLATE	10.0	109.6	
246.4	CARBONDALE	BRIAR HILL	COAL	2.3	119.6	
244.2	CARBONDALE		LIMESTONE	1.0	121.8	
243.2	CARBONDALE		LIMESTONE	2.6	122.8	
240.6	CARBONDALE		COAL	0.7	125.4	
239.9	CARBONDALE		SANDSTONE	10.8	126.1	
229.2	CARBONDALE		SANDY SLATE	7.0	136.8	
222.2	CARBONDALE		BLACK SHALE	24.5	143.8	
197.7	CARBONDALE		SANDSTONE	16.0	168.3	
181.7	CARBONDALE		BLACK SHALE	17.0	184.3	
164.7	CARBONDALE		SANDSTONE	52.0	201.3	
112.7	CARBONDALE	SPRINGFIELD	SANDSTONE	0.0	253.3	GALATIA CHANNEL: COAL MISSING

MAPID: 16500267000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.590784 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.739754 **DATE COLLECTED:** 6 / 0 / 1905

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. HOLE #43 **WELL TYPE:** Coal Test

COMMENT: W.P.DORRIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	39.6	0.0	
338.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.3	39.6	
332.1	CARBONDALE	ANVIL ROCK	SANDSTONE	0.8	45.9	
331.3	CARBONDALE	ANVIL ROCK	SANDY SLATE	18.3	46.7	
313.0	CARBONDALE	JAMESTOWN	COAL	0.2	65.0	W/ BONE
312.8	CARBONDALE		SANDY SLATE	2.7	65.2	
310.2	CARBONDALE	BRERETON	LIMESTONE	4.3	67.8	
305.9	CARBONDALE	ANNA	BLACK SHALE	1.3	72.1	
304.7	CARBONDALE	HERRIN	COAL	5.0	73.3	
299.7	CARBONDALE		UNDERCLAY	2.8	78.3	
296.9	CARBONDALE		SHALE	16.0	81.1	
280.9	CARBONDALE		LIMESTONE	0.9	97.1	
280.0	CARBONDALE		SANDY SLATE	18.5	98.0	
261.5	CARBONDALE		COAL W/ LIMESTONE	0.1	116.5	
261.4	CARBONDALE		SANDY SLATE	3.9	116.6	SOME BONE IN LOWER .33
257.5	CARBONDALE	BRIAR HILL	COAL	1.8	120.5	
255.7	CARBONDALE		SANDY SLATE	75.6	122.3	
180.1	CARBONDALE		BLACK SHALE	10.8	197.9	
169.2	CARBONDALE	SPRINGFIELD	UNKNOWN	0.3	208.8	LOG HAS BONE
168.9	CARBONDALE	SPRINGFIELD	COAL	5.3	209.1	
163.7	CARBONDALE	SPRINGFIELD	COAL W/ BLACK SHALE	0.4	214.3	
163.2	CARBONDALE		UNDERCLAY	1.3	214.8	

MAPID: 16500267000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.590784 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.739754 **DATE COLLECTED:** 8 / 0 / 1905
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	39.6	0.0	
338.4			ROCK	33.8	39.6	
304.7	CARBONDALE	HERRIN	COAL	5.0	73.3	
299.7	CARBONDALE		ROCK	42.2	78.3	
257.5	CARBONDALE	BRIAR HILL	COAL	1.8	120.5	
255.7	CARBONDALE		ROCK	86.8	122.3	
168.9	CARBONDALE	SPRINGFIELD	COAL	5.3	209.1	
163.7	CARBONDALE		ROCK	1.7	214.3	

MAPID: 16500268000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 100' N line, 10' E line of NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582314 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.73848 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
310.0	CARBONDALE	HERRIN	COAL	4.5	70.0	
264.0	CARBONDALE	BRIAR HILL	COAL	1.5	116.0	
147.0	CARBONDALE	SPRINGFIELD	COAL	3.0	233.0	

MAPID: 16500268000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 100' N line, 10' E line of NW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582314 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.73848 **DATE COLLECTED:** 5 / 20 / 1905

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	19.0	0.0	
361.0			COAL	3.5	19.0	
357.5			ROCK	47.5	22.5	
310.0	CARBONDALE	HERRIN	COAL	4.5	70.0	
305.5	CARBONDALE		ROCK	41.5	74.5	
264.0	CARBONDALE	BRIAR HILL	COAL	1.5	116.0	
262.5	CARBONDALE		ROCK	115.3	117.5	
147.2	CARBONDALE	SPRINGFIELD	COAL	3.0	232.8	
144.2	CARBONDALE		ROCK	4.2	235.8	

MAPID: 16500268000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 100' N line, 10' E line of NW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582314 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.73848 **DATE COLLECTED:** 5 / 20 / 1905

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. PATTERSON #1 **WELL TYPE:** Coal Test

COMMENT: W.D.MCILRATH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	16.5	0.0	
363.5			SAND	2.5	16.5	
361.0	CARBONDALE	ALLENBY	COAL	3.5	19.0	
357.5	CARBONDALE		UNDERCLAY	1.5	22.5	
356.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	24.0	
352.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	28.0	
334.0	CARBONDALE		SHALE	15.0	46.0	
319.0	CARBONDALE		BLACK SHALE	2.0	61.0	
317.0	CARBONDALE	BRERETON	LIMESTONE	5.5	63.0	
311.5	CARBONDALE	ANNA	BLACK SHALE	1.5	68.5	
310.0	CARBONDALE	HERRIN	COAL	4.5	70.0	
305.5	CARBONDALE		SHALE	30.5	74.5	
275.0	CARBONDALE		SHALE	11.0	105.0	
264.0	CARBONDALE	BRIAR HILL	COAL	1.5	116.0	
262.5	CARBONDALE		SHALE	13.0	117.5	
249.5	CARBONDALE		SHALE	102.3	130.5	
147.2	CARBONDALE	SPRINGFIELD	COAL	3.0	232.8	
144.2	CARBONDALE		UNDERCLAY	4.2	235.8	

MAPID: 16500269000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE NW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582897 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.73552 **DATE COLLECTED:** 10 / 0 / 1901

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 212.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO., HOLE #4 **WELL TYPE:** Coal Test

COMMENT: W.D.MCILRATH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			SAND	25.0	0.0	
348.0	CARBONDALE		SANDSTONE	10.0	25.0	
338.0	CARBONDALE	ALLENBY	COAL	0.7	35.0	
337.3	CARBONDALE		SANDSTONE	5.0	35.7	
332.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	40.7	
328.6	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	44.4	
323.6	CARBONDALE	BRERETON	LIMESTONE	3.3	49.4	
320.2	CARBONDALE	ANNA	BLACK SHALE	3.0	52.8	
317.2	CARBONDALE	HERRIN	COAL	5.5	55.8	
311.7	CARBONDALE		UNDERCLAY	8.0	61.3	
303.7	CARBONDALE		SANDSTONE	8.3	69.3	
295.4	CARBONDALE		LIMESTONE	5.3	77.6	
290.2	CARBONDALE		SANDSTONE	4.1	82.8	
286.1	CARBONDALE		SANDSTONE	31.0	86.9	
255.1	CARBONDALE	BRIAR HILL	COAL	1.5	117.9	
253.6	CARBONDALE		UNDERCLAY	0.8	119.4	
252.7	CARBONDALE		BLACK SHALE	17.1	120.3	
235.7	CARBONDALE		SANDY SLATE	18.0	137.3	
217.7	CARBONDALE		BLACK SHALE	11.0	155.3	
206.7	CARBONDALE	DYKERSBURG	SANDSTONE	9.0	166.3	
197.7	CARBONDALE	DYKERSBURG	BLACK SHALE	28.0	175.3	
169.7	CARBONDALE	SPRINGFIELD	COAL	0.5	203.3	
169.2	CARBONDALE	SPRINGFIELD	BLACK SHALE	2.0	203.8	
167.2	CARBONDALE	SPRINGFIELD	COAL	0.3	205.8	
166.8	CARBONDALE	SPRINGFIELD	BLACK SHALE	1.0	206.2	
165.8	CARBONDALE	SPRINGFIELD	COAL	0.8	207.2	
165.0	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.3	208.0	
164.7	CARBONDALE	SPRINGFIELD	COAL	4.0	208.3	
160.7	CARBONDALE		UNDERCLAY	0.5	212.3	

MAPID: 16500269000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE NW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582897 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.73552 **DATE COLLECTED:** 10 / 0 / 1901

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 212.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	25.0	0.0	
348.0			ROCK	10.0	25.0	
338.0			COAL	0.7	35.0	
337.3			ROCK	20.1	35.7	
317.2	CARBONDALE	HERRIN	COAL	5.5	55.8	
311.7	CARBONDALE		ROCK	56.7	61.3	
255.1	CARBONDALE	BRIAR HILL	COAL	1.5	117.9	
253.6	CARBONDALE		ROCK	83.9	119.4	
169.7	CARBONDALE	SPRINGFIELD	COAL	9.0	203.3	
160.7	CARBONDALE		ROCK	0.5	212.3	

MAPID: 16500955000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 340' S line, 0' E line of SE SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.587137 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.739742 **DATE COLLECTED:** 4 / 23 / 1946

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 6 **WELL TYPE:** Coal Test

COMMENT: ELEVATION NOT FOUND

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	16.0	0.0	SURFACE CLAY
-	CARBONDALE	DANVILLE	COAL	1.3	16.0	
-	CARBONDALE		GRAY SHALE	11.7	17.3	
-	CARBONDALE		SANDSTONE	9.0	29.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	38.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	41.0	
-	CARBONDALE		GRAY SHALE	4.8	57.0	
-	CARBONDALE		BLACK SHALE	10.7	61.8	
-	CARBONDALE	BRERETON	LIMESTONE	5.8	72.5	
-	CARBONDALE	ANNA	BLACK SHALE	1.8	78.3	
-	CARBONDALE	HERRIN	COAL	4.5	80.2	
-	CARBONDALE		UNDERCLAY	1.3	84.7	
-	CARBONDALE		SANDSTONE	43.5	86.0	AND SHALE
-	CARBONDALE	BRIAR HILL	COAL	1.8	129.5	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	26.7	131.3	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	32.0	158.0	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	20.0	190.0	
-	CARBONDALE	DYKERSBURG	BLACK SHALE	9.0	210.0	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	219.0	
-	CARBONDALE		UNDERCLAY	1.0	225.0	
-	CARBONDALE		SANDSTONE	4.0	226.0	

MAPID: 16500955000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 340' S line, 0' E line of SE SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.587137 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.739742 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 84.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.2	CARBONDALE	DANVILLE	COAL	1.3	13.8	
354.9	CARBONDALE		SHALE & SANDSTONE	20.7	15.1	
334.2	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	3.1	35.8	UPPER BENCH
331.2	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	0.3	38.8	SHALE PARTING
330.9	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	39.1	LOWER BENCH
329.2	CARBONDALE	LAWSON	SANDSTONE	16.0	40.8	
313.2	CARBONDALE	LAWSON	GRAY SHALE	4.8	56.8	
308.3	CARBONDALE		BLACK SHALE	10.7	61.7	
297.7	CARBONDALE	BRERETON	LIMESTONE	5.8	72.3	
291.8	CARBONDALE	ANNA	BLACK SHALE	1.8	78.2	
290.0	CARBONDALE	HERRIN	COAL	4.5	80.0	

MAPID: 16501413000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.583406 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.745266 **DATE COLLECTED:** 3 / 0 / 1949

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1440.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	378.0	
-113.0	SPOON	DAVIS	UNCLASSIFIED	-	483.0	
-1070.0	BASE OF PENN.		UNCLASSIFIED	-	1440.0	

MAPID: 16501413000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.583406 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.745266 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2348.0 **LOG TYPE:**
SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.0	CARBONDALE	BRERETON	LIMESTONE	-	120.0	
-1228.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1598.0	
-1586.0			LIMESTONE	-	1956.0	
-1978.0		BASE BARLOW	LIMESTONE	-	2348.0	

MAPID: 16501413000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.583406 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.745266 **DATE COLLECTED:** 3 / 0 / 1949
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2377.0 **LOG TYPE:** Electric Log
SOURCE: HEATH B M ETAL, WASSON ESTATE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	292.0	
30.0	CARBONDALE	SURVANT	COAL	0.8	340.0	
-5.0	CARBONDALE	COLCHESTER	COAL	0.5	375.0	
-60.0	CARBONDALE	DEKOVEN	COAL	3.0	430.0	
-92.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	462.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-114.0	CARBONDALE	DAVIS	COAL	4.0	484.0	
-158.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	528.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-168.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	538.0	
-229.0	TRADEWATER	MT. RORAH	COAL	2.0	599.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 16590132000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591809 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.746101 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.6 **LOGGED (FT.):** 55.3 **LOG TYPE:** Company map
SOURCE: AMAX P-219 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.6	CARBONDALE	HERRIN	COAL	5.3	50.0	

MAPID: 16590555000C **VERSION:** 1 **PROJECT:** GALATIA

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586473 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.738955 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.7 **LOGGED (FT.):** 68.8 **LOG TYPE:** Company map
SOURCE: AMAX P-121 **WELL TYPE:** Coal Test
COMMENT: AMAX COAL COMPANY MAP, ISGS FILE 5-D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.7	CARBONDALE	HERRIN	COAL	4.8	64.0	

MAPID: 16590806000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 895' S line, 805' E line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.584692 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.74505 **DATE COLLECTED:** 5 / 11 / 1993
SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P197 **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		CLAY	10.0	0.0	BROWN
358.9	PLEISTOCENE		UNCONSOLIDATED	3.5	10.0	BROWN
355.4	PLEISTOCENE		UNCONSOLIDATED	3.8	13.5	GRAY
351.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	17.3	BROWN
346.8	CARBONDALE		SHALE	1.6	22.1	GREEN-GRAY
345.2	CARBONDALE		SILTSTONE	1.4	23.7	GREEN-GRAY
343.8	CARBONDALE		GRAY SHALE	1.2	25.1	
342.6	CARBONDALE		ARGILLACEOUS SANDSTONE	7.3	26.3	GRAY-GREEN
335.3	CARBONDALE		SILTY SHALE	6.6	33.6	
328.7	CARBONDALE		CALCAREOUS SANDSTONE	0.9	40.2	LIGHT GRAY
327.8	CARBONDALE		SILTY SHALE	5.9	41.1	
321.9	CARBONDALE		DARK GRAY SHALE	3.4	47.0	
318.5	CARBONDALE	CONANT	ARGILLACEOUS LIMESTONE	0.3	50.4	DARK GRAY
318.2	CARBONDALE	JAMESTOWN	COAL	0.3	50.7	
317.9	CARBONDALE	BRERETON	LIMESTONE	0.3	51.0	GRAY
317.6	CARBONDALE	ANNA	BLACK SHALE	1.1	51.3	
316.5	CARBONDALE	ENERGY	GRAY SHALE	3.9	52.4	
312.6	CARBONDALE	HERRIN	COAL	4.1	56.3	
308.5	CARBONDALE		UNDERCLAY	1.8	60.4	
306.7	CARBONDALE		SILTSTONE	0.6	62.2	GRAY-GREEN
306.1	CARBONDALE	HIGGINSVILLE	LIMESTONE	0.6	62.8	BROWN-GRAY
305.5	CARBONDALE		SILTSTONE	7.6	63.4	GRAY-GREEN

MAPID: 16590825000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 425' N line, 170' E line of SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582534 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.741439 **DATE COLLECTED:** 5 / 17 / 1993

SURFACE ELEVATION (FT.): 368.1 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P148B **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.1	PLEISTOCENE		CLAY	7.0	0.0	BROWN
361.1	PLEISTOCENE		UNCONSOLIDATED	4.0	7.0	GRAY
357.1	PLEISTOCENE		UNCONSOLIDATED	17.0	11.0	BROWN
340.1	PLEISTOCENE		UNCONSOLIDATED	12.5	28.0	GRAY
327.6	PLEISTOCENE		GLACIAL DRIFT	9.1	40.5	GRAY
318.5	CARBONDALE	JAMESTOWN	COAL	0.2	49.6	
318.3	CARBONDALE		BLACK SHALE	0.7	49.8	
317.6	CARBONDALE	BRERETON	LIMESTONE	5.2	50.5	DARK GRAY
312.4	CARBONDALE	ANNA	BLACK SHALE	1.1	55.7	
311.3	CARBONDALE	HERRIN	COAL	4.6	56.8	
306.7	CARBONDALE		GRAY SHALE	2.6	61.4	
304.1	CARBONDALE		SANDY SHALE	0.5	64.0	LIMY
303.6	CARBONDALE		CALCAREOUS SANDSTONE	6.5	64.5	GRAY

MAPID: 16590826000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 460' N line, 575' W line of SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58978 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.741309 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.1 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P145N **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.1	PLEISTOCENE		CLAY	9.0	0.0	BROWN
374.1	PLEISTOCENE		UNCONSOLIDATED	1.5	9.0	BROWN
372.6	CARBONDALE	DANVILLE	COAL	1.5	10.5	
371.1	CARBONDALE		SHALE	3.0	12.0	
368.1	CARBONDALE		SANDY DARK SHALE	7.5	15.0	
360.6	CARBONDALE	ALLENBY	COAL	0.5	22.5	
360.1	CARBONDALE		UNDERCLAY	1.0	23.0	
359.1	CARBONDALE		GRAY SHALE	1.2	24.0	
357.9	CARBONDALE	ALLENBY	COAL	0.6	25.2	
357.3	CARBONDALE		GRAY SHALE	3.0	25.8	
354.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.7	28.8	BROWN
347.6	CARBONDALE		SANDY SHALE	3.2	35.5	
344.4	CARBONDALE		CALCAREOUS SANDSTONE	8.3	38.7	GRAY
336.1	CARBONDALE		GRAY SHALE	3.0	47.0	
333.1	CARBONDALE		SANDY DARK SHALE	15.3	50.0	
317.8	CARBONDALE	JAMESTOWN	BLACK SHALE	0.8	65.3	WITH BONE COAL
317.0	CARBONDALE	ENERGY	SANDY DARK SHALE	1.9	66.1	
315.1	CARBONDALE	ENERGY	SANDY SHALE	3.8	68.0	
311.3	CARBONDALE	ENERGY	DARK GRAY SHALE	1.2	71.8	
310.1	CARBONDALE	HERRIN	COAL	4.5	73.0	
305.6	CARBONDALE		GRAY SHALE	2.0	77.5	
303.6	CARBONDALE		SANDY SHALE	3.3	79.5	LIMY
300.3	CARBONDALE		CALCAREOUS SANDSTONE	4.2	82.8	GRAY

MAPID: 16590827000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 440' N line, 807' E line of SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.584714 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.741379 **DATE COLLECTED:** 5 / 12 / 1993

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P147NP **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA W. HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0	PLEISTOCENE		CLAY	7.0	0.0	BROWN
364.0	PLEISTOCENE		UNCONSOLIDATED	11.0	7.0	BROWN
353.0	CARBONDALE		BROWN SHALE	1.0	18.0	WEATHERED
352.0	CARBONDALE		SANDSTONE	4.0	19.0	GRAY
348.0	CARBONDALE		SANDSTONE	3.6	23.0	BROWN-GRAY
344.4	CARBONDALE		SANDSTONE	2.1	26.6	GRAY
342.3	CARBONDALE	BANKSTON FORK	LIMESTONE	1.6	28.7	GRAY
340.7	CARBONDALE		SANDY SHALE	18.4	30.3	
322.3	CARBONDALE		BLACK SHALE	0.6	48.7	
321.7	CARBONDALE	JAMESTOWN	COAL	0.4	49.3	
321.3	CARBONDALE		BLACK SHALE	1.0	49.7	
320.3	CARBONDALE	BRERETON	LIMESTONE	3.6	50.7	DARK GRAY
316.7	CARBONDALE	ANNA	BLACK SHALE	0.9	54.3	
315.8	CARBONDALE	HERRIN	COAL	4.5	55.2	
311.3	CARBONDALE		GRAY SHALE	2.0	59.7	
309.3	CARBONDALE		SANDY SHALE	5.3	61.7	LIMY

MAPID: 16590828000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 490' N line, 35' W line of SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586423 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.741243 **DATE COLLECTED:** 5 / 12 / 1993

SURFACE ELEVATION (FT.): 372.4 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log

SOURCE: AMAX COAL CO P146N **WELL TYPE:** Coal Test

COMMENT: PERMIT 283; DELTA; W, HARRISBURG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.4	PLEISTOCENE		CLAY	4.0	0.0	BROWN
368.4	PLEISTOCENE		UNCONSOLIDATED	7.0	4.0	BROWN
361.4	CARBONDALE		SANDSTONE	5.0	11.0	BROWN
356.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	16.0	BROWN
353.4	CARBONDALE		GRAY SHALE	2.0	19.0	
351.4	CARBONDALE		SANDY SHALE	2.0	21.0	
349.4	CARBONDALE		SANDSTONE	7.0	23.0	GRAY
342.4	CARBONDALE		CALCAREOUS SANDSTONE	3.0	30.0	GRAY
339.4	CARBONDALE		SANDY SHALE	1.5	33.0	
337.9	CARBONDALE		SANDSTONE	2.5	34.5	GRAY
335.4	CARBONDALE		SANDY SHALE	15.2	37.0	
320.2	CARBONDALE	JAMESTOWN	COAL	0.2	52.2	
320.0	CARBONDALE		BLACK SHALE	0.2	52.4	
319.8	CARBONDALE	BRERETON	LIMESTONE	3.4	52.6	DARK GRAY
316.4	CARBONDALE	ANNA	BLACK SHALE	2.6	56.0	
313.8	CARBONDALE	HERRIN	COAL	4.7	58.6	
309.1	CARBONDALE		UNDERCLAY	1.7	63.3	
307.4	CARBONDALE		SILTSTONE	6.0	65.0	GREEN-GRAY

MAPID: 16590829000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:** 1947' N line, 2256' E line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.594336 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.740917 **DATE COLLECTED:** 6 / 22 / 1983
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: AMAX COAL CO P143PI **WELL TYPE:** Coal Test
COMMENT: PERMIT 283; DELTA HARCO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0	PLEISTOCENE		CLAY	22.7	0.0	BROWN
348.3	CARBONDALE		GRAY SHALE	6.3	22.7	
342.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	29.0	LIGHT GRAY
337.1	CARBONDALE		GRAY SHALE	4.1	33.9	
333.0	CARBONDALE		SANDSTONE	11.0	38.0	GRAY
322.0	CARBONDALE		SILTY SHALE	19.0	49.0	
303.0	CARBONDALE	BRERETON	LIMESTONE	5.0	68.0	DARK GRAY
298.0	CARBONDALE	ANNA	BLACK SHALE	0.5	73.0	
297.5	CARBONDALE	HERRIN	COAL	4.8	73.5	
292.7	CARBONDALE		UNDERCLAY	2.3	78.3	
290.4	CARBONDALE		SANDY SHALE	2.4	80.6	

MAPID: 16500080104M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1120' N line, 1095' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.593206 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728425 **DATE COLLECTED:** 11 / 14 / 1967
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 7.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SIMON, SAHARA C C, MINE 16 **WELL TYPE:** Underground mine
COMMENT: OTHER NOTES AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	7.8		
-			ROCK	-		

MAPID: 16500271000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588541 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.71941 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.0	CARBONDALE	DANVILLE	COAL	2.3	27.0	
396.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	3.0	40.0	
387.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	49.0	
380.0	CARBONDALE	ANVIL ROCK	SANDSTONE & BLACK SHALE	29.0	56.0	
345.0	CARBONDALE	HERRIN	COAL	4.6	91.0	
338.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	18.0	98.0	
320.0	CARBONDALE	BRIAR HILL	COAL	2.4	116.0	
315.0	CARBONDALE	CANTON	SANDSTONE & BLACK SHALE	23.0	121.0	
171.0	CARBONDALE	SPRINGFIELD	COAL	8.3	265.0	

MAPID: 16500271000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588541 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71941 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 274.9 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	14.2	0.0	
421.8			ROCK	12.6	14.2	
409.2			COAL	2.3	26.8	
407.0			ROCK	14.7	29.0	
392.3			COAL	0.6	43.7	
391.8			ROCK	46.5	44.2	
345.3	CARBONDALE	HERRIN	COAL	4.6	90.7	
340.7	CARBONDALE		ROCK	20.6	95.3	
320.1	CARBONDALE		COAL	2.4	115.9	
317.7	CARBONDALE		ROCK	52.4	118.3	
265.3	CARBONDALE		COAL	1.5	170.7	
263.8	CARBONDALE		ROCK	93.0	172.2	
170.8	CARBONDALE	SPRINGFIELD	COAL	7.3	265.2	
163.4	CARBONDALE		ROCK	2.5	272.6	

MAPID: 16500271000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588541 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.71941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 274.9 **LOG TYPE:** Drillers Log

SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test

COMMENT: ABE RANN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	14.2	0.0	
421.8	MODESTO	PIASA	LIMESTONE	3.6	14.2	BASTARD
418.2	MODESTO		UNKNOWN	2.2	17.8	LOG HAS "BLACK MUCK"
416.1	MODESTO		BLACK SHALE	6.8	19.9	
409.2	CARBONDALE	DANVILLE	COAL	2.3	26.8	
407.0	CARBONDALE		UNDERCLAY	1.7	29.0	
405.3	CARBONDALE		SANDY SLATE	9.0	30.7	
396.3	CARBONDALE		SANDSTONE	3.0	39.7	
393.3	CARBONDALE		BLACK SHALE	1.0	42.7	
392.3	CARBONDALE	ALLENBY	COAL	0.6	43.7	
391.7	CARBONDALE		UNDERCLAY	4.7	44.3	
387.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	48.9	
379.9	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	28.7	56.1	SS AND SANDY SLATE
351.2	CARBONDALE		BLACK SHALE	0.5	84.8	
350.7	CARBONDALE	BRERETON	LIMESTONE	2.9	85.3	
347.8	CARBONDALE	ANNA	BLACK SHALE	2.6	88.2	
345.2	CARBONDALE	HERRIN	COAL	4.6	90.8	LOG HAS W/ SULPHUR STREAK; MAY BE PYRITE
340.7	CARBONDALE		UNDERCLAY	3.1	95.3	
337.6	CARBONDALE		SANDSTONE	17.5	98.4	
320.1	CARBONDALE		COAL	2.4	115.9	LOG HAS W/ SULPHUR STREAK; MAY BE PYRITE
317.7	CARBONDALE		UNDERCLAY	3.1	118.3	22
314.6	CARBONDALE		SANDSTONE	17.5	121.4	
297.1	CARBONDALE		SANDY SLATE	2.2	138.9	
294.9	CARBONDALE		SANDSTONE	3.4	141.1	
291.5	CARBONDALE		SANDY SLATE	20.0	144.5	
271.5	CARBONDALE		BLACK SHALE	6.3	164.5	
265.2	CARBONDALE	BRIAR HILL	COAL	1.5	170.8	
263.7	CARBONDALE	DYKERSBURG	SANDSTONE/SILTSTONE	93.0	172.3	SS AND SANDY SLATE
170.7	CARBONDALE	SPRINGFIELD	COAL	2.8	265.3	
167.9	CARBONDALE	SPRINGFIELD	BONE COAL	0.4	268.1	
167.5	CARBONDALE	SPRINGFIELD	COAL	2.9	268.5	
164.6	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	271.4	
164.2	CARBONDALE	SPRINGFIELD	COAL	0.7	271.8	
163.6	CARBONDALE		BONE COAL	1.2	272.4	
162.4	CARBONDALE		UNDERCLAY	1.3	273.6	

MAPID: 16500272000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586725 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.717087 **DATE COLLECTED:** 8 / 17 / 1905

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: A.RANN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	11.0	0.0	
432.0			SAND	3.0	11.0	
429.0	CARBONDALE		SANDSTONE	4.0	14.0	
425.0	CARBONDALE	GALUM	LIMESTONE	2.0	18.0	
423.0	CARBONDALE		SHALE	9.0	20.0	
414.0	CARBONDALE	ALLENBY	COAL	1.0	29.0	
413.0	CARBONDALE		SANDSTONE	7.0	30.0	
406.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	37.0	
398.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.5	45.0	
388.5	CARBONDALE	ANVIL ROCK	SANDY SLATE	8.0	54.5	
380.5	CARBONDALE		SHALE	20.0	62.5	
360.5	CARBONDALE	BRERETON	LIMESTONE	6.0	82.5	
354.5	CARBONDALE	ANNA	BLACK SHALE	2.0	88.5	
352.5	CARBONDALE	HERRIN	COAL	5.0	90.5	
347.5	CARBONDALE		UNDERCLAY	1.0	95.5	
346.5	CARBONDALE		SANDY LIMESTONE	3.0	96.5	
343.5	CARBONDALE		LIMESTONE	5.0	99.5	
338.5	CARBONDALE		SANDSTONE	9.0	104.5	
329.5	CARBONDALE		SANDY LIMESTONE	25.0	113.5	
304.5	CARBONDALE		BLACK SHALE	4.0	138.5	
300.5	CARBONDALE	BRIAR HILL	COAL	1.5	142.5	
299.0	CARBONDALE		BLACK SHALE	4.0	144.0	
295.0	CARBONDALE		LIMESTONE	1.5	148.0	
293.5	CARBONDALE		SANDSTONE	1.0	149.5	
292.5	CARBONDALE		BLACK SHALE	1.5	150.5	
291.0	CARBONDALE		SHALE	67.0	152.0	
224.0	CARBONDALE	SPRINGFIELD	COAL	7.0	219.0	

MAPID: 16500272000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW SW SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586725 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.717087 **DATE COLLECTED:** 8 / 17 / 1905

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 226.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	14.0	0.0	
429.0			ROCK	15.0	14.0	
414.0			COAL	1.0	29.0	
413.0			ROCK	60.5	30.0	
352.5	CARBONDALE	HERRIN	COAL	5.0	90.5	
347.5	CARBONDALE		ROCK	47.0	95.5	
300.5	CARBONDALE	BRIAR HILL	COAL	1.5	142.5	
299.0	CARBONDALE		ROCK	75.0	144.0	
224.0	CARBONDALE	SPRINGFIELD	COAL	7.0	219.0	

MAPID: 16502456000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586031 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.724936 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 281.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., HOLE #4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	40.0	0.0	
320.0			SAND	19.0	40.0	QUICK
301.0	MODESTO		SANDSTONE	13.0	59.0	
288.0	MODESTO		SHALE	6.0	72.0	
282.0	MODESTO	PIASA	LIMESTONE	2.0	78.0	
280.0	MODESTO		UNDERCLAY	3.0	80.0	
277.0	MODESTO		SHALE	5.0	83.0	
272.0	CARBONDALE	DANVILLE	COAL	1.0	88.0	
271.0	CARBONDALE		SANDSTONE	14.0	89.0	
257.0	CARBONDALE		SHALE	9.0	103.0	
248.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	112.0	
238.0	CARBONDALE		SHALE	5.0	122.0	
233.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	127.0	
226.0	CARBONDALE		SHALE	10.0	134.0	
216.0	CARBONDALE		BLACK SHALE	4.0	144.0	
212.0	CARBONDALE	BRERETON	LIMESTONE	6.0	148.0	
206.0	CARBONDALE	ANNA	BLACK SHALE	1.0	154.0	
205.0	CARBONDALE	HERRIN	COAL	4.5	155.0	
200.5	CARBONDALE		UNDERCLAY	1.5	159.5	
199.0	CARBONDALE		SANDSTONE	14.0	161.0	
185.0	CARBONDALE		SHALE	16.0	175.0	
169.0	CARBONDALE		SHALE	12.0	191.0	
157.0	CARBONDALE	BRIAR HILL	COAL	1.0	203.0	
156.0	CARBONDALE		UNDERCLAY	2.0	204.0	
154.0	CARBONDALE		SHALE	5.0	206.0	
149.0	CARBONDALE		LIMESTONE	1.0	211.0	
148.0	CARBONDALE		SANDSTONE	16.0	212.0	
132.0	CARBONDALE	DYKERSBURG	SHALE	28.0	228.0	
104.0	CARBONDALE	DYKERSBURG	BLACK SHALE	18.8	256.0	
85.2	CARBONDALE	SPRINGFIELD	COAL	4.8	274.8	
80.5	CARBONDALE		UNDERCLAY	1.5	279.5	

MAPID: 16502456000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586031 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.724936 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 281.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	40.0	0.0	
320.0			ROCK	48.0	40.0	
272.0			COAL	1.0	88.0	
271.0			ROCK	66.0	89.0	
205.0	CARBONDALE	HERRIN	COAL	4.5	155.0	
200.5	CARBONDALE		ROCK	43.5	159.5	
157.0	CARBONDALE	BRIAR HILL	COAL	1.0	203.0	
156.0	CARBONDALE		ROCK	70.8	204.0	
85.2	CARBONDALE	SPRINGFIELD	COAL	4.8	274.8	
80.5	CARBONDALE		ROCK	1.5	279.5	

MAPID: 16503489000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 500' N line, 100' E line of NE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.592571 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.718981 **DATE COLLECTED:** 5 / 18 / 1965

SURFACE ELEVATION (FT.): 412.9 **LOGGED (FT.):** 166.2 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 245-65P **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.9			CLAY	10.0	0.0	SURFACE CLAY
402.9	CARBONDALE		SHALE	1.0	10.0	WITH SOME CLAY
401.9	CARBONDALE	ALLENBY	COAL	0.7	11.0	
401.2	CARBONDALE		UNDERCLAY	0.3	11.7	
400.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	12.0	
393.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	28.6	19.4	WITH HARD STREAKS
364.9	CARBONDALE	JAMESTOWN	COAL	0.5	48.0	
364.4	CARBONDALE		UNDERCLAY	1.0	48.5	
363.4	CARBONDALE	BRERETON	LIMESTONE	5.5	49.5	
357.9	CARBONDALE	ANNA	BLACK SHALE	0.8	55.0	
357.1	CARBONDALE	HERRIN	COAL	4.5	55.8	
352.6	CARBONDALE		UNDERCLAY	1.3	60.3	
351.2	CARBONDALE		UNDERCLAY	2.2	61.7	
349.1	CARBONDALE		GRAY SANDSTONE	24.2	63.8	
324.9	CARBONDALE		SANDY SHALE	6.0	88.0	
318.9	CARBONDALE		SANDY SHALE	22.0	94.0	
296.9	CARBONDALE	BRIAR HILL	COAL	1.7	116.0	
295.2	CARBONDALE		UNDERCLAY	1.3	117.7	
293.9	CARBONDALE	DYKERSBURG	SANDY SHALE	35.0	119.0	
258.9	CARBONDALE	DYKERSBURG	SANDY SHALE	3.3	154.0	
255.6	CARBONDALE	SPRINGFIELD	COAL	7.1	157.3	
248.6	CARBONDALE		UNDERCLAY	1.8	164.3	

MAPID: 16503489000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 500' N line, 100' E line of NE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.592571 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.718981 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 60.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.8	CARBONDALE	ALLENBY	COAL	0.7	11.2	
401.2	CARBONDALE		CLAYSTONE	0.3	11.8	
400.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	12.2	
393.4	CARBONDALE	LAWSON	SILTY SHALE	28.6	19.6	
364.8	CARBONDALE	JAMESTOWN	BONE COAL	0.5	48.2	
364.3	CARBONDALE		CLAYSTONE & SHALE	1.0	48.7	
363.3	CARBONDALE	BRERETON	LIMESTONE	5.5	49.7	
357.8	CARBONDALE	ANNA	BLACK SHALE	0.8	55.2	
357.0	CARBONDALE	HERRIN	COAL	4.5	56.0	

MAPID: 16503499000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.593467 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.71758 **DATE COLLECTED:** 6 / 12 / 1965

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 213.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 246-65P **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION FOUND

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	7.0	0.0	SURFACE CLAY
-	CARBONDALE		RED SANDSTONE	3.3	7.0	
-	CARBONDALE		GRAY SHALE	1.2	10.3	
-	CARBONDALE	ALLENBY	COAL	0.8	11.5	
-	CARBONDALE		UNDERCLAY	0.7	12.3	
-	CARBONDALE		GRAY SHALE	5.0	13.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	18.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.5	23.5	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	2.0	27.0	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	2.0	29.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.8	31.0	
-	CARBONDALE	BRERETON	LIMESTONE	5.8	51.8	
-	CARBONDALE	ANNA	BLACK SHALE	1.6	57.5	
-	CARBONDALE	HERRIN	COAL	4.6	59.1	
-	CARBONDALE		UNDERCLAY	1.5	63.7	
-	CARBONDALE		SANDY SHALE	5.8	65.2	
-	CARBONDALE		GRAY SANDSTONE	12.0	71.0	
-	CARBONDALE		SANDY SHALE	16.0	83.0	
-	CARBONDALE		GRAY SANDSTONE	9.0	99.0	
-	CARBONDALE		SANDY SHALE	3.0	108.0	WITH LGY SS
-	CARBONDALE		GRAY SANDSTONE	1.8	111.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	112.8	
-	CARBONDALE		UNDERCLAY	1.3	114.3	
-	CARBONDALE		SANDY SHALE	8.3	115.7	
-	CARBONDALE		LIMESTONE	0.5	124.0	
-	CARBONDALE		SANDY SHALE	12.5	124.5	WITH GY SS MIXED
-	CARBONDALE	ST. DAVID	LIMESTONE	1.0	137.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	138.0	WITH GY SS
-	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	146.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	148.0	WITH GY SS
-	CARBONDALE	DYKERSBURG	SANDY SHALE	44.7	151.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	9.0	195.7	
-	CARBONDALE	SPRINGFIELD	COAL	7.2	204.7	
-	CARBONDALE		UNDERCLAY	1.7	211.8	

MAPID: 16526200000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1400' N line, 2800' E line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.587173 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.727554 **DATE COLLECTED:** 7 / 1 / 1979

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 79-54 **WELL TYPE:** Water Well

COMMENT: PERMIT 90; MINE #20; FR. COLUMNAR SECT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0	PLEISTOCENE		UNCONSOLIDATED	15.3	0.0	
396.7	CARBONDALE	DANVILLE	COAL	1.5	15.3	
395.2	CARBONDALE		SHALE	21.8	16.8	
373.4	CARBONDALE		SANDSTONE/SHALE	3.9	38.6	
369.5	CARBONDALE	ALLENBY	COAL	0.5	42.5	
369.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	43.0	
367.0	CARBONDALE		GRAY SHALE	5.8	45.0	
361.2	CARBONDALE		SANDY SHALE	3.5	50.8	
357.7	CARBONDALE		GRAY SHALE	5.1	54.3	
352.6	CARBONDALE		SANDSTONE/SHALE	14.8	59.4	
337.8	CARBONDALE	BRERETON	LIMESTONE	1.5	74.2	
336.3	CARBONDALE	ANNA	BLACK SHALE	1.2	75.7	
335.2	CARBONDALE	ENERGY	GRAY SHALE	4.5	76.8	
330.7	CARBONDALE	HERRIN	COAL	4.8	81.3	
325.9	CARBONDALE		UNDERCLAY	2.4	86.1	
323.5	CARBONDALE		SANDSTONE	1.5	88.5	

MAPID: 16526201000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.595761 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.730626 **DATE COLLECTED:** 9 / 19 / 1982

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 69.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 82-19 **WELL TYPE:** Water Well

COMMENT: PERMIT 201

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0	PLEISTOCENE		CLAY	12.0	0.0	
395.0	CARBONDALE		SHALE	10.0	12.0	YELLOW
385.0	CARBONDALE		SANDSTONE	2.4	22.0	BROWN
382.6	CARBONDALE		SHALE	16.7	24.4	
365.9	CARBONDALE	JAMESTOWN	COAL	0.6	41.1	
365.3	CARBONDALE		SHALE	1.5	41.7	
363.8	CARBONDALE		SANDY SHALE	0.4	43.2	WITH SANDSTONE
363.4	CARBONDALE	BRERETON	LIMESTONE	15.4	43.6	
348.0	CARBONDALE	ANNA	BLACK SHALE	3.4	59.0	BLACK
344.6	CARBONDALE	HERRIN	COAL	4.4	62.4	
340.1	CARBONDALE		SHALE	2.4	66.9	

MAPID: 16526202000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579874 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.729461 **DATE COLLECTED:** 2 / 23 / 1984
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 84-3 **WELL TYPE:** Water Well
COMMENT: PERMIT 201

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0	PLEISTOCENE		CLAY	17.0	0.0	
388.0	CARBONDALE		SANDSTONE	1.0	17.0	BROWN
387.0	CARBONDALE		SHALE	1.5	18.0	
385.5	CARBONDALE		SANDSTONE	1.5	19.5	
384.0	CARBONDALE	ALLENBY	COAL	1.3	21.0	
382.7	CARBONDALE		SHALE	2.7	22.3	
380.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	25.0	
373.0	CARBONDALE		SANDY SHALE	14.0	32.0	
359.0	CARBONDALE		SHALE	1.0	46.0	
358.0	CARBONDALE		COAL	1.0	47.0	
357.0	CARBONDALE		SHALE	12.5	48.0	
344.5	CARBONDALE	JAMESTOWN	COAL	0.5	60.5	
344.0	CARBONDALE		SHALE	1.3	61.0	
342.7	CARBONDALE	BRERETON	LIMESTONE	5.2	62.3	
337.5	CARBONDALE	ANNA	BLACK SHALE	0.9	67.5	BLACK
336.6	CARBONDALE	HERRIN	COAL	4.6	68.4	
332.0	CARBONDALE		UNDERCLAY	1.0	73.0	

MAPID: 165273A0004F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.590393 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71803 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 15.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	13.0		
-			COAL	2.0		

MAPID: 16590879000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.578701 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.723019 **DATE COLLECTED:** 7 / 1 / 1979
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 84-4 **WELL TYPE:** Coal Test
COMMENT: PERMIT #92 MINE #22

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
378.0	CARBONDALE		SANDSTONE	2.0	12.0	
376.0	CARBONDALE		CLAYSTONE	3.0	14.0	
373.0	CARBONDALE		SHALE	5.0	17.0	
368.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	31.0	22.0	
337.0	CARBONDALE	CONANT	LIMESTONE	0.5	53.0	
336.5	CARBONDALE	JAMESTOWN	COAL	0.5	53.5	
336.0	CARBONDALE		SHALE	7.3	54.0	
328.7	CARBONDALE	BRERETON	LIMESTONE	7.3	61.3	
321.5	CARBONDALE	HERRIN	COAL	4.8	68.5	
316.7	CARBONDALE		UNDERCLAY	1.5	73.3	
315.2	CARBONDALE		SANDSTONE	3.2	74.8	

MAPID: 16500273000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' N line, 1300' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572908 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729498 **DATE COLLECTED:** 3 / 17 / 1906
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 74.2 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: J.B.HEATHERINGTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	13.0	0.0	
391.0	CARBONDALE		SANDSTONE	12.7	13.0	
378.3	CARBONDALE		UNDERCLAY	2.3	25.7	
376.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	28.0	
370.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	34.0	
352.0	CARBONDALE		SHALE	11.0	52.0	
341.0	CARBONDALE	ANNA	BLACK SHALE	7.0	63.0	
334.0	CARBONDALE	HERRIN	COAL	4.2	70.0	

MAPID: 16500273000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' N line, 1300' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.572908 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729498 **DATE COLLECTED:** 3 / 17 / 1906
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	13.0	0.0	
391.0			ROCK	57.0	13.0	
334.0	CARBONDALE	HERRIN	COAL	4.2	70.0	

MAPID: 16500274000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571104 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728115 **DATE COLLECTED:** 3 / 29 / 1906
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 207.2 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: J.B.HEATHERINGTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0			UNCONSOLIDATED	15.0	0.0	
381.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	15.0	
374.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	21.4	
358.6	CARBONDALE		SHALE	17.0	37.4	
341.6	CARBONDALE	BRERETON	CALCAREOUS SHALE	4.0	54.4	
337.6	CARBONDALE	ANNA	BLACK SHALE	1.0	58.4	
336.6	CARBONDALE	HERRIN	COAL	4.2	59.4	
332.4	CARBONDALE		UNDERCLAY	1.5	63.6	
330.9	CARBONDALE		SANDSTONE	23.0	65.1	
307.9	CARBONDALE		SHALE	21.8	88.1	
286.2	CARBONDALE	BRIAR HILL	COAL	1.5	109.8	
284.7	CARBONDALE		CALCAREOUS SHALE	5.0	111.3	
279.7	CARBONDALE		SHALE	8.0	116.3	
271.7	CARBONDALE		CALCAREOUS SHALE	26.0	124.3	
245.7	CARBONDALE		SHALE	53.8	150.3	
191.8	CARBONDALE		SANDY SHALE	3.0	204.2	
188.8	CARBONDALE	SPRINGFIELD	SHALE	0.0	207.2	COAL MISSING: GALATIA CHANNEL

MAPID: 16500274000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571104 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728115 **DATE COLLECTED:** 3 / 29 / 1906
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 207.2 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0			UNCONSOLIDATED	15.0	0.0	
381.0			ROCK	44.4	15.0	
336.6	CARBONDALE	HERRIN	COAL	4.2	59.4	
332.4	CARBONDALE		ROCK	46.3	63.6	
286.2	CARBONDALE	BRIAR HILL	COAL	1.5	109.8	
284.7			ROCK	95.8	111.3	

MAPID: 16500275000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57574 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.724395 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 308.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	20.0	
360.0	CARBONDALE	HERRIN	COAL	4.5	59.0	
352.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	24.0	67.0	
311.0	CARBONDALE	BRIAR HILL	COAL	1.8	108.0	
249.0	CARBONDALE	CANTON	SANDSTONE/SHALE	-	170.0	

MAPID: 16500275000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57574 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724395 **DATE COLLECTED:** 7 / 26 / 1905
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 308.0 **LOG TYPE:** Survey Core Study
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	19.7	0.0	
399.3			ROCK	39.8	19.7	
359.6	CARBONDALE	HERRIN	COAL	4.5	59.4	
355.1	CARBONDALE		ROCK	44.1	63.9	
311.0	CARBONDALE	BRIAR HILL	COAL	1.8	108.0	
309.2			ROCK	198.2	109.8	

MAPID: 16500275000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57574 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724395 **DATE COLLECTED:** 7 / 26 / 1905
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 308.0 **LOG TYPE:** Drillers Log
SOURCE: GUARANTEE TRUST CO. **WELL TYPE:** Coal Test
COMMENT: STEPHENS AND FURMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	19.7	0.0	
399.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	19.7	BASTARD
395.0	CARBONDALE	ANVIL ROCK	SANDY SLATE	15.0	24.0	W/ SS STREAKS
380.0	CARBONDALE	ANVIL ROCK	SANDY SLATE	12.0	39.0	
368.0	CARBONDALE	BRERETON	LIMESTONE	7.5	51.0	BASTARD
360.5	CARBONDALE	ANNA	BLACK SHALE	0.9	58.5	
359.6	CARBONDALE	HERRIN	COAL	4.5	59.4	LOG HAS COAL W/ "LITTLE SULPHUR"
355.1	CARBONDALE		UNDERCLAY	3.1	63.9	
352.0	CARBONDALE		SANDSTONE/SHALE	13.8	67.0	
338.2	CARBONDALE		SANDSTONE/SHALE	10.3	80.8	
327.9	CARBONDALE		SANDY SLATE	13.8	91.1	
314.1	CARBONDALE		SANDY SLATE	2.7	104.9	W/ PEBBLES
311.4	CARBONDALE		BLACK SHALE	0.4	107.6	
311.0	CARBONDALE	BRIAR HILL	COAL	1.8	108.0	
309.2	CARBONDALE		SANDY CLAYSTONE	17.2	109.8	
292.0	CARBONDALE		SANDY SLATE	25.0	127.0	
267.0	CARBONDALE	DYKERSBURG	SANDY SLATE	49.0	152.0	W/ SS STREAKS
218.0	CARBONDALE	DYKERSBURG	SANDSTONE	107.0	201.0	W/ SANDY SLATE STREAKS
111.0	CARBONDALE	DYKERSBURG	SANDSTONE	0.0	308.0	COAL MISSING: GALATIA CHANNEL

MAPID: 16500327600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560873 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717019 **DATE COLLECTED:** 0 / 0 / 1963
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 49.5 **LOG TYPE:**
SOURCE: MINE NOTES-CHAMNESS DRAINAGE LIBERTY C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			ROCK	45.0	0.0	
395.0	CARBONDALE	HERRIN	COAL	4.5	45.0	

MAPID: 16500327700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.564847 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721209 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 34.2 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-GULLEY & PENROD C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	30.0	0.0	
390.0	CARBONDALE	DANVILLE	COAL	4.2	30.0	

MAPID: 16502743000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.562528 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.723097 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 2353.0 **LOG TYPE:**
SOURCE: ATHENE DEV. CO., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1193.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1598.0	
-1539.0			LIMESTONE	-	1944.0	
-1948.0		BASE BARLOW	LIMESTONE	-	2353.0	

MAPID: 16502832000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571679 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.728558 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 1459.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-28.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	427.0	
-124.0	SPOON	DAVIS	UNCLASSIFIED	-	523.0	
-1060.0	BASE OF PENN.		UNCLASSIFIED	-	1459.0	

MAPID: 16502832000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571679 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.728558 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2382.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	BRERETON	LIMESTONE	-	115.0	
-1212.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1611.0	
-1584.0			LIMESTONE	-	1983.0	
-1983.0		BASE BARLOW	LIMESTONE	-	2382.0	

MAPID: 16502832000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571679 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.728558 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2833.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., NUGGE GEORGE G **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	292.0	
55.0	CARBONDALE	SURVANT	COAL	1.2	344.0	
-28.0	CARBONDALE	COLCHESTER	COAL	0.5	427.0	
-77.0	CARBONDALE	DEKOVEN	COAL	3.0	476.0	
-77.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	476.0	
-96.0	CARBONDALE	DAVIS	COAL	4.0	495.0	
-125.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	524.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-163.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	562.0	
-196.0	TRADEWATER	MT. RORAH	COAL	1.0	595.0	

MAPID: 16502887000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 60' S line, 1010' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571848 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.716744 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 23.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CORP 35 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.5	CARBONDALE	ANNA	BLACK SHALE	1.5	17.5	
392.0	CARBONDALE	HERRIN	COAL	4.5	19.0	

MAPID: 16526203000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2200' S line, 1200' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573308 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.722655 **DATE COLLECTED:** 11 / 1 / 1979
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 62.5 **LOG TYPE:** Drillers Log
SOURCE: SAHARA COAL CO. 79-129 **WELL TYPE:** Water Well
COMMENT: PERMIT 90 (WITHDRAWN); MINE #20

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.0	PLEISTOCENE		CLAY	10.0	0.0	
425.0	CARBONDALE		SANDSTONE	8.0	10.0	CLAY CEMENT
417.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	18.0	BLACK & RED STAINS
413.7	CARBONDALE		CLAYSTONE	5.1	21.3	SOME LS FRAGS; POORLY INDURATED
408.6	CARBONDALE	ANVIL ROCK	SANDSTONE	3.1	26.4	FINE, CLAY MATRIZ
405.5	CARBONDALE	ANVIL ROCK	MICACEOUS SANDSTONE	15.5	29.5	MINOR CALCAREOUS, CARBONACEOUS, CEMENT
390.0	CARBONDALE		SANDSTONE/SHALE	5.0	45.0	
385.0	CARBONDALE		GRAY SHALE	2.1	50.0	
382.9	CARBONDALE	BRERETON	LIMESTONE	2.8	52.1	
380.2	CARBONDALE	ANNA	BLACK SHALE & LIMESTONE	1.8	54.8	PYRITE
378.4	CARBONDALE	HERRIN	COAL	5.1	56.6	
373.3	CARBONDALE		UNDERCLAY	0.8	61.7	

MAPID: 16500004302M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE SW NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.543304 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72161 **DATE COLLECTED:** 1 / 9 / 1907
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 6.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C, MINE # 9 **WELL TYPE:** Underground mine
COMMENT: SAMPLED 1000' N AND 200' E OF SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	6.8		
-	CARBONDALE		ROCK	-		

MAPID: 16500004300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 780' S line, 1240' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.544743 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718721 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 159.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C, MINE # 9 **WELL TYPE:** Underground mine
COMMENT: MANY SAMPLED AREAS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	152.0	0.0	
228.0	CARBONDALE	SPRINGFIELD	COAL	7.3	152.0	
220.7	CARBONDALE		ROCK	-	159.3	

MAPID: 16500327800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550352 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.719797 **DATE COLLECTED:** 0 / 0 / 1922
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-RHONDDA C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNKNOWN	0.0	0.0	

MAPID: 16500033000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.536767 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730216 **DATE COLLECTED:** 3 / 23 / 1909
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 218.4 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-RIEFKIN O'GARA C C MINE # 4 **WELL TYPE:** Underground mine
COMMENT: OTHER SAMPLE SECTIONS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			ROCK	213.2	0.0	
155.8			ROCK	-213.2	213.2	
-	CARBONDALE	SPRINGFIELD	COAL	5.2		
-	CARBONDALE		ROCK	-		

MAPID: 16500060803M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.525481 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717277 **DATE COLLECTED:** 8 / 24 / 1933
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 6.1 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAHARA C C, MINE # 3 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	6.1		

MAPID: 16500098900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53353 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718304 **DATE COLLECTED:** 0 / 0 / 1978
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 25.5 **LOG TYPE:**
SOURCE: MINE NOTES-NELSON A & G C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	15.0	0.0	
355.0			ROCK	5.0	15.0	
350.0	CARBONDALE	HERRIN	COAL	5.5	20.0	

MAPID: 16503051000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534466 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.730182 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1440.0 **LOG TYPE:** Electric Log
SOURCE: GOAD E E **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-40.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	402.0	
-106.0	SPOON	DAVIS	UNCLASSIFIED	-	468.0	
-1078.0	BASE OF PENN.		UNCLASSIFIED	-	1440.0	

MAPID: 16503051000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534466 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.730182 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2300.0 **LOG TYPE:**
SOURCE: GOAD E E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1226.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1588.0	
-1617.0			LIMESTONE	-	1979.0	
-1938.0		BASE BARLOW	LIMESTONE	-	2300.0	

MAPID: 16503051000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534466 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.730182 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2621.0 **LOG TYPE:** Electric Log
SOURCE: GOAD E E, PARKER F P 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
97.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	265.0	
49.0	CARBONDALE	SURVANT	COAL	0.8	313.0	
-40.0	CARBONDALE	COLCHESTER	COAL	0.5	402.0	
-78.0	CARBONDALE	DEKOVEN	COAL	3.0	440.0	
-83.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	445.0	
-106.0	CARBONDALE	DAVIS	COAL	4.0	468.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-163.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	525.0	
-210.0	TRADEWATER	MT. RORAH	COAL	3.0	572.0	

MAPID: 165273A0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.535216 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720609 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WELLER **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		
-	CARBONDALE		ROCK	-		

MAPID: 16500276000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.504528 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.730654 **DATE COLLECTED:** 9 / 0 / 1905
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 166.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #9 **WELL TYPE:** Coal Test
COMMENT: HOFMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.0			UNCONSOLIDATED	57.0	0.0	
294.0	CARBONDALE		SANDY SHALE	45.0	57.0	
249.0	CARBONDALE	BRIAR HILL	COAL	1.0	102.0	
248.0	CARBONDALE		UNDERCLAY	3.0	103.0	
245.0	CARBONDALE		SANDY SHALE	27.0	106.0	
218.0	CARBONDALE		SHALE	9.0	133.0	
209.0	CARBONDALE		BLACK SHALE	4.0	142.0	
205.0	CARBONDALE		BLACK SHALE	15.0	146.0	
190.0	CARBONDALE	SPRINGFIELD	COAL	5.5	161.0	
184.5	CARBONDALE		UNDERCLAY	0.0	166.5	

MAPID: 16500276000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.504528 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730654 **DATE COLLECTED:** 9 / 0 / 1905
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 166.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.0			UNCONSOLIDATED	57.0	0.0	
294.0			ROCK	45.0	57.0	
249.0			COAL	1.0	102.0	
248.0			ROCK	58.0	103.0	
190.0	CARBONDALE	SPRINGFIELD	COAL	5.5	161.0	

MAPID: 16500277000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 350' N line, 40' W line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512747 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.730047 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 467.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
347.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	25.0	25.0	
305.0	CARBONDALE	HERRIN	COAL	4.5	67.0	
296.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	20.0	76.0	
234.0	CARBONDALE	BRIAR HILL	COAL	1.0	138.0	
181.0	CARBONDALE	SPRINGFIELD	COAL	4.5	191.0	
104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	268.0	

MAPID: 16500277000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 350' N line, 40' W line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512747 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.730047 **DATE COLLECTED:** 8 / 1 / 1923

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 467.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	25.0	0.0	
347.0			ROCK	41.8	25.0	
305.2	CARBONDALE	HERRIN	COAL	4.5	66.8	
300.7	CARBONDALE		ROCK	67.2	71.3	
233.5	CARBONDALE	BRIAR HILL	COAL	1.0	138.5	
232.5	CARBONDALE		ROCK	51.3	139.5	
181.2	CARBONDALE	SPRINGFIELD	COAL	4.5	190.8	
176.7	CARBONDALE		ROCK	73.2	195.3	
103.5	CARBONDALE		COAL	2.0	268.5	
101.5	CARBONDALE		ROCK	44.8	270.5	
56.7	CARBONDALE		COAL	1.0	315.3	
55.7	CARBONDALE		ROCK	5.7	316.3	
50.0	CARBONDALE		COAL	1.0	322.0	
49.0	CARBONDALE		ROCK	57.0	323.0	
-8.0	CARBONDALE		COAL	0.7	380.0	
-8.7	CARBONDALE		ROCK	33.8	380.7	
-42.5	CARBONDALE		COAL	1.5	414.5	
-44.0	CARBONDALE		ROCK	9.0	416.0	
-53.0	CARBONDALE		COAL	1.0	425.0	
-54.0	CARBONDALE		ROCK	19.0	426.0	
-73.0	CARBONDALE	COLCHESTER	COAL	2.8	445.0	
-75.8	CARBONDALE		ROCK	19.2	447.8	

MAPID: 16500277000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 350' N line, 40' W line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512747 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.730047 **DATE COLLECTED:** 8 / 1 / 1923

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 467.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			SOIL	5.0	0.0	
357.0			CLAY	7.0	5.0	
350.0			SAND/CLAY	13.0	12.0	
337.0	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	25.0	
312.0	CARBONDALE		SHALE	6.0	50.0	
306.0	CARBONDALE		SHALE	1.0	56.0	
305.0	CARBONDALE	CONANT	LIMESTONE	2.0	57.0	
303.0	CARBONDALE		BLACK SHALE	1.0	59.0	
302.0	CARBONDALE	BRERETON	LIMESTONE	5.5	60.0	
296.5	CARBONDALE	ANNA	BLACK SHALE	1.3	65.5	
295.2	CARBONDALE	HERRIN	COAL	4.5	66.8	
290.7	CARBONDALE		UNDERCLAY	4.7	71.3	W/ SH
286.0	CARBONDALE		SANDSTONE	20.0	76.0	
266.0	CARBONDALE		SANDY SHALE	20.0	96.0	
246.0	CARBONDALE		SHALE	22.5	116.0	
223.5	CARBONDALE	BRIAR HILL	COAL	1.0	138.5	
222.5	CARBONDALE		SANDY SHALE	18.0	139.5	
204.5	CARBONDALE		SHALE	12.0	157.5	
192.5	CARBONDALE		BLACK SHALE	2.0	169.5	
190.5	CARBONDALE		SHALE	19.3	171.5	
171.2	CARBONDALE	SPRINGFIELD	COAL	4.5	190.8	
166.7	CARBONDALE		UNDERCLAY	0.5	195.3	
166.2	CARBONDALE		CLAYSTONE & LIMESTONE	3.7	195.8	FIRECLAY & LS
162.5	CARBONDALE		SANDY SHALE	14.5	199.5	
148.0	CARBONDALE		SHALE	48.5	214.0	
99.5	CARBONDALE	EXCELLO	BLACK SHALE	6.0	262.5	
93.5	CARBONDALE	HOUCHIN CREEK	COAL	2.0	268.5	
91.5	CARBONDALE		UNDERCLAY	2.0	270.5	
89.5	CARBONDALE		SANDSTONE	2.0	272.5	
87.5	CARBONDALE		SANDY SHALE	19.0	274.5	
68.5	CARBONDALE		SHALE	21.8	293.5	
46.7	CARBONDALE	SURVANT - UPPER	COAL	1.0	315.3	
45.7	CARBONDALE		SHALE	1.7	316.3	
44.0	CARBONDALE		SHALE	4.0	318.0	
40.0	CARBONDALE	SURVANT - LOWER	COAL	1.0	322.0	
39.0	CARBONDALE		SANDY SHALE	18.0	323.0	
21.0	CARBONDALE		BLACK SHALE	5.0	341.0	
16.0	CARBONDALE		LIMESTONE	2.0	346.0	

14.0	CARBONDALE		SHALE	6.0	348.0
8.0	CARBONDALE		SHALE	25.0	354.0
-17.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	379.0
-18.0	CARBONDALE	COLCHESTER	COAL	0.7	380.0
-18.7	SPOON		SHALE	10.8	380.7
-29.5	SPOON		CALCAREOUS SHALE	3.5	391.5
-33.0	SPOON		LIMESTONE	3.0	395.0
-36.0	SPOON		SANDSTONE	10.0	398.0
-46.0	SPOON		SANDY SHALE	3.0	408.0
-49.0	SPOON		SHALE	3.5	411.0
-52.5	SPOON	DEKOVEN	COAL	1.5	414.5
-54.0	SPOON		CALCAREOUS SHALE	2.0	416.0
-56.0	SPOON		SHALE	7.0	418.0
-63.0	SPOON	LOWER DEKOVEN	COAL	1.0	425.0
-64.0	SPOON		SANDY SHALE	9.0	426.0
-73.0	SPOON		SHALE	4.0	435.0
-77.0	SPOON		BLACK SHALE	6.0	439.0
-83.0	SPOON	DAVIS	COAL	2.8	445.0
-85.8	SPOON		UNDERCLAY	2.2	447.8
-88.0	SPOON		SANDSTONE	17.0	450.0

MAPID: 16500277000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** 350' N line, 40' W line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512747 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.730047 **DATE COLLECTED:** 8 / 0 / 1923

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 445.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	380.0	
-73.0	SPOON	DAVIS	UNCLASSIFIED	-	445.0	

MAPID: 16500278000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.511257 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.726928 **DATE COLLECTED:** 9 / 0 / 1905
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 152.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	18.0	0.0	
344.0			ROCK	8.0	18.0	
336.0	CARBONDALE	HERRIN	COAL	5.0	26.0	
331.0	CARBONDALE		ROCK	65.0	31.0	
266.0	CARBONDALE	BRIAR HILL	COAL	2.0	96.0	
264.0	CARBONDALE		ROCK	49.0	98.0	
215.0	CARBONDALE	SPRINGFIELD	COAL	5.0	147.0	

MAPID: 16500278000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.511257 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.726928 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 31.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
344.0	CARBONDALE	BRERETON	LIMESTONE	8.0	18.0	
336.0	CARBONDALE	HERRIN	COAL	5.0	26.0	

MAPID: 16500278000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.511257 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726928 **DATE COLLECTED:** 9 / 0 / 1905
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 152.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #8 **WELL TYPE:** Coal Test
COMMENT: HOFMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	18.0	0.0	
344.0	CARBONDALE	BRERETON	LIMESTONE	8.0	18.0	
336.0	CARBONDALE	HERRIN	COAL	5.0	26.0	
331.0	CARBONDALE		UNDERCLAY	2.0	31.0	
329.0	CARBONDALE		SANDSTONE	38.0	33.0	
291.0	CARBONDALE		SHALE	25.0	71.0	
266.0	CARBONDALE	BRIAR HILL	COAL	2.0	96.0	
264.0	CARBONDALE		UNDERCLAY	1.0	98.0	
263.0	CARBONDALE		SANDY SHALE	28.0	99.0	
235.0	CARBONDALE		BLACK SHALE	4.0	127.0	
231.0	CARBONDALE		SANDY SHALE	16.0	131.0	
215.0	CARBONDALE	SPRINGFIELD	COAL	5.0	147.0	
210.0	CARBONDALE		UNDERCLAY	0.0	152.0	T.D.

MAPID: 16500279000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505218 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.717431 **DATE COLLECTED:** 11 / 0 / 1910
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: C.V.PARKER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			SOIL	40.0	0.0	
322.0			SILT & SAND	36.0	40.0	
286.0	CARBONDALE		SANDSTONE	2.0	76.0	
284.0	CARBONDALE		BLACK SHALE	2.0	78.0	
282.0	CARBONDALE		SHALE	13.5	80.0	
268.5	CARBONDALE	SPRINGFIELD	COAL	5.5	93.5	
263.0	CARBONDALE		UNDERCLAY	2.0	99.0	
261.0	CARBONDALE		SHALE	2.0	101.0	
259.0	CARBONDALE		SANDSTONE	1.0	103.0	

MAPID: 16500279000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505218 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717431 **DATE COLLECTED:** 11 / 0 / 1910
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	76.0	0.0	
286.0			ROCK	17.5	76.0	
268.5			COAL	5.5	93.5	
263.0			ROCK	5.0	99.0	

MAPID: 16500327900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505182 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721078 **DATE COLLECTED:** 0 / 0 / 1934
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE INDEX-WILSON & LANE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500280000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.503421 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727026 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	90.0	0.0	
270.0			ROCK	45.3	90.0	
224.7	CARBONDALE	SPRINGFIELD	COAL	2.2	135.3	
222.5			ROCK	80.0	137.5	
142.5			COAL	1.5	217.5	

MAPID: 16500280000C **VERSION:** 2 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.503421 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727026 **DATE COLLECTED:** 8 / 0 / 1905
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #7 **WELL TYPE:** Coal Test
COMMENT: BEN DOOLY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	90.0	0.0	
270.0	CARBONDALE		SANDSTONE	6.0	90.0	
264.0	CARBONDALE		SANDY SHALE	21.0	96.0	
243.0	CARBONDALE		BLACK SHALE	3.0	117.0	
240.0	CARBONDALE		UNDERCLAY	1.0	120.0	
239.0	CARBONDALE		SANDY SHALE	12.0	121.0	
227.0	CARBONDALE		BLACK SHALE	2.3	133.0	
224.7	CARBONDALE	SPRINGFIELD	COAL	2.2	135.3	
222.5	CARBONDALE		UNDERCLAY	4.0	137.5	
218.5	CARBONDALE		SANDSTONE	24.0	141.5	
194.5	CARBONDALE		SHALE	47.0	165.5	
147.5	CARBONDALE		BLACK SHALE	5.0	212.5	
142.5	CARBONDALE		COAL W/ BLACK SHALE	1.5	217.5	
141.0	CARBONDALE		UNDERCLAY	0.0	219.0	T.D.

MAPID: 16500281000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.492901 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724463 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 138.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #10 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			UNCONSOLIDATED	96.0	0.0	
262.0	CARBONDALE		SANDY SHALE	20.0	96.0	
242.0	CARBONDALE		BLACK SHALE	1.0	116.0	
241.0	CARBONDALE		BLACK SHALE	1.0	117.0	
240.0	CARBONDALE		BLACK SHALE	3.0	118.0	
237.0	CARBONDALE		SHALE	13.0	121.0	
224.0	CARBONDALE	SPRINGFIELD	COAL	4.9	134.0	
219.1	CARBONDALE		UNDERCLAY	0.0	138.9	

MAPID: 16500281000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.492901 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724463 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			UNCONSOLIDATED	96.0	0.0	
262.0			ROCK	38.0	96.0	
224.0			COAL	4.9	134.0	
219.1			ROCK	-	138.9	

MAPID: 16502830000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.495871 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.717543 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1402.0 **LOG TYPE:** Electric Log
SOURCE: BRUER & ROBINSON OIL **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
64.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	292.0	
-29.0	SPOON	DAVIS	UNCLASSIFIED	-	385.0	
-1046.0	BASE OF PENN.		UNCLASSIFIED	-	1402.0	

MAPID: 16502830000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.495871 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.717543 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2254.0 **LOG TYPE:**
SOURCE: BRUER & ROBINSON OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1184.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1540.0	
-1514.0			LIMESTONE	-	1870.0	
-1898.0		BASE BARLOW	LIMESTONE	-	2254.0	

MAPID: 16502830000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.495871 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.717543 **DATE COLLECTED:** 3 / 0 / 1956

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2689.0 **LOG TYPE:** Electric Log

SOURCE: BRUER & ROBINSON OIL, LARGENT-PARKER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
180.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	176.0	
136.0	CARBONDALE	SURVANT	COAL	0.5	220.0	
63.0	CARBONDALE	COLCHESTER	COAL	0.5	293.0	
-4.0	CARBONDALE	DEKOVEN	COAL	3.0	360.0	
-4.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	360.0	
-28.0	CARBONDALE	DAVIS	COAL	4.0	384.0	
-84.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	440.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-92.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	448.0	
-124.0	TRADEWATER	MT. RORAH	COAL	2.0	480.0	

MAPID: 16503726000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 780' S line, 10' W line of NW SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.504032 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.72051 **DATE COLLECTED:** 12 / 21 / 1971

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 392.0 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 28-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			CLAY	35.0	0.0	
326.0			SAND	5.0	35.0	
321.0			CLAY	45.0	40.0	
276.0	CARBONDALE		SHALE	7.0	85.0	
269.0	CARBONDALE	SPRINGFIELD	COAL	4.5	92.0	
264.5	CARBONDALE		SHALE	4.5	96.5	
260.0	CARBONDALE		SANDSTONE	34.0	101.0	
226.0	CARBONDALE		SANDY SHALE	45.0	135.0	LOG IN ERROR. DEPTHS DO DONT MATCH.
181.0	CARBONDALE	EXCELLO	BLACK SHALE	6.0	180.0	
175.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	186.0	
173.5	CARBONDALE		SANDY SHALE	67.5	187.5	
106.0	CARBONDALE		SANDY SHALE	47.0	255.0	WITH SS BANDS
59.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	302.0	
57.0	SPOON		SANDSTONE	52.0	304.0	
5.0	SPOON		DARK SHALE	8.0	356.0	
-3.0	SPOON	DEKOVEN	COAL	3.0	364.0	
-6.0	SPOON		SANDSTONE	17.0	367.0	WITH SOME SDY SH
-23.0	SPOON		BLACK SHALE	3.0	384.0	
-26.0	SPOON	DAVIS	COAL	4.0	387.0	
-30.0	SPOON		UNDERCLAY	1.0	391.0	

MAPID: 16503760000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2640' S line, 10' W line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.503967 **GEOLOGIST:** MORGAN

CONFIDENTIAL: N **LATITUDE:** 37.727467 **DATE COLLECTED:** 1 / 15 / 1971

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 432.0 **LOG TYPE:** Drillers Log

SOURCE: PIAMCO INC. (SOMERSET) **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0			UNCONSOLIDATED	94.0	0.0	
270.0			SHALE	3.0	94.0	
267.0			COAL	1.5	97.0	
265.5			SHALE	37.5	98.5	SANDY
228.0			SHALE	2.0	136.0	BLACK
226.0			SHALE	15.0	138.0	
211.0			COAL	3.0	153.0	
208.0			LIMESTONE	24.0	156.0	
184.0			SHALE	46.0	180.0	SANDY
138.0			SHALE	4.0	226.0	BLACK
134.0			COAL	2.0	230.0	
132.0			SANDSTONE	18.0	232.0	
114.0			SHALE	54.0	250.0	
60.0			SHALE	36.0	304.0	SANDY
24.0			SHALE	2.0	340.0	BLACK AND COAL
22.0			LIMESTONE	56.0	342.0	
-34.0			SHALE	1.5	398.0	
-35.5			COAL	3.0	399.5	
-38.5			SHALE	9.5	402.5	
-48.0			SANDSTONE	8.0	412.0	
-56.0			SHALE	7.8	420.0	BLACK
-63.8	CARBONDALE	DAVIS	COAL	3.8	427.8	
-67.6	CARBONDALE		SHALE	0.4	431.6	

MAPID: 16503761000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2640' N line, 15' E line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485372 **GEOLOGIST:** MORGAN

CONFIDENTIAL: N **LATITUDE:** 37.720523 **DATE COLLECTED:** 2 / 11 / 1971

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 411.0 **LOG TYPE:** Drillers Log

SOURCE: PIAMCO INC. (SOMERSET) **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	99.0	0.0	
266.0			SHALE	28.0	99.0	
238.0	CARBONDALE	SPRINGFIELD	COAL	4.0	127.0	
234.0	CARBONDALE		SANDSTONE	24.0	131.0	
210.0	CARBONDALE		SHALE	53.0	155.0	
157.0	CARBONDALE		COAL	7.0	208.0	SHY AND BK BONE
150.0	CARBONDALE		SANDSTONE	26.0	215.0	
124.0	CARBONDALE		SHALE	44.0	241.0	
80.0	CARBONDALE		SANDSTONE	9.0	285.0	
71.0	CARBONDALE		SHALE	41.0	294.0	
30.0	CARBONDALE		LIMESTONE	43.0	335.0	
-13.0	CARBONDALE		SHALE	5.0	378.0	DK
-18.0	CARBONDALE	DEKOVEN	COAL	3.0	383.0	
-21.0	CARBONDALE		SHALE	4.0	386.0	
-25.0	CARBONDALE		SANDSTONE	8.0	390.0	
-33.0	CARBONDALE		SHALE	8.0	398.0	BK
-41.0	CARBONDALE	DAVIS	COAL	3.9	406.0	
-44.9	CARBONDALE		UNDERCLAY	1.1	409.9	

MAPID: 16526204000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485154 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.723914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.5 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO./WILLARD G. CORP. WG-17-88 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.5	PLEISTOCENE		SOIL	4.0	0.0	SILTY CLAY
359.5	PLEISTOCENE		CLAY	8.0	4.0	
351.5			SILTY CLAYSTONE	41.0	12.0	
310.5			SMUT	1.0	53.0	COAL, SOFT
309.5			SANDSTONE	5.0	54.0	SOFT
304.5			SILTY CLAYSTONE	43.0	59.0	
261.5			GRAY SHALE	6.0	102.0	
255.5			BLACK SHALE	2.5	108.0	
253.0			UNDERCLAY	7.5	110.5	
245.5			SANDY SHALE	82.0	118.0	

MAPID: 16500282000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49064 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.714399 **DATE COLLECTED:** 9 / 27 / 1906
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 165.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #11 **WELL TYPE:** Coal Test
COMMENT: W.S.BLACKMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCONSOLIDATED	78.0	0.0	
277.0			CLAY	21.0	78.0	
256.0	CARBONDALE	SPRINGFIELD	COAL	1.2	99.0	TOP ERODED
254.8	CARBONDALE		SANDSTONE	33.0	100.2	
221.8	CARBONDALE		SHALE	25.0	133.2	
196.8	CARBONDALE	EXCELLO	BLACK SHALE	5.6	158.2	
191.2	CARBONDALE	HOUCHIN CREEK	COAL	2.0	163.8	
189.2	CARBONDALE		UNDERCLAY	0.0	165.8	

MAPID: 16500282000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49064 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714399 **DATE COLLECTED:** 9 / 27 / 1905
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 165.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCONSOLIDATED	78.0	0.0	
277.0			ROCK	99.0	78.0	
178.0			COAL	1.2	177.0	
176.8			ROCK	63.6	178.2	
113.2			COAL	2.0	241.8	
111.2			ROCK	-	243.8	

MAPID: 16500849000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49588 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.713885 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2221.0 **LOG TYPE:**
SOURCE: WILLIAMS J H ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1152.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1510.0	
-1487.0			LIMESTONE	-	1845.0	
-1863.0		BASE BARLOW	LIMESTONE	-	2221.0	

MAPID: 16502744000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498268 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.713862 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 1340.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
69.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	280.0	
-23.0	SPOON	DAVIS	UNCLASSIFIED	-	372.0	
-991.0	BASE OF PENN.		UNCLASSIFIED	-	1340.0	

MAPID: 16502744000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498268 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.713862 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2219.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1149.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1511.0	
-1478.0			LIMESTONE	-	1840.0	
-1857.0		BASE BARLOW	LIMESTONE	-	2219.0	

MAPID: 16502744000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498268 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.713862 **DATE COLLECTED:** 12 / 0 / 1955
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2744.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., MCCARTY W R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
184.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	165.0	
139.0	CARBONDALE	SURVANT	COAL	0.8	210.0	
69.0	CARBONDALE	COLCHESTER	COAL	0.5	280.0	
2.0	CARBONDALE	DEKOVEN	COAL	3.0	347.0	
2.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	347.0	
-24.0	CARBONDALE	DAVIS	COAL	4.0	373.0	
-83.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	432.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-91.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	440.0	
-123.0	TRADEWATER	MT. RORAH	COAL	1.8	472.0	

MAPID: 16502822000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 260' W line of NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.493833 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.713903 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2640.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., PARKER FRANK P **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	178.0	
159.0	CARBONDALE	SURVANT	COAL	1.2	223.0	
90.0	CARBONDALE	COLCHESTER	COAL	0.5	292.0	
27.0	CARBONDALE	DEKOVEN	COAL	3.0	355.0	
27.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	355.0	
8.0	CARBONDALE	DAVIS	COAL	4.0	374.0	
-56.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	438.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-62.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	444.0	
-98.0	TRADEWATER	MT. RORAH	COAL	1.2	480.0	

MAPID: 16502822000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 260' W line of NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.493833 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.713903 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2236.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1150.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1532.0	
-1485.0			LIMESTONE	-	1867.0	
-1854.0		BASE BARLOW	LIMESTONE	-	2236.0	

MAPID: 16502930000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.495885 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.712063 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2670.0 **LOG TYPE:** Electric Log
SOURCE: BREVER-ROBISON OIL CO., LEDFORD MED **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	160.0	
153.0	CARBONDALE	SURVANT	COAL	2.0	205.0	
83.0	CARBONDALE	COLCHESTER	COAL	0.5	275.0	
23.0	CARBONDALE	DEKOVEN	COAL	3.0	335.0	
23.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	335.0	
3.0	CARBONDALE	DAVIS	COAL	4.0	355.0	
-62.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	420.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-67.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	425.0	
-102.0	TRADEWATER	MT. RORAH	COAL	1.8	460.0	

MAPID: 16502930000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.495885 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.712063 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2224.0 **LOG TYPE:**
SOURCE: BREVER-ROBISON OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1144.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1517.0	
-1476.0			LIMESTONE	-	1849.0	
-1851.0		BASE BARLOW	LIMESTONE	-	2224.0	

MAPID: 16503006000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.502924 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.708356 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2552.0 **LOG TYPE:** Electric Log
SOURCE: MCCONNELL, M. W., HALL V E ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	118.0	
194.0	CARBONDALE	SURVANT	COAL	2.0	169.0	
129.0	CARBONDALE	COLCHESTER	COAL	0.5	234.0	
63.0	CARBONDALE	DEKOVEN	COAL	3.0	300.0	
63.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	300.0	
38.0	CARBONDALE	DAVIS	COAL	3.0	325.0	
-12.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	375.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-22.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	385.0	
-57.0	TRADEWATER	MT. RORAH	COAL	1.3	420.0	

MAPID: 16503006000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.502924 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.708356 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2189.0 **LOG TYPE:**
SOURCE: MCCONNELL, M. W. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
249.0	CARBONDALE	BRERETON	LIMESTONE	-	114.0	
-1119.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1482.0	
-1461.0			LIMESTONE	-	1824.0	
-1826.0		BASE BARLOW	LIMESTONE	-	2189.0	

MAPID: 16503707000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 520' S line, 2660' W line of SW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485508 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.703438 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 306.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 14-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	146.5	
139.0	CARBONDALE	COLCHESTER	COAL	0.0	216.0	
86.0	CARBONDALE	DEKOVEN	COAL	3.0	269.0	
86.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	269.0	
56.8	CARBONDALE	DAVIS	COAL	4.1	298.2	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503707000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 520' S line, 2660' W line of SW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485508 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.703438 **DATE COLLECTED:** 12 / 7 / 1971
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 14-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			CLAY	20.0	0.0	
335.0			CLAY	26.0	20.0	ADJUSTED THICKNESS +20FT TO MATCH LOG
309.0	CARBONDALE		SANDY SHALE	44.0	46.0	
265.0	CARBONDALE		SANDSTONE	35.0	90.0	
230.0	CARBONDALE		SHALE	21.5	125.0	
208.5	CARBONDALE	SURVANT	COAL	1.5	146.5	
207.0	CARBONDALE		SANDY SHALE	68.0	148.0	
139.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	216.0	BLACK, BONEY SHALE
137.0	SPOON		SHALE	4.0	218.0	
133.0	SPOON		SANDSTONE	47.0	222.0	
86.0	SPOON	DEKOVEN	COAL	3.0	269.0	
83.0	SPOON		UNDERCLAY	2.5	272.0	WITH SH MIXED
80.5	SPOON		GRAY SHALE	9.5	274.5	
71.0	SPOON		GRAY SANDSTONE	0.7	284.0	
70.3	SPOON		DARK GRAY SHALE	7.8	284.7	
62.5	SPOON		GRAY SANDSTONE	3.8	292.5	
58.8	SPOON		DARK GRAY SHALE	1.9	296.2	
56.8	SPOON	DAVIS	COAL	4.1	298.2	
52.7	SPOON		DARK GRAY SHALE	2.7	302.3	
50.0	SPOON		GRAY SILTSTONE	1.0	305.0	

MAPID: 16503708000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' N line, 2500' W line of NE NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.488389 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.715067 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 369.7 **LOG TYPE:**

SOURCE: JOHN T. BOYD 18-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	165.0	
149.0	CARBONDALE	SURVANT	COAL	1.0	209.0	
17.0	CARBONDALE	DEKOVEN	COAL	3.4	341.0	
17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	341.0	
-5.4	CARBONDALE	DAVIS	COAL	4.1	363.4	1% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503708000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 600' N line, 2500' W line of NE NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.488389 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.715067 **DATE COLLECTED:** 12 / 1 / 1971

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 369.7 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 18-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			CLAY	35.0	0.0	
323.0			CLAY	5.0	35.0	
318.0			SAND	10.0	40.0	
308.0			CLAY	36.0	50.0	
272.0	CARBONDALE	SPRINGFIELD	COAL	4.0	86.0	
268.0	CARBONDALE		SHALE	7.0	90.0	
261.0	CARBONDALE		SANDSTONE	27.0	97.0	
234.0	CARBONDALE		SANDY SHALE	38.0	124.0	
196.0	CARBONDALE	EXCELLO	BLACK SHALE	3.0	162.0	
193.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	165.0	
191.5	CARBONDALE		SANDSTONE	14.5	166.5	
177.0	CARBONDALE		SHALE	28.0	181.0	
149.0	CARBONDALE	SURVANT	COAL	1.0	209.0	
148.0	CARBONDALE		SANDY SHALE	72.0	210.0	
76.0	CARBONDALE		SANDSTONE	52.0	282.0	
24.0	CARBONDALE		DARK SHALE	7.0	334.0	
17.0	SPOON	DEKOVEN	COAL	3.4	341.0	
13.6	SPOON		UNDERCLAY	1.6	344.4	
12.0	SPOON		GRAY SHALE	2.2	346.0	
9.8	SPOON		GRAY SANDSTONE	2.0	348.2	
7.8	SPOON		GRAY SHALE	9.6	350.2	
-1.8	SPOON		DARK GRAY SHALE	3.6	359.8	
-5.4	SPOON	DAVIS	COAL	4.1	363.4	
-9.5	SPOON		GRAY SILTSTONE	1.8	367.5	
-11.3	SPOON		GRAY SANDSTONE	0.4	369.3	

MAPID: 16503727000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 590' N line, 30' W line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.503995 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.714908 **DATE COLLECTED:** 12 / 17 / 1971

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: JOHN T. BOYD 26-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
214.0	CARBONDALE	HOUCHIN CREEK	COAL	0.0	148.0	
157.0	CARBONDALE	SURVANT	COAL	1.0	205.0	
34.5	CARBONDALE	DEKOVEN	COAL	3.0	327.5	
34.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	327.5	
2.5	CARBONDALE	DAVIS	COAL	4.0	359.5	

MAPID: 16503762000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** SW SW SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.499414 **GEOLOGIST:** MORGAN

CONFIDENTIAL: N **LATITUDE:** 37.712941 **DATE COLLECTED:** 9 / 3 / 1970

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 326.3 **LOG TYPE:** Drillers Log

SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			UNCONSOLIDATED	40.0	0.0	
318.0			SHALE	4.0	40.0	SOFT WITH SOOTY COAL AND CL
314.0			SANDSTONE/SHALE	67.0	44.0	INTERBEDDED
247.0			SHALE	3.0	111.0	BLACK
244.0			LIMESTONE	0.8	114.0	
243.3			SHALE	0.3	114.7	DARK GRAY
243.0			COAL	2.0	115.0	
241.0			UNDERCLAY	1.5	117.0	
239.5			SANDSTONE	11.5	118.5	
228.0			SHALE	34.5	130.0	
193.5			COAL	2.0	164.5	
191.5			SHALE	0.5	166.5	PARTING
191.0			COAL	1.5	167.0	
189.5			UNDERCLAY	0.5	168.5	
189.0			SHALE	1.0	169.0	
188.0			SANDSTONE	2.0	170.0	
186.0			SHALE	10.0	172.0	
176.0			LIMESTONE	4.0	182.0	WITH SOME SHALE
172.0			SHALE	4.0	186.0	
168.0			SANDSTONE	3.0	190.0	
165.0			SHALE	41.0	193.0	
124.0			SANDSTONE	60.0	234.0	
64.0			COAL	2.5	294.0	
61.5			SHALE	0.5	296.5	PARTING
61.0	CARBONDALE	DEKOVEN	COAL	2.0	297.0	
59.0	CARBONDALE		UNDERCLAY	0.5	299.0	
58.5	CARBONDALE		SHALE	4.5	299.5	
54.0	CARBONDALE		SANDSTONE	8.0	304.0	
46.0	CARBONDALE		SHALE	5.5	312.0	
40.5	CARBONDALE		SHALE	3.7	317.5	DARK
36.9	CARBONDALE	DAVIS	COAL	4.1	321.1	
32.8	CARBONDALE		UNDERCLAY	1.1	325.2	

MAPID: 16503763000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2600' S line, 2200' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49177 **GEOLOGIST:** MORGAN

CONFIDENTIAL: N **LATITUDE:** 37.712844 **DATE COLLECTED:** 12 / 17 / 1970

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 329.0 **LOG TYPE:** Drillers Log

SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			UNCONSOLIDATED	67.0	0.0	
291.0	CARBONDALE		SHALE	47.0	67.0	
244.0	CARBONDALE		COAL	6.0	114.0	BK, BONE
238.0	CARBONDALE		COAL	2.5	120.0	
235.5	CARBONDALE		SHALE	2.5	122.5	
233.0	CARBONDALE		SANDSTONE	20.0	125.0	
213.0	CARBONDALE		SHALE	26.5	145.0	
186.5	CARBONDALE		COAL	1.5	171.5	
185.0	CARBONDALE		SHALE	3.0	173.0	
182.0	CARBONDALE		COAL	1.0	176.0	
181.0	CARBONDALE		SHALE	64.0	177.0	WITH SS BANDS
117.0	CARBONDALE		COAL	1.0	241.0	
116.0	CARBONDALE		SHALE	3.0	242.0	
113.0	CARBONDALE		LIMESTONE	4.0	245.0	
109.0	CARBONDALE		SHALE	49.0	249.0	DARK
60.0	CARBONDALE	DEKOVEN	COAL	3.5	298.0	
56.5	CARBONDALE		SHALE	6.5	301.5	
50.0	CARBONDALE		SANDSTONE	10.0	308.0	
40.0	CARBONDALE		SHALE	6.2	318.0	
33.8	CARBONDALE	DAVIS	COAL	4.1	324.2	
29.7	CARBONDALE		UNDERCLAY	0.7	328.3	

MAPID: 16503764000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2610' N line, 10' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485467 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.705864 **DATE COLLECTED:** 2 / 1 / 1971
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 343.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			CLAY	40.0	0.0	
318.0			SAND	15.0	40.0	
303.0			CLAY	45.0	55.0	
258.0	CARBONDALE		SHALE	30.0	100.0	
228.0	CARBONDALE		SHALE	3.0	130.0	BLACK
225.0	CARBONDALE		COAL	2.5	133.0	
222.5	CARBONDALE		SANDSTONE	19.5	135.5	
203.0	CARBONDALE		SHALE	27.0	155.0	
176.0	CARBONDALE		COAL	1.0	182.0	AND SH
175.0	CARBONDALE		SHALE	8.0	183.0	
167.0	CARBONDALE		COAL	2.0	191.0	
165.0	CARBONDALE		SHALE	52.0	193.0	SANDY WITH SS BANDS
113.0	CARBONDALE		LIMESTONE	66.0	245.0	
47.0	CARBONDALE		SHALE	1.0	311.0	
46.0	CARBONDALE	DEKOVEN	COAL	3.0	312.0	
43.0	CARBONDALE		SANDSTONE	10.0	315.0	
33.0	CARBONDALE		SHALE	12.8	325.0	DARK
20.2	CARBONDALE	DAVIS	COAL	4.0	337.8	
16.2	CARBONDALE		UNDERCLAY	1.2	341.8	

MAPID: 16500283000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512515 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.715979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	SPRINGFIELD	COAL	5.3	81.0	

MAPID: 16500283000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512515 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 86.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	67.0	0.0	
298.0			COAL	1.4	67.0	
296.6			ROCK	13.0	68.4	
283.6	CARBONDALE	SPRINGFIELD	COAL	5.3	81.4	

MAPID: 16500283000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512515 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.715979 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 86.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #12 **WELL TYPE:** Coal Test
COMMENT: W.BAKER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	30.0	0.0	
335.0			CLAY	37.0	30.0	
298.0	CARBONDALE		COAL W/ BLACK SHALE	1.4	67.0	
296.6	CARBONDALE	DYKERSBURG	SHALE	13.0	68.4	
283.6	CARBONDALE	SPRINGFIELD	COAL	5.3	81.4	
278.2	CARBONDALE		UNDERCLAY	0.0	86.8	T.D.

MAPID: 16500328100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.518195 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70509 **DATE COLLECTED:** 0 / 0 / 1962
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-BLACKDOT C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	0.0		

MAPID: 16500328200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 350' S line, 400' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.520713 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710095 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-INGRAM MINE **WELL TYPE:** Underground mine
COMMENT: DRIFT MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	327.0	0.0	
53.0			COAL	5.0	327.0	

MAPID: 16502905000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50524 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.713796 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1400.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
105.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	260.0	
19.0	SPOON	DAVIS	UNCLASSIFIED	-	346.0	
-1035.0	BASE OF PENN.		UNCLASSIFIED	-	1400.0	

MAPID: 16502905000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50524 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.713796 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2220.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1140.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1505.0	
-1484.0			LIMESTONE	-	1849.0	
-1855.0		BASE BARLOW	LIMESTONE	-	2220.0	

MAPID: 16502905000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50524 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.713796 **DATE COLLECTED:** 4 / 0 / 1956
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2703.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., ENDSLEY JOHN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	145.0	
175.0	CARBONDALE	SURVANT	COAL	1.4	190.0	
105.0	CARBONDALE	COLCHESTER	COAL	0.5	260.0	
43.0	CARBONDALE	DEKOVEN	COAL	3.0	322.0	
43.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	322.0	
19.0	CARBONDALE	DAVIS	COAL	4.0	346.0	
-44.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	409.0	70% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-50.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	415.0	
-85.0	TRADEWATER	MT. RORAH	COAL	1.2	450.0	

MAPID: 16503572000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.517648 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.701938 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 292.1 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3317 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.9	CARBONDALE	HOUCHIN CREEK	COAL	1.9	82.1	
233.4	CARBONDALE	SURVANT	COAL	2.6	136.6	
164.6	CARBONDALE	COLCHESTER	COAL	0.3	205.4	
105.3	CARBONDALE	DEKOVEN	COAL	3.4	264.7	
105.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	264.7	
83.4	CARBONDALE	DAVIS	COAL	4.0	286.6	31% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503572000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SE SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.517648 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.701938 **DATE COLLECTED:** 4 / 26 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 292.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3317 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-6872 (SE/c SE-SW-SW)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	20.0	0.0	SURFACE EARTH AND CLAY
-	CARBONDALE		SANDSTONE	4.5	20.0	
-	CARBONDALE		GRAY SANDSTONE	11.5	24.5	
-	CARBONDALE		GRAY SHALE	41.6	36.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	0.9	77.6	
-	CARBONDALE	EXCELLO	BLACK SHALE	1.2	78.5	
-	CARBONDALE	EXCELLO	BLACK SHALE	2.4	79.7	
-	CARBONDALE	HOUCHIN CREEK	COAL	1.9	82.1	
-	CARBONDALE		UNDERCLAY	1.5	84.0	
-	CARBONDALE		LIMESTONE	6.7	85.5	
-	CARBONDALE		GRAY SHALE	2.1	92.2	
-	CARBONDALE		GRAY SANDSTONE	8.7	94.3	
-	CARBONDALE		GRAY SHALE	33.7	103.0	
-	CARBONDALE	SURVANT	COAL	2.6	136.7	
-	CARBONDALE		GRAY SHALE	16.0	139.3	
-	CARBONDALE		LIMESTONE	1.6	155.3	
-	CARBONDALE		GRAY SHALE	45.9	156.8	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.7	202.7	
-	CARBONDALE	COLCHESTER	COAL	0.4	205.4	
-	SPOON		UNDERCLAY	4.3	205.8	
-	SPOON		LIMESTONE	2.1	210.1	
-	SPOON		LIMESTONE	5.6	212.2	LIMESTONE WITH SHALE STREAKS
-	SPOON		GRAY SANDSTONE	44.8	217.8	
-	SPOON		GRAY SHALE	2.2	262.5	
-	SPOON	DEKOVEN	COAL	3.5	264.7	
-	SPOON		GRAY SHALE	1.6	268.2	
-	SPOON		GRAY SANDSTONE	5.8	269.8	
-	SPOON		GRAY SHALE	11.0	275.5	
-	SPOON		UNCLASSIFIED	0.1	286.5	PYRITE BAND
-	SPOON	DAVIS	COAL	4.0	286.6	
-	SPOON		UNDERCLAY	1.5	290.6	

MAPID: 16503682000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.518171 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708698 **DATE COLLECTED:** 12 / 20 / 1971
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.0	0.0	
372.0			ROCK	40.0	18.0	
332.0			COAL	5.0	58.0	
327.0			ROCK	22.0	63.0	

MAPID: 16503765000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 10' S line, 1350' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.51296 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.701981 **DATE COLLECTED:** 2 / 23 / 1971
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 296.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			CLAY	23.0	0.0	
347.0	CARBONDALE		SANDSTONE	23.0	23.0	
324.0	CARBONDALE		SHALE	34.0	46.0	
290.0	CARBONDALE		SHALE	6.0	80.0	BLACK
284.0	CARBONDALE		COAL	1.5	86.0	
282.5	CARBONDALE		SHALE	1.5	87.5	
281.0	CARBONDALE		SANDSTONE	19.0	89.0	
262.0	CARBONDALE		SHALE	34.0	108.0	
228.0	CARBONDALE		COAL	1.0	142.0	
227.0	CARBONDALE		SHALE	65.0	143.0	SANDY WITH SS BANDS
162.0	CARBONDALE		SHALE	2.0	208.0	BLACK, COAL
160.0	CARBONDALE		LIMESTONE	56.0	210.0	
104.0	CARBONDALE		SHALE	2.5	266.0	DARK
101.5	CARBONDALE	DEKOVEN	COAL	3.0	268.5	
98.5	CARBONDALE		SANDSTONE	10.5	271.5	
88.0	CARBONDALE		SHALE	9.6	282.0	DARK
78.4	CARBONDALE	DAVIS	COAL	3.7	291.6	
74.7	CARBONDALE		UNDERCLAY	0.7	295.3	

MAPID: 16503766000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** 175' S line, 1340' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.513235 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.702436 **DATE COLLECTED:** 12 / 19 / 1970
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			CLAY	21.0	0.0	
351.0	CARBONDALE		SANDSTONE	29.0	21.0	
322.0	CARBONDALE		SHALE	41.0	50.0	
281.0	CARBONDALE		COAL	2.5	91.0	
278.5	CARBONDALE		SANDSTONE	21.5	93.5	
257.0	CARBONDALE		SHALE	31.0	115.0	
226.0	CARBONDALE		COAL	1.5	146.0	
224.5	CARBONDALE		SHALE	12.5	147.5	
212.0	CARBONDALE		SANDSTONE	20.0	160.0	
192.0	CARBONDALE		SHALE	38.0	180.0	
154.0	CARBONDALE		SHALE	1.0	218.0	COALY
153.0	CARBONDALE		LIMESTONE	55.0	219.0	
98.0	CARBONDALE		SHALE	5.0	274.0	DARK
93.0	CARBONDALE	DEKOVEN	COAL	3.0	279.0	
90.0	CARBONDALE		SANDSTONE	16.0	282.0	
74.0	CARBONDALE		SHALE	3.5	298.0	BLACK
70.5	CARBONDALE	DAVIS	COAL	4.0	301.5	
66.5	CARBONDALE		UNDERCLAY	0.5	305.5	

MAPID: 16524063000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50745 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.704696 **DATE COLLECTED:** 1 / 15 / 1979
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	18.0	0.0	
342.0			ROCK	74.0	18.0	
268.0			COAL	2.0	92.0	
266.0			ROCK	56.0	94.0	
210.0			COAL	3.0	150.0	
207.0			ROCK	20.0	153.0	

MAPID: 16500284000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526093 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.714113 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
331.0	CARBONDALE	BRIAR HILL	COAL	1.4	45.0	
278.0	CARBONDALE	SPRINGFIELD	COAL	5.2	98.0	

MAPID: 16500284000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526093 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714113 **DATE COLLECTED:** 10 / 4 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 103.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	26.0	0.0	
350.0			ROCK	19.0	26.0	
331.0			COAL	1.4	45.0	
329.6			ROCK	52.0	46.4	
277.6	CARBONDALE	SPRINGFIELD	COAL	5.2	98.4	

MAPID: 16500284000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526093 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.714113 **DATE COLLECTED:** 10 / 4 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 103.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #13 **WELL TYPE:** Coal Test
COMMENT: JOHNSON BELT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	26.0	0.0	
350.0	CARBONDALE		SHALE	19.0	26.0	
331.0	CARBONDALE	BRIAR HILL	COAL	1.5	45.0	
329.5	CARBONDALE		SANDY SHALE	37.0	46.5	
292.5	CARBONDALE		BLACK SHALE	3.0	83.5	
289.5	CARBONDALE	DYKERSBURG	SHALE	12.0	86.5	
277.5	CARBONDALE	SPRINGFIELD	COAL	5.2	98.5	
272.3	CARBONDALE		UNDERCLAY	0.0	103.7	T.D.

MAPID: 16500285000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.535329 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.708737 **DATE COLLECTED:** 10 / 0 / 1905
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #16 **WELL TYPE:** Coal Test
COMMENT: E.H. UPCHURCH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	13.0	0.0	
360.0	CARBONDALE		SANDSTONE	14.0	13.0	
346.0	CARBONDALE		SANDSTONE	14.0	27.0	
332.0	CARBONDALE		BLACK SHALE	5.0	41.0	
327.0	CARBONDALE	DYKERSBURG	SHALE	13.0	46.0	
314.0	CARBONDALE	SPRINGFIELD	COAL	4.8	59.0	
309.2	CARBONDALE		UNDERCLAY	2.2	63.8	
307.0	CARBONDALE		SANDSTONE	16.0	66.0	
291.0	CARBONDALE		SANDY SHALE	23.0	82.0	
268.0	CARBONDALE		SHALE	24.0	105.0	
244.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	129.0	
239.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	134.0	
237.0	CARBONDALE		UNDERCLAY	2.0	136.0	

MAPID: 16500285000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.535329 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.708737 **DATE COLLECTED:** 10 / 0 / 1905
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	13.0	0.0	
360.0			ROCK	46.0	13.0	
314.0	CARBONDALE	SPRINGFIELD	COAL	4.8	59.0	
309.2			ROCK	70.2	63.8	
239.0			COAL	2.0	134.0	
237.0			ROCK	2.0	136.0	

MAPID: 16500286000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NW NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.524997 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707782 **DATE COLLECTED:** 11 / 28 / 1905
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 158.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #20 **WELL TYPE:** Coal Test
COMMENT: DAVENPORT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	10.0	0.0	
365.0	CARBONDALE		SANDSTONE	44.0	10.0	
321.0	CARBONDALE		SANDY SHALE	39.0	54.0	
282.0	CARBONDALE	BRIAR HILL	COAL	2.0	93.0	
280.0	CARBONDALE		UNDERCLAY	4.0	95.0	
276.0			SANDSTONE	6.0	99.0	
270.0			SANDY SHALE	5.0	105.0	
265.0			SANDSTONE	1.0	110.0	
264.0			SHALE	9.0	111.0	
255.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	120.0	
253.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	122.0	
249.0	CARBONDALE	DYKERSBURG	SHALE	11.0	126.0	
238.0	CARBONDALE	SPRINGFIELD	COAL	4.1	137.0	
233.9	CARBONDALE		UNDERCLAY	17.0	141.1	

MAPID: 16500286000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE NW NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.524997 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707782 **DATE COLLECTED:** 11 / 28 / 1905
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 158.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	10.0	0.0	
365.0			ROCK	83.0	10.0	
282.0	CARBONDALE	BRIAR HILL	COAL	2.0	93.0	
280.0			ROCK	42.0	95.0	
238.0			COAL	4.1	137.0	
233.9			ROCK	17.0	141.1	

MAPID: 16500287000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SE NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.537638 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.706001 **DATE COLLECTED:** 10 / 23 / 1905
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 166.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #15 **WELL TYPE:** Coal Test
COMMENT: A.J. PANKEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	10.0	0.0	
361.0			SAND	14.0	10.0	POSSIBLY SS
347.0	CARBONDALE		BLACK SHALE	4.0	24.0	
343.0	CARBONDALE	DYKERSBURG	SHALE	10.0	28.0	
333.0	CARBONDALE	SPRINGFIELD	COAL	4.2	38.0	
328.8	CARBONDALE		UNDERCLAY	2.0	42.2	
326.8	CARBONDALE		SANDSTONE	26.0	44.2	
300.8	CARBONDALE		SANDY SHALE	27.0	70.2	
273.8	CARBONDALE		SHALE	10.0	97.2	
263.8	CARBONDALE	EXCELLO	BLACK SHALE	5.5	107.2	
258.3	CARBONDALE	HOUCHIN CREEK	COAL	1.7	112.7	
256.7	CARBONDALE		SHALE	0.3	114.3	
256.3	CARBONDALE		UNDERCLAY	2.0	114.7	
254.3	CARBONDALE		SANDSTONE	24.0	116.7	
230.3	CARBONDALE		SANDY SHALE	13.0	140.7	
217.3	CARBONDALE		SHALE	10.0	153.7	
207.3	CARBONDALE		COAL	2.5	163.7	

MAPID: 16500287000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SE NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.537638 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.706001 **DATE COLLECTED:** 10 / 23 / 1905
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 166.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	24.0	0.0	
347.0			ROCK	14.0	24.0	
333.0	CARBONDALE	SPRINGFIELD	COAL	4.2	38.0	
328.8	CARBONDALE		ROCK	70.5	42.2	
258.3	CARBONDALE		COAL	1.7	112.7	
256.7	CARBONDALE		ROCK	49.3	114.3	
207.3	CARBONDALE	HOUCHIN CREEK	COAL	2.5	163.7	

MAPID: 16500288000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 10' N line, 180' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531953 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.705508 **DATE COLLECTED:** 10 / 12 / 1905
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 162.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #14 **WELL TYPE:** Coal Test
COMMENT: R.R. MEYERS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	20.0	0.0	
349.0	CARBONDALE		SHALE	10.0	20.0	
339.0	CARBONDALE	SPRINGFIELD	COAL	2.5	30.0	
336.5	CARBONDALE		UNDERCLAY	5.0	32.5	
331.5	CARBONDALE		SANDY SHALE	51.0	37.5	
280.5	CARBONDALE		SHALE	16.0	88.5	
264.5	CARBONDALE	EXCELLO	BLACK SHALE	5.0	104.5	
259.5	CARBONDALE	HOUCHIN CREEK	COAL	0.8	109.5	
258.7	CARBONDALE		SANDSTONE	26.0	110.3	
232.7	CARBONDALE		SANDY SHALE	14.0	136.3	
218.7	CARBONDALE		SHALE	10.0	150.3	
208.7	CARBONDALE	SURVANT	COAL	1.3	160.3	
207.3	CARBONDALE		BLACK SHALE	0.9	161.7	
206.4	CARBONDALE		UNDERCLAY	0.0	162.6	T.D.

MAPID: 16500288000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 10' N line, 180' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531953 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.705508 **DATE COLLECTED:** 10 / 12 / 1905
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 162.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	20.0	0.0	
349.0			ROCK	10.0	20.0	
339.0	CARBONDALE	SPRINGFIELD	COAL	2.5	30.0	
336.5			ROCK	77.0	32.5	
259.5			COAL	0.8	109.5	
258.7			ROCK	50.0	110.3	
208.7			COAL	1.3	160.3	
207.3			ROCK	0.9	161.7	

MAPID: 16500325700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531837 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715998 **DATE COLLECTED:** 0 / 0 / 1967
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-SHAWNEE C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNKNOWN	0.0	0.0	

MAPID: 16500328400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 850' S line, 650' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.52903 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.711505 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 80.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BANKSTON CREEK COLLIERY # 4 **WELL TYPE:** Underground mine
COMMENT: THIS SLOPE MINE WAS LATER STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	75.0	0.0	
305.0	CARBONDALE	SPRINGFIELD	COAL	5.3	75.0	

MAPID: 16500328300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.537069 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.704627 **DATE COLLECTED:** 0 / 0 / 1947
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-NEW C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500424100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 850' S line, 880' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.528231 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.711501 **DATE COLLECTED:** 0 / 0 / 1947
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 4.7 **LOG TYPE:**
SOURCE: MINE NOTES-BANKSTON CREEK COLLIERY # 2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16526205000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 10' N line, 2360' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530243 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.716404 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 14.6 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 1 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	10.5	0.0	YELLOW
-	CARBONDALE	HERRIN	SMUT	1.3	10.5	SOFT COAL, TOP ERODED
-	CARBONDALE	HERRIN	COAL	2.8	11.8	

MAPID: 16526206000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 200' N line, 2520' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530803 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.715887 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 20.0 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 2 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	13.8	0.0	
-	CARBONDALE		SHALE	1.3	13.8	
-	CARBONDALE	HERRIN	COAL	3.0	15.0	
-	CARBONDALE		UNDERCLAY	2.0	18.0	

MAPID: 16526207000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 300' N line, 2200' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.529695 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.715596 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 21.0 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 3 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	19.5	0.0	
-			SHALE	1.5	19.5	SOFT; NO COAL ENCOUNTERED

MAPID: 16526208000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 460' N line, 2580' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531017 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.715171 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 20.8 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 4 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; # 1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	15.7	0.0	YELLOW
-	CARBONDALE		SHALE	0.5	15.7	
-	CARBONDALE	HERRIN	COAL	4.7	16.2	

MAPID: 16526209000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 680' N line, 2280' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.529983 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.714549 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 20.0 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 5 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	14.0	0.0	
-			SHALE	6.0	14.0	LIGHT YELLOW; NO COAL FOUND

MAPID: 16526210000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 800' N line, 2520' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530818 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.714231 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 19.0 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 6 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	14.2	0.0	
-			SHALE	2.3	14.2	
-			UNDERCLAY	2.5	16.5	NO COAL ENCOUNTERED

MAPID: 16526211000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1100' N line, 2420' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530478 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.713397 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 23.5 **LOG TYPE:** Drillers Log
SOURCE: A & G COAL CO. HOLE 7 **WELL TYPE:** Coal Test
COMMENT: PERMIT 50; #1 MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	LOG SAYS "SURFACE COAL"
-			SHALE	6.0	14.0	
-			UNDERCLAY	3.5	20.0	NO COAL ENCOUNTERED

MAPID: 16500004301M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550404 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716101 **DATE COLLECTED:** 1 / 9 / 1907
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 7.2 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C, MINE # 9 **WELL TYPE:** Underground mine
COMMENT: SAMPLED 2000' SW OF MAIN SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	7.2		
-			ROCK	0.0		

MAPID: 16500289000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.541088 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.707846 **DATE COLLECTED:** 11 / 0 / 1905
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #17 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	20.0	0.0	
346.0	CARBONDALE		SANDSTONE	9.0	20.0	
337.0	CARBONDALE		BLACK SHALE	4.0	29.0	
333.0	CARBONDALE	DYKERSBURG	BLACK SHALE	16.0	33.0	
317.0	CARBONDALE	SPRINGFIELD	COAL	5.3	49.0	
311.7	CARBONDALE		UNDERCLAY	1.8	54.3	
310.0	CARBONDALE		SANDSTONE	16.0	56.0	
294.0	CARBONDALE		SANDY SHALE	30.0	72.0	
264.0	CARBONDALE		SHALE	12.0	102.0	
252.0	CARBONDALE	EXCELLO	BLACK SHALE	6.5	114.0	
245.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	120.5	
244.0	CARBONDALE		UNDERCLAY	1.0	122.0	

MAPID: 16500289000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.541088 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.707846 **DATE COLLECTED:** 11 / 0 / 1905
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	20.0	0.0	
346.0			ROCK	29.0	20.0	
317.0	CARBONDALE	SPRINGFIELD	COAL	5.3	49.0	
311.7			ROCK	66.3	54.3	
245.5			COAL	1.5	120.5	
244.0			ROCK	1.0	122.0	

MAPID: 16500290000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 70' S line, 100' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.540866 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702066 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #1 **WELL TYPE:** Coal Test
COMMENT: JN. NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			NO RECORD	19.0	0.0	
351.0	CARBONDALE		COAL	2.0	19.0	UPPER BENCH OF SPRINGFIELD COAL?
349.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	21.0	
343.0	CARBONDALE	DYKERSBURG	SHALE	14.0	27.0	
329.0	CARBONDALE	SPRINGFIELD	COAL	4.0	41.0	
325.0	CARBONDALE		SANDSTONE	10.0	45.0	
315.0	CARBONDALE		SHALE	26.0	55.0	

MAPID: 16500290000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** 70' S line, 100' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.540866 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702066 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNKNOWN	19.0	0.0	
351.0			COAL	2.0	19.0	
349.0			ROCK	20.0	21.0	
329.0			COAL	4.0	41.0	
325.0			ROCK	26.0	45.0	

MAPID: 16500291000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.544643 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.702341 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
330.0	CARBONDALE	SPRINGFIELD	COAL	7.9	55.0	

MAPID: 16500291000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.544643 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702341 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 65.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNKNOWN	17.0	0.0	
368.0			ROCK	38.5	17.0	
329.5	CARBONDALE	SPRINGFIELD	COAL	7.9	55.5	
321.6	CARBONDALE		ROCK	1.8	63.4	

MAPID: 16500291000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.544643 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702341 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 65.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #2 **WELL TYPE:** Coal Test
COMMENT: JNO. NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			NO RECORD	17.0	0.0	
368.0	CARBONDALE		SANDSTONE	13.0	17.0	
355.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	30.0	
353.7	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	31.3	
348.7	CARBONDALE	DYKERSBURG	SHALE	19.3	36.3	
329.5	CARBONDALE	SPRINGFIELD	COAL	7.9	55.5	
321.6	CARBONDALE		UNDERCLAY	1.8	63.4	
319.7	CARBONDALE		SANDSTONE	0.0	65.3	T.D.

MAPID: 16500328500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.555122 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.712433 **DATE COLLECTED:** 0 / 0 / 1909
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 123.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-O'GARA C C MINE # 6 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			ROCK	118.8	0.0	
260.2	CARBONDALE	SPRINGFIELD	COAL	5.0	118.8	

MAPID: 16503561000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.551086 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.706478 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 327.7 **LOG TYPE:**

SOURCE: PEABODY COAL CO. 3304 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.9	CARBONDALE	HOUCHIN CREEK	COAL	2.0	112.1	
236.7	CARBONDALE	SURVANT	COAL	2.1	163.3	
163.2	CARBONDALE	COLCHESTER	COAL	1.0	236.8	
108.0	CARBONDALE	DEKOVEN	COAL	3.4	292.0	
108.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	292.0	
78.5	CARBONDALE	DAVIS	COAL	3.9	321.5	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503561000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.551086 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.706478 **DATE COLLECTED:** 3 / 25 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 327.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3304 **WELL TYPE:** Coal Test

COMMENT: SW/C SE NE SW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	12.0	0.0	SURFACE CLAY (ISGS CORE# C-6861)
-	CARBONDALE		BROWN SHALE	4.0	12.0	
-	CARBONDALE		GRAY SHALE	17.7	16.0	
-	CARBONDALE		LIMESTONE	1.2	33.7	
-	CARBONDALE		BLACK SHALE	2.2	34.9	
-	CARBONDALE		COAL	1.0	37.1	
-	CARBONDALE		GRAY SHALE	18.4	38.1	
-	CARBONDALE	SPRINGFIELD	COAL	6.0	56.5	
-	CARBONDALE		UNDERCLAY	1.0	62.5	
-	CARBONDALE		GRAY SANDSTONE	2.3	63.5	
-	CARBONDALE		GRAY SHALE	41.2	65.8	
-	CARBONDALE	HANOVER	LIMESTONE	1.5	107.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	3.6	108.5	
-	CARBONDALE	HOUCHIN CREEK	COAL	2.0	112.1	
-	CARBONDALE		UNDERCLAY	1.9	114.1	
-	CARBONDALE		GRAY SANDSTONE	7.5	116.0	
-	CARBONDALE		GRAY SHALE	14.5	123.5	
-	CARBONDALE		GRAY SHALE	25.3	138.0	
-	CARBONDALE	SURVANT	COAL	2.1	163.3	
-	CARBONDALE		UNDERCLAY	1.4	165.4	
-	CARBONDALE		SANDSTONE	4.2	166.8	
-	CARBONDALE		GRAY SHALE	11.0	171.0	
-	CARBONDALE		LIMESTONE	1.5	182.0	
-	CARBONDALE		GRAY SHALE	1.0	183.5	
-	CARBONDALE		GRAY SANDSTONE	17.5	184.5	
-	CARBONDALE		SANDY SHALE	19.0	202.0	
-	CARBONDALE		GRAY SHALE	12.8	221.0	
-	CARBONDALE		DARK SHALE	3.0	233.8	
-	CARBONDALE	COLCHESTER	COAL	1.0	236.8	
-	SPOON		GRAY SHALE	10.7	237.8	
-	SPOON		GRAY SANDSTONE	34.5	248.5	
-	SPOON		GRAY SANDSTONE	6.7	283.0	GRAY SANDSTONE WITH SDY SHALE STREAKS
-	SPOON		GRAY SHALE	2.3	289.7	GRAY SHALE WITH SOFT STREAKS
-	SPOON	DEKOVEN	COAL	1.1	292.0	
-	SPOON	DEKOVEN	ROCK	0.0	293.1	FUSION BAND
-	SPOON	DEKOVEN	COAL	1.0	293.1	
-	SPOON	DEKOVEN	SHALE	0.1	294.1	SHALE BAND
-	SPOON	DEKOVEN	COAL	0.4	294.2	
-	SPOON	DEKOVEN	COAL	0.4	294.6	COAL WITH PYRITE

-	SPOON	DEKOVEN	COAL	0.4	295.0	
-	SPOON		SANDY SHALE	11.6	295.4	
-	SPOON		GRAY SANDSTONE	13.3	307.0	
-	SPOON		BLACK SHALE	1.2	320.3	
-	SPOON	DAVIS	COAL	0.6	321.5	
-	SPOON	DAVIS	COAL	0.2	322.1	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.2	322.3	
-	SPOON	DAVIS	ROCK	0.0	322.5	FUSION BANDDDDD
-	SPOON	DAVIS	COAL	0.5	322.5	
-	SPOON	DAVIS	COAL	0.3	322.9	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.3	323.2	
-	SPOON	DAVIS	COAL	0.2	323.5	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.5	323.7	
-	SPOON	DAVIS	COAL	0.2	324.2	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	1.0	324.3	
-	SPOON		SANDSTONE	2.3	325.4	

MAPID: 165273A0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.552886 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.703274 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 19.8 **LOG TYPE:**
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	10.0	0.0	
390.0			ROCK	15.4	10.0	
374.6	CARBONDALE	SPRINGFIELD	COAL	4.5	25.4	

MAPID: 16500328800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.569492 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.715659 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-VAN METER C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	-		

MAPID: 16500328700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 600' N line, 600' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.561269 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.714896 **DATE COLLECTED:** 0 / 0 / 1918
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 5.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-HARRISBURG FUEL CO **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	5.0		

MAPID: 16500328600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.573525 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70333 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 5.0 **LOG TYPE:**
SOURCE: MINE NOTES-INDIAN HEAD C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16502467000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.568386 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.709256 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 117.0 **LOG TYPE:** Drillers Log
SOURCE: LEDFORD SHAFT **WELL TYPE:** Coal Test
COMMENT: J.W. MITCHELL AUTHORITY; NO QTR GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			LOESS	13.0	0.0	
407.0	CARBONDALE		SANDSTONE	6.0	13.0	
401.0	CARBONDALE		SHALE	2.0	19.0	
399.0	CARBONDALE		SANDSTONE	7.0	21.0	
392.0	CARBONDALE		SHALE	2.0	28.0	
390.0	CARBONDALE		SANDSTONE	6.0	30.0	
384.0	CARBONDALE		SHALE	2.0	36.0	
382.0	CARBONDALE		SANDSTONE	3.0	38.0	
379.0	CARBONDALE		SANDSTONE/SHALE	9.0	41.0	
370.0	CARBONDALE		SANDSTONE	17.0	50.0	
353.0	CARBONDALE		COAL	5.0	67.0	
348.0	CARBONDALE		SANDSTONE	45.0	72.0	

MAPID: 16502893000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1030' S line, 1010' E line of SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.576449 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.712121 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 65.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CORP 41 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	24.0	
394.5	CARBONDALE	LAWSON	GRAY SHALE	27.5	26.5	
367.0	CARBONDALE		BLACK SHALE	1.0	54.0	
366.0	CARBONDALE	BRERETON	LIMESTONE	4.3	55.0	
361.7	CARBONDALE	ANNA	BLACK SHALE	1.7	59.3	
360.0	CARBONDALE	HERRIN	COAL	4.5	61.0	

MAPID: 16503562000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' N line, 330' E line of NE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560476 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.705578 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 417.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3305 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
164.0	CARBONDALE	SURVANT	COAL	2.4	261.0	
81.0	CARBONDALE	COLCHESTER	COAL	0.0	344.0	
37.5	CARBONDALE	DEKOVEN	COAL	3.6	387.5	
37.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	387.5	
14.0	CARBONDALE	DAVIS	COAL	3.5	411.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503562000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** 0' N line, 330' E line of NE SE SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560476 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.705578 **DATE COLLECTED:** 4 / 1 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 417.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3305 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-6862

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	13.0	0.0	SURFACE CLAY
-	CARBONDALE		GRAY SHALE	26.5	13.0	
-	CARBONDALE		GRAY SHALE	7.0	39.5	GRAY SHALE WITH LIME STREAKS
-	CARBONDALE		GRAY SHALE	12.3	46.5	
-	CARBONDALE	BRIAR HILL	COAL	1.8	58.8	
-	CARBONDALE		GRAY SHALE	18.1	60.6	
-	CARBONDALE		BLACK SHALE	1.0	78.7	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	59.8	79.7	
-	CARBONDALE	SPRINGFIELD	COAL	4.7	139.5	
-	CARBONDALE		UNDERCLAY	1.8	144.2	
-	CARBONDALE		GRAY SHALE	41.0	146.0	
-	CARBONDALE		GRAY SANDSTONE	67.2	187.0	
-	CARBONDALE		GRAY SHALE	6.8	254.2	
-	CARBONDALE	SURVANT - UPPER	COAL	1.4	261.0	
-	CARBONDALE		UNDERCLAY	2.0	262.4	
-	CARBONDALE		GRAY SANDSTONE	5.6	264.4	
-	CARBONDALE	SURVANT - LOWER	COAL	1.0	270.0	
-	CARBONDALE		GRAY SHALE	7.0	271.0	
-	CARBONDALE		SANDY SHALE	64.5	278.0	SDY SHALE WITH SS STREAKS
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	342.5	
-	SPOON		GRAY SHALE	1.5	344.0	
-	SPOON		SANDY SHALE	31.0	345.5	
-	SPOON		GRAY SHALE	9.5	376.5	
-	SPOON		GRAY SHALE	1.5	386.0	GRAY SHALE WITH SOFT STREAKS
-	SPOON	DEKOVEN	COAL	0.6	387.5	
-	SPOON	DEKOVEN	COAL	0.6	388.1	COAL WITH VERTICAL PYRITE
-	SPOON	DEKOVEN	ROCK	0.1	388.7	PYRITE BAND
-	SPOON	DEKOVEN	COAL	0.5	388.8	
-	SPOON	DEKOVEN	ROCK	0.0	389.3	FUSION BAND
-	SPOON	DEKOVEN	COAL	0.4	389.3	
-	SPOON	DEKOVEN	COAL	0.2	389.7	COAL WITH SLATE STREAKS
-	SPOON	DEKOVEN	BLACK SHALE	0.2	389.8	SLATE BAND
-	SPOON	DEKOVEN	COAL	1.0	390.0	
-	SPOON		SANDSTONE	4.0	391.1	
-	SPOON		GRAY SHALE	13.5	395.1	
-	SPOON		BLACK SHALE	2.5	408.5	
-	SPOON	DAVIS	COAL	0.3	411.0	COAL WITH VERTICAL CALCITE
-	SPOON	DAVIS	BONE COAL	0.1	411.3	

-	SPOON	DAVIS	COAL	0.3	411.3	COAL WITH VERTICAL CALCITE
-	SPOON	DAVIS	COAL	0.3	411.6	COAL WITH FUSIONS
-	SPOON	DAVIS	COAL	0.3	411.9	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.2	412.3	
-	SPOON	DAVIS	ROCK	0.1	412.5	PYRITE BAND
-	SPOON	DAVIS	COAL	0.8	412.6	
-	SPOON	DAVIS	ROCK	0.0	413.4	FUSION BAND
-	SPOON	DAVIS	COAL	0.2	413.4	
-	SPOON	DAVIS	ROCK	0.2	413.6	PYRITE BAND
-	SPOON	DAVIS	COAL	0.2	413.7	
-	SPOON	DAVIS	ROCK	0.0	413.9	FUSION BAND
-	SPOON	DAVIS	COAL	0.6	413.9	2.5
-	SPOON		SANDSTONE	2.5	414.5	

MAPID: 16500012800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 685' S line, 550' E line of SE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5794 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.703882 **DATE COLLECTED:** 0 / 0 / 1923

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 145.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-O'GARA C C # 14 **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	139.0	0.0	
261.0	CARBONDALE	SPRINGFIELD	COAL	6.0	139.0	

MAPID: 16500292000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59664 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.702612 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 221.0 **LOG TYPE:** Drillers Log

SOURCE: O'HARA COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0	CARBONDALE	HERRIN	COAL	4.5	63.0	
272.0	CARBONDALE	SPRINGFIELD	COAL	2.8	188.0	

MAPID: 16500292000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59664 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.702612 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 220.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	20.0	0.0	
440.0			ROCK	43.5	20.0	
396.5			COAL	4.5	63.5	
392.0			ROCK	120.0	68.0	
272.0	CARBONDALE	SPRINGFIELD	COAL	2.9	188.0	
269.1			ROCK	30.0	190.9	

MAPID: 16500292000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59664 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.702612 **DATE COLLECTED:** 0 / 0 / 1913
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 220.9 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: WM. HENSLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	20.0	0.0	
440.0	CARBONDALE	BANKSTON FORK	LIMESTONE	8.5	20.0	
431.5	CARBONDALE	ANVIL ROCK	SHALE	19.0	28.5	
412.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	47.5	
400.5	CARBONDALE	ANVIL ROCK	UNDERCLAY	4.0	59.5	AND SOAPSTONE
396.5	CARBONDALE	HERRIN	COAL	4.5	63.5	
392.0	CARBONDALE		UNDERCLAY	1.0	68.0	
391.0	CARBONDALE		SHALE	6.0	69.0	
385.0	CARBONDALE		SANDSTONE	8.0	75.0	
377.0	CARBONDALE		SANDY SHALE	14.0	83.0	
363.0	CARBONDALE		SANDSTONE	9.0	97.0	
354.0	CARBONDALE		SHALE	12.0	106.0	
342.0	CARBONDALE	DYKERSBURG	BLACK SHALE	70.0	118.0	
272.0	CARBONDALE	SPRINGFIELD	COAL	2.9	188.0	
269.1	CARBONDALE		BLACK SHALE	30.0	190.9	

MAPID: 16503494000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.593484 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.715742 **DATE COLLECTED:** 6 / 14 / 1965

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 214.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 247-65P **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	11.0	0.0	SURFACE CLAY
-			SANDSTONE	1.0	11.0	
-			CLAY	3.0	12.0	
-	CARBONDALE		GRAY SHALE	3.0	15.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	18.0	
-	CARBONDALE	BANKSTON FORK	SANDSTONE	1.0	22.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	2.3	23.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	27.9	25.3	
-	CARBONDALE	BRERETON	LIMESTONE	0.3	53.3	
-	CARBONDALE	ANNA	BLACK SHALE	0.8	53.5	
-	CARBONDALE	ANNA	BLACK SHALE	0.5	54.3	
-	CARBONDALE	ENERGY	SANDY SHALE	4.3	54.8	
-	CARBONDALE	HERRIN	COAL	4.5	59.0	
-	CARBONDALE		UNDERCLAY	0.5	63.5	
-	CARBONDALE		UNDERCLAY	1.0	64.0	
-	CARBONDALE		SANDY SHALE	3.0	65.0	
-	CARBONDALE		GRAY SANDSTONE	3.0	68.0	
-	CARBONDALE		GRAY SANDSTONE	5.0	71.0	
-	CARBONDALE		SANDY SHALE	1.0	76.0	
-	CARBONDALE		SANDY SHALE	0.5	77.0	
-	CARBONDALE		GRAY SANDSTONE	1.0	77.5	
-	CARBONDALE		SANDY SHALE	1.0	78.5	WITH GY SS
-	CARBONDALE		GRAY SANDSTONE	16.0	79.5	
-	CARBONDALE		SANDY SHALE	18.3	95.5	
-	CARBONDALE	BRIAR HILL	COAL	1.8	113.8	
-	CARBONDALE		UNDERCLAY	1.5	115.5	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	89.5	117.0	
-	CARBONDALE	SPRINGFIELD	COAL	0.3	206.5	SOFT SPRINGFIELD COAL
-	CARBONDALE	SPRINGFIELD	COAL	7.1	206.8	SPRINGFIELD (#5) COAL
-	CARBONDALE		UNDERCLAY	0.7	213.8	

MAPID: 16503494000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.593484 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.715742 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 63.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.7	CARBONDALE		SANDSTONE	4.0	15.3	
410.7	CARBONDALE		GRAY SHALE	3.0	19.3	
407.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	22.3	UPPER BENCH
403.7	CARBONDALE	BANKSTON FORK	SANDSTONE	1.0	26.3	SHALE PARTING
402.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.3	27.3	LOWER BENCH
400.4	CARBONDALE	LAWSON	SILTY SHALE	27.9	29.6	
372.5	CARBONDALE	BRERETON	LIMESTONE	0.3	57.5	
372.2	CARBONDALE	ANNA	BLACK SHALE	1.3	57.8	
371.0	CARBONDALE	HERRIN	COAL	4.5	59.0	

MAPID: 16503495000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591027 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.715733 **DATE COLLECTED:** 6 / 21 / 1965

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 248-65P **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	9.0	0.0	SURFACE CLAY
-			SANDSTONE	2.5	9.0	WITH CLAY
-			CLAY	5.0	11.5	WITH SS PEBBLES
-	CARBONDALE		GRAY SHALE	1.5	16.5	
-	CARBONDALE		COAL	0.3	18.0	
-	CARBONDALE		UNDERCLAY	0.7	18.3	
-	CARBONDALE		GRAY SHALE	4.0	19.0	
-	CARBONDALE	ALLENBY	COAL	0.8	23.0	
-	CARBONDALE		UNDERCLAY	1.0	23.8	
-	CARBONDALE		GRAY SHALE	3.2	24.8	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.6	28.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	28.7	34.6	
-	CARBONDALE	BRERETON	LIMESTONE	4.8	63.3	
-	CARBONDALE	ANNA	BLACK SHALE	0.2	68.0	
-	CARBONDALE	ANNA	BLACK SHALE	0.9	68.2	
-	CARBONDALE	HERRIN	COAL	4.6	69.1	
-	CARBONDALE		UNDERCLAY	1.0	73.7	
-	CARBONDALE		UNDERCLAY	0.5	74.7	
-	CARBONDALE		SANDY SHALE	2.3	75.2	
-	CARBONDALE		GRAY SANDSTONE	0.5	77.5	
-	CARBONDALE		SANDY SHALE	1.0	78.0	
-	CARBONDALE		GRAY SANDSTONE	3.5	79.0	
-	CARBONDALE		GRAY SANDSTONE	21.5	82.5	
-	CARBONDALE		SANDY SHALE	22.0	104.0	
-	CARBONDALE	BRIAR HILL	COAL	0.5	126.0	
-	CARBONDALE		NO RECORD	1.0	126.5	NO RECORD IN LOG (SKIPS 1')
-	CARBONDALE		UNDERCLAY	1.0	127.5	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	1.0	128.5	
-	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	1.0	129.5	
-	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	2.0	130.5	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	73.8	132.5	
-	CARBONDALE	SPRINGFIELD	COAL	0.2	206.3	
-	CARBONDALE	SPRINGFIELD	COAL	5.3	206.4	
-	CARBONDALE		SANDY SHALE	0.7	211.8	
-	CARBONDALE		COAL	0.2	212.4	
-	CARBONDALE		SANDY SHALE	0.2	212.6	
-	CARBONDALE		UNDERCLAY	0.3	212.8	
-	CARBONDALE		UNDERCLAY	4.8	213.2	
-	CARBONDALE		SANDY SHALE	37.0	218.0	

MAPID: 16503496000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591036 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.713917 **DATE COLLECTED:** 7 / 0 / 1965

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 199.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 249-65P **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION GIVEN ON LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	8.5	0.0	SURFACE CLAY
-	CARBONDALE		SANDSTONE	2.0	8.5	
-	CARBONDALE	ALLENBY	COAL	0.3	10.5	
-	CARBONDALE		GRAY SHALE	3.3	10.8	
-	CARBONDALE		SANDSTONE	2.0	14.0	WITH SOME LS
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	16.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.3	22.0	
-	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.3	37.3	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.8	37.7	
-	CARBONDALE	BRERETON	LIMESTONE	0.8	48.5	
-	CARBONDALE	ANNA	BLACK SHALE	1.2	49.3	
-	CARBONDALE	ENERGY	SANDY SHALE	4.4	50.4	
-	CARBONDALE	HERRIN	COAL	5.0	54.8	
-	CARBONDALE		UNDERCLAY	2.2	59.8	
-	CARBONDALE		SANDY SHALE	3.0	62.0	
-	CARBONDALE		GRAY SANDSTONE	21.0	65.0	
-	CARBONDALE		SANDY SHALE	3.5	86.0	WITH GY SS
-	CARBONDALE		SANDY SHALE	12.0	89.5	
-	CARBONDALE		GRAY SANDSTONE	0.3	101.5	
-	CARBONDALE		SANDY SHALE	3.2	101.8	
-	CARBONDALE		GRAY SANDSTONE	2.0	105.0	
-	CARBONDALE		SANDY SHALE	6.8	107.0	
-	CARBONDALE	BRIAR HILL	COAL	1.7	113.8	
-	CARBONDALE		UNDERCLAY	1.5	115.5	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	72.8	117.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.4	189.8	
-	CARBONDALE	SPRINGFIELD	SANDY SHALE	0.2	195.2	
-	CARBONDALE	SPRINGFIELD	COAL	0.3	195.4	
-	CARBONDALE	SPRINGFIELD	SANDY SHALE	1.0	195.7	
-	CARBONDALE	SPRINGFIELD	COAL	1.2	196.7	
-	CARBONDALE	SPRINGFIELD	SHALY COAL	0.1	197.9	SHALY COAL
-	CARBONDALE		UNDERCLAY	1.3	198.0	

MAPID: 16503497000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.595949 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.713939 **DATE COLLECTED:** 6 / 27 / 1965

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 202.5 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 250-65P **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION GIVEN ON LOGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	9.0	0.0	SURFACE CLAY
-			CLAY	3.5	9.0	SURFACE CLAY WITH SS PEBBLES
-	CARBONDALE		SANDSTONE	2.5	12.5	
-	CARBONDALE		GRAY SHALE	1.5	15.0	
-	CARBONDALE		SANDY SHALE	3.3	16.5	
-	CARBONDALE		COAL	0.3	19.8	
-	CARBONDALE		UNDERCLAY	0.8	20.2	
-	CARBONDALE		SANDY SHALE	4.2	21.0	
-	CARBONDALE		SANDSTONE	1.8	25.2	
-	CARBONDALE		SANDY SHALE	0.2	27.0	
-	CARBONDALE	ALLENBY	COAL	0.8	27.2	
-	CARBONDALE		UNDERCLAY	1.0	28.0	
-	CARBONDALE		SANDY SHALE	2.0	29.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	31.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.5	38.3	
-	CARBONDALE	ANNA	BLACK SHALE	1.5	64.8	
-	CARBONDALE	ENERGY	SANDY SHALE	6.5	66.3	
-	CARBONDALE	HERRIN	COAL	4.6	72.8	
-	CARBONDALE		UNDERCLAY	1.6	77.4	
-	CARBONDALE		SANDY SHALE	2.0	79.0	
-	CARBONDALE		GRAY SANDSTONE	23.0	81.0	
-	CARBONDALE		SANDY SHALE	15.2	104.0	
-	CARBONDALE		GRAY SANDSTONE	0.5	119.2	
-	CARBONDALE		SANDY SHALE	6.1	119.7	
-	CARBONDALE	BRIAR HILL	COAL	1.7	125.8	
-	CARBONDALE		UNDERCLAY	1.6	127.4	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	23.0	129.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	2.5	152.0	WITH GY SS SEAMS
-	CARBONDALE	DYKERSBURG	SANDY SHALE	39.5	154.5	
-	CARBONDALE	SPRINGFIELD	COAL	6.8	194.0	
-	CARBONDALE		UNDERCLAY	1.7	200.8	

MAPID: 16526128000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1' N line, 2220' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.585236 **GEOLOGIST:** C KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.716617 **DATE COLLECTED:** 8 / 6 / 1940
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 66.0 **LOG TYPE:** Drillers Log
SOURCE: PITTSBURG & MIDWAY 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	16.0	0.0	
-			SHALE	8.0	16.0	
-			SHALE	2.0	24.0	BLUE
-			COAL	1.8	26.0	HARD
-			UNDERCLAY	1.3	27.8	
-			SHALE	17.3	29.0	SANDY
-			COAL	0.7	46.3	
-			UNDERCLAY	3.5	47.0	
-			LIMESTONE	8.0	50.5	
-			SHALE	7.5	58.5	SANDY; BLUE

MAPID: 16526129000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.58801 **GEOLOGIST:** C KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.712987 **DATE COLLECTED:** 8 / 7 / 1940
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 47.5 **LOG TYPE:** Drillers Log
SOURCE: PITTSBURG & MIDWAY 2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	18.0	0.0	
-	CARBONDALE		SANDSTONE	7.0	18.0	
-	CARBONDALE		SHALE	13.5	25.0	SANDY
-	CARBONDALE	BRERETON	LIMESTONE	1.8	38.5	
-	CARBONDALE	ANNA	SHALE	1.5	40.3	BLACK
-	CARBONDALE	HERRIN	COAL	5.3	41.8	HARD
-	CARBONDALE		UNDERCLAY	0.4	47.1	

MAPID: 165273A0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59351 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.710298 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	-		
-			ROCK	-		

MAPID: 16500293000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.589887 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.70027 **DATE COLLECTED:** 11 / 30 / 1905
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 150.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER D1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	8.0	0.0	
437.0	CARBONDALE		SANDSTONE	45.0	8.0	
392.0	CARBONDALE		SANDY SHALE	30.0	53.0	
362.0	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
360.0	CARBONDALE		SANDSTONE	2.0	85.0	
358.0	CARBONDALE		SHALE	27.0	87.0	
331.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	114.0	
329.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	116.0	
325.0	CARBONDALE	DYKERSBURG	BLACK SHALE	16.0	120.0	
309.0	CARBONDALE	SPRINGFIELD	COAL	3.6	136.0	UPPER BENCH
305.4	CARBONDALE	SPRINGFIELD	SANDY SHALE	4.0	139.6	
301.4	CARBONDALE	SPRINGFIELD	COAL	1.1	143.6	MIDDLE BENCH
300.3	CARBONDALE	SPRINGFIELD	SANDY SHALE	3.2	144.7	
297.2	CARBONDALE	SPRINGFIELD	COAL	0.3	147.8	LOWER BENCH
296.8	CARBONDALE		SANDY SHALE	2.0	148.2	

MAPID: 16500293000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.589887 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.70027 **DATE COLLECTED:** 11 / 30 / 1905
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 150.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	8.0	0.0	
437.0			ROCK	75.0	8.0	
362.0	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
360.0	CARBONDALE		ROCK	51.0	85.0	
309.0	CARBONDALE	SPRINGFIELD	COAL	3.6	136.0	
305.4	CARBONDALE		SHALE	4.0	139.6	
301.4	CARBONDALE	SPRINGFIELD	COAL	4.0	143.6	
297.4	CARBONDALE		SHALE	3.2	147.6	
294.3	CARBONDALE	SPRINGFIELD	COAL	0.3	150.7	
293.9	CARBONDALE		ROCK	2.0	151.1	

MAPID: 16500294000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.580129 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.696545 **DATE COLLECTED:** 12 / 9 / 1905
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 145.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER #2 **WELL TYPE:** Coal Test
COMMENT: M.D. BUMGARNER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
446.0			UNCONSOLIDATED	2.0	0.0	
444.0	CARBONDALE		SANDSTONE	40.0	2.0	
404.0	CARBONDALE		SANDY SHALE	30.0	42.0	
374.0	CARBONDALE	BRIAR HILL	COAL	1.0	72.0	
373.0	CARBONDALE		SANDSTONE	3.0	73.0	
370.0	CARBONDALE		SANDY SHALE	28.0	76.0	
342.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	104.0	
340.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	106.0	
335.0	CARBONDALE	DYKERSBURG	BLACK SHALE	24.0	111.0	
311.0	CARBONDALE	SPRINGFIELD	COAL	5.3	135.0	
305.7	CARBONDALE	SPRINGFIELD	COAL W/ BLACK SHALE	3.7	140.3	
302.0	CARBONDALE		UNDERCLAY	1.0	144.0	

MAPID: 16500294000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.580129 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.696545 **DATE COLLECTED:** 12 / 9 / 1905
SURFACE ELEVATION (FT.): 446.0 **LOGGED (FT.):** 145.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
446.0			UNCONSOLIDATED	21.0	0.0	
425.0			ROCK	70.0	21.0	
355.0	CARBONDALE	BRIAR HILL	COAL	1.0	91.0	
354.0	CARBONDALE		ROCK	62.0	92.0	
292.0	CARBONDALE	SPRINGFIELD	COAL	5.3	154.0	
286.7	CARBONDALE		ROCK	3.7	159.3	
283.0	CARBONDALE		ROCK	1.0	163.0	

MAPID: 16500295000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 200' S line, 400' E line of SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588931 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.695346 **DATE COLLECTED:** 8 / 26 / 1905
SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 142.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #18 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.0			UNCONSOLIDATED	8.0	0.0	
447.0	CARBONDALE		SANDSTONE	18.0	8.0	
429.0	CARBONDALE		SHALE	9.0	26.0	
420.0	CARBONDALE		SANDSTONE	10.0	35.0	
410.0	CARBONDALE		SHALE	20.0	45.0	
390.0	CARBONDALE		BLACK SHALE	7.0	65.0	
383.0	CARBONDALE		BLACK SHALE	3.0	72.0	
380.0	CARBONDALE	BRIAR HILL	COAL	2.0	75.0	
378.0	CARBONDALE		UNDERCLAY	3.0	77.0	
375.0	CARBONDALE		SANDSTONE	16.0	80.0	
359.0	CARBONDALE		BLACK SHALE	15.0	96.0	
344.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	111.0	
342.0	CARBONDALE		BLACK SHALE	8.0	113.0	
334.0	CARBONDALE	DYKERSBURG	BLACK SHALE	14.6	121.0	
319.4	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	135.6	
318.9	CARBONDALE	SPRINGFIELD	COAL	5.9	136.1	
313.0	CARBONDALE		UNDERCLAY	0.7	142.0	

MAPID: 16500296000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586928 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.695236 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: DAVENPORT COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.0	CARBONDALE	BRIAR HILL	COAL	2.5	86.0	
314.0	CARBONDALE	SPRINGFIELD	COAL	5.5	131.0	

MAPID: 16500296000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586928 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.695236 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: DAVENPORT C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	8.0	0.0	
437.0			ROCK	78.0	8.0	
359.0	CARBONDALE	BRIAR HILL	COAL	2.5	86.0	
356.5	CARBONDALE		ROCK	43.0	88.5	
313.5	CARBONDALE	SPRINGFIELD	COAL	4.3	131.5	
309.2	CARBONDALE		SHALE	0.7	135.8	
308.6	CARBONDALE	SPRINGFIELD	COAL	0.6	136.4	
308.0	CARBONDALE		ROCK	1.0	137.0	

MAPID: 16500296000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW SW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586928 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.695236 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log

SOURCE: DAVENPORT COAL CO., HOLE #172 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.0			UNCONSOLIDATED	8.0	0.0	
437.0	CARBONDALE		SANDSTONE	44.0	8.0	
393.0	CARBONDALE		SANDY SHALE	34.0	52.0	
359.0	CARBONDALE	BRIAR HILL	COAL	2.5	86.0	
356.5	CARBONDALE		SANDY SHALE	27.0	88.5	
329.5	CARBONDALE	ST. DAVID	LIMESTONE	2.0	115.5	
327.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	117.5	
325.2	CARBONDALE	DYKERSBURG	SANDY SHALE	11.8	119.8	
313.5	CARBONDALE	SPRINGFIELD	COAL	4.3	131.5	
309.2	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.7	135.8	SHALE PARTING
308.6	CARBONDALE	SPRINGFIELD	COAL	0.6	136.4	
308.0	CARBONDALE		SHALE	1.0	137.0	

MAPID: 16500297000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 720' N line, 510' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57957 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.692736 **DATE COLLECTED:** 8 / 21 / 1905
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 92.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #17 **WELL TYPE:** Coal Test
COMMENT: SAM ODUM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	8.0	0.0	
392.0	CARBONDALE		SHALE	5.0	8.0	
387.0	CARBONDALE		BLACK SHALE	1.0	13.0	
386.0	CARBONDALE	BRIAR HILL	COAL	1.5	14.0	
384.5	CARBONDALE		UNDERCLAY	2.0	15.5	
382.5	CARBONDALE		SANDSTONE	12.0	17.5	
370.5	CARBONDALE		SHALE	10.0	29.5	
360.5	CARBONDALE		BLACK SHALE	14.0	39.5	
346.5	CARBONDALE	ST. DAVID	LIMESTONE	1.5	53.5	
345.0	CARBONDALE	TURNER MINE	BLACK SHALE	6.0	55.0	
339.0	CARBONDALE	DYKERSBURG	BLACK SHALE	23.8	61.0	
315.2	CARBONDALE	SPRINGFIELD	COAL	6.2	84.8	
309.0	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.2	91.0	
308.8	CARBONDALE	SPRINGFIELD	COAL	0.5	91.2	
308.3	CARBONDALE		BLACK SHALE	0.4	91.7	
307.9	CARBONDALE		UNDERCLAY	0.6	92.1	

MAPID: 16500297000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 720' N line, 510' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57957 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.692736 **DATE COLLECTED:** 8 / 21 / 1905
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 92.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	8.0	0.0	
392.0			ROCK	6.0	8.0	
386.0	CARBONDALE	BRIAR HILL	COAL	1.5	14.0	
384.5	CARBONDALE		ROCK	69.3	15.5	
315.2	CARBONDALE	SPRINGFIELD	COAL	6.8	84.8	
308.3	CARBONDALE		ROCK	1.0	91.7	

MAPID: 16500298000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW NW NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586975 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.693414 **DATE COLLECTED:** 12 / 15 / 1905
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER D#3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	8.0	0.0	
448.0	CARBONDALE		SANDSTONE	78.0	8.0	
370.0	CARBONDALE	BRIAR HILL	COAL	2.0	86.0	
368.0	CARBONDALE		SANDY SHALE	26.0	88.0	
342.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	114.0	
340.0	CARBONDALE		SHALE	2.0	116.0	
338.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	118.0	
333.0	CARBONDALE	DYKERSBURG	BLACK SHALE	6.0	123.0	
327.0	CARBONDALE	SPRINGFIELD	COAL	3.6	129.0	
323.4	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.7	132.6	
322.7	CARBONDALE	SPRINGFIELD	COAL	0.3	133.3	
322.4	CARBONDALE		SANDY SHALE	4.4	133.6	

MAPID: 16500298000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW NW NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.586975 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.693414 **DATE COLLECTED:** 12 / 15 / 1905
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	8.0	0.0	
448.0			ROCK	80.0	8.0	
368.0	CARBONDALE	BRIAR HILL	COAL	2.0	88.0	
366.0	CARBONDALE		ROCK	41.0	90.0	
325.0	CARBONDALE	SPRINGFIELD	COAL	3.6	131.0	
321.4	CARBONDALE		SHALE	0.7	134.6	
320.8	CARBONDALE	SPRINGFIELD	COAL	0.3	135.2	
320.4	CARBONDALE		ROCK	4.4	135.6	

MAPID: 16500299000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.589406 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.694342 **DATE COLLECTED:** 12 / 23 / 1905
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 135.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., LANCASTER D#4 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.0			UNCONSOLIDATED	12.0	0.0	
442.0	CARBONDALE		SANDSTONE	43.0	12.0	
399.0	CARBONDALE		SANDY SHALE	38.0	55.0	
361.0	CARBONDALE	BRIAR HILL	COAL	2.0	93.0	
359.0	CARBONDALE		SANDY SHALE	17.0	95.0	
342.0	CARBONDALE	ST. DAVID	LIMESTONE	3.0	112.0	
339.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	115.0	
335.0	CARBONDALE	DYKERSBURG	BLACK SHALE	9.0	119.0	
326.0	CARBONDALE	SPRINGFIELD	COAL	7.7	128.0	

MAPID: 16500299000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.589406 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694342 **DATE COLLECTED:** 12 / 23 / 1905
SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 135.6 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.0			UNCONSOLIDATED	12.0	0.0	
442.0			ROCK	81.0	12.0	
361.0	CARBONDALE	BRIAR HILL	COAL	2.0	93.0	
359.0	CARBONDALE		ROCK	33.0	95.0	
326.0	CARBONDALE	SPRINGFIELD	COAL	7.7	128.0	

MAPID: 16500300000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.590052 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69298 **DATE COLLECTED:** 11 / 0 / 1905
SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 137.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #27 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	9.0	0.0	
453.0	CARBONDALE		SANDSTONE	5.0	9.0	
448.0	CARBONDALE		SANDSTONE	51.0	14.0	
397.0	CARBONDALE		SHALE	25.0	65.0	
372.0	CARBONDALE	BRIAR HILL	COAL	2.0	90.0	
370.0	CARBONDALE		UNDERCLAY	3.0	92.0	
367.0	CARBONDALE		SANDSTONE	6.0	95.0	
361.0	CARBONDALE		SHALE	19.0	101.0	
342.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	120.0	
340.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	122.0	
337.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	125.0	
336.0	CARBONDALE	SPRINGFIELD	COAL	5.2	126.0	
330.8	CARBONDALE		UNDERCLAY	6.0	131.2	

MAPID: 16500302000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.594953 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.693014 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 92.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #12 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	6.0	0.0	
424.0	CARBONDALE		SANDSTONE	18.0	6.0	
406.0	CARBONDALE		SANDY SHALE	33.5	24.0	
372.5	CARBONDALE	BRIAR HILL	COAL	2.0	57.5	UPPER SPLIT OF #5 OR HOLE IS MIS-LOCATED
370.5	CARBONDALE		UNDERCLAY	3.5	59.5	
367.0	CARBONDALE		CALCAREOUS SHALE	16.0	63.0	
351.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	79.0	
349.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	81.0	DYKERSBURG SHOULD BE >50FT
344.0	CARBONDALE	SPRINGFIELD	COAL	5.0	86.0	HOLE MIS-LOCATED?
339.0	CARBONDALE		SANDY SLATE	1.0	91.0	

MAPID: 16500303000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591917 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.691626 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 119.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #10 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	7.0	0.0	
423.0	CARBONDALE		SANDSTONE	25.0	7.0	
398.0	CARBONDALE		BLACK SHALE	48.5	32.0	
349.5	CARBONDALE	BRIAR HILL	COAL	1.0	80.5	
348.5	CARBONDALE		SHALE	19.0	81.5	
329.5	CARBONDALE	ST. DAVID	LIMESTONE	1.5	100.5	
328.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	102.0	
326.0	CARBONDALE	DYKERSBURG	BLACK SHALE	7.5	104.0	
318.5	CARBONDALE	SPRINGFIELD	COAL	5.5	111.5	
313.0	CARBONDALE		UNDERCLAY	2.0	117.0	

MAPID: 16500303000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591917 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691626 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 119.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE IN THIS LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	7.0	0.0	
423.0			ROCK	73.5	7.0	
349.5			COAL	1.0	80.5	
348.5			ROCK	30.0	81.5	
318.5	CARBONDALE	SPRINGFIELD	COAL	5.5	111.5	
313.0			ROCK	2.0	117.0	

MAPID: 16500304000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW NW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.596845 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.689829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 159.5 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #13 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.0			UNCONSOLIDATED	15.0	0.0	
446.0	CARBONDALE		SANDY SHALE	22.0	15.0	
424.0	CARBONDALE		SANDSTONE	4.0	37.0	
420.0	CARBONDALE		SHALE	26.0	41.0	
394.0	CARBONDALE		COAL	2.0	67.0	
392.0	CARBONDALE		SHALE	2.0	69.0	
390.0	CARBONDALE		BLACK SHALE	3.0	71.0	
387.0	CARBONDALE	BRIAR HILL	COAL	1.0	74.0	
386.0	CARBONDALE		SANDSTONE	2.0	75.0	
384.0	CARBONDALE		SHALE	10.0	77.0	
374.0	CARBONDALE		SANDSTONE	3.0	87.0	
371.0	CARBONDALE	DYKERSBURG	SHALE	46.0	90.0	
325.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	136.0	
317.0	CARBONDALE	DYKERSBURG	SHALE	5.0	144.0	
312.0	CARBONDALE	DYKERSBURG	CALCAREOUS SHALE	4.0	149.0	
308.0	CARBONDALE	SPRINGFIELD	COAL	6.5	153.0	

MAPID: 16500304000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW NW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.596845 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.689829 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 159.5 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.0			UNCONSOLIDATED	15.0	0.0	
446.0			ROCK	52.0	15.0	
394.0			COAL	2.0	67.0	
392.0			ROCK	5.0	69.0	
387.0			COAL	1.0	74.0	
386.0			ROCK	78.0	75.0	
308.0	CARBONDALE	SPRINGFIELD	COAL	6.5	153.0	

MAPID: 16500305000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.594418 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.688902 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 157.3 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #14 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.0			UNCONSOLIDATED	18.0	0.0	
440.0	CARBONDALE		SANDY SHALE	20.0	18.0	
420.0	CARBONDALE		UNDERCLAY	1.0	38.0	
419.0	CARBONDALE		SANDSTONE	10.0	39.0	
409.0	CARBONDALE		SHALE	29.1	49.0	
379.9	CARBONDALE	BRIAR HILL	COAL	2.9	78.1	
377.0	CARBONDALE		SHALE	2.0	81.0	
375.0	CARBONDALE		SANDSTONE	3.0	83.0	
372.0	CARBONDALE		SHALE	14.0	86.0	
358.0	CARBONDALE		BLACK SHALE	4.8	100.0	
353.2	CARBONDALE		COAL	0.1	104.8	
353.2	CARBONDALE	DYKERSBURG	SANDSTONE	3.3	104.8	
349.9	CARBONDALE	DYKERSBURG	SHALE	42.0	108.1	
307.9	CARBONDALE	SPRINGFIELD	COAL	6.3	150.1	
301.6	CARBONDALE		SANDSTONE	0.8	156.4	

MAPID: 16500305000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW SE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.594418 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688902 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 157.3 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.0			UNCONSOLIDATED	18.0	0.0	
440.0			ROCK	60.1	18.0	
379.9			COAL	2.9	78.1	
377.0			ROCK	104.8	81.0	
272.3			COAL	0.1	185.7	
272.2			ROCK	42.3	185.8	
229.9	CARBONDALE	SPRINGFIELD	COAL	6.3	228.1	
223.6	CARBONDALE		ROCK	0.8	234.4	

MAPID: 16500306000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.59502 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.689362 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 116.2 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #15 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	14.0	0.0	
391.0	CARBONDALE		SANDY SHALE	6.0	14.0	
385.0	CARBONDALE		SANDSTONE	5.0	20.0	
380.0	CARBONDALE		SHALE	5.0	25.0	
375.0	CARBONDALE		BLACK SHALE	4.0	30.0	
371.0	CARBONDALE		SHALE	15.0	34.0	
356.0			BOULDER	3.0	49.0	IRON BOULDER
353.0	CARBONDALE	BRIAR HILL	COAL	3.0	52.0	
350.0	CARBONDALE		SHALE	52.0	55.0	
298.0	CARBONDALE	SPRINGFIELD	COAL	9.2	107.0	

MAPID: 16500307000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591994 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.687977 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 176.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY COAL CO., HOLE #16 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.0			UNCONSOLIDATED	9.0	0.0	
442.0	CARBONDALE		SANDY SHALE	14.0	9.0	
428.0	CARBONDALE		SANDSTONE	6.0	23.0	
422.0	CARBONDALE		SHALE	21.0	29.0	
401.0	CARBONDALE		COAL	1.0	50.0	
400.0	CARBONDALE		SHALE	3.0	51.0	
397.0	CARBONDALE		CHERT	4.0	54.0	
393.0	CARBONDALE		SHALE	5.0	58.0	
388.0	CARBONDALE		COAL	2.0	63.0	
386.0	CARBONDALE		SHALE	47.0	65.0	
339.0	CARBONDALE		BLACK SHALE	3.0	112.0	
336.0	CARBONDALE		SHALE	3.0	115.0	
333.0	CARBONDALE		SANDSTONE	21.0	118.0	
312.0	CARBONDALE			11.8	139.0	GRAY FLINT
300.2	CARBONDALE		COAL	0.3	150.8	
300.0	CARBONDALE		SHALE	4.0	151.0	
296.0	CARBONDALE		SANDSTONE	7.0	155.0	
289.0	CARBONDALE		SHALE	14.0	162.0	

MAPID: 16500307000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591994 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687977 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 176.0 **LOG TYPE:**
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.0			UNCONSOLIDATED	9.0	0.0	
442.0			ROCK	41.0	9.0	
401.0			COAL	1.0	50.0	
400.0			ROCK	12.0	51.0	
388.0	CARBONDALE	BRIAR HILL	COAL	2.0	63.0	
386.0	CARBONDALE		ROCK	85.8	65.0	
300.2	CARBONDALE	SPRINGFIELD	COAL	0.3	150.8	
300.0	CARBONDALE		ROCK	25.0	151.0	

MAPID: 16500328900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.583427 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688839 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-NEW OAK HILL C C # 3 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500328000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.591219 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.695723 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-NUTTY C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNKNOWN	0.0	0.0	

MAPID: 16500329100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE NW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.590555 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697998 **DATE COLLECTED:** 0 / 0 / 1909
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 148.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-0'GARA C C MINE # 5 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.0			ROCK	143.0	0.0	
289.0	CARBONDALE	SPRINGFIELD	COAL	5.0	143.0	

MAPID: 16500329000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE SW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.585676 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.696134 **DATE COLLECTED:** 0 / 0 / 1913
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 150.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SALINE COUNTY C C # 1 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.0			ROCK	145.0	0.0	
289.0	CARBONDALE	SPRINGFIELD	COAL	5.0	145.0	

MAPID: 16500308000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.575275 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.700147 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 39.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #6 **WELL TYPE:** Coal Test
COMMENT: JOHN NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	16.0	0.0	
374.0	CARBONDALE		SANDSTONE	9.0	16.0	
365.0	CARBONDALE		SHALE	14.0	25.0	
351.0	CARBONDALE		SANDSTONE	0.0	39.0	T.D.

MAPID: 16500309000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE NW NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.564497 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.699648 **DATE COLLECTED:** 11 / 0 / 1924

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 318.8 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL COAL CO., HOLE #25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.0	0.0	
372.0	CARBONDALE	DYKERSBURG	SHALE	52.0	18.0	
320.0	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	70.0	LOG HAS "W/ COAL SPARS"
316.0	CARBONDALE	DYKERSBURG	SANDSTONE	40.0	74.0	GALATIA CHANNEL: SPRINGFLD. COAL MISSING
276.0	CARBONDALE		SANDSTONE	2.0	114.0	LOG HAS "W/ COAL SPARS"
274.0	CARBONDALE		SANDY SHALE	10.0	116.0	
264.0	CARBONDALE	EXCELLO	BLACK SHALE	2.0	126.0	
262.0	CARBONDALE	HOUCHIN CREEK	COAL	0.7	128.0	
261.3	CARBONDALE		UNDERCLAY	4.3	128.7	
257.0	CARBONDALE		SHALE	9.0	133.0	
248.0	CARBONDALE		SANDY SHALE	22.0	142.0	
226.0	CARBONDALE		SHALE	10.0	164.0	
216.0	CARBONDALE	SURVANT - UPPER	COAL	0.5	174.0	
215.5	CARBONDALE		UNDERCLAY	2.5	174.5	
213.0	CARBONDALE		SHALE	6.0	177.0	
207.0	CARBONDALE	SURVANT - LOWER	COAL	1.5	183.0	
205.5	CARBONDALE		UNDERCLAY	2.0	184.5	
203.5	CARBONDALE		SHALE	4.5	186.5	
199.0	CARBONDALE		SANDY SHALE	10.0	191.0	
189.0	CARBONDALE		BLACK SHALE	4.0	201.0	
185.0	CARBONDALE		LIMESTONE	2.0	205.0	
183.0	CARBONDALE		SANDY SHALE	16.0	207.0	
167.0	CARBONDALE		SHALE	34.0	223.0	
133.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	7.0	257.0	
126.0	CARBONDALE	COLCHESTER	COAL	0.5	264.0	
125.5	SPOON		UNDERCLAY	12.5	264.5	
113.0	SPOON		SHALE	4.0	277.0	
109.0	SPOON		SHALE	12.0	281.0	
97.0	SPOON	DEKOVEN	COAL	3.6	293.0	BONEY 295.25-295.42
93.4	SPOON		SHALY SANDSTONE	3.0	296.6	
90.4	SPOON		SANDSTONE	2.0	299.6	
88.4	SPOON		SHALE	8.0	301.6	
80.4	SPOON		BLACK SHALE	4.3	309.6	
76.1	SPOON		PYRITE	0.1	313.9	
76.0	SPOON	DAVIS	COAL	2.7	314.0	
73.3	SPOON	DAVIS	PYRITE	0.1	316.7	
73.2	SPOON	DAVIS	COAL	0.5	316.8	
72.7	SPOON		UNDERCLAY	1.5	317.3	

MAPID: 16500309000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.564497 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699648 **DATE COLLECTED:** 11 / 0 / 1944
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 318.8 **LOG TYPE:** Drillers Log
SOURCE: SALINE GASS C C ?? **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	18.0	0.0	
372.0			ROCK	110.0	18.0	
262.0			COAL	0.7	128.0	
261.3			ROCK	45.3	128.7	
216.0			COAL	0.5	174.0	
215.5			ROCK	8.5	174.5	
207.0			COAL	1.5	183.0	
205.5			ROCK	79.5	184.5	
126.0			COAL	0.5	264.0	
125.5			ROCK	28.5	264.5	
97.0			COAL	3.6	293.0	
93.4			ROCK	17.4	296.6	
76.0			COAL	3.2	314.0	
72.8			ROCK	1.5	317.2	

MAPID: 16500310000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5758 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.701512 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 134.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	BRIAR HILL	COAL	-	55.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.3	129.0	

MAPID: 16500310000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5758 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.701512 **DATE COLLECTED:** 7 / 3 / 1905

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 133.9 **LOG TYPE:** Drillers Log

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	7.0	0.0	
393.0			ROCK	48.5	7.0	
344.5			COAL	1.8	55.5	
342.7			SHALE	2.4	57.3	
340.3			COAL	1.3	59.7	
339.0			ROCK	2.4	61.0	
336.6			COAL	0.3	63.4	
336.3			ROCK	66.0	63.7	
270.3	CARBONDALE	SPRINGFIELD	COAL	4.3	129.7	

MAPID: 16500310000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW NW NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5758 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.701512 **DATE COLLECTED:** 7 / 3 / 1905

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 133.9 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #7 **WELL TYPE:** Coal Test

COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	7.0	0.0	
-			SAND	3.0	7.0	
-	CARBONDALE		UNDERCLAY	9.0	10.0	
-	CARBONDALE		SANDSTONE	10.0	19.0	
-	CARBONDALE		SHALE	12.0	29.0	
-	CARBONDALE		BLACK SHALE	14.5	41.0	
-	CARBONDALE		COAL	1.8	55.5	BRIAR HILL COAL OR UPPER BENCH
-	CARBONDALE		BLACK SHALE	2.4	57.3	OF THE SPRINGFIELD COAL
-	CARBONDALE		COAL	1.3	59.7	
-	CARBONDALE		LIMESTONE	1.3	61.0	
-	CARBONDALE		UNDERCLAY	1.2	62.3	
-	CARBONDALE		COAL	0.3	63.4	
-	CARBONDALE		UNDERCLAY	3.0	63.7	
-	CARBONDALE		BLACK SHALE	16.0	66.7	
-	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	82.7	
-	CARBONDALE	DYKERSBURG	SHALE	20.0	90.7	
-	CARBONDALE	DYKERSBURG	SHALE	19.0	110.7	
-	CARBONDALE	SPRINGFIELD	COAL	4.3	129.7	
-	CARBONDALE		UNDERCLAY	0.0	133.9	T.D.

MAPID: 16500311000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 550' S line, 200' E line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.569225 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.696172 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 99.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #14 **WELL TYPE:** Coal Test
COMMENT: SIEGAL LEDFORD FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.0			UNCONSOLIDATED	14.0	0.0	
400.0	CARBONDALE		SANDSTONE	10.0	14.0	
390.0	CARBONDALE		BLACK SHALE	11.0	24.0	
379.0	CARBONDALE		BLACK SHALE	3.0	35.0	
376.0	CARBONDALE		UNDERCLAY	1.0	38.0	
375.0	CARBONDALE		SHALE	8.0	39.0	
367.0	CARBONDALE	DYKERSBURG	BLACK SHALE	33.0	47.0	
334.0	CARBONDALE	DYKERSBURG	BLACK SHALE	12.0	80.0	GRAY AND BLACK
322.0	CARBONDALE	DYKERSBURG	BLACK SHALE	1.0	92.0	
321.0	CARBONDALE	SPRINGFIELD	COAL	5.9	93.0	BOTTOM 1.5' BONE
315.1	CARBONDALE		UNDERCLAY	0.9	98.9	

MAPID: 16500311000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 550' S line, 200' E line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.569225 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.696172 **DATE COLLECTED:** 0 / 0 / 1905
SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 99.8 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
414.0			UNCONSOLIDATED	14.0	0.0	
400.0			ROCK	79.0	14.0	
321.0	CARBONDALE	SPRINGFIELD	COAL	4.4	93.0	
316.6			ROCK	1.5	97.4	
315.1			ROCK	0.6	98.9	

MAPID: 16500312000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1' S line, 40' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577592 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.694711 **DATE COLLECTED:** 8 / 18 / 1905
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #15 **WELL TYPE:** Coal Test
COMMENT: G. HENSLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			UNCONSOLIDATED	8.0	0.0	
433.0	CARBONDALE		SANDSTONE	20.0	8.0	
413.0	CARBONDALE		SANDSTONE	10.0	28.0	
403.0	CARBONDALE		SHALE	15.0	38.0	
388.0	CARBONDALE		SHALE	19.0	53.0	
369.0	CARBONDALE	BRIAR HILL	COAL	1.3	72.0	
367.7	CARBONDALE		UNDERCLAY	2.0	73.3	
365.7	CARBONDALE		SANDSTONE	5.0	75.3	
360.7	CARBONDALE		SHALE	15.0	80.3	
345.7	CARBONDALE		BLACK SHALE	10.0	95.3	
335.7	CARBONDALE		BLACK SHALE	5.0	105.3	
330.7	CARBONDALE	DYKERSBURG	BLACK SHALE	16.0	110.3	
314.7	CARBONDALE	DYKERSBURG	BLACK SHALE	2.1	126.3	
312.6	CARBONDALE	SPRINGFIELD	COAL	4.0	128.4	UPPER 3' BONE
308.6	CARBONDALE		BLACK SHALE	2.0	132.4	
306.6	CARBONDALE		UNDERCLAY	0.6	134.4	

MAPID: 16500312000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1' S line, 40' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577592 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694711 **DATE COLLECTED:** 8 / 18 / 1905
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			UNCONSOLIDATED	8.0	0.0	
433.0			ROCK	64.0	8.0	
369.0			COAL	1.3	72.0	
367.7			ROCK	55.2	73.3	
312.6			ROCK	3.0	128.4	
309.6	CARBONDALE	SPRINGFIELD	COAL	1.0	131.4	
308.6	CARBONDALE		ROCK	8.0	132.4	

MAPID: 16500313000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 100' N line, 200' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577047 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.694428 **DATE COLLECTED:** 8 / 18 / 1905
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #16 **WELL TYPE:** Coal Test
COMMENT: BARNARD FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	14.0	0.0	
442.0	CARBONDALE		SANDSTONE	12.0	14.0	
430.0	CARBONDALE		SHALE	4.0	26.0	
426.0	CARBONDALE		SANDSTONE	10.0	30.0	
416.0	CARBONDALE		SHALE	15.0	40.0	
401.0	CARBONDALE		BLACK SHALE	18.0	55.0	
383.0	CARBONDALE	BRIAR HILL	COAL	1.5	73.0	
381.5	CARBONDALE		UNDERCLAY	0.5	74.5	
381.0	CARBONDALE		SANDY SHALE	13.0	75.0	
368.0	CARBONDALE		SHALE	19.0	88.0	
349.0	CARBONDALE		BLACK SHALE	9.0	107.0	
340.0	CARBONDALE	DYKERSBURG	BLACK SHALE	15.0	116.0	
325.0	CARBONDALE	SPRINGFIELD	COAL	6.8	131.0	
318.2	CARBONDALE		UNDERCLAY	0.3	137.8	

MAPID: 16500313000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 100' N line, 200' W line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577047 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694428 **DATE COLLECTED:** 8 / 18 / 1905
SURFACE ELEVATION (FT.): 456.0 **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
456.0			UNCONSOLIDATED	14.0	0.0	
442.0			ROCK	59.0	14.0	
383.0			COAL	1.5	73.0	
381.5			ROCK	56.5	74.5	
325.0	CARBONDALE	SPRINGFIELD	COAL	6.8	131.0	
318.2	CARBONDALE		ROCK	0.3	137.8	

MAPID: 16500314000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 450' N line, 660' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.570865 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.693422 **DATE COLLECTED:** 8 / 7 / 1905
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #13 **WELL TYPE:** Coal Test
COMMENT: DR. BAKER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	12.0	0.0	
403.0	CARBONDALE		SANDSTONE	6.0	12.0	
397.0	CARBONDALE		SHALE	14.0	18.0	
383.0	CARBONDALE		BLACK SHALE	2.0	32.0	
381.0	CARBONDALE		UNDERCLAY	3.0	34.0	
378.0	CARBONDALE		BLACK SHALE	35.0	37.0	
343.0	CARBONDALE		BLACK SHALE	2.0	72.0	
341.0	CARBONDALE	SPRINGFIELD	COAL	3.9	74.0	
337.1	CARBONDALE	SPRINGFIELD	BONE COAL	4.6	77.9	
332.5	CARBONDALE		UNDERCLAY	0.5	82.5	

MAPID: 16500314000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 450' N line, 660' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.570865 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.693422 **DATE COLLECTED:** 8 / 7 / 1905
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCONSOLIDATED	12.0	0.0	
403.0			ROCK	62.0	12.0	
341.0	CARBONDALE	SPRINGFIELD	COAL	3.9	74.0	
337.1	CARBONDALE		ROCK	4.6	77.9	
332.5	CARBONDALE		ROCK	0.5	82.5	

MAPID: 16500319000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.569231 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.688727 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 397.3 **LOGGED (FT.):** 289.5 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO., HOLE #21 **WELL TYPE:** Coal Test

COMMENT: 2' NORTH OF WEST CORNER OF HOIST SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.3			CLAY	17.0	0.0	
380.3	CARBONDALE	DYKERSBURG	SHALE	18.3	17.0	
362.0	CARBONDALE	SPRINGFIELD	COAL	7.5	35.3	
354.5	CARBONDALE		UNDERCLAY	1.2	42.8	
353.3	CARBONDALE		SHALE	4.0	44.0	
349.3	CARBONDALE		SANDSTONE	28.0	48.0	
321.3	CARBONDALE		SHALY SANDSTONE	9.0	76.0	
312.3	CARBONDALE		SHALE	3.0	85.0	
309.3	CARBONDALE	EXCELLO	BLACK SHALE	6.1	88.0	
303.2	CARBONDALE	HOUCHIN CREEK	COAL	1.8	94.1	
301.5	CARBONDALE		UNDERCLAY	2.2	95.8	
299.3	CARBONDALE		SHALE	14.0	98.0	SOFT
285.3	CARBONDALE		SHALE	16.0	112.0	
269.3	CARBONDALE		SHALE	16.3	128.0	
253.0	CARBONDALE	SURVANT - UPPER	COAL	1.3	144.3	
251.8	CARBONDALE		SHALE	1.0	145.5	
250.8	CARBONDALE		SANDSTONE	1.5	146.5	
249.3	CARBONDALE		SANDY SHALE	4.8	148.0	
244.5	CARBONDALE	SURVANT - LOWER	COAL	1.2	152.8	
243.3	CARBONDALE		SANDY SHALE	4.0	154.0	
239.3	CARBONDALE		SHALE	9.0	158.0	
230.3	CARBONDALE		SHALE	1.5	167.0	
228.8	CARBONDALE		LIMESTONE	1.8	168.5	
227.0	CARBONDALE		SANDSTONE	25.8	170.3	
201.3	CARBONDALE		SHALE	36.0	196.0	
165.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.3	232.0	
161.0	CARBONDALE	COLCHESTER	COAL	0.9	236.3	
160.0	SPOON		SANDY SHALE	0.8	237.3	
159.3	SPOON		SANDY SHALE	7.0	238.0	
152.3	SPOON		SHALE	20.4	245.0	BLUE W/ BROWN BANDS
131.9	SPOON	DEKOVEN	COAL	3.1	265.4	
128.8	SPOON		SANDSTONE	3.0	268.5	
125.8	SPOON		SANDY SHALE	5.5	271.5	
120.3	SPOON		SHALE	2.0	277.0	
118.3	SPOON		BLACK SHALE	5.4	279.0	
112.9	SPOON	DAVIS	COAL	3.6	284.4	
109.3	SPOON		UNDERCLAY	1.5	288.0	

MAPID: 16500319000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.569231 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.688727 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 289.5 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS C C, MINE INDEX 3292 **WELL TYPE:** Coal Test

COMMENT: 2' NORTH OF WEST CORNER OF HOIST SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.0			UNCONSOLIDATED	17.0	0.0	
380.0			ROCK	18.3	17.0	
361.7	CARBONDALE	SPRINGFIELD	COAL	7.5	35.3	
354.2			ROCK	51.3	42.8	
302.9			COAL	1.8	94.1	
301.2			ROCK	48.4	95.8	
252.7			COAL	1.3	144.3	
251.5			ROCK	7.3	145.5	
244.2			COAL	1.2	152.8	
243.0			ROCK	82.3	154.0	
160.7			COAL	0.9	236.3	
159.8			ROCK	28.2	237.2	
131.6			COAL	3.1	265.4	
128.5			ROCK	16.0	268.5	
112.5			COAL	3.6	284.5	
108.9			ROCK	1.5	288.1	

MAPID: 16500321000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** SE NW SE SW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571532 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.689659 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO., HOLE #22 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			SANDY CLAY	14.0	0.0	
376.0	CARBONDALE	DYKERSBURG	SHALE	5.0	14.0	SOFT
371.0	CARBONDALE	DYKERSBURG	SHALE	8.8	19.0	
362.2	CARBONDALE	SPRINGFIELD	COAL	9.0	27.8	
353.2	CARBONDALE		UNDERCLAY	1.3	36.8	
352.0	CARBONDALE		SHALE & SANDSTONE	11.0	38.0	
341.0	CARBONDALE		SANDSTONE	14.0	49.0	W/ SH BANDS
327.0	CARBONDALE		SANDSTONE	6.5	63.0	
320.5	CARBONDALE	EXCELLO	BLACK SHALE	6.8	69.5	
313.7	CARBONDALE	HOUCHIN CREEK	COAL	1.8	76.3	
311.8	CARBONDALE		UNDERCLAY	0.8	78.2	
311.0	CARBONDALE		SANDSTONE	12.0	79.0	
299.0	CARBONDALE		SANDSTONE/SHALE	7.0	91.0	
292.0	CARBONDALE		SHALE	32.2	98.0	
259.8	CARBONDALE	SURVANT - UPPER	COAL	0.8	130.2	
259.0	CARBONDALE		SANDY SHALE	6.3	131.0	
252.7	CARBONDALE	SURVANT - LOWER	COAL	0.7	137.3	
252.0	CARBONDALE		SHALE	3.0	138.0	
249.0	CARBONDALE		SANDY SHALE	5.0	141.0	
244.0	CARBONDALE		SHALE	9.0	146.0	W/ WHITE HARD BANDS
235.0	CARBONDALE		SANDSTONE	9.0	155.0	
226.0	CARBONDALE		SANDY SHALE	22.0	164.0	
204.0	CARBONDALE		SHALE	31.0	186.0	
173.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	217.0	
170.0	SPOON		SHALE	3.0	220.0	
167.0	SPOON		SANDSTONE	4.0	223.0	
163.0	SPOON		SHALE	16.0	227.0	SOFT
147.0	SPOON		SHALE	8.3	243.0	
138.7	SPOON	DEKOVEN	COAL	3.2	251.3	
135.5	SPOON		SANDSTONE	4.5	254.5	
131.0	SPOON		SHALE	9.0	259.0	
122.0	SPOON		BLACK SHALE	2.8	268.0	
119.2	SPOON	DAVIS	COAL	3.7	270.8	
115.6	SPOON		SANDSTONE	1.6	274.4	

MAPID: 16500321000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** SE NW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571532 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.689659 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	14.0	0.0	
376.0			ROCK	13.8	14.0	
362.2			COAL	9.0	27.8	
353.2			ROCK	39.6	36.8	
313.7			COAL	1.8	76.3	
311.8			ROCK	52.0	78.2	
259.8			COAL	0.8	130.2	
259.0			SHALE	6.3	131.0	
252.7			COAL	0.7	137.3	
252.0			ROCK	113.3	138.0	
138.7			COAL	3.2	251.3	
135.5			ROCK	21.5	254.5	

MAPID: 16500327000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 250' N line, 800' E line of SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.576032 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.690372 **DATE COLLECTED:** 8 / 3 / 1905
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 64.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #12 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	15.0	0.0	
395.0	CARBONDALE		SHALE	16.0	15.0	
379.0	CARBONDALE		SHALE	14.0	31.0	
365.0	CARBONDALE		BLACK SHALE	9.0	45.0	
356.0	CARBONDALE	SPRINGFIELD	COAL	9.3	54.0	
346.7	CARBONDALE		UNDERCLAY	1.0	63.3	

MAPID: 16500327000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 250' N line, 800' E line of SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.576032 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.690372 **DATE COLLECTED:** 8 / 3 / 1905
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 64.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	15.0	0.0	
395.0			ROCK	48.3	15.0	
346.7	CARBONDALE	SPRINGFIELD	COAL	9.3	63.3	
337.5	CARBONDALE		ROCK	1.0	72.5	

MAPID: 16500329200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 600' N line, 700' E line of SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.571013 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.693009 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 49.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SALINE GAS C C # 1 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			ROCK	40.0	0.0	
350.0	CARBONDALE	SPRINGFIELD	COAL	9.5	40.0	

MAPID: 16501028000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1360' N line, 15' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.559433 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698163 **DATE COLLECTED:** 2 / 1 / 1931
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 70.5 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG C C, MAP BY FRED WILLIAMS **WELL TYPE:** Coal Test
COMMENT: 12 OTHER DATA SETS AVAILABLE IN AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	67.0	0.0	
333.0			COAL	3.5	67.0	

MAPID: 16501031000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** 630' N line, 20' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.559452 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.700175 **DATE COLLECTED:** 2 / 1 / 1931
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG COAL MINING, HOLE #22 **WELL TYPE:** Coal Test
COMMENT: 11 MORE HOLES W/ SIM. DATA;NO ELEV. GIV.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	39.0	0.0	NO RECORD
-	CARBONDALE		COAL	4.0	39.0	

MAPID: 165273A0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.570177 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699672 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 442.0 **LOGGED (FT.):** 23.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: COAL OUTCROPS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	6.0		
-			COAL	4.5		
-			ROCK	13.0		

MAPID: 16500328000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1020' N line, 860' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.543599 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.699064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 38.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
337.0	CARBONDALE	SPRINGFIELD	COAL	7.8	28.0	

MAPID: 16500328000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1020' N line, 860' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.543599 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 38.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNKNOWN	24.0	0.0	
341.0			ROCK	4.0	24.0	
337.0	CARBONDALE	SPRINGFIELD	COAL	7.8	28.0	
329.2	CARBONDALE		ROCK	2.5	35.8	

MAPID: 16500328000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1020' N line, 860' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.543599 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 38.3 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #3 **WELL TYPE:** Coal Test
COMMENT: JOHN NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			NO RECORD	24.0	0.0	
341.0	CARBONDALE		SHALE	4.0	24.0	
337.0	CARBONDALE	SPRINGFIELD	COAL	7.8	28.0	
329.2	CARBONDALE		UNDERCLAY	2.5	35.8	
326.7	CARBONDALE		SANDSTONE	0.0	38.3	T.D.

MAPID: 16500329000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.557621 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 52.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #4 **WELL TYPE:** Coal Test
COMMENT: JOHN NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	24.0	0.0	
354.0	CARBONDALE		SHALE	12.0	24.0	
342.0	CARBONDALE			4.8	36.0	SANDY SHALE, SLATE, AND BONE
337.2			BOULDER	1.2	40.8	
336.0	CARBONDALE	SPRINGFIELD	COAL	7.5	42.0	
328.5	CARBONDALE		UNDERCLAY	2.5	49.5	
326.0	CARBONDALE		SANDSTONE	0.0	52.0	

MAPID: 16500329400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.548789 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.700976 **DATE COLLECTED:** 0 / 0 / 1930
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 5.5 **LOG TYPE:**
SOURCE: MINE NOTES-HARRISBURG COAL & MNG C #8 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	5.5		

MAPID: 16500329300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1200' N line, 1320' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.554796 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.698594 **DATE COLLECTED:** 0 / 0 / 1945
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 30.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-COULTER & MCKENNA C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			ROCK	25.0	0.0	
345.0	CARBONDALE	SPRINGFIELD	COAL	5.7	25.0	

MAPID: 16500329000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.557621 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 52.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	24.0	0.0	
354.0			ROCK	18.0	24.0	
336.0	CARBONDALE	SPRINGFIELD	COAL	7.5	42.0	
328.5	CARBONDALE		ROCK	2.6	49.5	

MAPID: 16500330000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.558797 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.69871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #5 **WELL TYPE:** Coal Test
COMMENT: JOHN NYBERG FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			NO RECORD	10.5	0.0	
389.5	CARBONDALE	DYKERSBURG	SANDSTONE	7.5	10.5	
382.0	CARBONDALE	DYKERSBURG	SHALE	5.0	18.0	
377.0	CARBONDALE	SPRINGFIELD	COAL	0.5	23.0	
376.5	CARBONDALE		SANDY SHALE	23.5	23.5	
353.0	CARBONDALE		SANDSTONE	0.0	47.0	

MAPID: 16500330000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.558797 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69871 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNKNOWN	10.5	0.0	
369.5			ROCK	12.5	10.5	
357.0			COAL	0.5	23.0	
356.5			ROCK	23.5	23.5	

MAPID: 16500331000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NE SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550603 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.697775 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 432.0 **LOG TYPE:** Drillers Log

SOURCE: SALINE GAS COAL CO., HOLE #23 **WELL TYPE:** Coal Test

COMMENT: G. HUFFMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			SANDY CLAY	20.0	0.0	
351.0	CARBONDALE		SHALE	0.5	20.0	
350.5	CARBONDALE		COAL	0.5	20.5	
350.0	CARBONDALE		SHALE	9.0	21.0	
341.0	CARBONDALE		CLAYSTONE & SILTSTONE	25.0	30.0	
316.0	CARBONDALE		SHALE & SANDSTONE	23.0	55.0	GALATIA CHANNEL: SPRINGFLD. COAL MISSING
293.0	CARBONDALE		SANDSTONE	12.0	78.0	
281.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	90.0	
276.0	CARBONDALE		SANDSTONE	11.0	95.0	
265.0	CARBONDALE		SHALE & SANDSTONE	19.0	106.0	
246.0	CARBONDALE		SHALE	5.9	125.0	
240.1	CARBONDALE	SURVANT - UPPER	COAL	0.8	130.9	
239.3	CARBONDALE		SHALE	5.3	131.7	
234.0	CARBONDALE	SURVANT - LOWER	COAL	1.5	137.0	
232.5	CARBONDALE		BLACK SHALE	9.5	138.5	
223.0	CARBONDALE		SANDSTONE	8.0	148.0	
215.0	CARBONDALE		SHALE & SANDSTONE	20.0	156.0	
195.0	CARBONDALE		SHALE	10.0	176.0	
185.0	CARBONDALE		SHALE	20.0	186.0	
165.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	206.0	
161.0	SPOON		CALCAREOUS SHALE	15.0	210.0	
146.0	SPOON		SANDY SHALE	10.0	225.0	
136.0	SPOON		SANDSTONE	15.0	235.0	
121.0	SPOON		BLACK SHALE	5.0	250.0	
116.0	SPOON		SHALE	3.3	255.0	
112.7	SPOON	DEKOVEN	COAL	3.2	258.3	
109.6	SPOON		SANDSTONE	5.5	261.4	
104.1	SPOON		SANDY SHALE	5.1	266.9	
99.0	SPOON		SHALE	3.5	272.0	
95.5	SPOON		BLACK SHALE	3.2	275.5	
92.3	SPOON	DAVIS	COAL	3.8	278.7	
88.6	SPOON		SANDSTONE	3.6	282.4	
85.0	SPOON		LIMESTONE	2.0	286.0	
83.0	SPOON		SHALE	13.0	288.0	
70.0	SPOON		SHALE	5.0	301.0	
65.0	SPOON		SANDSTONE	10.0	306.0	
55.0	SPOON		SANDY SHALE	18.0	316.0	DARK ONLY FROM 330
37.0	SPOON		SHALE	5.0	334.0	
32.0	SPOON		SHALE	5.0	339.0	

27.0	SPOON	BLACK SHALE	3.0	344.0	
24.0	SPOON	SANDSTONE	3.5	347.0	
20.5	SPOON	UNDERCLAY	2.3	350.5	
18.2	SPOON	COAL	0.3	352.8	
18.0	SPOON	SHALE	4.0	353.0	
14.0	SPOON	LIMESTONE	7.0	357.0	
7.0	SPOON	BLACK SHALE	4.0	364.0	
3.0	SPOON	SHALE	2.0	368.0	
1.0	SPOON	COAL	0.7	370.0	
0.3	SPOON	SHALE	1.3	370.7	
-1.0	SPOON	SHALE	5.0	372.0	
-6.0	SPOON	BLACK SHALE	1.0	377.0	
-7.0	SPOON	UNDERCLAY	4.0	378.0	
-11.0	SPOON	SANDY SHALE	5.0	382.0	
-16.0	CARBONDALE	BLACK SHALE	4.0	387.0	
-20.0	CARBONDALE	COAL	1.0	391.0	
-21.0	CARBONDALE	UNDERCLAY	2.0	392.0	
-23.0	CARBONDALE	SANDY SHALE	22.0	394.0	
-45.0	CARBONDALE	UNDERCLAY	3.0	416.0	
-48.0	CARBONDALE	SHALE	6.5	419.0	W/ FIRECLAY
-54.5	CARBONDALE	COAL	0.8	425.5	
-55.3	CARBONDALE	SANDSTONE	0.7	426.3	
-56.0	CARBONDALE	SHALE	1.0	427.0	
-57.0	CARBONDALE	SANDY SHALE	4.0	428.0	

MAPID: 16500331000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NE SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550603 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697775 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 432.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	20.0	0.0	
350.0			ROCK	0.5	20.0	
349.5			COAL	0.5	20.5	
349.0			ROCK	151.9	21.0	
197.1			COAL	0.8	172.9	
196.3			SHALE	5.3	173.7	
191.0			COAL	1.5	179.0	
189.5			ROCK	119.8	180.5	
69.8			COAL	3.2	300.2	
66.6			ROCK	17.2	303.4	
49.4			COAL	3.8	320.6	
45.6			ROCK	70.3	324.4	
-24.7			COAL	0.3	394.7	
-25.0			ROCK	17.0	395.0	
-42.0			COAL	0.7	412.0	
-42.6			ROCK	20.3	412.6	
-63.0			COAL	1.0	433.0	
-64.0			ROCK	33.5	434.0	
-97.5			COAL	0.3	467.5	
-97.8			ROCK	5.7	467.8	

MAPID: 16500331000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE NE SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550603 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.697775 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 277.9 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS COAL **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
162.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	209.0	
93.1	SPOON	DAVIS	UNCLASSIFIED	-	277.9	

MAPID: 16501039000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 360' N line, 890' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.556294 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.700914 **DATE COLLECTED:** 2 / 1 / 1931
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG C C, MAP BY FRED WILLIAMS **WELL TYPE:** Coal Test
COMMENT: 28 OTHER DATA SETS AVAILABLE IN AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNKNOWN	62.0	0.0	
328.0			COAL	6.0	62.0	

MAPID: 16501048000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1000' N line, 1140' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.555421 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.699145 **DATE COLLECTED:** 2 / 1 / 1931
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG COAL MINING CO., HOLE #50 **WELL TYPE:** Coal Test
COMMENT: 28 MORE HOLES W/ SIMILAR DATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	40.0	0.0	NO RECORD
-	CARBONDALE	SPRINGFIELD	COAL	6.0	40.0	

MAPID: 16503696000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 10' S line, 1285' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.526885 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.687292 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 180.2 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 35-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0			UNCLASSIFIED	95.5	0.0	
268.5	CARBONDALE	COLCHESTER	COAL	1.3	95.5	UNCERTAIN CORRELATION
267.2	CARBONDALE		UNCLASSIFIED	57.2	96.8	
210.0	CARBONDALE	DEKOVEN	COAL	3.2	154.0	
206.8	CARBONDALE		UNCLASSIFIED	18.9	157.2	
187.9	CARBONDALE	DAVIS	COAL	4.1	176.1	

MAPID: 16500675000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** SE SE NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.509174 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691446 **DATE COLLECTED:** 2 / 0 / 1929
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1125.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG OIL & GAS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	25.0	0.0	
335.0			ROCK	155.0	25.0	
180.0			COAL	5.0	180.0	
175.0			ROCK	930.0	185.0	

MAPID: 16502577000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505166 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.691917 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 1270.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	198.0	
149.0	SPOON	DAVIS	UNCLASSIFIED	-	220.0	
-901.0	BASE OF PENN.		UNCLASSIFIED	-	1270.0	

MAPID: 16502577000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505166 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.691917 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2090.0 **LOG TYPE:**
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1011.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1380.0	
-1336.0			LIMESTONE	-	1705.0	
-1721.0		BASE BARLOW	LIMESTONE	-	2090.0	

MAPID: 16502577000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.505166 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691917 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S., WIEDEMAN LOUIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
229.0	CARBONDALE	COLCHESTER	COAL	0.5	140.0	
179.0	CARBONDALE	DEKOVEN	COAL	2.5	190.0	
179.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	190.0	
149.0	CARBONDALE	DAVIS	COAL	2.8	220.0	
96.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	273.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-16.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	385.0	
49.0	TRADEWATER	MT. RORAH	COAL	1.2	320.0	

MAPID: 16503709000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 35 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.513199 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.694667 **DATE COLLECTED:** 11 / 3 / 1971
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 15-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
263.5	CARBONDALE	SURVANT	COAL	0.5	94.5	
210.0	CARBONDALE	COLCHESTER	COAL	0.2	148.0	
161.3	CARBONDALE	DEKOVEN	COAL	3.0	196.7	
161.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	196.7	
135.2	CARBONDALE	DAVIS	COAL	3.7	222.8	54% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502914000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.493645 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.691987 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1270.0 **LOG TYPE:** Electric Log
SOURCE: VICKERY DRLG. CO., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
217.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	149.0	
138.0	SPOON	DAVIS	UNCLASSIFIED	-	228.0	
-904.0	BASE OF PENN.		UNCLASSIFIED	-	1270.0	

MAPID: 16502914000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.493645 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.691987 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2158.0 **LOG TYPE:**
SOURCE: VICKERY DRLG. CO., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1038.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1404.0	
-1376.0			LIMESTONE	-	1742.0	
-1792.0		BASE BARLOW	LIMESTONE	-	2158.0	

MAPID: 16502914000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.493645 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691987 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2635.0 **LOG TYPE:** Electric Log
SOURCE: VICKERY DRLG. CO., INC., MUGGEE HEIRS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
216.0	CARBONDALE	COLCHESTER	COAL	0.5	150.0	
164.0	CARBONDALE	DEKOVEN	COAL	3.0	202.0	
164.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	202.0	
137.0	CARBONDALE	DAVIS	COAL	5.0	229.0	
91.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	275.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
71.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	295.0	
38.0	TRADEWATER	MT. RORAH	COAL	1.5	328.0	

MAPID: 16503565000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of NW SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.4994 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.69834 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 262.2 **LOG TYPE:**

SOURCE: PEABODY COAL CO. 3308 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.2	CARBONDALE	HOUCHIN CREEK	COAL	1.9	38.8	
248.0	CARBONDALE	SURVANT	COAL	2.1	102.0	
176.0	CARBONDALE	COLCHESTER	COAL	0.5	174.0	
115.8	CARBONDALE	DEKOVEN	COAL	3.5	234.2	
115.8	CARBONDALE	LOWER DEKOVEN	COAL	0.0	234.2	
94.3	CARBONDALE	DAVIS	COAL	4.1	255.7	36% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503565000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 0' N line, 0' W line of NW SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.4994 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.69834 **DATE COLLECTED:** 4 / 9 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 262.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3308 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-6865 (NW/c NW-SE-NW)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	20.0	0.0	SURFACE CLAY
-			SAND	15.2	20.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	3.6	35.2	
-	CARBONDALE	HOUCHIN CREEK	COAL	1.9	38.8	
-	CARBONDALE		UNDERCLAY	1.5	40.7	
-	CARBONDALE		GRAY SANDSTONE	31.3	42.2	
-	CARBONDALE		GRAY SHALE	28.5	73.5	
-	CARBONDALE	SURVANT	COAL	2.1	102.0	
-	CARBONDALE		GRAY SANDSTONE	12.9	104.1	
-	CARBONDALE		GRAY SHALE	3.0	117.0	
-	CARBONDALE		SHALE	7.0	120.0	SHALE WITH LS STREAKS
-	CARBONDALE		GRAY SANDSTONE	8.0	127.0	
-	CARBONDALE		SANDY SHALE	19.0	135.0	
-	CARBONDALE		GRAY SHALE	18.0	154.0	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	172.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	174.0	
-	SPOON		UNDERCLAY	3.5	174.5	
-	SPOON		GRAY SANDSTONE	56.2	178.0	
-	SPOON	DEKOVEN	COAL	3.5	234.2	
-	SPOON		UNDERCLAY	1.3	237.7	
-	SPOON		GRAY SANDSTONE	6.6	239.0	
-	SPOON		GRAY SHALE	7.5	245.6	
-	SPOON		BLACK SHALE	2.6	253.1	
-	SPOON	DAVIS	COAL	0.4	255.7	
-	SPOON	DAVIS	ROCK	0.0	256.1	FUSION BAND
-	SPOON	DAVIS	COAL	0.4	256.1	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.8	256.5	
-	SPOON	DAVIS	ROCK	0.1	257.3	PYRITE BAND
-	SPOON	DAVIS	COAL	1.4	257.4	
-	SPOON	DAVIS	COAL	0.2	258.8	COAL WITH VERTICAL PYRITE
-	SPOON	DAVIS	COAL	0.3	258.9	
-	SPOON	DAVIS	ROCK	0.0	259.2	FUSION BAND
-	SPOON	DAVIS	COAL	0.6	259.2	
-	SPOON		SHALE	1.2	259.8	
-	SPOON		SANDSTONE	1.2	261.0	

MAPID: 16503573000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE NE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.486152 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.690673 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3318 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
281.5	CARBONDALE	SURVANT	COAL	2.5	78.5	
203.4	CARBONDALE	COLCHESTER	COAL	0.8	156.6	
154.1	CARBONDALE	DEKOVEN	COAL	3.4	205.9	
154.1	CARBONDALE	LOWER DEKOVEN	COAL	0.0	205.9	
128.4	CARBONDALE	DAVIS	COAL	4.8	231.6	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503697000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 10' S line, 2500' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.494295 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.68746 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 210.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 43-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0			UNCONSOLIDATED	25.0	0.0	
342.0	CARBONDALE		ROCK	31.0	25.0	
311.0	CARBONDALE	SURVANT	COAL	1.5	56.0	UNCERTAIN CORRELATION
309.5	CARBONDALE		ROCK	64.0	57.5	
245.5	CARBONDALE	COLCHESTER	COAL WITH SHALE	3.1	121.5	UNCERTAIN CORRELATION
242.4	CARBONDALE		ROCK	53.4	124.6	
189.0	CARBONDALE	DEKOVEN	COAL	3.1	178.0	
185.9	CARBONDALE		ROCK	25.4	181.1	
160.5	CARBONDALE	DAVIS	COAL	4.0	206.5	

MAPID: 16503698000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 10' S line, 1980' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49713 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687435 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 200.8 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 44-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	32.0	0.0	
340.0	CARBONDALE		ROCK	26.5	32.0	
313.5	CARBONDALE	SURVANT	COAL	1.0	58.5	UNCERTAIN CORRELATION
312.5	CARBONDALE		ROCK	55.0	59.5	
257.5	CARBONDALE		BLACK SHALE & COAL	4.0	114.5	
253.5	CARBONDALE		ROCK	54.4	118.5	
199.1	CARBONDALE	DEKOVEN	COAL	3.1	172.9	
196.0	CARBONDALE		ROCK	20.6	176.0	
175.4	CARBONDALE	DAVIS	COAL	4.2	196.6	

MAPID: 16503699000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 10' S line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.490195 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687495 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 217.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 45-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCONSOLIDATED	30.0	0.0	
336.0	CARBONDALE		ROCK	25.5	30.0	
310.5	CARBONDALE	SURVANT	COAL	1.5	55.5	UNCERTAIN CORRELATION
309.0	CARBONDALE		ROCK	69.5	57.0	
239.5	CARBONDALE		BLACK SHALE & COAL	4.5	126.5	
235.0	CARBONDALE		ROCK	52.0	131.0	
183.0	CARBONDALE	DEKOVEN	COAL	3.1	183.0	
179.9	CARBONDALE		ROCK	27.3	186.1	
152.6	CARBONDALE	DAVIS	COAL	4.1	213.4	

MAPID: 16503700000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 10' S line, 5' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.48563 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687532 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 209.8 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 47-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	33.0	0.0	
332.0	CARBONDALE		ROCK	18.0	33.0	
314.0	CARBONDALE	SURVANT	COAL	1.7	51.0	UNCERTAIN CORRELATION
312.3	CARBONDALE		ROCK	68.3	52.7	
244.0	CARBONDALE		BLACK SHALE	4.0	121.0	RASHY
240.0	CARBONDALE		ROCK	54.5	125.0	
185.5	CARBONDALE	DEKOVEN	COAL	3.0	179.5	
182.5	CARBONDALE		ROCK	23.0	182.5	
159.5	CARBONDALE	DAVIS	ROCK	4.3	205.5	

MAPID: 16503710000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1475' N line, 1400' W line of NW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49454 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.694281 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 258.1 **LOG TYPE:**
SOURCE: JOHN T. BOYD 12-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
319.5	CARBONDALE	HOUCHIN CREEK	COAL	0.0	37.5	
259.0	CARBONDALE	SURVANT	COAL	3.0	98.0	
124.0	CARBONDALE	DEKOVEN	COAL	3.0	233.0	
124.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	233.0	
105.3	CARBONDALE	DAVIS	COAL	3.9	251.7	

MAPID: 16503710000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1475' N line, 1400' W line of NW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49454 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.694281 **DATE COLLECTED:** 12 / 14 / 1971
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 259.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 12-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0			CLAY	24.0	0.0	
333.0			SAND	9.0	24.0	
324.0	CARBONDALE	EXCELLO	BLACK SHALE	4.5	33.0	BLACK, BONEY SHALE
319.5	CARBONDALE		SANDSTONE	37.5	37.5	
282.0	CARBONDALE		SANDY SHALE	23.0	75.0	
259.0	CARBONDALE	SURVANT	COAL	3.0	98.0	
256.0	CARBONDALE		SANDY SHALE	67.0	101.0	
189.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	168.0	
187.0	SPOON		SANDSTONE	63.0	170.0	
124.0	SPOON	DEKOVEN	COAL	3.0	233.0	
121.0	SPOON		UNDERCLAY	1.5	236.0	
119.5	SPOON		GRAY SHALE	0.9	237.5	
118.6	SPOON		DARK GRAY SHALE	1.8	238.4	
116.8	SPOON		GRAY SANDSTONE	0.8	240.2	
116.0	SPOON		GRAY SHALE	3.4	241.0	
112.6	SPOON		DARK GRAY SHALE	4.2	244.4	
108.4	SPOON		BLACK SHALE	2.6	248.6	
105.9	SPOON		NO RECORD	0.6	251.1	NO RECORD IN LOG (0.6' GAP)
105.3	SPOON	DAVIS	COAL	3.9	251.7	
101.4	SPOON		GRAY SHALE	1.5	255.6	LOG SAYS 'SEATROCK'
99.9	SPOON		GRAY SILTSTONE	1.0	257.1	

MAPID: 16503736000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.491285 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.699271 **DATE COLLECTED:** 3 / 18 / 1972
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	29.0	0.0	
331.0			ROCK	33.0	29.0	
298.0			COAL	2.0	62.0	
296.0			ROCK	23.0	64.0	

MAPID: 16503767000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 20' S line, 1250' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.499666 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687443 **DATE COLLECTED:** 12 / 3 / 1970
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 192.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			CLAY	35.0	0.0	
335.0			COAL	1.5	35.0	
333.5			SHALE	18.5	36.5	
315.0			SANDSTONE	30.0	55.0	
285.0			SHALE	24.0	85.0	
261.0			SHALE	2.0	109.0	BLACK AND COAL
259.0			SANDSTONE	31.0	111.0	
228.0			SHALE	20.0	142.0	
208.0			COAL	3.5	162.0	
204.5			SHALE	5.5	165.5	
199.0			SHALE	12.0	171.0	SANDY
187.0			SHALE	3.6	183.0	BLACK
183.4			COAL	4.0	186.6	
179.4			SANDSTONE	1.4	190.6	

MAPID: 16503768000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1250' S line, 1700' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498111 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.69085 **DATE COLLECTED:** 9 / 6 / 1970
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. F172L **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	HOUCHIN CREEK	COAL	1.9	62.0	
242.0	CARBONDALE	SURVANT	COAL	1.5	118.0	
167.0	CARBONDALE	COLCHESTER	COAL	0.5	193.0	
112.5	CARBONDALE	DEKOVEN	COAL	3.0	247.5	
112.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	247.5	
88.4	CARBONDALE	DAVIS	COAL	4.0	271.6	29% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503769000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 6E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1320' N line, 0' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485496 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.698358 **DATE COLLECTED:** 1 / 21 / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. F175 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	SURVANT	COAL	1.0	104.0	
183.0	CARBONDALE	COLCHESTER	COAL	0.5	178.0	
138.5	CARBONDALE	DEKOVEN	COAL	3.0	222.5	
138.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	222.5	
104.0	CARBONDALE	DAVIS	COAL	4.2	257.0	77% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16500846000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.390982 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.769604 **DATE COLLECTED:** 6 / 0 / 1939
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1437.0 **LOG TYPE:** Electric Log
SOURCE: EVANS, C G & HAYPENNY, T **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
30.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	350.0	
-54.0	SPOON	DAVIS	UNCLASSIFIED	-	434.0	
-1057.0	BASE OF PENN.		UNCLASSIFIED	-	1437.0	

MAPID: 16500846000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.390982 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.769604 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1608.0 **LOG TYPE:**
SOURCE: EVANS, C G & HAYPENNY, T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1228.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1608.0	

MAPID: 16500846000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.390982 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.769604 **DATE COLLECTED:** 6 / 0 / 1939
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:** Electric Log
SOURCE: EVANS, C G & HAYPENNY, T, SWINNEY M W **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	245.0	
89.0	CARBONDALE	SURVANT	COAL	0.5	291.0	
30.0	CARBONDALE	COLCHESTER	COAL	0.5	350.0	
-30.0	CARBONDALE	DEKOVEN	COAL	3.0	410.0	
-30.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	410.0	
-57.0	CARBONDALE	DAVIS	COAL	4.0	437.0	
-105.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	485.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-122.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	502.0	
-160.0	TRADEWATER	MT. RORAH	COAL	1.2	540.0	

MAPID: 16501226000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 15' N line, 975' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.381798 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.768692 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #96 **WELL TYPE:** Coal Test
COMMENT: #1 CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	25.0	0.0	
357.0	CARBONDALE		SANDY SHALE	6.8	25.0	
350.2	CARBONDALE	BRERETON	LIMESTONE	2.8	31.8	
347.5	CARBONDALE	ANNA	BLACK SHALE	2.8	34.5	
344.7	CARBONDALE	HERRIN	COAL	4.2	37.3	
340.5	CARBONDALE		UNDERCLAY	1.5	41.5	

MAPID: 16501227000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 25' N line, 40' W line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.37836 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.775975 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 81.1 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #91 **WELL TYPE:** Coal Test

COMMENT: #2 CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	20.0	0.0	
350.0			SHALE	12.0	20.0	
338.0			SANDY SHALE	10.0	32.0	
328.0			SHALE	3.0	42.0	
325.0			COAL	0.8	45.0	
324.2			SHALE	2.5	45.8	
321.7			LIMESTONE	3.0	48.3	
318.7			SHALE	3.8	51.3	
315.0			SHALE	4.0	55.0	
311.0			BLACK SHALE	2.0	59.0	
309.0			LIMESTONE	0.5	61.0	
308.5			BLACK SHALE	2.5	61.5	
306.0			SHALE	2.1	64.0	
303.9			SHALE	3.0	66.1	
300.9			COAL	1.9	69.1	LOG HAS COAL AND RASH
299.0			UNDERCLAY	1.1	71.0	
297.9			SANDY SHALE	5.3	72.1	
292.7			COAL	0.4	77.3	LOG HAS COAL AND RASH
292.2			SANDY SHALE	3.3	77.8	

MAPID: 16501227000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 25' N line, 40' W line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.37836 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775975 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 87.9 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.0	CARBONDALE		SILTY SHALE	25.0	18.0	
327.0	CARBONDALE	ALLENBY	COAL	0.8	43.0	
326.2	CARBONDALE		GRAY SHALE	2.5	43.8	
323.7	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	46.3	
320.7	CARBONDALE	LAWSON	GRAY SHALE	3.8	49.3	
317.0	CARBONDALE	LAWSON	DARK GRAY SHALE	4.0	53.0	
313.0	CARBONDALE		BLACK SHALE	2.0	57.0	
311.0	CARBONDALE	BRERETON	LIMESTONE	0.5	59.0	
310.5	CARBONDALE	ANNA	BLACK SHALE	2.5	59.5	
308.0	CARBONDALE	ENERGY	GRAY SHALE	21.0	62.0	
287.0	CARBONDALE	ENERGY	DARK GRAY SHALE	3.0	83.0	
284.0	CARBONDALE	HERRIN	COAL	1.9	86.0	

MAPID: 16501228000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2' S line, 12' W line of SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.378368 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.768755 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 73.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #92 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL; C.H. MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	24.0	0.0	
349.0			SHALE	3.0	24.0	
346.0			SHALE	3.5	27.0	
342.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	30.5	
337.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.8	35.8	
331.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	41.5	
315.5			CALCAREOUS SHALE	1.5	57.5	
314.0	CARBONDALE	BRERETON	LIMESTONE	8.0	59.0	
306.0	CARBONDALE		SHALE	0.2	67.0	
305.8	CARBONDALE	HERRIN	COAL	4.3	67.2	BONEY UPPER .25'
301.5	CARBONDALE		UNDERCLAY	1.5	71.5	

MAPID: 16501229000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 660' N line, 630' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.376286 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.774234 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #93 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL; C.H. MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	33.0	0.0	
339.0	CARBONDALE		SHALE	9.3	33.0	
329.7	CARBONDALE		LIMESTONE	2.1	42.3	
327.7	CARBONDALE		SHALE	4.7	44.3	
323.0	CARBONDALE		SHALE	5.3	49.0	
317.7	CARBONDALE		BLACK SHALE	3.0	54.3	
314.7	CARBONDALE		SHALE	22.8	57.3	

MAPID: 16501230000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1200' N line, 3' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.378357 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.765437 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 55.1 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #94 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL; MUENSTERMAN-DRONE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	16.0	0.0	
364.0	CARBONDALE		SHALE	3.0	16.0	
361.0	CARBONDALE		SHALE	3.0	19.0	
358.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	22.0	
351.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	28.5	
338.5	CARBONDALE		CALCAREOUS SHALE	1.5	41.5	
337.0	CARBONDALE	BRERETON	LIMESTONE	4.3	43.0	
332.7	CARBONDALE		SHALE	0.5	47.3	
332.2	CARBONDALE	ANNA	BLACK SHALE	1.5	47.8	
330.7	CARBONDALE		UNKNOWN	0.2	49.3	LOG HAS "SULPHER"; PROBABLY PYRITE
330.6	CARBONDALE	HERRIN	COAL	4.3	49.4	
326.3	CARBONDALE		UNDERCLAY	1.4	53.7	

MAPID: 16501231000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' N line, 1' W line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.37845 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.772398 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 76.5 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #95 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL; C.H. MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	24.0	0.0	
348.0			SHALE	4.0	24.0	
344.0			SHALE	1.5	28.0	
342.5			BLACK SHALE	3.5	29.5	
339.0			SHALE	24.5	33.0	
314.5	CARBONDALE	HERRIN	COAL	1.8	57.5	CORRELATION UNCERTAIN
312.7			UNDERCLAY	1.7	59.3	
311.0			SHALE	14.3	61.0	
296.7			LIMESTONE	1.3	75.3	

MAPID: 16526543000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.388357 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775855 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.8 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-423 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
380.8	PLEISTOCENE		CLAY	10.0	2.0	
370.8	PLEISTOCENE		SANDY CLAY	12.0	12.0	
358.8	SHELBURN		COAL	1.0	24.0	
357.8	SHELBURN		UNDERCLAY	2.0	25.0	
355.8	SHELBURN		CALCAREOUS SANDSTONE	2.0	27.0	
353.8	SHELBURN		SHALY SANDSTONE	4.0	29.0	
349.8	SHELBURN		GRAY SHALE	2.0	33.0	
347.8	SHELBURN		BLACK SHALE	3.5	35.0	
344.3	SHELBURN		BLACK SHALE	0.5	38.5	
343.8	SHELBURN		BLACK SHALE	1.0	39.0	
342.8	SHELBURN		GRAY SHALE	5.0	40.0	
337.8	SHELBURN		SHALE	5.0	45.0	SIDERITE
332.8	SHELBURN		GRAY SHALE	14.0	50.0	SIDERITE
318.8	SHELBURN	DANVILLE	COAL	1.0	64.0	
317.8	SHELBURN		UNDERCLAY	1.0	65.0	
316.8	SHELBURN		SANDY SHALE	3.0	66.0	
313.8	SHELBURN		SHALY SANDSTONE	2.0	69.0	
311.8	SHELBURN		SHALE	1.0	71.0	
310.8	SHELBURN		SANDSTONE	8.0	72.0	
302.8	SHELBURN		SHALY SANDSTONE	2.0	80.0	
300.8	SHELBURN	ALLENBY	COAL	1.0	82.0	
299.8	SHELBURN		SANDY SHALE	1.0	83.0	
298.8	SHELBURN		GRAY SHALE	2.5	84.0	
296.3	SHELBURN	BANKSTON FORK	LIMESTONE	6.5	86.5	
289.8	SHELBURN		SANDY SHALE	2.0	93.0	
287.8	SHELBURN		SANDSTONE	18.0	95.0	
269.8	SHELBURN		SANDY SHALE	3.0	113.0	
266.8	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	6.5	116.0	
260.3	CARBONDALE	ANNA	BLACK SHALE	3.0	122.5	
257.3	CARBONDALE	HERRIN	COAL	4.5	125.5	
252.8	CARBONDALE		UNDERCLAY	1.0	130.0	
251.8	CARBONDALE		SANDY SHALE	2.0	131.0	
249.8	CARBONDALE		SANDSTONE	11.0	133.0	
238.8	CARBONDALE		SHALY SANDSTONE	24.0	144.0	
214.8	CARBONDALE		SANDY SHALE	18.5	168.0	
196.3	CARBONDALE	BRIAR HILL	COAL	1.5	186.5	
194.8	CARBONDALE		SANDY SHALE	2.0	188.0	

192.8	CARBONDALE		SANDSTONE	10.0	190.0	
182.8	CARBONDALE		SHALY SANDSTONE	6.0	200.0	
176.8	CARBONDALE		BLACK SHALE	0.5	206.0	
176.3	CARBONDALE		SANDSTONE	5.5	206.5	
170.8	CARBONDALE		SANDSTONE	6.0	212.0	BKSH
164.8	CARBONDALE		SANDY SHALE	14.0	218.0	
150.8	CARBONDALE		SANDY SHALE	3.9	232.0	SIDERITE
146.9	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	0.8	235.9	
146.2	CARBONDALE	ST. DAVID	LIMESTONE	0.6	236.6	
145.6	CARBONDALE		GRAY SHALE	0.3	237.2	
145.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	237.5	
142.7	CARBONDALE	TURNER MINE	DARK SHALE	0.8	240.1	
141.9	CARBONDALE	TURNER MINE	BLACK SHALE	0.4	240.9	
141.5	CARBONDALE	SPRINGFIELD	COAL	4.8	241.3	
136.7	CARBONDALE	CANTON	BLACK SHALE	0.1	246.1	
136.6	CARBONDALE		PYRITE	0.1	246.2	
136.5	CARBONDALE		SHALE	0.6	246.3	
135.9	CARBONDALE		SANDY SHALE	3.7	246.9	W/ LS NODULES
132.2	CARBONDALE		SANDSTONE	0.6	250.6	
131.6	CARBONDALE		SHALY SANDSTONE	0.8	251.2	

MAPID: 16526544000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.385282 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776017 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.1 **LOGGED (FT.):** 266.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-425 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.1	PLEISTOCENE		SOIL	2.0	0.0	
376.1	PLEISTOCENE		CLAY	23.0	2.0	
353.1	PLEISTOCENE		SANDY CLAY	6.0	25.0	
347.1	SHELBURN		COAL	0.5	31.0	
346.6	SHELBURN		GRAY SHALE	2.4	31.5	
344.1	SHELBURN		SANDY SHALE	3.0	34.0	
341.1	SHELBURN		CALCAREOUS SANDSTONE	2.5	37.0	
338.6	SHELBURN		GRAY SHALE	3.5	39.5	
335.1	SHELBURN		SANDY SHALE	4.0	43.0	
331.1	SHELBURN		BLACK SHALE	1.0	47.0	
330.1	SHELBURN		BLACK SHALE	1.0	48.0	
329.1	SHELBURN		BLACK SHALE	2.0	49.0	
327.1	SHELBURN		GRAY SHALE	5.0	51.0	
322.1	SHELBURN		SANDY SHALE	17.0	56.0	SIDERITE
305.1	SHELBURN	DANVILLE	COAL	2.5	73.0	
302.6	SHELBURN		SHALE	2.5	75.5	
300.1	SHELBURN		SANDY SHALE	4.0	78.0	
296.1	SHELBURN		BLACK SHALE & COAL	1.0	82.0	
295.1	SHELBURN		SANDY SHALE	4.0	83.0	
291.1	SHELBURN	ALLENBY	COAL	1.0	87.0	
290.1	SHELBURN		SANDY SHALE	2.0	88.0	
288.1	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	90.0	
282.1	SHELBURN		SHALE	2.0	96.0	
280.1	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	2.0	98.0	
278.1	SHELBURN	ANVIL ROCK	SANDSTONE	15.0	100.0	
263.1	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	7.0	115.0	
256.1	SHELBURN		BLACK SHALE	1.0	122.0	
255.1	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	6.0	123.0	
249.1	CARBONDALE	ANNA	BLACK SHALE	2.0	129.0	
247.1	CARBONDALE	HERRIN	COAL	4.5	131.0	
242.6	CARBONDALE		SHALE	3.5	135.5	
239.1	CARBONDALE		SANDSTONE	11.0	139.0	
228.1	CARBONDALE		SHALY SANDSTONE	3.0	150.0	
225.1	CARBONDALE		SANDSTONE	5.0	153.0	
220.1	CARBONDALE		SHALY SANDSTONE	39.5	158.0	
180.6	CARBONDALE	BRIAR HILL	COAL	1.5	197.5	
179.1	CARBONDALE		SANDSTONE	13.0	199.0	
166.1	CARBONDALE		SHALY SANDSTONE	4.0	212.0	

162.1	CARBONDALE		SANDSTONE	10.0	216.0	
152.1	CARBONDALE		SHALY SANDSTONE	6.0	226.0	
146.1	CARBONDALE		SANDY SHALE	15.9	232.0	
130.2	CARBONDALE	ST. DAVID	LIMESTONE	0.2	247.9	
130.0	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.6	248.1	
129.4	CARBONDALE	TURNER MINE	BLACK SHALE	0.2	248.7	
129.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	248.9	
126.5	CARBONDALE	SPRINGFIELD	COAL	4.8	251.6	
121.8	CARBONDALE		UNDERCLAY	0.8	256.3	
121.0	CARBONDALE		SHALY SANDSTONE	0.8	257.1	W/ LS NODULES
119.2	CARBONDALE		LIMESTONE	0.9	258.9	
118.3	CARBONDALE		SILTSTONE & SHALE	5.0	259.8	
113.4	CARBONDALE		SANDSTONE	0.3	264.7	
113.1	CARBONDALE		SILTSTONE	1.0	265.0	SANDY

MAPID: 16526545000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.392121 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775784 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.2 **LOGGED (FT.):** 265.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-447 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
375.2	PLEISTOCENE		CLAY	8.0	2.0	
367.2	PLEISTOCENE		CLAY	10.0	10.0	
357.2	SHELBURN		GRAY SHALE	5.0	20.0	
352.2	SHELBURN		CALCAREOUS SANDSTONE	3.0	25.0	
349.2	SHELBURN		SHALE	5.0	28.0	
344.2	SHELBURN		CALCAREOUS SHALE	5.0	33.0	
339.2	SHELBURN		BLACK SHALE	1.0	38.0	
338.2	SHELBURN		GRAY SHALE	20.0	39.0	SIDERITE
318.2	SHELBURN		COAL	1.5	59.0	BKSH
316.7	SHELBURN		GRAY SHALE	4.5	60.5	
312.2	SHELBURN		SANDSTONE	5.0	65.0	
307.2	SHELBURN	DANVILLE	COAL	1.0	70.0	
306.2	SHELBURN		SHALE	1.0	71.0	
305.2	SHELBURN		SANDSTONE	8.0	72.0	
297.2	SHELBURN	ALLENBY	COAL	1.5	80.0	
295.7	SHELBURN		SHALE	2.5	81.5	
293.2	SHELBURN	BANKSTON FORK	LIMESTONE	5.0	84.0	
288.2	SHELBURN		SHALE	3.0	89.0	
285.2	SHELBURN		SANDSTONE	20.0	92.0	
265.2	SHELBURN		SHALY SANDSTONE	3.0	112.0	
262.2	SHELBURN		BLACK SHALE	2.0	115.0	
260.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	7.5	117.0	
252.7	CARBONDALE	ANNA	BLACK SHALE	1.0	124.5	
251.7	CARBONDALE	HERRIN	COAL	4.5	125.5	
247.2	CARBONDALE		SHALE	3.0	130.0	
244.2	CARBONDALE		SANDSTONE	23.0	133.0	
221.2	CARBONDALE		SHALY SANDSTONE	31.0	156.0	
190.2	CARBONDALE	BRIAR HILL	COAL	1.5	187.0	
188.7	CARBONDALE		SANDY SHALE	1.5	188.5	
187.2	CARBONDALE		SANDSTONE	34.2	190.0	
153.0	CARBONDALE		SHALE	4.5	224.2	SS STREAKS
148.5	CARBONDALE		COAL	0.1	228.7	BAND
148.4	CARBONDALE		SHALY SANDSTONE	8.2	228.8	
140.2	CARBONDALE		SANDY SHALE	6.5	237.0	
133.7	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	1.3	243.5	
132.4	CARBONDALE	ST. DAVID	LIMESTONE	0.7	244.8	
131.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	245.5	

129.6	CARBONDALE	TURNER MINE	PYRITE	0.2	247.6	
129.4	CARBONDALE	TURNER MINE	DARK SHALE	1.5	247.8	
127.9	CARBONDALE	SPRINGFIELD	COAL	5.2	249.3	
122.7	CARBONDALE		SHALE	1.3	254.5	
121.5	CARBONDALE		SILTSTONE	9.3	255.7	SANDY

MAPID: 16526546000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.38487 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.771729 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 56.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-459 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	1.0		
375.1	PLEISTOCENE		CLAY	15.0	1.0	
360.1	PLEISTOCENE		CLAY	5.0	16.0	
355.1	SHELBURN	BANKSTON FORK	LIMESTONE	1.0	21.0	
354.1	SHELBURN		GRAY SHALE	3.0	22.0	
351.1	SHELBURN		GRAY SANDSTONE	2.0	25.0	SHALEY
349.1	SHELBURN		SANDSTONE	8.0	27.0	
341.1	SHELBURN		SANDSTONE/SHALE	9.5	35.0	
331.6	SHELBURN	BRERETON	SHALY LIMESTONE	1.5	44.5	
330.1	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	3.5	46.0	
326.6	CARBONDALE	ANNA	BLACK SHALE	2.5	49.5	
324.1	CARBONDALE	HERRIN	MINE OPENING	4.5	52.0	

MAPID: 16526917000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 201' N, 22' W, SE/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373794 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.762023 **DATE COLLECTED:** 7 / 26 / 2000

SURFACE ELEVATION (FT.): 361.8 **LOGGED (FT.):** 73.8 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 64R6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.8			UNCONSOLIDATED	22.0	0.0	
339.8			SHALE	4.8	22.0	
335.0			COAL	0.5	26.8	
334.5			SHALE	1.8	27.3	
332.8			LIMESTONE	2.3	29.0	
330.5			SHALE	1.6	31.3	
328.9			SHALE	2.8	32.9	
326.1			SANDSTONE	1.4	35.7	
324.7			SHALE	2.1	37.1	
322.6			SANDSTONE	4.6	39.2	
318.1			SHALE	10.2	43.7	
307.9			SHALE	8.6	53.9	
299.3			LIMESTONE	1.2	62.5	
298.1			LIMESTONE	3.7	63.7	
294.5			SHALE	0.3	67.3	
294.1			SHALE	1.4	67.7	
292.7			LIMESTONE	0.1	69.1	
292.6	CARBONDALE	HERRIN	COAL	4.3	69.2	
288.4	CARBONDALE		CLAYSTONE	0.4	73.4	

MAPID: 16526918000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1542' S, 2081' E, NW/c
QUADRANGLE: ELDORADO **LONGITUDE:** -88.384915 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.771773 **DATE COLLECTED:** 7 / 26 / 2000
SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 56.5 **LOG TYPE:** Drillers Log
SOURCE: BLACK BEAUTY COAL CO. AC-459 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.1			UNCONSOLIDATED	21.0	0.0	
355.1	SHELBURN	BANKSTON FORK	LIMESTONE	1.0	21.0	
354.1	SHELBURN		GRAY SHALE	3.0	22.0	
351.1	SHELBURN		SHALY SANDSTONE	2.0	25.0	
349.1	SHELBURN	ANVIL ROCK	SANDSTONE	8.0	27.0	
341.1	SHELBURN		SANDSTONE/SHALE	9.5	35.0	
331.6	SHELBURN		SHALY LIMESTONE	1.5	44.5	
330.1	SHELBURN	BRERETON	BLACK LIMESTONE	3.5	46.0	
326.6	CARBONDALE	ANNA	BLACK SHALE	2.5	49.5	
324.1	CARBONDALE	HERRIN	COAL	4.5	52.0	

MAPID: 16526919000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2629' N, 2310' W, SE/c
QUADRANGLE: ELDORADO **LONGITUDE:** -88.381827 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.768669 **DATE COLLECTED:** 5 / 3 / 1966
SURFACE ELEVATION (FT.): 374.8 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: BLACK BEAUTY COAL CO. 1601QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.8			UNCONSOLIDATED	21.3	0.0	
353.5			SHALE	10.7	21.3	
342.8	SHELBURN	BRERETON	LIMESTONE	2.9	32.0	
339.9	CARBONDALE	ANNA	BLACK SHALE	2.6	34.9	
337.3	CARBONDALE	HERRIN	COAL	2.8	37.5	
334.5	CARBONDALE	HERRIN	SHALE	0.2	40.3	
334.3	CARBONDALE	HERRIN	COAL	0.9	40.5	
333.4	CARBONDALE		UNDERCLAY	1.6	41.4	

MAPID: 16590884000C **VERSION:** 1 **PROJECT:** NCRDS98

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.384915 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.771768 **DATE COLLECTED:** 5 / 4 / 1999

SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 56.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO. 1 **WELL TYPE:** Coal Test

COMMENT: EXPLORATORY HOLE LOOKING FOR MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.1	PLEISTOCENE		SOIL	1.0	0.0	
375.1	PLEISTOCENE		CLAY	2.0	1.0	RED AND GRAY
373.1	PLEISTOCENE		CLAY	13.0	3.0	GRAY
360.1	PLEISTOCENE		CLAY & GRAVEL	5.0	16.0	RED AND GRAY
355.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	21.0	
354.1	CARBONDALE		GRAY SHALE	5.0	22.0	
349.1	CARBONDALE		SANDSTONE	8.0	27.0	
341.1	CARBONDALE		SANDSTONE/SHALE	9.5	35.0	
331.6	CARBONDALE	BRERETON	SHALY LIMESTONE	5.0	44.5	
326.6	CARBONDALE	ANNA	BLACK SHALE	2.5	49.5	
324.1	CARBONDALE	HERRIN	MINE OPENING	4.5	52.0	

MAPID: 16500183000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408281 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.766662 **DATE COLLECTED:** 6 / 16 / 1909
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 173.3 **LOG TYPE:** Drillers Log
SOURCE: W.M. BRIDGETT, HOLE #6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	14.0	0.0	
351.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	14.0	
348.0	CARBONDALE	ANVIL ROCK		14.0	17.0	
334.0	CARBONDALE		CALCAREOUS SHALE	7.0	31.0	
327.0	CARBONDALE		BLACK SHALE	6.0	38.0	
321.0	CARBONDALE	BRERETON	LIMESTONE	5.0	44.0	
316.0	CARBONDALE	ANNA	BLACK SHALE	1.5	49.0	
314.5	CARBONDALE	HERRIN	COAL	4.8	50.5	
309.7	CARBONDALE		UNDERCLAY	2.7	55.3	
307.0	CARBONDALE		SANDY SHALE	4.0	58.0	
303.0	CARBONDALE		CALCAREOUS SHALE	22.0	62.0	
281.0	CARBONDALE		BLACK SHALE	13.0	84.0	
268.0	CARBONDALE		CALCAREOUS SHALE	12.0	97.0	
256.0	CARBONDALE		BLACK SHALE	11.0	109.0	
245.0	CARBONDALE	BRIAR HILL	COAL	2.0	120.0	
243.0	CARBONDALE		CALCAREOUS SHALE	23.0	122.0	
220.0	CARBONDALE		BLACK SHALE	16.2	145.0	
203.8	CARBONDALE		BLACK SHALE	3.0	161.2	
200.8	CARBONDALE		BLACK SHALE	1.8	164.2	
199.0	CARBONDALE	SPRINGFIELD	COAL	4.8	166.0	
194.2	CARBONDALE		UNDERCLAY	2.5	170.8	

MAPID: 16500183000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408281 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.766662 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
315.0	CARBONDALE	HERRIN	COAL	4.8	50.0	
245.0	CARBONDALE	BRIAR HILL	COAL	2.0	120.0	
199.0	CARBONDALE	SPRINGFIELD	COAL	4.8	166.0	

MAPID: 16501232000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 25' N line, 5' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.392131 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.772258 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #103 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, H.INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	15.0	0.0	
365.0	CARBONDALE		SHALE	10.0	15.0	
355.0	CARBONDALE		SANDY SHALE	7.0	25.0	
348.0	CARBONDALE		SANDY SHALE	15.0	32.0	
333.0	CARBONDALE		CALCAREOUS SHALE	1.5	47.0	
331.5	CARBONDALE	ANNA	BLACK SHALE	2.0	48.5	
329.5	CARBONDALE		SHALE	3.8	50.5	
325.7	CARBONDALE	HERRIN	COAL	4.6	54.3	W/ BONE & RASH
321.2	CARBONDALE		UNKNOWN	0.1	58.8	LOG HAS "SULPHER"; PROBABLY PYRITE
321.1	CARBONDALE		UNDERCLAY	1.1	58.9	

MAPID: 16501233000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 15' S line, 15' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.396665 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.772329 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 73.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #104 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HARVEY INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.0			UNCONSOLIDATED	14.0	0.0	
363.0	CARBONDALE		SHALE	6.0	14.0	
357.0	CARBONDALE		SHALE	2.5	20.0	
354.5	CARBONDALE	ALLENBY	COAL	0.5	22.5	
354.0	CARBONDALE		SHALE	5.0	23.0	
349.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	28.0	
343.0	CARBONDALE		SHALE	4.5	34.0	
338.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	38.5	
335.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	41.5	
333.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.3	44.0	
320.7	CARBONDALE	BRERETON	LIMESTONE	8.8	56.3	
311.9	CARBONDALE	ANNA	BLACK SHALE	1.5	65.1	
310.4	CARBONDALE	HERRIN	COAL	4.7	66.6	W/ BAND AND SULFUR
305.7	CARBONDALE		UNDERCLAY	1.8	71.3	

MAPID: 16501234000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 30' N line, 15' W line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.39665 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.775857 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #105 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL, HARVEY INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	25.0	0.0	
350.0			SHALE	20.7	25.0	
329.3			SHALE	2.0	45.7	
327.3			COAL	0.6	47.7	
326.7	CARBONDALE		UNDERCLAY	2.0	48.3	
324.7	CARBONDALE		LIMESTONE	3.0	50.3	
321.7	CARBONDALE		SHALE	9.8	53.3	
312.0	CARBONDALE		BLACK SHALE	3.1	63.0	
308.9	CARBONDALE		SHALE	13.9	66.1	

MAPID: 16501235000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 20' N line, 90' E line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.392416 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.775905 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 100.8 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #106 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL, HARVEY INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	20.8	0.0	
357.2			SHALE	4.8	20.8	
352.4	CARBONDALE		COAL	0.4	25.6	
352.0	CARBONDALE		UNDERCLAY	2.3	26.0	
349.7	CARBONDALE		LIMESTONE	3.5	28.3	
346.2	CARBONDALE		SHALE	4.0	31.8	
342.2	CARBONDALE		SHALE	7.5	35.8	
334.7	CARBONDALE		SHALE	17.5	43.3	
317.2	CARBONDALE		SHALE	3.0	60.8	
314.2	CARBONDALE	HERRIN	COAL	2.2	63.8	
312.1	CARBONDALE		UNDERCLAY	1.8	65.9	
310.2	CARBONDALE		SANDSTONE	4.5	67.8	
305.7	CARBONDALE		SHALE	1.3	72.3	
304.5	CARBONDALE		UNKNOWN	0.3	73.5	LOG HAS "RASH"
304.2	CARBONDALE		SHALE	1.5	73.8	
302.7	CARBONDALE		SANDSTONE	6.5	75.3	
296.2	CARBONDALE		SANDY SHALE	3.0	81.8	
293.2	CARBONDALE		COAL	0.7	84.8	
292.6	CARBONDALE		UNDERCLAY	1.3	85.4	
291.2	CARBONDALE		LIMESTONE	6.0	86.8	
285.2	CARBONDALE		SANDY SHALE	8.0	92.8	

MAPID: 16501236000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394405 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.774129 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #107 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HARVEY INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.0			UNCONSOLIDATED	16.0	0.0	
358.0	MODESTO		SHALE	15.0	16.0	
343.0	CARBONDALE	DANVILLE	COAL	1.8	31.0	
341.2	CARBONDALE		UNDERCLAY	2.7	32.8	
338.5	CARBONDALE		SANDY SHALE	4.5	35.5	
334.0	CARBONDALE		COAL	0.7	40.0	W/ RASH
333.3	CARBONDALE		UNDERCLAY	3.3	40.7	
330.0	CARBONDALE		SANDY SHALE	3.7	44.0	
326.3	CARBONDALE	ALLENBY	COAL	0.6	47.7	
325.7	CARBONDALE		UNDERCLAY	2.3	48.3	
323.5	CARBONDALE		SANDY SHALE	2.5	50.5	
321.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	53.0	
314.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.0	59.5	
291.5	CARBONDALE	BRERETON	LIMESTONE	7.8	82.5	
283.7	CARBONDALE	ANNA	BLACK SHALE	1.4	90.3	
282.2	CARBONDALE	HERRIN	COAL	4.4	91.8	W/ BAND AND SULFUR
277.8	CARBONDALE		UNDERCLAY	0.8	96.2	

MAPID: 16501237000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394416 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.770485 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #108 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HARVEY INGRAM FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	28.0	0.0	
352.0	CARBONDALE		SHALE	4.8	28.0	
347.2	CARBONDALE		SHALE	1.9	32.8	
345.2	CARBONDALE	BRERETON	LIMESTONE	7.0	34.8	
338.2	CARBONDALE		SHALE	0.8	41.8	
337.5	CARBONDALE	ANNA	BLACK SHALE	0.8	42.5	
336.7	CARBONDALE	HERRIN	COAL	4.6	43.3	W/ BAND (.17' THICK)
332.1	CARBONDALE		UNDERCLAY	1.1	47.9	

MAPID: 16501238000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 15' N line, 690' W line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394357 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.76498 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #98 **WELL TYPE:** Coal Test
COMMENT: CON. SWINNEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	23.0	0.0	
345.0	CARBONDALE		SHALE	5.0	23.0	
340.0	CARBONDALE		SHALE	6.0	28.0	
334.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	27.0	34.0	
307.0	CARBONDALE	HERRIN	COAL	1.8	61.0	LOG HAS "COAL RASHY"
305.2	CARBONDALE		SANDY SHALE	37.2	62.8	

MAPID: 16501239000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 30' N line, 660' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.394441 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.768581 **DATE COLLECTED:** 4 / 0 / 1905
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #99 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL; CON. SWINNEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			UNCONSOLIDATED	25.0	0.0	
354.0	CARBONDALE		SHALE	6.0	25.0	
348.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	31.0	
342.0	CARBONDALE	BRERETON	LIMESTONE	2.5	37.0	
339.5	CARBONDALE		CALCAREOUS SHALE	0.5	39.5	
339.0	CARBONDALE	ANNA	BLACK SHALE	2.4	40.0	
336.6	CARBONDALE	HERRIN	COAL	4.3	42.4	LOG HAS W/ .17' BAND AT 44.5
332.2	CARBONDALE		UNDERCLAY	1.3	46.8	

MAPID: 16501240000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 15' N line, 225' E line of SW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.397537 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.764933 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 84.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #101 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL; CON. SWINNEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	14.0	0.0	
359.0	CARBONDALE		SHALE	6.0	14.0	
353.0	CARBONDALE		SHALE	6.0	20.0	
347.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	27.5	26.0	
319.5	CARBONDALE		UNKNOWN	0.1	53.5	LOG HAS "SULPHER"; PROBABLY PYRITE
319.4	CARBONDALE	HERRIN	COAL	1.6	53.6	W/ RASH
317.8	CARBONDALE		SANDY SHALE	26.8	55.2	
291.0	CARBONDALE		SANDY SHALE	2.0	82.0	

MAPID: 16503136000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393271 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.769588 **DATE COLLECTED:** 9 / 0 / 1957
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1370.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRILLING CO. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
38.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	327.0	
-44.0	SPOON	DAVIS	UNCLASSIFIED	-	409.0	
-1005.0	BASE OF PENN.		UNCLASSIFIED	-	1370.0	

MAPID: 16503136000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393271 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.769588 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2396.0 **LOG TYPE:**
SOURCE: V S & S DRILLING CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1177.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1542.0	
-2031.0		BASE BARLOW	LIMESTONE	-	2396.0	

MAPID: 16503136000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.393271 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.769588 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2957.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRILLING CO., INGRAM **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
150.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	215.0	
101.0	CARBONDALE	SURVANT	COAL	0.7	264.0	
37.0	CARBONDALE	COLCHESTER	COAL	0.5	328.0	
-17.0	CARBONDALE	DEKOVEN	COAL	3.5	382.0	
-17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	382.0	
-45.0	CARBONDALE	DAVIS	COAL	3.5	410.0	
-93.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	458.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-110.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	475.0	
-145.0	TRADEWATER	MT. RORAH	COAL	1.2	510.0	

MAPID: 16526547000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.404598 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766401 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.2 **LOGGED (FT.):** 292.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-415 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.2	PLEISTOCENE		SOIL	3.0	0.0	
363.2	PLEISTOCENE		CLAY	28.0	3.0	
335.2	CARBONDALE	HERRIN	COAL	0.5	31.0	
334.7	CARBONDALE		UNDERCLAY	8.5	31.5	
326.2	CARBONDALE		CLAYSTONE	3.0	40.0	
323.2	CARBONDALE		SANDSTONE	2.0	43.0	
321.2	CARBONDALE		GRAY SANDSTONE	4.0	45.0	
317.2	CARBONDALE		SHALY SANDSTONE	2.0	49.0	
315.2	CARBONDALE		SANDSTONE	6.0	51.0	
309.2	CARBONDALE		SHALY SANDSTONE	4.0	57.0	
305.2	CARBONDALE		SANDSTONE	8.0	61.0	
297.2	CARBONDALE		SANDY SHALE	9.0	69.0	
288.2	CARBONDALE		GRAY SANDSTONE	2.0	78.0	
286.2	CARBONDALE		SHALY SANDSTONE	14.0	80.0	
272.2	CARBONDALE		GRAY SHALE	7.0	94.0	
265.2	CARBONDALE	BRIAR HILL	COAL	2.0	101.0	
263.2	CARBONDALE		BLACK SHALE & COAL	1.0	103.0	
262.2	CARBONDALE		DARK SHALE	2.0	104.0	
260.2	CARBONDALE		SANDSTONE	2.0	106.0	
258.2	CARBONDALE		SANDY SHALE	3.0	108.0	
255.2	CARBONDALE		SANDSTONE	4.0	111.0	
251.2	CARBONDALE		SHALY SANDSTONE	12.0	115.0	
239.2	CARBONDALE		DARK SHALE	2.0	127.0	
237.2	CARBONDALE		BLACK SHALE	2.0	129.0	
235.2	CARBONDALE		DARK SHALE	6.0	131.0	
229.2	CARBONDALE		SANDY SHALE	9.0	137.0	
220.2	CARBONDALE		CALCAREOUS SHALE	1.0	146.0	
219.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	147.0	
216.2	CARBONDALE		GRAY SHALE	1.5	150.0	
214.7	CARBONDALE	SPRINGFIELD	COAL	4.5	151.5	
210.2	CARBONDALE		UNDERCLAY	7.0	156.0	
203.2	CARBONDALE		SANDSTONE	6.0	163.0	
197.2	CARBONDALE		SHALY SANDSTONE	7.0	169.0	
190.2	CARBONDALE		SANDSTONE	13.0	176.0	
177.2	CARBONDALE		SANDY DARK SHALE	39.0	189.0	
138.2	CARBONDALE	EXCELLO	BLACK SHALE	6.4	228.0	
131.8	CARBONDALE	HOUCHIN CREEK	COAL	2.2	234.4	
129.6	CARBONDALE		UNDERCLAY	1.9	236.6	SHALEY

127.8	CARBONDALE		GRAY SHALE & SANDSTONE	5.3	238.4
122.5	CARBONDALE		SANDSTONE	4.0	243.7
118.8	CARBONDALE		SHALY SANDSTONE	4.3	247.4
114.2	CARBONDALE		SANDY SHALE	28.0	252.0
86.2	CARBONDALE		GRAY SHALE & SANDSTONE	7.0	280.0
79.2	CARBONDALE	COLCHESTER	COAL	2.3	287.0
76.9	CARBONDALE		SHALE	1.4	289.3
75.5	CARBONDALE		SHALY SANDSTONE	1.3	290.7

MAPID: 16526548000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.403608 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.765949 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 233.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-416 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	3.0		
363.0	PLEISTOCENE		CLAY	45.0	3.0	
318.0	CARBONDALE		SANDY SHALE	10.0	48.0	
308.0	CARBONDALE		SANDSTONE	4.0	58.0	
304.0	CARBONDALE		SHALY SANDSTONE	22.0	62.0	
282.0	CARBONDALE	BRIAR HILL	COAL	1.0	84.0	
281.0	CARBONDALE		SANDY SHALE	4.0	85.0	
277.0	CARBONDALE		SANDSTONE	3.0	89.0	
274.0	CARBONDALE		SHALY SANDSTONE	3.0	92.0	
271.0	CARBONDALE		SANDSTONE	7.0	95.0	
264.0	CARBONDALE		SHALY SANDSTONE	9.0	102.0	
255.0	CARBONDALE		DARK SHALE	1.0	111.0	
254.0	CARBONDALE		BLACK SHALE	2.0	112.0	
252.0	CARBONDALE		SANDY SHALE	14.0	114.0	
238.0	CARBONDALE		BLACK SHALE	1.5	128.0	
236.5	CARBONDALE		SHALE	1.0	129.5	
235.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	130.5	
233.0	CARBONDALE		SANDY SHALE	0.5	133.0	
232.5	CARBONDALE	SPRINGFIELD	COAL	4.5	133.5	
228.0	CARBONDALE		UNDERCLAY	1.2	138.0	
226.8	CARBONDALE		SANDSTONE	8.8	139.2	
218.0	CARBONDALE		SANDSTONE	2.0	148.0	SIDERITE
216.0	CARBONDALE		SHALY SANDSTONE	8.0	150.0	
208.0	CARBONDALE		SANDSTONE	4.0	158.0	
204.0	CARBONDALE		SANDY SHALE	38.0	162.0	
166.0	CARBONDALE		SANDY SHALE	12.0	200.0	W/ SIDERITE
154.0	CARBONDALE	EXCELLO	BLACK SHALE	1.0	212.0	
153.0	CARBONDALE	EXCELLO	LIMESTONE AND BLACK SHALE	2.3	213.0	
150.7	CARBONDALE	EXCELLO	BLACK SHALE	2.3	215.3	
148.5	CARBONDALE	HOUCHIN CREEK	COAL	1.6	217.5	
146.7	CARBONDALE		UNDERCLAY	2.5	219.3	
144.2	CARBONDALE		SANDY SHALE	3.0	221.8	
141.2	CARBONDALE		SANDSTONE	0.7	224.8	
140.5	CARBONDALE		SANDY SHALE	7.5	225.5	

MAPID: 16526549000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.402618 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.765498 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.8 **LOGGED (FT.):** 220.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-417 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	3.0		
362.8	PLEISTOCENE		CLAY	41.0	3.0	
321.8	CARBONDALE		SANDY SHALE	3.0	44.0	
318.8	CARBONDALE		SANDSTONE	6.0	47.0	
312.8	CARBONDALE		SHALY SANDSTONE	17.0	53.0	
293.8	CARBONDALE	BRIAR HILL	COAL	2.0	72.0	
291.8	CARBONDALE		SHALY SANDSTONE	4.0	74.0	
287.8	CARBONDALE		SANDSTONE	2.0	78.0	
285.8	CARBONDALE		SHALY SANDSTONE	3.0	80.0	
282.8	CARBONDALE		SANDSTONE	7.0	83.0	
275.8	CARBONDALE		SHALY SANDSTONE	7.0	90.0	
268.8	CARBONDALE		BLACK SHALE	2.0	97.0	
266.8	CARBONDALE		DARK SHALE	2.0	99.0	
264.8	CARBONDALE		GRAY SHALE	7.0	101.0	
257.8	CARBONDALE		SANDY SHALE	8.5	108.0	
249.3	CARBONDALE	ST. DAVID	LIMESTONE	1.5	116.5	
247.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	118.0	
245.8	CARBONDALE		GRAY SHALE	1.0	120.0	
244.8	CARBONDALE	SPRINGFIELD	COAL	4.5	121.0	
240.3	CARBONDALE		UNDERCLAY	4.5	125.5	
235.8	CARBONDALE		SANDSTONE	7.0	130.0	
228.8	CARBONDALE		SHALY SANDSTONE	15.0	137.0	
213.8	CARBONDALE		GRAY SHALE	8.0	152.0	
205.8	CARBONDALE		SANDY SHALE	28.0	160.0	
177.8	CARBONDALE		SANDY SHALE	11.0	188.0	W/ SIDERITE BANDS
166.8	CARBONDALE		CALCAREOUS SHALE	1.0	199.0	
165.8	CARBONDALE	EXCELLO	BLACK SHALE	3.6	200.0	
162.3	CARBONDALE	HOUCHIN CREEK	COAL	2.0	203.5	
160.2	CARBONDALE		UNDERCLAY	1.9	205.6	SHALEY
158.3	CARBONDALE		SANDY SHALE	2.7	207.5	W/ SIDERITE BANDS
155.7	CARBONDALE		SANDSTONE	5.5	210.1	
150.2	CARBONDALE		SANDSTONE	3.0	215.6	W/ LS NODULES
147.2	CARBONDALE		SHALY SANDSTONE	1.4	218.6	

MAPID: 16526550000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.398868 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.763648 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.4 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-418 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.4	PLEISTOCENE		SOIL	3.0	0.0	
362.4	PLEISTOCENE		CLAY	17.0	3.0	
345.4	PLEISTOCENE		SANDY CLAY	2.0	20.0	
343.4	CARBONDALE		GRAY SHALE	4.0	22.0	
339.4	CARBONDALE		SANDY SHALE	14.0	26.0	
325.4	CARBONDALE		GRAY SHALE	3.0	40.0	
322.4	CARBONDALE		BLACK SHALE	1.0	43.0	
321.4	CARBONDALE	BRIAR HILL	COAL	1.5	44.0	
319.9	CARBONDALE		UNDERCLAY	1.5	45.5	
318.4	CARBONDALE		SHALY SANDSTONE	3.0	47.0	
315.4	CARBONDALE		GRAY SHALE	2.0	50.0	
313.4	CARBONDALE		BLACK SHALE	1.0	52.0	
312.4	CARBONDALE		SANDSTONE	3.0	53.0	
309.4	CARBONDALE		SHALY SANDSTONE	15.0	56.0	
294.4	CARBONDALE		BLACK SHALE	2.0	71.0	
292.4	CARBONDALE		GRAY SHALE	4.0	73.0	
288.4	CARBONDALE		SANDY SHALE	13.0	77.0	
275.4	CARBONDALE		CALCAREOUS SANDSTONE	1.5	90.0	
273.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	91.5	
272.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	93.0	
271.4	CARBONDALE	SPRINGFIELD	COAL	5.0	94.0	
266.4	CARBONDALE		SANDY SHALE	1.0	99.0	
265.4	CARBONDALE		SHALE	3.0	100.0	
262.4	CARBONDALE		CALCAREOUS SANDSTONE	1.5	103.0	
260.9	CARBONDALE		SANDSTONE	5.5	104.5	
255.4	CARBONDALE		SANDSTONE/SHALE	10.0	110.0	
245.4	CARBONDALE		SANDY SHALE	26.0	120.0	
219.4	CARBONDALE		SANDY SHALE	23.0	146.0	W/ SIDERITE
196.4	CARBONDALE		DARK SHALE	1.0	169.0	
195.4	CARBONDALE		LIMESTONE AND BLACK SHALE	1.0	170.0	
194.4	CARBONDALE	EXCELLO	BLACK SHALE	2.5	171.0	
191.9	CARBONDALE		DARK SHALE	0.9	173.5	
191.1	CARBONDALE	HOUCHIN CREEK	COAL	1.9	174.3	
189.1	CARBONDALE		UNDERCLAY	1.7	176.3	
187.4	CARBONDALE		SANDSTONE	6.0	178.0	

MAPID: 16526551000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.406248 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.767153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.3 **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-419 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.3	PLEISTOCENE		CLAY	28.0	2.0	
337.3	SHELBURN		SANDSTONE	3.0	30.0	
334.3	SHELBURN		SANDY SHALE	3.0	33.0	
331.3	SHELBURN		COAL	0.5	36.0	
330.8	SHELBURN		BLACK SHALE	0.5	36.5	
330.3	SHELBURN	ALLENBY	COAL	2.0	37.0	
328.3	SHELBURN		UNDERCLAY	3.0	39.0	
325.3	SHELBURN		SANDY SHALE	0.5	42.0	
324.8	SHELBURN	ANVIL ROCK	SANDSTONE	1.5	42.5	
323.3	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	2.0	44.0	
321.3	SHELBURN	ANVIL ROCK	SANDSTONE	4.0	46.0	SIDERITE
317.3	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	2.0	50.0	
315.3	SHELBURN		SHALE	3.5	52.0	SIDERITE
311.8	SHELBURN		BLACK SHALE	1.5	55.5	
310.3	SHELBURN		BLACK SHALE	1.0	57.0	
309.3	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	4.0	58.0	
305.3	CARBONDALE	ANNA	BLACK SHALE	2.0	62.0	
303.3	CARBONDALE	HERRIN	COAL	4.5	64.0	
298.8	CARBONDALE		UNDERCLAY	3.5	68.5	
295.3	CARBONDALE		SANDSTONE	23.0	72.0	
272.3	CARBONDALE		SHALY SANDSTONE	3.0	95.0	
269.3	CARBONDALE		SANDY SHALE	2.0	98.0	
267.3	CARBONDALE		SANDY DARK SHALE	11.0	100.0	
256.3	CARBONDALE		SANDSTONE	1.0	111.0	
255.3	CARBONDALE		SHALY SANDSTONE	10.0	112.0	
245.3	CARBONDALE		SANDY SHALE	9.0	122.0	SIDERITE
236.3	CARBONDALE	BRIAR HILL	COAL	1.8	131.0	
234.5	CARBONDALE		SHALY SANDSTONE	8.3	132.8	
226.3	CARBONDALE		SANDSTONE/SHALE	10.0	141.0	
216.3	CARBONDALE		SANDY SHALE	3.6	151.0	
212.7	CARBONDALE		SANDY SHALE	2.9	154.6	W/ DARK SHALE STREAKS
209.8	CARBONDALE		DARK SHALE	1.3	157.5	
208.6	CARBONDALE		SANDY SHALE	0.9	158.7	
207.7	CARBONDALE		DARK SHALE	0.4	159.6	
207.3	CARBONDALE		GRAY SHALE	0.8	160.0	
206.5	CARBONDALE		BLACK SHALE	0.3	160.8	
206.2	CARBONDALE		GRAY SHALE	0.5	161.1	

205.7	CARBONDALE		BLACK SHALE	0.6	161.6	CALCITE
205.1	CARBONDALE		SANDY SHALE	7.8	162.2	
197.3	CARBONDALE		SANDY SHALE	6.3	170.0	SIDERITE
191.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.9	176.3	NODULAR
189.1	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	178.2	
188.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	178.4	
185.6	CARBONDALE		GRAY SHALE	0.7	181.7	
184.9	CARBONDALE	SPRINGFIELD	COAL	4.6	182.4	
180.3	CARBONDALE		UNDERCLAY	2.0	187.0	SHALEY
178.4	CARBONDALE		SHALY SANDSTONE	1.3	188.9	
177.1	CARBONDALE		SANDY SHALE	4.8	190.2	
172.3	CARBONDALE		SANDSTONE	1.9	195.0	SIDERITE
170.4	CARBONDALE		SHALY SANDSTONE	4.1	196.9	

MAPID: 16526552000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.408648 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768247 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.7 **LOGGED (FT.):** 239.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-420 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
367.7	PLEISTOCENE		CLAY	15.0	2.0	
352.7	PLEISTOCENE		SAND	1.0	17.0	
351.7	PLEISTOCENE		CLAY	7.0	18.0	
344.7	SHELBURN		SANDSTONE	1.0	25.0	
343.7	SHELBURN		SANDY SHALE	1.0	26.0	
342.7	SHELBURN		BLACK SHALE	3.0	27.0	
339.7	SHELBURN		LIMESTONE AND BLACK SHALE	0.5	30.0	
339.2	SHELBURN		BLACK SHALE	2.0	30.5	
337.2	SHELBURN		LIMESTONE AND BLACK SHALE	0.5	32.5	
336.7	SHELBURN		GRAY SHALE	15.0	33.0	SIDERITE
321.7	SHELBURN		SANDY SHALE	3.0	48.0	
318.7	SHELBURN		GRAY SHALE	2.0	51.0	SIDERITE
316.7	SHELBURN	DANVILLE	COAL	2.0	53.0	
314.7	SHELBURN		UNDERCLAY	1.0	55.0	
313.7	SHELBURN		SANDY CLAYSTONE	2.0	56.0	
311.7	SHELBURN		SANDSTONE	6.0	58.0	
305.7	SHELBURN		SANDY SHALE	2.0	64.0	
303.7	SHELBURN		SANDSTONE	1.0	66.0	
302.7	SHELBURN		BLACK SHALE	1.5	67.0	
301.2	SHELBURN		SANDY SHALE	1.5	68.5	
299.7	SHELBURN		SANDSTONE	4.0	70.0	
295.7	SHELBURN		SANDY DARK SHALE	3.5	74.0	SIDERITE
292.2	SHELBURN	ALLENBY	COAL	3.0	77.5	
289.2	SHELBURN		SANDY DARK SHALE	4.5	80.5	
284.7	SHELBURN		SANDSTONE	1.0	85.0	SIDERITE
283.7	SHELBURN	BANKSTON FORK	LIMESTONE	2.5	86.0	TAN
281.2	SHELBURN		CALCAREOUS SANDSTONE	0.5	88.5	
280.7	SHELBURN		SANDY SHALE	3.0	89.0	SIDERITE
277.7	SHELBURN		SANDSTONE	2.0	92.0	
275.7	SHELBURN		SHALY SANDSTONE	1.0	94.0	
274.7	SHELBURN		BLACK SHALE	0.5	95.0	
274.2	SHELBURN		SANDY SHALE	1.0	95.5	SIDERITE
273.2	SHELBURN		BLACK SHALE	2.0	96.5	
271.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.0	98.5	
266.2	CARBONDALE	ANNA	BLACK SHALE	1.5	103.5	

264.7	CARBONDALE	HERRIN	COAL	4.5	105.0	
260.2	CARBONDALE		UNDERCLAY	3.5	109.5	
256.7	CARBONDALE		SANDSTONE	4.0	113.0	
252.7	CARBONDALE		SHALY SANDSTONE	3.0	117.0	
249.7	CARBONDALE		SANDSTONE	18.0	120.0	
231.7	CARBONDALE		SHALY SANDSTONE	35.5	138.0	
196.2	CARBONDALE	BRIAR HILL	COAL	1.5	173.5	
194.7	CARBONDALE		SHALY SANDSTONE	26.0	175.0	
168.7	CARBONDALE		GRAY SHALE	3.0	201.0	SOME BLACK SHALE
165.7	CARBONDALE		SHALY SANDSTONE	10.7	204.0	
155.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.7	214.7	NODULAR
154.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	215.4	
152.0	CARBONDALE		DARK SHALE	1.8	217.7	LIMEY
150.2	CARBONDALE		DARK SHALE	2.7	219.5	
147.5	CARBONDALE	SPRINGFIELD	COAL	0.6	222.2	
146.9	CARBONDALE	SPRINGFIELD	COAL	4.6	222.8	
142.3	CARBONDALE		SHALE	0.6	227.4	
141.8	CARBONDALE		GRAY SHALE	1.8	227.9	
140.0	CARBONDALE		SANDY SHALE	2.6	229.7	
137.4	CARBONDALE		SHALE	4.7	232.3	SS STREAKS
132.7	CARBONDALE		SANDSTONE	2.5	237.0	LS NODULES

MAPID: 16526553000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.407451 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.767712 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.6 **LOGGED (FT.):** 221.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-421 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
386.6	PLEISTOCENE		CLAY	24.0	2.0	
362.6	SHELBURN		GRAY SHALE	8.0	26.0	
354.6	SHELBURN		DARK SHALE	2.0	34.0	
352.6	SHELBURN		GRAY SHALE	1.5	36.0	
351.1	SHELBURN	DANVILLE	COAL	2.0	37.5	
349.1	SHELBURN		UNDERCLAY	0.5	39.5	
348.6	SHELBURN		SANDY SHALE	3.0	40.0	
345.6	SHELBURN		SANDSTONE	3.0	43.0	
342.6	SHELBURN		GRAY SHALE	4.0	46.0	
338.6	SHELBURN		SANDSTONE	3.0	50.0	
335.6	SHELBURN		BLACK SHALE	1.0	53.0	
334.6	SHELBURN		GRAY SHALE	1.5	54.0	
333.1	SHELBURN		SANDSTONE	5.5	55.5	
327.6	SHELBURN		SHALY SANDSTONE	2.5	61.0	
325.1	SHELBURN	ALLENBY	COAL	3.5	63.5	
321.6	SHELBURN		SHALY SANDSTONE	7.0	67.0	
314.6	SHELBURN	BANKSTON FORK	LIMESTONE	4.0	74.0	
310.6	SHELBURN	BANKSTON FORK	GRAY LIMESTONE	2.5	78.0	
308.1	SHELBURN		DARK SHALE	1.0	80.5	
307.1	SHELBURN		GRAY SHALE	2.5	81.5	
304.6	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	1.5	84.0	
303.1	CARBONDALE	ANNA	BLACK SHALE	2.5	85.5	
300.6	CARBONDALE	HERRIN	COAL	4.5	88.0	
296.1	CARBONDALE		UNDERCLAY	5.5	92.5	
290.6	CARBONDALE		LIMESTONE AND SANDSTONE	1.0	98.0	
289.6	CARBONDALE		SANDY SHALE	1.0	99.0	
288.6	CARBONDALE		SANDSTONE	2.0	100.0	
286.6	CARBONDALE		SANDY SHALE	3.0	102.0	
283.6	CARBONDALE		SHALY SANDSTONE	6.0	105.0	
277.6	CARBONDALE		SANDSTONE	12.0	111.0	
265.6	CARBONDALE		SANDY SHALE	1.0	123.0	
264.6	CARBONDALE		DARK SHALE	4.0	124.0	
260.6	CARBONDALE		SHALY SANDSTONE	22.0	128.0	
238.6	CARBONDALE		SANDY SHALE	7.0	150.0	
231.6	CARBONDALE	BRIAR HILL	COAL	1.5	157.0	
230.1	CARBONDALE		SANDY SHALE	1.5	158.5	
228.6	CARBONDALE		SANDSTONE	4.0	160.0	

224.6	CARBONDALE		SHALY SANDSTONE	6.0	164.0	
218.6	CARBONDALE		SANDSTONE	6.0	170.0	
212.6	CARBONDALE		SHALY SANDSTONE	5.0	176.0	
207.6	CARBONDALE		SANDY SHALE	2.3	181.0	
205.3	CARBONDALE		SANDY SHALE	1.3	183.3	SOME BLACK SHALE
204.0	CARBONDALE		SANDY SHALE	0.8	184.6	
203.1	CARBONDALE		BLACK SHALE	1.1	185.5	
202.2	CARBONDALE		GRAY SHALE	1.2	186.4	SOME BLACK SHALE
201.0	CARBONDALE		SANDY SHALE	13.7	187.6	
187.3	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	1.0	201.3	
186.3	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.4	202.3	
185.9	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	202.7	
185.3	CARBONDALE	TURNER MINE	LIMESTONE AND BLACK SHALE	0.2	203.3	
185.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	203.4	
182.9	CARBONDALE	TURNER MINE	LIMESTONE AND BLACK SHALE	0.4	205.7	
182.5	CARBONDALE	SPRINGFIELD	COAL	5.0	206.1	
177.5	CARBONDALE		UNDERCLAY	0.7	211.1	
176.8	CARBONDALE		CALCAREOUS SHALE	3.6	211.8	
173.2	CARBONDALE		SHALY SANDSTONE	5.6	215.4	

MAPID: 16526554000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.405273 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766708 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.7 **LOGGED (FT.):** 178.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-422 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
364.7	PLEISTOCENE		CLAY	28.0	2.0	
336.7	PLEISTOCENE		SANDY CLAY	7.0	30.0	
329.7	SHELBURN		SANDY DARK SHALE	1.0	37.0	
328.7	SHELBURN		BLACK SHALE	2.5	38.0	
326.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.0	40.5	
321.2	CARBONDALE	ANNA	BLACK SHALE	1.5	45.5	
319.7	CARBONDALE	HERRIN	COAL	4.5	47.0	
315.2	CARBONDALE		UNDERCLAY	4.0	51.5	
311.2	CARBONDALE		SHALY SANDSTONE	1.5	55.5	
309.7	CARBONDALE		SANDSTONE	2.0	57.0	
307.7	CARBONDALE		SHALY SANDSTONE	5.0	59.0	
302.7	CARBONDALE		SANDSTONE	14.0	64.0	
288.7	CARBONDALE		SHALY SANDSTONE	3.0	78.0	SIDERITE
285.7	CARBONDALE		SANDY SHALE	11.0	81.0	
274.7	CARBONDALE		SANDSTONE	6.0	92.0	
268.7	CARBONDALE		SHALY SANDSTONE	10.0	98.0	
258.7	CARBONDALE		SANDY SHALE	5.0	108.0	
253.7	CARBONDALE	BRIAR HILL	COAL	1.5	113.0	
252.2	CARBONDALE		GRAY SHALE	2.5	114.5	
249.7	CARBONDALE		SANDSTONE	3.0	117.0	
246.7	CARBONDALE		SANDY SHALE	4.0	120.0	
242.7	CARBONDALE		SANDSTONE	6.0	124.0	
234.7	CARBONDALE		SHALY SANDSTONE	7.0	132.0	
227.7	CARBONDALE		DARK SHALE	2.0	139.0	SIDERITE
225.7	CARBONDALE		SANDY SHALE	0.4	141.0	
224.1	CARBONDALE		BLACK SHALE	1.0	142.6	
223.2	CARBONDALE		SHALY SANDSTONE	4.7	143.5	
218.5	CARBONDALE		SHALE	0.2	148.2	
218.3	CARBONDALE		SANDY SHALE	8.1	148.4	
210.1	CARBONDALE		SHALE	1.8	156.6	SIDERITE
208.3	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	0.9	158.4	
207.4	CARBONDALE	ST. DAVID	LIMESTONE	0.9	159.3	
206.5	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	0.4	160.2	
206.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	160.6	
203.4	CARBONDALE		GRAY SHALE	0.3	163.3	SIDERITE
203.1	CARBONDALE		BROWN SHALE	0.1	163.6	
203.0	CARBONDALE		DARK SHALE	0.4	163.7	SIDERITE

202.6	CARBONDALE	SPRINGFIELD	COAL	4.6	164.1
198.0	CARBONDALE		SHALE	0.7	168.7
197.3	CARBONDALE		SHALY SANDSTONE	0.9	169.4
196.4	CARBONDALE		SANDY SHALE	1.0	170.3
195.4	CARBONDALE		NODULAR LIMESTONE	0.1	171.3
195.3	CARBONDALE		SANDY SHALE	2.7	171.4
192.7	CARBONDALE		SANDSTONE	3.0	174.0
189.7	CARBONDALE		SHALY SANDSTONE	1.0	177.0

MAPID: 16526555000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.399466 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775759 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 295.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-424 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
371.0	PLEISTOCENE		CLAY	28.0	2.0	
343.0	PLEISTOCENE		SANDY CLAY	3.0	30.0	
340.0	SHELBURN		SANDSTONE	2.0	33.0	
338.0	SHELBURN		SHALY SANDSTONE	5.0	35.0	
333.0	SHELBURN		SANDY SHALE	10.0	40.0	SIDERITE
323.0	SHELBURN		BLACK SHALE & COAL	0.5	50.0	
322.5	SHELBURN		GRAY SHALE	1.5	50.5	
321.0	SHELBURN		CALCAREOUS SANDSTONE	2.0	52.0	
319.0	SHELBURN		SANDSTONE	2.0	54.0	
317.0	SHELBURN		SHALY SANDSTONE	2.0	56.0	
315.0	SHELBURN		GRAY SHALE	3.0	58.0	SIDERITE
312.0	SHELBURN		BLACK SHALE	1.0	61.0	
311.0	SHELBURN		BLACK SHALE	1.0	62.0	
310.0	SHELBURN		BLACK SHALE	2.0	63.0	
308.0	SHELBURN		GRAY SHALE	5.0	65.0	SIDERITE
303.0	SHELBURN		SANDY SHALE	10.0	70.0	SIDERITE
293.0	SHELBURN		DARK SHALE	6.5	80.0	
286.5	SHELBURN	DANVILLE	COAL	2.0	86.5	
284.5	SHELBURN		GRAY SHALE	1.5	88.5	
283.0	SHELBURN		SANDSTONE	5.0	90.0	
278.0	SHELBURN		SHALY SANDSTONE	1.0	95.0	
277.0	SHELBURN		BLACK SHALE	2.0	96.0	
275.0	SHELBURN		SANDY SHALE	1.0	98.0	
274.0	SHELBURN		SANDSTONE	10.0	99.0	
264.0	SHELBURN	ALLENBY	COAL	2.0	109.0	
262.0	SHELBURN		GRAY SHALE	3.5	111.0	
258.5	SHELBURN	BANKSTON FORK	LIMESTONE	5.0	114.5	
253.5	SHELBURN		GREEN SHALE	0.5	119.5	
253.0	SHELBURN		SANDY SHALE	4.0	120.0	
249.0	SHELBURN		DARK SHALE	2.0	124.0	
247.0	SHELBURN		SANDSTONE	5.0	126.0	
242.0	SHELBURN		SHALY SANDSTONE	14.0	131.0	
228.0	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	2.5	145.0	
226.0	CARBONDALE	ANNA	BLACK SHALE	2.5	147.0	
223.0	CARBONDALE		GRAY SHALE	2.0	150.0	
221.0	CARBONDALE	HERRIN	COAL	4.5	152.0	
216.5	CARBONDALE		GRAY SHALE	3.5	156.5	

213.0	CARBONDALE		SANDSTONE	17.0	160.0	
196.0	CARBONDALE		SHALY SANDSTONE	23.0	177.0	
173.0	CARBONDALE		SANDY SHALE	17.5	200.0	
155.5	CARBONDALE	BRIAR HILL	COAL	1.5	217.5	
154.0	CARBONDALE		SANDY SHALE	4.0	219.0	
150.0	CARBONDALE		SANDSTONE	7.0	223.0	
143.0	CARBONDALE		SHALY SANDSTONE	29.9	230.0	
113.1	CARBONDALE		SANDY SHALE	13.6	259.9	
99.6	CARBONDALE		LIMESTONE	1.2	273.4	
98.4	CARBONDALE		BLACK SHALE	2.5	274.6	
95.9	CARBONDALE		LIMESTONE	0.7	277.1	
95.2	CARBONDALE		BLACK SHALE	0.3	277.8	
94.9	CARBONDALE		LIMESTONE	0.9	278.1	
94.0	CARBONDALE		BLACK SHALE	0.2	279.0	
93.8	CARBONDALE		GRAY SHALE	1.8	279.2	
92.0	CARBONDALE	SPRINGFIELD	COAL	5.7	281.0	
85.1	CARBONDALE		SANDY SHALE	0.9	287.9	W/ LS NODULES
84.2	CARBONDALE		SILTSTONE	5.2	288.8	SANDY W/ LS NODULES

MAPID: 16526556000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.40322 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775696 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 295.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-426 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
372.2	PLEISTOCENE		CLAY	24.0	2.0	
348.2	SHELBURN		SANDSTONE	4.0	26.0	
344.2	SHELBURN		GRAY SHALE	1.0	30.0	
343.2	SHELBURN		SANDY SHALE	15.0	31.0	
328.2	SHELBURN		SANDY SHALE	4.0	46.0	SIDERITE
324.2	SHELBURN		GRAY SHALE	6.0	50.0	
318.2	SHELBURN		BLACK SHALE	1.0	56.0	
317.2	SHELBURN		GRAY SHALE	4.0	57.0	
313.2	SHELBURN		CALCAREOUS SHALE	4.0	61.0	SIDERITE
309.2	SHELBURN		SANDY SHALE	2.0	65.0	SIDERITE
307.2	SHELBURN		CALCAREOUS SHALE	2.0	67.0	
305.2	SHELBURN		BLACK SHALE	2.0	69.0	
303.7	SHELBURN		LIMESTONE AND BLACK SHALE	1.5	70.5	
301.2	SHELBURN		BLACK SHALE	2.5	73.0	
299.2	SHELBURN		DARK SHALE	3.0	75.0	
296.2	SHELBURN		SANDY SHALE	14.5	78.0	
281.7	SHELBURN		GRAY SHALE	1.5	92.5	
280.2	SHELBURN	DANVILLE	COAL	2.0	94.0	
278.2	SHELBURN		SANDY SHALE	2.0	96.0	
276.2	SHELBURN		SANDSTONE	5.0	98.0	
271.2	SHELBURN		SANDY SHALE	3.0	103.0	SIDERITE
268.2	SHELBURN		SANDSTONE	5.0	106.0	
263.2	SHELBURN		GRAY SHALE	2.0	111.0	
261.2	SHELBURN		DARK SHALE	2.0	113.0	
259.2	SHELBURN		GRAY SHALE	3.0	115.0	
256.2	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	118.0	TAN
250.2	SHELBURN		GREEN SHALE	1.0	124.0	
249.2	SHELBURN		SANDY SHALE	2.0	125.0	
247.2	SHELBURN		SHALY SANDSTONE	5.0	127.0	
242.2	SHELBURN		SANDSTONE	5.0	132.0	
237.2	SHELBURN		SHALY SANDSTONE	11.0	137.0	
226.2	SHELBURN		DARK SHALE	2.0	148.0	
224.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.5	150.0	
218.7	CARBONDALE	ANNA	BLACK SHALE	2.0	155.5	
216.7	CARBONDALE	HERRIN	COAL	4.5	157.5	
212.2	CARBONDALE		UNDERCLAY	3.0	162.0	
209.2	CARBONDALE		SHALY SANDSTONE	5.0	165.0	

204.2	CARBONDALE		SANDSTONE	8.0	170.0	
196.2	CARBONDALE		SHALY SANDSTONE	15.0	178.0	
181.2	CARBONDALE		SANDY SHALE	27.5	193.0	
153.7	CARBONDALE	BRIAR HILL	COAL	1.5	220.5	
152.2	CARBONDALE		SANDY SHALE	1.5	222.0	
150.7	CARBONDALE		SANDSTONE	16.5	223.5	
134.2	CARBONDALE		SANDY SHALE	33.4	240.0	
100.8	CARBONDALE		SANDY SHALE	1.6	273.4	
99.2	CARBONDALE	ST. DAVID	SHALE	0.6	275.0	LS NODS
98.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	275.6	
95.5	CARBONDALE	SPRINGFIELD	COAL	5.1	278.7	
90.4	CARBONDALE		SANDSTONE	1.0	283.8	
89.5	CARBONDALE		UNDERCLAY	4.3	284.7	
85.2	CARBONDALE		CALCAREOUS SILTSTONE	1.2	289.0	
84.0	CARBONDALE		SILTSTONE	3.8	290.2	
80.2	CARBONDALE		DARK SHALE	1.0	294.0	

MAPID: 16526557000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.407959 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.774883 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 298.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-427 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
372.0	PLEISTOCENE		CLAY	8.0	2.0	
364.0	PLEISTOCENE		SANDY CLAY	15.0	10.0	
349.0	SHELBURN		COAL	0.5	25.0	
348.5	SHELBURN		GRAY SHALE	19.5	25.5	
329.0	SHELBURN		SANDSTONE	3.0	45.0	
326.0	SHELBURN		SANDY SHALE	6.0	48.0	
320.0	SHELBURN		GRAY SHALE	10.0	54.0	SIDERITE
310.0	SHELBURN		BLACK SHALE	2.0	64.0	
308.0	SHELBURN		GRAY SHALE	2.0	66.0	
306.0	SHELBURN		SANDSTONE	4.0	68.0	
302.0	SHELBURN		SHALY SANDSTONE	4.0	72.0	
298.0	SHELBURN		BLACK SHALE	4.0	76.0	
294.0	SHELBURN		SANDY SHALE	17.5	80.0	SIDERITE
276.5	SHELBURN	DANVILLE	COAL	2.0	97.5	
274.5	SHELBURN		SANDY SHALE	0.5	99.5	
274.0	SHELBURN		SANDSTONE	2.0	100.0	
272.0	SHELBURN		SHALY SANDSTONE	6.0	102.0	
266.0	SHELBURN		SANDY SHALE	2.0	108.0	
264.0	SHELBURN		SANDSTONE	10.0	110.0	
254.0	SHELBURN		GRAY SHALE	1.0	120.0	
253.0	SHELBURN	ALLENBY	COAL	1.0	121.0	
252.0	SHELBURN		GRAY SHALE	4.0	122.0	
248.0	SHELBURN	BANKSTON FORK	LIMESTONE	7.0	126.0	
241.0	SHELBURN		GREEN SHALE	1.0	133.0	
240.0	SHELBURN		SANDY SHALE	5.0	134.0	
235.0	SHELBURN		SHALY SANDSTONE	4.0	139.0	
231.0	SHELBURN		SANDSTONE	3.0	143.0	
228.0	SHELBURN		SHALY SANDSTONE	13.0	146.0	
215.0	SHELBURN		BLACK SHALE	2.0	159.0	
213.0	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	3.0	161.0	
210.0	CARBONDALE	ANNA	BLACK SHALE	3.0	164.0	
207.0	CARBONDALE	HERRIN	COAL	4.5	167.0	
202.5	CARBONDALE		UNDERCLAY	1.5	171.5	
201.0	CARBONDALE		SANDY SHALE	3.0	173.0	
198.0	CARBONDALE		SANDSTONE	11.0	176.0	
187.0	CARBONDALE		SHALY SANDSTONE	4.0	187.0	
183.0	CARBONDALE		SANDY SHALE	37.0	191.0	

146.0	CARBONDALE	BRIAR HILL	COAL	1.5	228.0
144.5	CARBONDALE		SANDY SHALE	10.5	229.5
134.0	CARBONDALE		SHALY SANDSTONE	5.0	240.0
129.0	CARBONDALE		SANDSTONE	3.0	245.0
126.0	CARBONDALE		SHALY SANDSTONE	2.0	248.0
124.0	CARBONDALE		SANDY SHALE	18.0	250.0
106.0	CARBONDALE		SANDY SHALE	4.5	268.0
101.5	CARBONDALE		NODULAR LIMESTONE	0.3	272.5
101.2	CARBONDALE		BLACK SHALE	0.5	272.8
100.8	CARBONDALE		BLACK SHALE	1.8	273.2
99.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	275.0
98.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	275.7
96.8	CARBONDALE		LIMESTONE	0.1	277.2
96.7	CARBONDALE		DARK SHALE	3.8	277.3
92.9	CARBONDALE	SPRINGFIELD	COAL	4.6	281.1
88.3	CARBONDALE		GRAY SHALE	2.4	285.7
86.0	CARBONDALE		SIDERITE	0.1	288.0
85.9	CARBONDALE		SHALY SANDSTONE	7.9	288.1
78.0	CARBONDALE		SANDY SHALE	0.9	296.0
77.1	CARBONDALE		SILTSTONE	1.1	296.9

MAPID: 16526558000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.396494 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775855 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 299.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-429 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
374.0	PLEISTOCENE		CLAY	4.0	2.0	
370.0	PLEISTOCENE		SANDY CLAY	16.0	6.0	
354.0	PLEISTOCENE		CLAY	8.0	22.0	
346.0	SHELBURN		GRAY SANDSTONE	2.0	30.0	
344.0	SHELBURN		SANDY SHALE	6.0	32.0	
338.0	SHELBURN		GRAY SHALE	4.0	38.0	
334.0	SHELBURN		SANDY SHALE	3.0	42.0	SIDERITE
331.0	SHELBURN		BLACK SHALE	2.0	45.0	
329.0	SHELBURN		COAL	0.5	47.0	
328.5	SHELBURN		SHALE	1.5	47.5	
327.0	SHELBURN		SANDSTONE	1.0	49.0	
326.0	SHELBURN		LIMESTONE	2.0	50.0	
324.0	SHELBURN		SANDY SHALE	7.0	52.0	
317.0	SHELBURN		BLACK SHALE	1.0	59.0	
316.0	SHELBURN		LIMESTONE AND BLACK SHALE	1.0	60.0	
315.0	SHELBURN		BLACK SHALE	3.0	61.0	
312.0	SHELBURN		GRAY SHALE	16.0	64.0	SIDERITE
296.0	SHELBURN		BLACK SHALE	4.0	80.0	
292.0	SHELBURN		LIMESTONE AND BLACK SHALE	4.0	84.0	CALCITE
288.0	SHELBURN		CALCAREOUS SANDSTONE	5.0	88.0	DANVILLE OUT
283.0	SHELBURN		SHALY SANDSTONE	2.0	93.0	
281.0	SHELBURN		SANDSTONE	8.0	95.0	
273.0	SHELBURN		BLACK SHALE	1.0	103.0	
272.0	SHELBURN		SANDY SHALE	1.0	104.0	
271.0	SHELBURN		SANDSTONE	4.0	105.0	
267.0	SHELBURN	ALLENBY	COAL	1.0	109.0	
266.0	SHELBURN		SANDY SHALE	4.0	110.0	
262.0	SHELBURN	BANKSTON FORK	LIMESTONE	7.5	114.0	
254.5	SHELBURN		GREEN SHALE	0.5	121.5	
254.0	SHELBURN		SANDY SHALE	4.0	122.0	
250.0	SHELBURN		SANDSTONE	3.0	126.0	
247.0	SHELBURN		SHALY SANDSTONE	2.0	129.0	
245.0	SHELBURN		SANDSTONE	3.0	131.0	
242.0	SHELBURN		SHALY SANDSTONE	2.0	134.0	
240.0	SHELBURN		SANDSTONE	6.0	136.0	
234.0	SHELBURN		SHALY SANDSTONE	3.5	142.0	

230.5	SHELBURN		SANDY DARK SHALE	1.5	145.5	
229.0	SHELBURN		BLACK SHALE	1.0	147.0	
228.0	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	6.5	148.0	
221.5	CARBONDALE	ANNA	BLACK SHALE	2.0	154.5	
219.5	CARBONDALE	HERRIN	COAL	4.5	156.5	
215.0	CARBONDALE		UNDERCLAY	4.0	161.0	
211.0	CARBONDALE		SANDY SHALE	1.0	165.0	
210.0	CARBONDALE		SANDSTONE	6.0	166.0	
204.0	CARBONDALE		SHALY SANDSTONE	3.0	172.0	
201.0	CARBONDALE		SANDSTONE	9.0	175.0	
192.0	CARBONDALE		SHALY SANDSTONE	11.0	184.0	
181.0	CARBONDALE		SANDY SHALE	24.0	195.0	
157.0	CARBONDALE	BRIAR HILL	COAL	1.5	219.0	
155.5	CARBONDALE		SANDY SHALE	4.5	220.5	
151.0	CARBONDALE		SANDSTONE	10.0	225.0	
141.0	CARBONDALE		SHALY SANDSTONE	13.0	235.0	
128.0	CARBONDALE		SANDY SHALE	11.0	248.0	
117.0	CARBONDALE		SANDY SHALE	10.0	259.0	W/ CALCITE (DIKE)
107.0	CARBONDALE		CALCAREOUS SHALE	1.0	269.0	W/ CALCITE (DIKE)
106.0	CARBONDALE		BLACK SHALE	3.2	270.0	DIKE
102.8	CARBONDALE		BLACK SHALE	1.8	273.2	W/ CALCITE (DIKE)
101.0	CARBONDALE		CALCAREOUS SANDSTONE	7.1	275.0	W/ CALCITE (DIKE)
93.9	CARBONDALE		BLACK SHALE	0.3	282.1	W/ CALCITE (DIKE)
93.6	CARBONDALE		GRAY SHALE	1.2	282.4	CALCITE (DIKE)
92.4	CARBONDALE		LIMESTONE	0.4	283.6	PYRITE (DIKE)
92.0	CARBONDALE		BLACK SHALE	7.5	284.0	W/ CALCITE (DIKE)
84.5	CARBONDALE		LIMESTONE	7.5	291.5	RED AND GRAY (DIKE)

MAPID: 16526559000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.396688 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775843 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Company Sample Study

SOURCE: ARCLAR COMPANY AC-445 **WELL TYPE:** Gas Injection

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
374.0	PLEISTOCENE		CLAY	10.0	2.0	
364.0	PLEISTOCENE		SANDY CLAY	13.0	12.0	
351.0	PLEISTOCENE		SAND/CLAY	3.0	25.0	
348.0	PLEISTOCENE		CLAY	5.0	28.0	
343.0	SHELBURN		SANDY SHALE	17.0	33.0	SIDERITE
326.0	SHELBURN		GRAY SHALE	2.0	50.0	
324.0	SHELBURN		BLACK SHALE	1.0	52.0	
323.0	SHELBURN		GRAY SHALE	1.0	53.0	
322.0	SHELBURN		CALCAREOUS SANDSTONE	2.0	54.0	
320.0	SHELBURN		SANDY SHALE	8.0	56.0	
312.0	SHELBURN		BLACK SHALE	2.0	64.0	
310.0	SHELBURN		LIMESTONE AND BLACK SHALE	1.0	66.0	
309.0	SHELBURN		BLACK SHALE	2.0	67.0	
307.0	SHELBURN		GRAY SHALE	19.0	69.0	SIDERITE
288.0	SHELBURN		BLACK SHALE	1.0	88.0	
287.0	SHELBURN	DANVILLE	COAL	2.0	89.0	
285.0	SHELBURN		UNDERCLAY	2.0	91.0	
283.0	SHELBURN		SANDSTONE	6.0	93.0	
277.0	SHELBURN		SANDY SHALE	2.0	99.0	
275.0	SHELBURN		BLACK SHALE	0.5	101.0	
274.5	SHELBURN		SANDY SHALE	4.5	101.5	
270.0	SHELBURN		SANDSTONE	2.0	106.0	
268.0	SHELBURN		SANDSTONE	2.0	108.0	CALCITE
266.0	SHELBURN		SANDY SHALE	4.0	110.0	W/CALCITE
262.0	SHELBURN		SHALY SANDSTONE	3.0	114.0	
259.0	SHELBURN		SANDSTONE	9.0	117.0	
250.0	SHELBURN		GRAY SANDSTONE	4.0	126.0	SOME BLACK
246.0	SHELBURN		SHALE	8.0	130.0	
238.0	SHELBURN		BLACK SHALE	1.0	138.0	
237.0	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	3.5	139.0	
233.5	CARBONDALE	ANNA	BLACK SHALE	2.5	142.5	
231.0	CARBONDALE	HERRIN	COAL	4.5	145.0	
226.5	CARBONDALE		UNDERCLAY	4.5	149.5	
222.0	CARBONDALE		SANDY SHALE	3.0	154.0	
219.0	CARBONDALE		SANDSTONE	13.0	157.0	
206.0	CARBONDALE		SHALY SANDSTONE	6.0	170.0	

200.0	CARBONDALE		SANDSTONE	4.0	176.0
196.0	CARBONDALE		SHALY SANDSTONE	13.0	180.0
183.0	CARBONDALE		SANDY SHALE	23.0	193.0
160.0	CARBONDALE	BRIAR HILL	COAL	1.5	216.0
158.5	CARBONDALE		UNDERCLAY	0.5	217.5
158.0	CARBONDALE		GRAY SHALE	7.0	218.0
151.0	CARBONDALE		SANDSTONE/SHALE	41.3	225.0
109.7	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	1.0	266.3
108.7	CARBONDALE	ST. DAVID	LIMESTONE	0.8	267.3
107.9	CARBONDALE	TURNER MINE	BLACK SHALE	0.9	268.1
107.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.6	269.0
103.4	CARBONDALE		GRAY SHALE	1.6	272.6
101.8	CARBONDALE	SPRINGFIELD	COAL	5.6	274.2
96.2	CARBONDALE		SANDY SHALE	6.3	279.8

MAPID: 16526560000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.394357 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775856 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.8 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-446 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
372.8	PLEISTOCENE		CLAY	10.0	2.0	
362.8	PLEISTOCENE		SANDY CLAY	12.0	12.0	
350.8	PLEISTOCENE		CLAY	6.0	24.0	
344.8	SHELBURN		GRAY SHALE	4.0	30.0	
340.8	SHELBURN		COAL	1.0	34.0	BKSH
339.8	SHELBURN		SHALE	3.0	35.0	
336.8	SHELBURN		CALCAREOUS SHALE	4.0	38.0	
332.8	SHELBURN		SHALE	2.0	42.0	
330.8	SHELBURN		SANDY SHALE	3.0	44.0	
327.8	SHELBURN		DARK SHALE	1.0	47.0	
326.8	SHELBURN		GRAY SHALE	4.0	48.0	
322.8	SHELBURN		LIMESTONE AND BLACK SHALE	0.5	52.0	
322.3	SHELBURN		BLACK SHALE	3.5	52.5	
318.8	SHELBURN		GRAY SHALE	10.0	56.0	SIDERITE
308.8	SHELBURN		GRAY SHALE	9.0	66.0	SOFT
299.8	SHELBURN	DANVILLE	COAL	1.5	75.0	
298.3	SHELBURN		SHALE	1.5	76.5	
296.8	SHELBURN		SANDY SHALE	2.0	78.0	
294.8	SHELBURN		GRAY SHALE	4.0	80.0	
290.8	SHELBURN		SANDSTONE	9.0	84.0	
281.8	SHELBURN	ALLENBY	COAL	1.5	93.0	
280.3	SHELBURN		SANDY SHALE	3.5	94.5	
276.8	SHELBURN	BANKSTON FORK	LIMESTONE	5.0	98.0	
271.8	SHELBURN		SHALE	3.0	103.0	
268.8	SHELBURN		SANDSTONE	27.0	106.0	
241.8	SHELBURN		SANDY SHALE	1.5	133.0	
240.3	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	2.0	134.5	
238.3	CARBONDALE	ANNA	BLACK SHALE	2.0	136.5	
236.3	CARBONDALE	HERRIN	COAL	4.5	138.5	
231.8	CARBONDALE		UNDERCLAY	4.0	143.0	
227.8	CARBONDALE		SANDSTONE	19.0	147.0	
208.8	CARBONDALE		SANDY SHALE	38.5	166.0	
170.3	CARBONDALE	BRIAR HILL	COAL	1.5	204.5	
168.8	CARBONDALE		SANDY SHALE	3.0	206.0	
165.8	CARBONDALE		SANDSTONE	7.0	209.0	
158.8	CARBONDALE		SHALY SANDSTONE	24.0	216.0	
134.8	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	13.8	240.0	

121.0	CARBONDALE	TURNER MINE	BLACK SHALE	0.7	253.8	
120.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	254.8	
116.6	CARBONDALE		SANDY SHALE	2.1	258.2	
114.6	CARBONDALE	SPRINGFIELD	COAL	5.0	260.2	
109.6	CARBONDALE		SILTSTONE	10.8	265.2	SHALEY

MAPID: 16500185000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE/c NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422103 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.773966 **DATE COLLECTED:** 12 / 6 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #26 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	20.0	0.0	
350.0	MODESTO		SHALE	24.0	20.0	
326.0	MODESTO		BLACK SHALE	7.0	44.0	
319.0	MODESTO		SHALE	12.0	51.0	
307.0	CARBONDALE	DANVILLE	COAL	2.0	63.0	
305.0	CARBONDALE		UNDERCLAY	1.0	65.0	
304.0	CARBONDALE		SANDSTONE	4.0	66.0	
300.0	CARBONDALE		SHALE	5.0	70.0	
295.0	CARBONDALE		SANDSTONE	7.0	75.0	
288.0	CARBONDALE	ALLENBY	COAL	2.0	82.0	
286.0	CARBONDALE		UNDERCLAY	3.0	84.0	
283.0	CARBONDALE		SHALE	7.0	87.0	
276.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	94.0	
270.0	CARBONDALE		UNDERCLAY	5.0	100.0	
265.0	CARBONDALE		SHALE	21.0	105.0	
244.0	CARBONDALE	ANNA	BLACK SHALE	2.3	126.0	
241.7	CARBONDALE	HERRIN	COAL	4.7	128.3	
237.0	CARBONDALE		UNDERCLAY	3.0	133.0	
234.0	CARBONDALE		SANDSTONE	30.0	136.0	
204.0	CARBONDALE		SHALE	25.0	166.0	
179.0	CARBONDALE	BRIAR HILL	COAL	2.0	191.0	
177.0	CARBONDALE		UNDERCLAY	2.0	193.0	
175.0	CARBONDALE		SANDSTONE	10.0	195.0	
165.0	CARBONDALE		SHALE	20.0	205.0	
145.0	CARBONDALE		BLACK SHALE	15.0	225.0	
130.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	240.0	
128.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	242.0	
123.0	CARBONDALE	SPRINGFIELD	COAL	4.8	247.0	
118.2	CARBONDALE		UNDERCLAY	1.3	251.8	

MAPID: 16500185000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE/c NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422103 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.773966 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
307.0	CARBONDALE	DANVILLE	COAL	2.0	63.0	
304.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	16.0	66.0	
276.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	94.0	
242.0	CARBONDALE	HERRIN	COAL	3.0	128.0	
234.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	30.0	136.0	
179.0	CARBONDALE	BRIAR HILL	COAL	2.0	191.0	
175.0	CARBONDALE	CANTON		10.0	195.0	
123.0	CARBONDALE	SPRINGFIELD	COAL	4.8	247.0	

MAPID: 16500976000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' N line, 0' E line of NE SE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.410608 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.764785 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 95.8 **LOG TYPE:** Survey Core Study

SOURCE: TERTELING BROS 45 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
318.4	CARBONDALE	ALLENBY	COAL	0.7	50.6	
317.7	CARBONDALE		SILTSTONE	0.5	51.3	
317.2	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	5.7	51.8	
311.6	CARBONDALE	LAWSON	SHALE	27.7	57.4	
283.9	CARBONDALE		DARK GRAY SHALE	1.8	85.1	
282.1	CARBONDALE	BRERETON	CALCAREOUS SHALE	0.8	86.9	
281.3	CARBONDALE	ANNA	BLACK SHALE	3.3	87.7	
278.0	CARBONDALE	HERRIN	COAL	4.8	91.0	

MAPID: 16501241000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 15' N line, 15' E line of SE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410661 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.764741 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 368.8 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #28 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, VERNON SETON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.8			UNCONSOLIDATED	29.0	0.0	
339.8	CARBONDALE		SANDSTONE	5.5	29.0	
334.3	CARBONDALE		SHALE	10.5	34.5	
323.8	CARBONDALE		SANDY SHALE	4.0	45.0	
319.8	CARBONDALE	ALLENBY	COAL	0.5	49.0	
319.3	CARBONDALE		SHALE	3.5	49.5	
315.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	53.0	
309.6	CARBONDALE		CALCAREOUS SHALE	5.3	59.2	
304.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.5	64.5	
281.8	CARBONDALE		CALCAREOUS SHALE	1.0	87.0	
280.8	CARBONDALE	ANNA	BLACK SHALE	3.4	88.0	
277.4	CARBONDALE	HERRIN	COAL	4.3	91.4	W/ BAND AND SULFUR
273.1	CARBONDALE		UNDERCLAY	1.3	95.7	

MAPID: 16502827000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.420941 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.773044 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1539.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-65.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	452.0	
-145.0	SPOON	DAVIS	UNCLASSIFIED	-	532.0	
-1152.0	BASE OF PENN.		UNCLASSIFIED	-	1539.0	

MAPID: 16502827000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.420941 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.773044 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2440.0 **LOG TYPE:**
SOURCE: PITTS & BASSFORD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.0	CARBONDALE	BRERETON	LIMESTONE	-	205.0	
-1298.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1685.0	
-1646.0			LIMESTONE	-	2033.0	
-2053.0		BASE BARLOW	LIMESTONE	-	2440.0	

MAPID: 16502827000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.420941 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.773044 **DATE COLLECTED:** 3 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2960.0 **LOG TYPE:** Electric Log
SOURCE: PITTS & BASSFORD, SPAHR NELLIE ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
2.0	CARBONDALE	SURVANT	COAL	2.8	385.0	
-63.0	CARBONDALE	COLCHESTER	COAL	0.5	450.0	
-116.0	CARBONDALE	DEKOVEN	COAL	2.8	503.0	
-123.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	510.0	
-146.0	CARBONDALE	DAVIS	COAL	4.0	533.0	
-193.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	580.0	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-206.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	593.0	
-243.0	TRADEWATER	MT. RORAH	COAL	1.2	630.0	

MAPID: 16526532000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.423561 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768413 **DATE COLLECTED:** 7 / 16 / 1998

SURFACE ELEVATION (FT.): 367.8 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC98-372 **WELL TYPE:** Coal Test

COMMENT: CORE OF IGNEOUS DIKE IN STORAGE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.8	PLEISTOCENE		CLAY	16.0	2.0	
349.8	CARBONDALE		GRAY SHALE	9.0	18.0	SOFT
338.8	CARBONDALE		LIMESTONE	1.5	29.0	BLACK
337.3	CARBONDALE		SHALE	1.5	30.5	
335.8	CARBONDALE		LIMESTONE	22.2	32.0	BLACK, BROKEN, CALCITE
313.6	CARBONDALE		SHALE	1.0	54.2	CALCITE, LIMEY
312.6	CARBONDALE		CALCAREOUS SANDSTONE	1.0	55.2	
311.6	CARBONDALE		IGNEOUS INTRUSION	1.4	56.2	#5 COAL MISSING
310.2	CARBONDALE		GRAY SHALE	2.4	57.6	
307.8	CARBONDALE		LIMESTONE	7.0	60.0	CALCITE
300.8	CARBONDALE		SANDSTONE	7.0	67.0	BLACK, LS STREAKS

MAPID: 16526536000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.423395 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768163 **DATE COLLECTED:** 10 / 2 / 1998

SURFACE ELEVATION (FT.): 367.6 **LOGGED (FT.):** 242.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC98-401 **WELL TYPE:** Coal Test

COMMENT: CORE OF IGNEOUS DIKE IN STORAGE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.6	PLEISTOCENE		CLAY	33.0	2.0	
332.6	CARBONDALE		CALCAREOUS SANDSTONE	11.0	35.0	BLACK, HARD, CALCITE
321.6	CARBONDALE		LIMESTONE	2.0	46.0	BLACK, CALCITE
319.6	CARBONDALE		CALCAREOUS SANDSTONE	9.0	48.0	BLACK,CALCITE
310.6	CARBONDALE		SANDSTONE	4.0	57.0	CALCITE
306.6	CARBONDALE		SANDY SHALE	2.5	61.0	
304.1	CARBONDALE		SANDSTONE	8.5	63.5	CALCITE
295.6	CARBONDALE		SANDY SHALE	5.0	72.0	BLACK
290.6	CARBONDALE		CALCAREOUS SANDSTONE	5.0	77.0	BLACK, CALCITE
285.6	CARBONDALE		SANDY SHALE	2.0	82.0	
283.6	CARBONDALE		CALCAREOUS SANDSTONE	4.0	84.0	CALCITE, BLACK
279.6	CARBONDALE		LIMESTONE	8.0	88.0	BLACK, CALCITE
271.6	CARBONDALE		CALCAREOUS SANDSTONE	16.0	96.0	BLACK, GREEN, CALCITE
255.6	CARBONDALE		LIMESTONE	18.0	112.0	BLACK, GREEN, CALCITE
237.6	CARBONDALE		CALCAREOUS SANDSTONE	30.0	130.0	BLACK, GREEN, CALCITE
207.6	CARBONDALE		CALCAREOUS SANDSTONE	10.0	160.0	BLACK, GREEN, CALCITE
197.6	CARBONDALE		CALCAREOUS SANDSTONE	27.0	170.0	BLACK, CALCITE
170.6	CARBONDALE		LIMESTONE	3.0	197.0	CHERTY, CALCITE
167.6	CARBONDALE		LIMESTONE	19.3	200.0	FRACTURED, HARD, CHERT, CALCITE
148.3	CARBONDALE		IGNEOUS INTRUSION	22.7	219.3	#5 COAL MISSING

MAPID: 16526561000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422908 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768408 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.6 **LOGGED (FT.):** 232.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-369 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.6	PLEISTOCENE		CLAY	22.0	2.0	GRAY AND BROWN
343.6	SHELBURN		SANDY SHALE	6.0	24.0	
337.6	SHELBURN		GRAY SHALE	7.0	30.0	
330.6	SHELBURN	DANVILLE	COAL	0.5	37.0	
330.1	SHELBURN		UNDERCLAY	3.5	37.5	
326.6	SHELBURN		SANDSTONE	3.0	41.0	
323.6	SHELBURN		SANDY SHALE	2.0	44.0	
321.6	SHELBURN		SANDSTONE	10.0	46.0	
311.6	SHELBURN		GRAY SHALE	7.0	56.0	
304.6	SHELBURN	ALLENBY	COAL	1.0	63.0	
303.6	SHELBURN		SHALE	0.5	64.0	
303.1	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	64.5	
297.1	SHELBURN		SHALE	23.5	70.5	
273.6	SHELBURN		CALCAREOUS SANDSTONE	1.0	94.0	
272.6	SHELBURN		GRAY SHALE	2.0	95.0	
270.6	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	1.0	97.0	
269.6	CARBONDALE	ANNA	BLACK SHALE	2.0	98.0	
267.6	CARBONDALE	ENERGY	GRAY SHALE	2.0	100.0	
265.6	CARBONDALE	HERRIN	COAL	4.5	102.0	
261.1	CARBONDALE		UNDERCLAY	4.0	106.5	
257.1	CARBONDALE		SANDSTONE	29.5	110.5	
227.6	CARBONDALE		SANDY SHALE	22.5	140.0	
205.1	CARBONDALE	BRIAR HILL	COAL	0.5	162.5	
204.6	CARBONDALE	BRIAR HILL	SHALE	1.0	163.0	
203.6	CARBONDALE	BRIAR HILL	COAL	1.5	164.0	
202.1	CARBONDALE		SHALE	2.5	165.5	
199.6	CARBONDALE		SANDSTONE	10.0	168.0	
189.6	CARBONDALE		SANDY SHALE	15.0	178.0	
174.6	CARBONDALE		SANDSTONE	7.0	193.0	
167.6	CARBONDALE		SANDY SHALE	11.0	200.0	
156.6	CARBONDALE		BLACK SHALE	1.0	211.0	
155.6	CARBONDALE		BLACK SHALE	0.8	212.0	
154.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	212.8	
154.3	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	213.3	
153.6	CARBONDALE		LIMESTONE	0.4	214.0	
153.2	CARBONDALE		SHALE	1.8	214.4	W/ LS NODULES
151.4	CARBONDALE		SHALE	5.4	216.2	

146.0	CARBONDALE	SPRINGFIELD	COAL	5.0	221.6	
141.0	CARBONDALE		UNDERCLAY	2.5	226.6	SHALEY
138.6	CARBONDALE		LIMESTONE	3.0	229.0	NODULAR

MAPID: 16526562000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.42847 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.76845 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.9 **LOGGED (FT.):** 231.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-366 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.9	PLEISTOCENE		CLAY	41.0	2.0	
324.9	SHELBURN		SHALE	2.0	43.0	
322.9	SHELBURN	DANVILLE	COAL	1.0	45.0	
321.9	SHELBURN		UNDERCLAY	4.0	46.0	
317.9	SHELBURN	ANVIL ROCK	SANDSTONE	4.0	50.0	
313.9	SHELBURN	ANVIL ROCK	GRAY SHALE	5.0	54.0	
308.9	SHELBURN	ANVIL ROCK	SANDSTONE	7.0	59.0	
301.9	SHELBURN		GRAY SHALE	1.0	66.0	
300.9	SHELBURN	JAMESTOWN	COAL	0.5	67.0	
300.4	SHELBURN	JAMESTOWN	SHALE	5.5	67.5	
294.9	SHELBURN	JAMESTOWN	COAL	2.5	73.0	
292.4	SHELBURN		SHALE	4.5	75.5	
287.9	SHELBURN		SANDSTONE	3.0	80.0	
284.9	SHELBURN		SANDY SHALE	7.0	83.0	SIDERITE
277.9	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	11.5	90.0	
266.4	CARBONDALE	ANNA	BLACK SHALE	1.5	101.5	
264.9	CARBONDALE	HERRIN	COAL	4.5	103.0	
260.4	CARBONDALE		UNDERCLAY	3.5	107.5	
256.9	CARBONDALE		SANDSTONE	19.0	111.0	
237.9	CARBONDALE		SANDY SHALE	35.0	130.0	
202.9	CARBONDALE		LIMESTONE	0.5	165.0	
202.4	CARBONDALE	BRIAR HILL	COAL	1.5	165.5	
200.9	CARBONDALE		UNDERCLAY	3.0	167.0	
197.9	CARBONDALE		SANDY SHALE	15.0	170.0	
182.9	CARBONDALE		SANDSTONE	15.0	185.0	
167.9	CARBONDALE		SANDY SHALE	8.0	200.0	
159.9	CARBONDALE	ST. DAVID	LIMESTONE AND BLACK SHALE	2.0	208.0	
157.9	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	210.0	
157.4	CARBONDALE	TURNER MINE	LIMESTONE AND BLACK SHALE	1.0	210.5	
156.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	211.5	
155.4	CARBONDALE		GRAY SHALE	6.7	212.5	
148.7	CARBONDALE		BLACK SHALE	0.1	219.2	
148.6	CARBONDALE	SPRINGFIELD	COAL	4.7	219.3	
143.9	CARBONDALE		SHALE	0.5	224.0	
143.4	CARBONDALE		SILTSTONE	3.5	224.5	SANDY
139.9	CARBONDALE		LIMESTONE	3.0	228.0	

MAPID: 16526563000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.420828 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768377 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.8 **LOGGED (FT.):** 233.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-368 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.8	PLEISTOCENE		CLAY	10.0	2.0	
355.8	SHELBURN		SANDY SHALE	5.0	12.0	
350.8	SHELBURN		GRAY SHALE	2.0	17.0	
348.8	SHELBURN		BLACK SHALE	1.0	19.0	
347.8	SHELBURN		BLACK SHALE & COAL	2.0	20.0	
345.8	SHELBURN		GRAY SHALE	8.0	22.0	
337.8	SHELBURN		SANDY SHALE	9.0	30.0	SIDERITE BANDS
328.8	SHELBURN		BLACK SHALE	0.5	39.0	
328.3	SHELBURN	DANVILLE	COAL	1.5	39.5	
326.8	SHELBURN		SANDSTONE	14.0	41.0	
312.8	SHELBURN		BLACK SHALE	2.0	55.0	
310.8	SHELBURN		SANDY SHALE	3.0	57.0	
307.8	SHELBURN		SANDSTONE	3.0	60.0	
304.8	SHELBURN	ALLENBY	BLACK SHALE & COAL	1.5	63.0	
303.3	SHELBURN		UNDERCLAY	1.5	64.5	
301.8	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	66.0	
295.8	SHELBURN		SHALE	3.0	72.0	
292.8	SHELBURN		SANDSTONE	8.0	75.0	
284.8	SHELBURN		SANDY SHALE	11.0	83.0	
273.8	SHELBURN		SANDSTONE	5.0	94.0	
268.8	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	7.5	99.0	
261.3	CARBONDALE	ANNA	BLACK SHALE	1.0	106.5	
260.3	CARBONDALE	HERRIN	COAL	4.5	107.5	
255.8	CARBONDALE		UNDERCLAY	2.0	112.0	
253.8	CARBONDALE		SANDSTONE	16.0	114.0	
237.8	CARBONDALE		SANDY SHALE	33.0	130.0	
204.8	CARBONDALE		SANDSTONE	2.5	163.0	
202.3	CARBONDALE	BRIAR HILL	COAL	1.5	165.5	
200.8	CARBONDALE		SANDY SHALE	2.0	167.0	
198.8	CARBONDALE		SANDSTONE	41.0	169.0	
157.8	CARBONDALE		SANDY SHALE	9.5	210.0	
148.3	CARBONDALE	ST. DAVID	LIMESTONE	1.5	219.5	
146.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	221.0	
145.2	CARBONDALE	TURNER MINE	LIMESTONE	1.5	222.6	
143.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	224.1	
143.3	CARBONDALE		SHALE	1.1	224.5	
142.2	CARBONDALE	SPRINGFIELD	COAL	4.2	225.6	

138.0	CARBONDALE	SANDY SHALE	2.2	229.8
135.8	CARBONDALE	SILTSTONE	1.0	232.0

MAPID: 16526564000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.424502 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768432 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.2 **LOGGED (FT.):** 232.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-371 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
366.2	PLEISTOCENE		CLAY	22.0	2.0	
344.2	SHELBURN		GRAY SHALE	12.0	24.0	
332.2	SHELBURN	DANVILLE	COAL WITH SHALE	2.0	36.0	
330.2	SHELBURN		SANDSTONE	4.0	38.0	
326.2	SHELBURN		SANDY SHALE	3.0	42.0	
323.2	SHELBURN		SANDSTONE	11.0	45.0	
312.2	SHELBURN		SHALE	5.0	56.0	
307.2	SHELBURN	ALLENBY	COAL	0.5	61.0	
306.7	SHELBURN		SHALE	1.5	61.5	
305.2	SHELBURN	BANKSTON FORK	LIMESTONE	5.5	63.0	
299.7	SHELBURN		SHALE	6.5	68.5	
293.2	SHELBURN		SANDSTONE	20.0	75.0	
273.2	SHELBURN		BLACK SHALE	1.0	95.0	
272.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	4.5	96.0	
267.7	CARBONDALE	ANNA	BLACK SHALE	2.0	100.5	
265.7	CARBONDALE	HERRIN	COAL	4.5	102.5	
261.2	CARBONDALE		UNDERCLAY	5.5	107.0	
255.7	CARBONDALE		SANDSTONE	23.5	112.5	
231.7	CARBONDALE		SANDY SHALE	18.0	136.5	
213.7	CARBONDALE	BRIAR HILL	COAL	0.5	154.5	
208.2	CARBONDALE	BRIAR HILL	SHALE	2.0	160.0	
206.2	CARBONDALE	BRIAR HILL	COAL	1.5	162.0	
204.7	CARBONDALE		SHALE	1.5	163.5	
203.2	CARBONDALE		SANDY SHALE	15.0	165.0	
188.2	CARBONDALE		SANDSTONE	31.5	180.0	
156.7	CARBONDALE	ST. DAVID	LIMESTONE	3.5	211.5	
153.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	215.0	
152.2	CARBONDALE		SANDY SHALE	5.2	216.0	
147.0	CARBONDALE		BLACK SHALE	0.4	221.2	
146.6	CARBONDALE	SPRINGFIELD	COAL	4.7	221.6	
142.0	CARBONDALE		SHALE	2.1	226.2	
139.9	CARBONDALE		SANDSTONE	3.7	228.3	

MAPID: 16526565000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.426021 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.768425 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.8 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-379 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
365.8	PLEISTOCENE		CLAY	9.0	2.0	BROWN
356.8	PLEISTOCENE		CLAY	19.0	11.0	GRAY
337.8	SHELBURN		SHALE	8.0	30.0	GRAY
329.8	SHELBURN		SANDY SHALE	2.0	38.0	
327.8	SHELBURN	DANVILLE	COAL WITH SHALE	2.0	40.0	
325.8	SHELBURN		SHALE	1.0	42.0	
324.8	SHELBURN		SANDSTONE	17.0	43.0	
307.8	SHELBURN		SHALE	4.0	60.0	GRAY
303.8	SHELBURN		SANDY SHALE	1.0	64.0	
302.8	SHELBURN	ALLENBY	COAL	2.0	65.0	
300.8	SHELBURN	BANKSTON FORK	LIMESTONE	5.5	67.0	
295.3	SHELBURN		SHALE	5.0	72.5	
290.3	SHELBURN		SANDY SHALE	3.5	77.5	
286.8	SHELBURN		SHALE	9.0	81.0	
277.8	SHELBURN	ANVIL ROCK	SANDSTONE	7.0	90.0	
270.8	SHELBURN		SHALE	1.0	97.0	
269.8	SHELBURN	BRERETON	LIMESTONE	5.0	98.0	BLACK
264.8	CARBONDALE	ANNA	CALCAREOUS SHALE	0.7	103.0	BLACK
264.1	CARBONDALE	ANNA	SHALE	2.1	103.7	BLACK
262.0	CARBONDALE	HERRIN	COAL	3.1	105.8	
259.0	CARBONDALE	HERRIN	SHALE	0.2	108.8	
258.8	CARBONDALE	HERRIN	COAL	0.1	109.0	
258.7	CARBONDALE	HERRIN	SHALE	0.1	109.1	
258.6	CARBONDALE	HERRIN	COAL	0.5	109.2	
258.1	CARBONDALE	HERRIN	PYRITE	0.1	109.7	
258.0	CARBONDALE	HERRIN	COAL	0.6	109.8	
257.4	CARBONDALE	HERRIN	UNDERCLAY	0.3	110.4	
257.1	CARBONDALE	HERRIN	COAL	0.1	110.7	
257.1	CARBONDALE		UNDERCLAY	3.9	110.7	
253.2	CARBONDALE		SANDSTONE	9.4	114.6	
243.8	CARBONDALE		CALCAREOUS SANDSTONE	2.0	124.0	
241.8	CARBONDALE		SANDSTONE	14.0	126.0	
227.8	CARBONDALE		SANDY SHALE	25.5	140.0	
202.3	CARBONDALE	BRIAR HILL	COAL	1.5	165.5	
200.8	CARBONDALE		UNDERCLAY/SHALE	9.0	167.0	
191.8	CARBONDALE		SANDSTONE	14.0	176.0	
177.8	CARBONDALE		SANDY SHALE	22.0	190.0	

155.8	CARBONDALE		CALCAREOUS SHALE	1.0	212.0	
154.8	CARBONDALE	ST. DAVID	LIMESTONE	3.0	213.0	
151.8	CARBONDALE	TURNER MINE	CALCAREOUS SHALE	1.0	216.0	BLACK
150.8	CARBONDALE	TURNER MINE	SHALE	0.5	217.0	BLACK
150.3	CARBONDALE	TURNER MINE	SHALE	3.8	217.5	GRAY
146.5	CARBONDALE	TURNER MINE	SHALE	0.2	221.3	BLACK
146.4	CARBONDALE	SPRINGFIELD	COAL	4.8	221.4	
141.6	CARBONDALE		SHALE	0.2	226.2	DARK
141.4	CARBONDALE		SHALE	1.3	226.4	SANDY
140.1	CARBONDALE		CALCAREOUS SANDSTONE	2.3	227.7	

MAPID: 16526566000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.414912 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769882 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 265.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-412 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	3.0		
366.3	PLEISTOCENE		CLAY	16.0	3.0	
350.3	PLEISTOCENE		SAND	8.0	19.0	
342.3	SHELBURN		GRAY SHALE	2.0	27.0	
340.3	SHELBURN		SANDY SHALE	3.0	29.0	
337.3	SHELBURN		BLACK SHALE & COAL	1.0	32.0	
336.3	SHELBURN		GRAY SHALE	3.5	33.0	
332.8	SHELBURN		LIMESTONE	1.5	36.5	
331.3	SHELBURN		SANDSTONE	2.0	38.0	
329.3	SHELBURN		SANDY SHALE	6.0	40.0	SIDERITE STREAKS
323.3	SHELBURN		LIMESTONE AND BLACK SHALE	1.0	46.0	
322.3	SHELBURN		BLACK SHALE	2.0	47.0	
320.3	SHELBURN		GRAY SHALE & SANDSTONE	17.0	49.0	
303.3	SHELBURN	DANVILLE	COAL	2.0	66.0	
301.3	SHELBURN		UNDERCLAY	0.5	68.0	
300.8	SHELBURN	ANVIL ROCK	SANDSTONE	4.5	68.5	
296.3	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	5.0	73.0	
291.3	SHELBURN	ANVIL ROCK	SANDSTONE	1.0	78.0	
290.3	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	3.0	79.0	
287.3	SHELBURN	ANVIL ROCK	SANDSTONE	5.0	82.0	
282.3	SHELBURN		GRAY SHALE & SANDSTONE	1.0	87.0	
281.3	SHELBURN	ALLENBY	COAL	1.5	88.0	
279.8	SHELBURN		UNDERCLAY	2.0	89.5	
277.8	SHELBURN	BANKSTON FORK	LIMESTONE	5.5	91.5	TAN
272.3	SHELBURN		SHALE	0.5	97.0	
271.8	SHELBURN		LIMESTONE	2.0	97.5	
269.8	SHELBURN		SHALE	1.5	99.5	
268.3	SHELBURN		SANDY SHALE	9.0	101.0	
259.3	SHELBURN		DARK SHALE	10.0	110.0	SIDERITE
249.3	SHELBURN		CALCAREOUS SANDSTONE	2.0	120.0	
247.3	SHELBURN		SANDY SHALE	3.0	122.0	
244.3	SHELBURN		BLACK SHALE	2.0	125.0	
242.3	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	4.5	127.0	
237.8	CARBONDALE	ANNA	BLACK SHALE	2.0	131.5	
235.8	CARBONDALE	HERRIN	COAL	4.5	133.5	

231.3	CARBONDALE		UNDERCLAY	1.0	138.0	
230.3	CARBONDALE		SANDSTONE	7.0	139.0	
223.3	CARBONDALE		SANDSTONE	2.0	146.0	
221.3	CARBONDALE		SHALY SANDSTONE	9.0	148.0	
212.3	CARBONDALE		SANDSTONE	11.0	157.0	
201.3	CARBONDALE		SANDY SHALE	21.0	168.0	
180.3	CARBONDALE		SANDSTONE	10.0	189.0	
170.3	CARBONDALE	BRIAR HILL	COAL	1.5	199.0	
168.8	CARBONDALE		UNDERCLAY	3.5	200.5	
165.3	CARBONDALE		SANDSTONE	4.0	204.0	
161.3	CARBONDALE		SANDY SHALE	2.0	208.0	
159.3	CARBONDALE		SANDSTONE	8.0	210.0	
151.3	CARBONDALE		SANDY SHALE	14.2	218.0	
137.1	CARBONDALE		SANDY SHALE	7.5	232.2	
129.6	CARBONDALE		GRAY SHALE & SANDSTONE	2.7	239.7	
126.9	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	1.0	242.4	
125.9	CARBONDALE	ST. DAVID	LIMESTONE	0.5	243.4	
125.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.2	243.8	
124.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	245.0	
122.1	CARBONDALE	SPRINGFIELD	COAL	4.6	247.2	
117.5	CARBONDALE		SANDY SHALE	5.1	251.8	LS NODULES
112.5	CARBONDALE		SANDSTONE	2.2	256.8	
110.3	CARBONDALE		SANDY SHALE	6.6	259.0	

MAPID: 16526567000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.413909 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769884 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 259.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-413 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
366.9	PLEISTOCENE		CLAY	10.0	2.0	
356.9	PLEISTOCENE		SANDY CLAY	12.0	12.0	
344.9	SHELBURN		GRAY SHALE & SANDSTONE	9.0	24.0	SIDERITE
335.9	SHELBURN		LIMESTONE	3.5	33.0	
332.4	SHELBURN		GRAY SHALE	3.5	36.5	
328.9	SHELBURN		BLACK SHALE	1.0	40.0	
327.9	SHELBURN		CALCAREOUS SHALE	2.0	41.0	
325.9	SHELBURN		COAL	0.5	43.0	
325.4	SHELBURN		BLACK SHALE	1.5	43.5	
323.9	SHELBURN		BLACK SHALE	2.0	45.0	
315.9	SHELBURN		GRAY SHALE & SANDSTONE	8.0	53.0	SIDERITE
307.9	SHELBURN		BLACK SHALE	1.0	61.0	
306.9	SHELBURN		GRAY SHALE	1.0	62.0	
305.9	SHELBURN	DANVILLE	SHALY COAL	2.0	63.0	
303.9	SHELBURN		SANDY SHALE	1.0	65.0	
302.9	SHELBURN	ANVIL ROCK	SANDSTONE	5.0	66.0	
297.9	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	3.0	71.0	SIDERITE STREAKS
294.9	SHELBURN	ANVIL ROCK	SANDSTONE	2.0	74.0	
292.9	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	1.0	76.0	
291.9	SHELBURN	ANVIL ROCK	SANDSTONE	3.0	77.0	
288.9	SHELBURN		SHALE	5.0	80.0	SIDERITE
283.9	SHELBURN	ALLENBY	COAL	1.5	85.0	
282.4	SHELBURN		UNDERCLAY	2.5	86.5	
279.9	SHELBURN	BANKSTON FORK	LIMESTONE	7.5	89.0	TAN
272.4	SHELBURN		GRAY SHALE	2.5	96.5	
269.9	SHELBURN		SANDY SHALE	6.0	99.0	
263.9	SHELBURN		GRAY SHALE	2.0	105.0	
261.9	SHELBURN		SANDY DARK SHALE	14.5	107.0	SIDERITE BANDS
247.4	SHELBURN		BLACK SHALE	2.5	121.5	
244.9	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	3.5	124.0	
241.4	CARBONDALE	ANNA	BLACK SHALE	2.5	127.5	
238.9	CARBONDALE	HERRIN	COAL	4.5	130.0	
234.4	CARBONDALE		UNDERCLAY	3.5	134.5	
230.9	CARBONDALE		SANDY SHALE	1.5	138.0	
229.4	CARBONDALE		SANDSTONE	4.5	139.5	
224.9	CARBONDALE		SHALY SANDSTONE	11.0	144.0	

213.9	CARBONDALE		SANDSTONE	8.0	155.0	
205.9	CARBONDALE		SHALY SANDSTONE	7.0	163.0	
198.9	CARBONDALE		SANDY SHALE	16.0	170.0	
182.9	CARBONDALE		SANDSTONE	4.0	186.0	
178.9	CARBONDALE		SHALY SANDSTONE	6.0	190.0	
172.9	CARBONDALE	BRIAR HILL	COAL	1.5	196.0	
171.4	CARBONDALE		UNDERCLAY	1.5	197.5	
169.9	CARBONDALE		SANDSTONE	8.0	199.0	
161.9	CARBONDALE		SHALY SANDSTONE	3.0	207.0	
158.9	CARBONDALE		SANDSTONE	8.0	210.0	
150.9	CARBONDALE		GRAY SHALE	3.0	218.0	
147.9	CARBONDALE		DARK SHALE	3.6	221.0	
144.3	CARBONDALE		BLACK SHALE	1.5	224.6	
142.9	CARBONDALE		GRAY SHALE	8.0	226.0	
134.9	CARBONDALE		GRAY SHALE	2.0	234.0	SIDERITE
132.9	CARBONDALE		CALCAREOUS SHALE	1.0	236.0	
131.9	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.0	237.0	
130.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	238.0	
128.9	CARBONDALE		DARK SHALE	0.8	240.0	
128.1	CARBONDALE	SPRINGFIELD	COAL	4.7	240.8	
123.4	CARBONDALE		GRAY SHALE	4.5	245.5	
118.9	CARBONDALE		SANDSTONE	1.2	250.0	
117.7	CARBONDALE		SHALY SANDSTONE	0.9	251.2	
116.8	CARBONDALE		SANDSTONE	0.9	252.1	SHALE STREAKS
115.9	CARBONDALE		SANDSTONE	0.9	253.0	
115.0	CARBONDALE		SANDY SHALE	5.1	253.9	

MAPID: 16526568000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.412767 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769886 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-414 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3	PLEISTOCENE		SOIL	2.0	0.0	
367.3	PLEISTOCENE		CLAY	10.0	2.0	
357.3	PLEISTOCENE		SANDY CLAY	5.0	12.0	
352.3	PLEISTOCENE		SAND/CLAY	12.0	17.0	
340.3	SHELBURN		SANDY SHALE	4.0	29.0	
336.3	SHELBURN		GRAY LIMESTONE	3.0	33.0	
333.3	SHELBURN		SANDY SHALE	7.0	36.0	SIDERITE BANDS
326.3	SHELBURN		BLACK SHALE & COAL	1.0	43.0	
325.3	SHELBURN		LIMESTONE AND BLACK SHALE	1.0	44.0	
324.3	SHELBURN		BLACK SHALE	2.0	45.0	
322.3	SHELBURN		GRAY SHALE	14.0	47.0	SIDERITE
308.3	SHELBURN		BLACK SHALE	2.0	61.0	
306.3	SHELBURN		GRAY SHALE	1.0	63.0	
305.3	SHELBURN	DANVILLE	SHALY COAL	2.0	64.0	
303.3	SHELBURN		SANDY SHALE	2.0	66.0	
301.3	SHELBURN		SANDSTONE	5.0	68.0	
296.3	SHELBURN		GRAY SHALE	3.0	73.0	
293.3	SHELBURN		DARK SHALE	4.0	76.0	
289.3	SHELBURN		SANDSTONE	4.0	80.0	
285.3	SHELBURN	ALLENBY	COAL	1.5	84.0	
283.8	SHELBURN		UNDERCLAY	3.0	85.5	
280.8	SHELBURN	BANKSTON FORK	LIMESTONE	6.5	88.5	
274.3	SHELBURN		GREEN SHALE	0.5	95.0	
273.8	SHELBURN		GRAY SHALE	1.5	95.5	
272.3	SHELBURN		SANDY SHALE	8.0	97.0	
264.3	SHELBURN		DARK SHALE	9.0	105.0	
255.3	SHELBURN		SANDSTONE	3.0	114.0	
252.3	SHELBURN		SANDY SHALE	2.0	117.0	
250.3	SHELBURN		CALCAREOUS SHALE	2.0	119.0	
248.3	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.0	121.0	
243.3	CARBONDALE	ANNA	BLACK SHALE	1.5	126.0	
241.8	CARBONDALE	HERRIN	COAL	4.5	127.5	
237.3	CARBONDALE		UNDERCLAY	3.0	132.0	
234.3	CARBONDALE		SANDSTONE	2.0	135.0	
232.3	CARBONDALE		SHALY SANDSTONE	10.0	137.0	
222.3	CARBONDALE		SANDSTONE	6.0	147.0	
216.3	CARBONDALE		SHALY SANDSTONE	18.0	153.0	
198.3	CARBONDALE		SANDY SHALE	12.0	171.0	

186.3	CARBONDALE		SANDSTONE	11.5	183.0
174.8	CARBONDALE	BRIAR HILL	COAL	1.5	194.5
173.3	CARBONDALE		UNDERCLAY	1.5	196.0
171.8	CARBONDALE		SANDSTONE	7.5	197.5
164.3	CARBONDALE		SHALY SANDSTONE	3.0	205.0
161.3	CARBONDALE		SANDSTONE	5.0	208.0
156.3	CARBONDALE		GRAY SHALE	3.0	213.0
153.3	CARBONDALE		DARK SHALE	8.6	216.0
144.7	CARBONDALE		GRAY SHALE	9.8	224.6
134.9	CARBONDALE	ST. DAVID	LIMESTONE	1.2	234.4
133.8	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	235.5
133.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	236.0
130.8	CARBONDALE	SPRINGFIELD	COAL	4.8	238.5
126.0	CARBONDALE		SANDY SHALE	4.7	243.3
121.3	CARBONDALE		LIMESTONE	0.9	248.0
120.4	CARBONDALE		GRAY SHALE	2.0	248.9
118.5	CARBONDALE		SHALY SANDSTONE	4.2	250.8

MAPID: 16526569000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.413774 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773946 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 286.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-428 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
373.4	PLEISTOCENE		CLAY	10.0	2.0	
363.4	PLEISTOCENE		SANDY CLAY	12.0	12.0	
351.4	SHELBURN		SANDSTONE	6.0	24.0	
345.4	SHELBURN		GRAY SANDSTONE	4.0	30.0	
341.4	SHELBURN		SANDY SHALE	20.0	34.0	SIDERITE
321.4	SHELBURN		CALCAREOUS SANDSTONE	2.0	54.0	
319.4	SHELBURN		SANDY SHALE	8.0	56.0	SIDERITE
311.4	SHELBURN		BLACK SHALE	2.0	64.0	
309.4	SHELBURN		GRAY SHALE	18.0	66.0	SIDERITE
291.4	SHELBURN	DANVILLE	COAL	2.0	84.0	
289.4	SHELBURN		SANDSTONE	15.0	86.0	
274.4	SHELBURN		DARK SHALE	2.0	101.0	
272.4	SHELBURN		SANDY SHALE	2.0	103.0	
270.4	SHELBURN		SANDSTONE	4.0	105.0	
266.4	SHELBURN		GRAY SHALE	1.0	109.0	
265.4	SHELBURN	ALLENBY	COAL	0.5	110.0	
264.9	SHELBURN		SHALE	2.5	110.5	
262.4	SHELBURN	BANKSTON FORK	LIMESTONE	6.5	113.0	TAN
255.9	SHELBURN		GREEN SHALE	0.5	119.5	
255.4	SHELBURN		GRAY SHALE	10.0	120.0	
245.4	SHELBURN		SANDY SHALE	2.0	130.0	
243.4	SHELBURN		SANDSTONE	2.0	132.0	
241.4	SHELBURN		SHALY SANDSTONE	2.0	134.0	
239.4	SHELBURN		SANDSTONE	6.0	136.0	
233.4	SHELBURN		SHALY SANDSTONE	2.0	142.0	
231.4	SHELBURN		GRAY SHALE	1.0	144.0	
230.4	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	5.5	145.0	
224.9	CARBONDALE	ANNA	BLACK SHALE	2.0	150.5	
222.9	CARBONDALE	HERRIN	COAL	4.5	152.5	
218.4	CARBONDALE		SHALE	5.0	157.0	
213.4	CARBONDALE		SANDSTONE	12.0	162.0	
201.4	CARBONDALE		SHALY SANDSTONE	6.0	174.0	
195.4	CARBONDALE		SHALY SANDSTONE	7.0	180.0	W/ SIDERITE
188.4	CARBONDALE		SANDSTONE	5.0	187.0	
183.4	CARBONDALE		SANDY SHALE	24.0	192.0	
159.4	CARBONDALE	BRIAR HILL	COAL	1.5	216.0	
157.9	CARBONDALE		SANDY SHALE	1.5	217.5	

156.4	CARBONDALE		SHALY SANDSTONE	1.0	219.0	
155.4	CARBONDALE		SANDSTONE	6.0	220.0	
149.4	CARBONDALE		SHALY SANDSTONE	4.0	226.0	
145.4	CARBONDALE		SANDSTONE	8.0	230.0	
137.4	CARBONDALE		SANDY SHALE	18.0	238.0	
119.4	CARBONDALE		SANDY SHALE	6.8	256.0	SIDERITE
112.7	CARBONDALE	ST. DAVID	NODULAR LIMESTONE	0.9	262.7	
111.7	CARBONDALE	ST. DAVID	LIMESTONE	0.8	263.7	
111.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	264.4	
107.5	CARBONDALE	SPRINGFIELD	COAL	4.9	267.9	
102.6	CARBONDALE		SANDY SHALE	1.0	272.8	W/ SIDERITE NODULES
101.6	CARBONDALE		SHALY SILTSTONE	2.2	273.8	
99.4	CARBONDALE		SANDSTONE	9.5	276.0	W/ LS NODULES

MAPID: 16526910000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.413996 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.773082 **DATE COLLECTED:** 5 / 15 / 1968

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 237.7 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 112E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			CLAY	17.0	0.0	
356.0	SHELBURN		GRAY SHALE	9.0	17.0	
347.0	SHELBURN		BLACK SHALE	3.0	26.0	
344.0	SHELBURN		GRAY SHALE	18.0	29.0	
326.0	SHELBURN	DANVILLE	COAL	1.0	47.0	
325.0	SHELBURN		GRAY SHALE	2.0	48.0	
323.0	SHELBURN		SANDSTONE	12.0	50.0	
311.0	SHELBURN		COAL	0.5	62.0	
310.5	SHELBURN		GRAY SHALE	5.5	62.5	
305.0	SHELBURN		COAL	0.5	68.0	
304.5	SHELBURN		GRAY SHALE	1.5	68.5	
303.0	SHELBURN	BANKSTON FORK	LIMESTONE	7.0	70.0	
296.0	SHELBURN	LAWSON	SANDY SHALE	28.5	77.0	
267.5	SHELBURN	BRERETON	LIMESTONE	5.0	105.5	
262.5	CARBONDALE	ANNA	BLACK SHALE	2.0	110.5	
260.5	CARBONDALE	HERRIN	COAL	4.3	112.5	
256.2	CARBONDALE		CLAYSTONE	4.2	116.8	
252.0	CARBONDALE		SANDSTONE	19.0	121.0	
233.0	CARBONDALE		GRAY SHALE	36.0	140.0	
197.0	CARBONDALE	BRIAR HILL	COAL	1.0	176.0	
196.0	CARBONDALE		SANDY SHALE	3.0	177.0	
193.0	CARBONDALE		SANDSTONE	22.0	180.0	
171.0	CARBONDALE		SANDY SHALE	21.0	202.0	
150.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	223.0	
147.0	CARBONDALE	DYKERSBURG	SANDY SHALE	6.8	226.0	
140.2	CARBONDALE	SPRINGFIELD	COAL	4.6	232.8	
135.6	CARBONDALE		CLAYSTONE	0.3	237.4	

MAPID: 16526911000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.41865 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.771224 **DATE COLLECTED:** 5 / 18 / 1968

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 254.8 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 113E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			CLAY	10.0	0.0	
360.0	SHELBURN		GRAY SHALE	10.0	10.0	
350.0	SHELBURN		SANDY SHALE	20.0	20.0	
330.0	SHELBURN		BLACK SHALE	1.0	40.0	
329.0	SHELBURN		GRAY SHALE	1.0	41.0	
328.0	SHELBURN		LIMESTONE	3.0	42.0	
325.0	SHELBURN		GRAY SHALE	7.0	45.0	
318.0	SHELBURN		BLACK SHALE	4.0	52.0	
314.0	SHELBURN		GRAY SHALE	14.0	56.0	
300.0	SHELBURN	DANVILLE	COAL	1.5	70.0	
298.5	SHELBURN		GRAY SHALE	2.5	71.5	
296.0	SHELBURN		SANDSTONE	4.0	74.0	
292.0	SHELBURN		GRAY SHALE	2.0	78.0	
290.0	SHELBURN		SANDSTONE	4.0	80.0	
286.0	SHELBURN		GRAY SHALE	1.5	84.0	
284.5	SHELBURN		COAL	1.5	85.5	
284.0	SHELBURN		DARK SHALE	2.0	86.0	
282.0	SHELBURN		SANDSTONE	4.0	88.0	
278.0	SHELBURN		DARK SHALE	1.0	92.0	
277.0	SHELBURN		COAL	0.5	93.0	
276.5	SHELBURN		GRAY SHALE	2.2	93.5	
274.3	SHELBURN	BANKSTON FORK	LIMESTONE	7.7	95.7	
266.6	SHELBURN	LAWSON	SHALE	25.2	103.4	
241.4	SHELBURN	BRERETON	LIMESTONE	4.8	128.6	
236.6	CARBONDALE	ANNA	BLACK SHALE	1.8	133.4	
234.8	CARBONDALE	HERRIN	COAL	4.3	135.2	
230.6	CARBONDALE		CLAYSTONE	4.6	139.4	
226.0	CARBONDALE		SANDSTONE	21.0	144.0	
205.0	CARBONDALE		SANDY SHALE	37.0	165.0	
168.0	CARBONDALE	BRIAR HILL	COAL	1.5	202.0	
166.5	CARBONDALE		GRAY SHALE	2.5	203.5	
164.0	CARBONDALE		SANDSTONE	8.0	206.0	
156.0	CARBONDALE		SANDY SHALE	32.0	214.0	
124.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	246.0	
123.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	247.0	
120.4	CARBONDALE	SPRINGFIELD	COAL	5.0	249.6	
115.4	CARBONDALE		CLAYSTONE	0.2	254.6	

MAPID: 16500186000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440608 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.773885 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.0	CARBONDALE	DANVILLE	COAL	2.0	62.0	
295.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	70.0	
279.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	86.0	
270.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	95.0	
233.0	CARBONDALE	HERRIN	COAL	5.0	132.0	
217.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	14.0	148.0	
171.0	CARBONDALE	BRIAR HILL	COAL	1.0	194.0	
114.0	CARBONDALE	SPRINGFIELD	COAL	3.8	251.0	
109.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	53.0	256.0	
36.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	329.0	

MAPID: 16500186000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440608 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.773885 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 137.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.0	MODESTO		SHALE & SANDSTONE	14.0	49.0	
302.0	CARBONDALE	DANVILLE	COAL	2.0	63.0	
300.0	CARBONDALE		CLAYSTONE	2.0	65.0	
298.0	CARBONDALE		SHALE & SANDSTONE	13.0	67.0	
285.0	CARBONDALE	ALLENBY	COAL	2.0	80.0	
283.0	CARBONDALE		SHALE & SANDSTONE	5.0	82.0	
278.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	87.0	
271.0	CARBONDALE	LAWSON	GRAY SHALE	2.0	94.0	
269.0	CARBONDALE	LAWSON	SANDSTONE	7.0	96.0	
262.0	CARBONDALE	LAWSON	GRAY SHALE	15.0	103.0	
247.0	CARBONDALE		BLACK SHALE	2.0	118.0	
245.0	CARBONDALE	BRERETON	LIMESTONE	5.5	120.0	
239.5	CARBONDALE	ANNA	BLACK SHALE	6.5	125.5	
233.0	CARBONDALE	HERRIN	COAL	5.0	132.0	

MAPID: 16500186000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440608 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.773885 **DATE COLLECTED:** 9 / 12 / 1905

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 331.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., LANCASTER C #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	48.0	0.0	
317.0	MODESTO		SANDSTONE	7.0	48.0	
310.0	MODESTO		SHALE	7.0	55.0	
303.0	CARBONDALE	DANVILLE	COAL	2.0	62.0	
301.0	CARBONDALE		UNDERCLAY	2.0	64.0	
299.0	CARBONDALE		SHALE	4.0	66.0	
295.0	CARBONDALE		SANDSTONE	7.0	70.0	
288.0	CARBONDALE		SHALE	2.0	77.0	
286.0	CARBONDALE	ALLENBY	COAL	2.0	79.0	
284.0	CARBONDALE		UNDERCLAY	3.0	81.0	
281.0	CARBONDALE		SANDSTONE	2.0	84.0	
279.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	86.0	
272.0	CARBONDALE		SHALE	2.0	93.0	
270.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	95.0	
263.0	CARBONDALE		SHALE	16.0	102.0	
247.0	CARBONDALE		BLACK SHALE	2.0	118.0	
245.0	CARBONDALE	BRERETON	LIMESTONE	5.0	120.0	
240.0	CARBONDALE		UNDERCLAY	0.5	125.0	
239.5	CARBONDALE	ANNA	BLACK SHALE	6.5	125.5	
233.0	CARBONDALE	HERRIN	COAL	5.0	132.0	
228.0	CARBONDALE		UNDERCLAY	1.0	137.0	
227.0	CARBONDALE		SANDY SHALE	10.0	138.0	
217.0	CARBONDALE		SANDSTONE	14.0	148.0	
203.0	CARBONDALE		SANDY SHALE	6.0	162.0	
197.0	CARBONDALE		SHALE	26.0	168.0	
171.0	CARBONDALE	BRIAR HILL	COAL	1.0	194.0	
170.0	CARBONDALE		UNDERCLAY	1.0	195.0	
169.0	CARBONDALE		SHALE	18.0	196.0	
151.0	CARBONDALE		SHALE	2.0	214.0	
149.0	CARBONDALE		BLACK SHALE	16.0	216.0	
133.0	CARBONDALE		SHALE	3.0	232.0	
130.0	CARBONDALE		BLACK SHALE	3.0	235.0	
127.0	CARBONDALE		UNDERCLAY	1.0	238.0	
126.0	CARBONDALE		SHALE	12.0	239.0	
114.0	CARBONDALE		COAL	3.8	251.0	
110.2	CARBONDALE		UNDERCLAY	1.3	254.8	
109.0	CARBONDALE		SANDSTONE	16.0	256.0	
93.0	CARBONDALE		BLACK SHALE	8.0	272.0	
85.0	CARBONDALE		SANDY SHALE	5.0	280.0	

80.0	CARBONDALE		SANDSTONE	19.0	285.0
61.0	CARBONDALE		SANDSTONE	5.0	304.0
56.0	CARBONDALE	HANOVER	LIMESTONE	8.0	309.0
48.0	CARBONDALE		SANDSTONE	7.0	317.0
41.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	324.0
36.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	329.0
33.5	CARBONDALE		UNDERCLAY	0.0	331.5

MAPID: 16500187000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.436063 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.76294 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 220.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #25 **WELL TYPE:** Coal Test

COMMENT: ELEV. SOURCE BAROMETER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	58.0	0.0	
307.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	58.0	
301.0	CARBONDALE		SHALE	8.0	64.0	
293.0	CARBONDALE		BLACK SHALE	5.0	72.0	
288.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	77.0	
278.0	CARBONDALE		BLACK SHALE	5.0	87.0	
273.0	CARBONDALE	BRERETON	LIMESTONE	5.0	92.0	
268.0	CARBONDALE	ANNA	BLACK SHALE	1.0	97.0	
267.0	CARBONDALE	HERRIN	COAL	4.0	98.0	
263.0	CARBONDALE	HERRIN	UNDERCLAY	0.3	102.0	
262.7	CARBONDALE	HERRIN	COAL	0.8	102.3	
262.0	CARBONDALE		UNDERCLAY	3.0	103.0	
259.0	CARBONDALE		SHALE	8.0	106.0	
251.0	CARBONDALE		LIMESTONE	2.0	114.0	
249.0	CARBONDALE		SANDY SHALE	25.0	116.0	
224.0	CARBONDALE		BLACK SHALE	17.0	141.0	
207.0	CARBONDALE	BRIAR HILL	COAL	1.5	158.0	
205.5	CARBONDALE		UNDERCLAY	3.5	159.5	
202.0	CARBONDALE		SANDSTONE	13.0	163.0	
189.0	CARBONDALE		SANDY SHALE	29.0	176.0	
160.0	CARBONDALE		BLACK SHALE	3.0	205.0	
157.0	CARBONDALE		BLACK SHALE	7.3	208.0	
149.7	CARBONDALE	SPRINGFIELD	COAL	4.5	215.3	
145.2	CARBONDALE		UNDERCLAY	0.2	219.8	

MAPID: 16526212000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.446429 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.765642 **DATE COLLECTED:** 0 / 0 / 1966

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 72.0 **LOG TYPE:** Drillers Log

SOURCE: EQUALITY MINING CO. 1708 **WELL TYPE:** Water Well

COMMENT: PERMIT #230; GENERALIZED LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
-	PLEISTOCENE		MUD	15.0	14.0	BLUE
-	PLEISTOCENE		CLAY	20.0	29.0	
-			LIMESTONE	6.0	49.0	
-			SHALE	12.0	55.0	BLUE
-			COAL	2.0	67.0	
-			LIMESTONE	3.0	69.0	

MAPID: 16526213000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.438414 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.775684 **DATE COLLECTED:** 9 / 1 / 1992

SURFACE ELEVATION (FT.): 367.7 **LOGGED (FT.):** 263.6 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-06 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.7	PLEISTOCENE		CLAY	34.0	0.0	
333.7	MODESTO		SILTSTONE	7.7	34.0	WEATHERED, VERY SOFT
326.0	MODESTO		SHALE	2.5	41.7	DARK GRAY
323.5	MODESTO		LIMESTONE	1.4	44.2	DARK GRAY, VERY HARD
322.1	MODESTO		BLACK SHALE	2.0	45.6	
320.1	MODESTO		SHALE	13.6	47.6	MEDIUM GRAY
306.5	MODESTO		LIMESTONE	0.4	61.2	MEDIUM TO DARK GRAY
306.1	MODESTO		SHALE	2.4	61.6	DARK GRAY
303.7	CARBONDALE	DANVILLE	COAL	2.0	64.0	
301.7	CARBONDALE		GRAY SHALE	8.1	66.0	
293.7	CARBONDALE		SANDSTONE	2.1	74.0	
291.6	CARBONDALE		SANDY SHALE	2.8	76.1	
288.8	CARBONDALE		COAL	0.2	78.9	
288.6	CARBONDALE		SANDSTONE	6.2	79.1	MEDIUM GRAY
282.4	CARBONDALE	ALLENBY	COAL	1.2	85.3	
281.2	CARBONDALE		GRAY SHALE	1.0	86.5	
280.2	CARBONDALE	BANKSTON FORK	LIMESTONE	8.2	87.5	
272.0	CARBONDALE		SANDY SHALE	8.3	95.7	WITH LIMESTONE NODULES
263.7	CARBONDALE		SHALE	16.5	104.0	DARK GRAY
247.2	CARBONDALE		BLACK SHALE	1.5	120.5	
245.7	CARBONDALE	BRERETON	LIMESTONE	4.2	122.0	
241.5	CARBONDALE	ANNA	BLACK SHALE	1.5	126.2	
240.0	CARBONDALE	HERRIN	COAL	4.7	127.7	
235.3	CARBONDALE		SANDY SHALE	5.7	132.4	
229.7	CARBONDALE		SANDSTONE	12.0	138.0	GRAY, TIGHTLY CEMENTED
217.7	CARBONDALE		SHALY SANDSTONE	14.0	150.0	GRAY
203.7	CARBONDALE		SHALE	26.1	164.0	SLIGHTLY SANDY, MEDIUM GRAY
177.6	CARBONDALE	BRIAR HILL	COAL	1.7	190.1	
175.9	CARBONDALE		SHALE	13.2	191.8	SL. SANDY
162.7	CARBONDALE		SHALE	29.8	205.0	
132.9	CARBONDALE		FOSSILIFEROUS LIMESTONE	1.8	234.8	
131.1	CARBONDALE		SHALE	2.7	236.6	
128.5	CARBONDALE		GRAY SHALE	13.5	239.2	
115.0	CARBONDALE	SPRINGFIELD	COAL	0.0	252.7	
114.9	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.0	252.8	BONY, HARD
114.9	CARBONDALE	SPRINGFIELD	COAL	5.6	252.8	
109.4	CARBONDALE		UNDERCLAY	5.3	258.3	

MAPID: 16526570000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.440733 **GEOLOGIST:** STRAYER

CONFIDENTIAL: N **LATITUDE:** 37.769915 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.7 **LOGGED (FT.):** 248.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-398 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	2.0		
363.7	PLEISTOCENE		CLAY	12.0	2.0	BROWN
351.7	PLEISTOCENE		CLAY	8.0	14.0	GRAY
343.7	PLEISTOCENE		CLAY	7.0	22.0	GREEN
336.7	PLEISTOCENE		CLAY	13.0	29.0	BROWN
323.7	PLEISTOCENE		CLAY	2.0	42.0	GRAY
321.7	SHELBURN		SHALE	16.0	44.0	SIDERITE
305.7	SHELBURN		SANDY SHALE	16.0	60.0	
289.7	SHELBURN		CALCAREOUS SANDSTONE	1.0	76.0	
288.7	SHELBURN	BANKSTON FORK	LIMESTONE	6.0	77.0	TAN
282.7	SHELBURN		SHALE	3.0	83.0	SANDY
279.7	SHELBURN		SANDSTONE	6.0	86.0	
273.7	SHELBURN		SANDY SHALE	2.0	92.0	GRAY
271.7	SHELBURN		SANDSTONE	2.0	94.0	
269.7	SHELBURN		SANDY SHALE	4.0	96.0	
265.7	SHELBURN		SANDSTONE	8.0	100.0	DARK
257.7	SHELBURN		CALCAREOUS SHALE	1.0	108.0	
256.7	SHELBURN	BRERETON	LIMESTONE	6.0	109.0	
250.7	CARBONDALE	ANNA	SHALE	1.5	115.0	BLACK
249.2	CARBONDALE	HERRIN	COAL	4.5	116.5	
244.7	CARBONDALE		UNDERCLAY	3.0	121.0	
241.7	CARBONDALE		SANDSTONE	32.0	124.0	
209.7	CARBONDALE		SANDY SHALE	24.5	156.0	
185.2	CARBONDALE	BRIAR HILL	COAL	1.5	180.5	
183.7	CARBONDALE		SANDY SHALE	3.0	182.0	
180.7	CARBONDALE		SANDSTONE	36.0	185.0	
144.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	221.0	GRAY
143.7	CARBONDALE	ST. DAVID	LIMESTONE	1.5	222.0	BLACK
142.2	CARBONDALE		SANDY SHALE	4.5	223.5	GRAY
137.7	CARBONDALE		SANDY SHALE	7.4	228.0	
130.3	CARBONDALE	SPRINGFIELD	COAL	4.9	235.4	
125.5	CARBONDALE		UNDERCLAY	0.5	240.2	
125.0	CARBONDALE		SANDY SHALE	7.3	240.7	W/ SIDERITE NODULES

MAPID: 16500188000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45096 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.774723 **DATE COLLECTED:** 10 / 20 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 286.5 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., LANCASTER C #2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	68.0	0.0	
302.0			UNKNOWN	1.0	68.0	LOG HAS "STONE,HARD"
301.0	MODESTO		SHALE	3.0	69.0	
298.0	MODESTO		BLACK SHALE	7.0	72.0	
291.0	MODESTO		SHALE	13.0	79.0	
278.0	CARBONDALE	DANVILLE	COAL	2.0	92.0	
276.0	CARBONDALE		UNDERCLAY	0.5	94.0	
275.5	CARBONDALE		SANDY SHALE	2.0	94.5	
273.5	CARBONDALE		SANDSTONE	12.0	96.5	
261.5	CARBONDALE		LIMESTONE	5.0	108.5	
256.5	CARBONDALE	ALLENBY	COAL	0.5	113.5	
256.0	CARBONDALE		UNDERCLAY	0.5	114.0	
255.5	CARBONDALE	BANKSTON FORK	LIMESTONE	11.5	114.5	
244.0	CARBONDALE		BLACK SHALE	6.0	126.0	
238.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	132.0	
233.0	CARBONDALE		SHALE	10.0	137.0	
223.0	CARBONDALE		BLACK SHALE	5.0	147.0	
218.0	CARBONDALE	BRERETON	LIMESTONE	5.0	152.0	
213.0	CARBONDALE		BLACK SHALE	4.0	157.0	
209.0	CARBONDALE	HERRIN	COAL	2.0	161.0	
207.0	CARBONDALE		UNDERCLAY	1.0	163.0	
206.0	CARBONDALE		SANDY SHALE	7.0	164.0	
199.0	CARBONDALE		SANDSTONE	22.0	171.0	
177.0	CARBONDALE		SANDY SHALE	4.0	193.0	
173.0	CARBONDALE		SHALE	18.0	197.0	
155.0	CARBONDALE		BLACK SHALE	2.0	215.0	
153.0	CARBONDALE	BRIAR HILL	COAL	1.0	217.0	
152.0	CARBONDALE		SANDY SHALE	14.0	218.0	
138.0	CARBONDALE		SANDSTONE	8.0	232.0	
130.0	CARBONDALE		SHALE	16.0	240.0	
114.0	CARBONDALE		SHALE	3.0	256.0	
111.0	CARBONDALE	SPRINGFIELD	BONE COAL	3.0	259.0	UPPER BENCH
108.0	CARBONDALE		SHALE	20.5	262.0	
87.5	CARBONDALE	SPRINGFIELD	COAL	0.4	282.5	
87.1	CARBONDALE	SPRINGFIELD	BLACK SHALE	0.5	282.9	
86.6	CARBONDALE	SPRINGFIELD	COAL	3.1	283.4	
83.5	CARBONDALE		UNDERCLAY	0.0	286.5	T.D.

MAPID: 16500188000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45096 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.774723 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 287.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.0	CARBONDALE	DANVILLE	COAL	2.0	92.0	
274.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	12.0	96.0	
256.0	CARBONDALE	BANKSTON FORK	LIMESTONE	12.0	114.0	
238.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	5.0	132.0	
209.0	CARBONDALE	HERRIN	COAL	2.0	161.0	
199.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	22.0	171.0	
153.0	CARBONDALE	BRIAR HILL	COAL	1.0	217.0	
87.0	CARBONDALE	SPRINGFIELD	COAL	5.0	283.0	

MAPID: 16500189000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463536 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.766293 **DATE COLLECTED:** 5 / 27 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 357.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., DANFORTH #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	38.0	0.0	
332.0	MODESTO		SHALE	8.0	38.0	
324.0	MODESTO	DEGRAFF	COAL	0.5	46.0	
323.5	MODESTO		UNDERCLAY	2.0	46.5	
321.5	MODESTO		SHALE	28.0	48.5	
293.5	CARBONDALE	DANVILLE	COAL	1.5	76.5	
292.0	CARBONDALE		UNDERCLAY	1.0	78.0	
291.0	CARBONDALE		LIMESTONE	8.0	79.0	
283.0	CARBONDALE		SHALE	13.0	87.0	
270.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	100.0	
261.0	CARBONDALE		SHALE	1.0	109.0	
260.0	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	110.0	
236.0	CARBONDALE	BRERETON	LIMESTONE	4.0	134.0	
232.0	CARBONDALE	HERRIN	COAL	6.3	138.0	
225.7	CARBONDALE		UNDERCLAY	5.0	144.3	
220.7	CARBONDALE		SANDSTONE	30.0	149.3	
190.7	CARBONDALE		SANDY SHALE	20.0	179.3	
170.7	CARBONDALE	BRIAR HILL	COAL	1.5	199.3	
169.2	CARBONDALE		SANDSTONE	21.0	200.8	
148.2	CARBONDALE		SANDY SHALE	36.0	221.8	
112.2	CARBONDALE		BLACK SHALE	8.0	257.8	
104.2	CARBONDALE	SPRINGFIELD	COAL	0.3	265.8	
103.8	CARBONDALE	SPRINGFIELD	BLACK SHALE	1.5	266.2	
102.3	CARBONDALE	SPRINGFIELD	COAL	3.0	267.7	
99.3	CARBONDALE		UNDERCLAY	2.0	270.7	
97.3	CARBONDALE		SANDSTONE	12.0	272.7	
85.3	CARBONDALE		SHALE	36.0	284.7	
49.3	CARBONDALE		SANDSTONE	5.0	320.7	
44.3	CARBONDALE		SHALE	23.0	325.7	
21.3	CARBONDALE	EXCELLO	BLACK SHALE	5.0	348.7	
16.3	CARBONDALE	HOUCHIN CREEK	COAL	2.2	353.7	
14.2	CARBONDALE		UNDERCLAY	1.2	355.8	

MAPID: 16500189000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463536 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.766293 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 144.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
270.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	100.0	
261.0	CARBONDALE	LAWSON	SHALE	1.0	109.0	
260.0	CARBONDALE	LAWSON	SANDSTONE	24.0	110.0	
236.0	CARBONDALE	BRERETON	LIMESTONE	4.0	134.0	
232.0	CARBONDALE	HERRIN	COAL	6.3	138.0	

MAPID: 16500190000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.454434 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.762778 **DATE COLLECTED:** 11 / 0 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #24 **WELL TYPE:** Coal Test

COMMENT: CENTER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	56.0	0.0	
314.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	56.0	
309.0	CARBONDALE		SHALE	7.0	61.0	
302.0	CARBONDALE		BLACK SHALE	3.0	68.0	
299.0	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	71.0	
282.0	CARBONDALE		BLACK SHALE	6.0	88.0	
276.0	CARBONDALE	BRERETON	LIMESTONE	6.0	94.0	
270.0	CARBONDALE	ANNA	BLACK SHALE	0.5	100.0	
269.5	CARBONDALE	HERRIN	COAL	4.5	100.5	
265.0	CARBONDALE		UNDERCLAY	4.0	105.0	
261.0	CARBONDALE		SHALE	11.0	109.0	
250.0	CARBONDALE		LIMESTONE	2.0	120.0	
248.0	CARBONDALE		SANDY SHALE	30.0	122.0	
218.0	CARBONDALE		BLACK SHALE	12.0	152.0	
206.0	CARBONDALE	BRIAR HILL	COAL	2.0	164.0	
204.0	CARBONDALE		UNDERCLAY	1.0	166.0	
203.0	CARBONDALE		BLACK SHALE	5.0	167.0	
198.0	CARBONDALE		SANDY SHALE	20.0	172.0	
178.0	CARBONDALE		UNDERCLAY	1.0	192.0	
177.0	CARBONDALE		BLACK SHALE	3.0	193.0	
174.0	CARBONDALE		BLACK SHALE	8.0	196.0	
166.0	CARBONDALE		BLACK SHALE	3.0	204.0	
163.0	CARBONDALE	DYKERSBURG	BLACK SHALE	17.0	207.0	
146.0	CARBONDALE	SPRINGFIELD	COAL	5.3	224.0	
140.7	CARBONDALE		UNDERCLAY	0.8	229.3	

MAPID: 16500642000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 25' N line, 71' E line of NW NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.463782 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768059 **DATE COLLECTED:** 0 / 0 / 1936

SURFACE ELEVATION (FT.): 368.3 **LOGGED (FT.):** 269.3 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.3			SOIL	5.0	0.0	TOP SOIL
363.3			CLAY	15.0	5.0	
348.3			CLAY	15.0	20.0	GRAY MUD
333.3			CLAY	13.0	35.0	YELLOW AND GRAY MUD
320.3			SAND	10.0	48.0	LOG SAYS 'YELLOW QUICK SAND'
310.3	MODESTO		LIMESTONE	1.0	58.0	
309.3	MODESTO		BLACK SHALE	4.0	59.0	
305.3	MODESTO		GRAY SHALE	12.0	63.0	
293.3	MODESTO	POND CREEK	COAL	1.5	75.0	
291.8	MODESTO		GRAY SHALE	4.5	76.5	
287.3	MODESTO	PIASA	LIMESTONE	2.0	81.0	
285.3	MODESTO		SANDY SHALE	2.0	83.0	
283.3	MODESTO		SANDSTONE	3.5	85.0	
279.8	MODESTO		GRAY SHALE	2.0	88.5	
277.8	MODESTO		BLACK SHALE	3.5	90.5	
274.3	CARBONDALE	DANVILLE	COAL	0.7	94.0	
273.6	CARBONDALE		UNDERCLAY	1.3	94.7	
272.3	CARBONDALE		GRAY SHALE	3.7	96.0	+1'2" TO MATCH NEXT LOG ENTRY
268.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	99.7	
261.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	107.0	
259.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	109.0	+2' TO MATCH NEXT ENTRY
243.3	CARBONDALE		BLACK SHALE	6.0	125.0	
237.3	CARBONDALE	BRERETON	LIMESTONE	4.5	131.0	+1' TO MATCH NEXT ENTRY
232.8	CARBONDALE	ANNA	BLACK SHALE	2.0	135.5	
230.8	CARBONDALE	HERRIN	COAL	4.8	137.5	
226.0	CARBONDALE		UNDERCLAY	3.0	142.3	
223.0	CARBONDALE		GRAY SHALE	37.8	145.3	-1' TO MATCH NEXT ENTRY
185.3	CARBONDALE		SANDY SHALE	17.0	183.0	
168.3	CARBONDALE		BLACK SHALE	5.0	200.0	
163.3	CARBONDALE	BRIAR HILL	COAL	1.5	205.0	
161.8	CARBONDALE	DYKERSBURG	GRAY SHALE	1.5	206.5	
160.3	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	35.0	208.0	
125.3	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	5.0	243.0	
120.3	CARBONDALE	DYKERSBURG	GRAY SHALE	14.0	248.0	SANDY
106.3	CARBONDALE	SPRINGFIELD	COAL	4.7	262.0	
101.6	CARBONDALE		UNDERCLAY	2.6	266.7	

MAPID: 16500643000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 20' N line, 121' E line of NE NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.457113 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.768175 **DATE COLLECTED:** 0 / 0 / 1936

SURFACE ELEVATION (FT.): 367.4 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.4			CLAY	15.0	0.0	SURFACE AND YELLOW CLAY
352.4			UNCONSOLIDATED	20.0	15.0	YELLOW, SANDY MUD
332.4			UNCONSOLIDATED	33.0	35.0	GREY, WAXY MUD
299.4	MODESTO		SANDSTONE	4.0	68.0	
295.4	MODESTO		DARK SHALE	3.0	72.0	
292.4	CARBONDALE	DANVILLE	COAL	0.5	75.0	
291.9	CARBONDALE		UNDERCLAY	3.8	75.5	
288.1	CARBONDALE		COAL	0.7	79.3	COAL BROKEN UP MIXED WITH SLATE
287.4	CARBONDALE		UNDERCLAY	4.0	80.0	
283.4	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	84.0	GREY AND BROWN LS MIXED
275.4	CARBONDALE		GRAY SHALE	2.0	92.0	
273.4	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	94.0	
267.4	CARBONDALE		DARK GRAY SHALE	19.0	100.0	
248.4	CARBONDALE	BRERETON	LIMESTONE	5.0	119.0	GREY AND BROWN LS MIXED
243.4	CARBONDALE	ANNA	BLACK SHALE	1.0	124.0	
242.4	CARBONDALE	HERRIN	COAL	4.5	125.0	
237.9	CARBONDALE		UNDERCLAY	2.5	129.5	
235.4	CARBONDALE		SANDSTONE	37.0	132.0	
198.4	CARBONDALE		DARK SHALE	25.0	169.0	DARK, SANDY SLATE
173.4	CARBONDALE	BRIAR HILL	COAL	1.0	194.0	
172.4	CARBONDALE		DARK SHALE	21.0	195.0	
151.4	CARBONDALE		BLACK SHALE	6.0	216.0	
145.4	CARBONDALE		DARK GRAY SHALE	23.3	222.0	
122.1	CARBONDALE		GRAY SHALE	1.0	245.3	
121.1	CARBONDALE	SPRINGFIELD	COAL	4.8	246.3	
116.4	CARBONDALE		UNDERCLAY	3.0	251.0	

MAPID: 16500644000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 25' S line, 295' W line of SE NW SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.462515 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764541 **DATE COLLECTED:** 0 / 0 / 1936

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 260.1 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3			CLAY	20.0	0.0	TOP SOIL AND CLAY
349.3			CLAY	18.0	20.0	
331.3	MODESTO		GRAY SHALE	5.0	38.0	
326.3	MODESTO		LIMESTONE	3.0	43.0	
323.3	MODESTO		GRAY SHALE	1.0	46.0	
322.3	MODESTO	POND CREEK	COAL	1.0	47.0	
321.3	MODESTO		BLACK SHALE	6.0	48.0	
315.3	MODESTO		DARK SHALE	11.0	54.0	
304.3	MODESTO		DARK SHALE	8.0	65.0	
296.3	CARBONDALE	DANVILLE	COAL	1.0	73.0	
295.3	CARBONDALE		UNDERCLAY	4.0	74.0	
291.3	CARBONDALE		COAL	1.0	78.0	
290.3	CARBONDALE		GRAY SHALE	3.0	79.0	
287.3	CARBONDALE		COAL	1.0	82.0	
286.3	CARBONDALE		GRAY SHALE	3.0	83.0	
283.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	86.0	
276.3	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	93.0	
264.3	CARBONDALE	ANVIL ROCK	DARK SHALE	10.0	105.0	
254.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	115.0	
251.3	CARBONDALE		DARK SHALE	2.0	118.0	
249.3	CARBONDALE	BRERETON	LIMESTONE	7.0	120.0	
242.3	CARBONDALE	ANNA	BLACK SHALE	1.0	127.0	
241.3	CARBONDALE	HERRIN	COAL	4.5	128.0	
236.8	CARBONDALE		UNDERCLAY	3.0	132.5	
233.8	CARBONDALE		SANDSTONE	27.5	135.5	
206.3	CARBONDALE		DARK SHALE	30.0	163.0	
176.3	CARBONDALE	BRIAR HILL	COAL	1.5	193.0	
174.8	CARBONDALE		ROCK	5.5	194.5	
169.3	CARBONDALE	DYKERSBURG	DARK SHALE	40.0	200.0	
129.3	CARBONDALE	DYKERSBURG	GRAY SHALE	14.0	240.0	
115.3	CARBONDALE	SPRINGFIELD	COAL	3.0	254.0	
112.3	CARBONDALE		UNCLASSIFIED	0.2	257.0	LOG SAYS 'ROCK'
112.1	CARBONDALE		COAL	0.6	257.2	COAL AND ROCK MIXED
111.5	CARBONDALE		SANDSTONE	2.2	257.8	SS AND COAL MIXED
109.4	CARBONDALE		UNDERCLAY	0.2	259.9	

MAPID: 16502378000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.453249 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.774699 **DATE COLLECTED:** 7 / 0 / 1946

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1694.0 **LOG TYPE:** Survey Sample Study

SOURCE: FORD, W. P. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1324.0	BASE OF PENN.		UNCLASSIFIED	-	1694.0	

MAPID: 16526034000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456847 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.762521 **DATE COLLECTED:** 4 / 28 / 1994

SURFACE ELEVATION (FT.): 368.7 **LOGGED (FT.):** 237.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-80-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.7	PLEISTOCENE		SOIL	4.0	0.0	
364.7	PLEISTOCENE		CLAY	6.0	4.0	YL
358.7	PLEISTOCENE		CLAY	18.0	10.0	GRAY
340.7	PLEISTOCENE		CLAY	32.0	28.0	BR
308.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	60.0	
304.2	CARBONDALE		SANDY SHALE	7.5	64.5	
296.7	CARBONDALE		SANDSTONE	2.0	72.0	
294.7	CARBONDALE		SANDY SHALE	3.0	74.0	
291.7	CARBONDALE		SANDSTONE	17.0	77.0	GRAY
274.7	CARBONDALE		BLACK SHALE	3.0	94.0	
271.7	CARBONDALE	BRERETON	LIMESTONE	6.5	97.0	BLACK
265.2	CARBONDALE	ANNA	BLACK SHALE	1.0	103.5	
264.2	CARBONDALE	HERRIN	COAL	3.0	104.5	
261.2	CARBONDALE		SHALE/UNDERCLAY	1.5	107.5	
259.7	CARBONDALE		SANDY SHALE	7.0	109.0	
252.7	CARBONDALE		SANDSTONE	7.0	116.0	GRAY
245.7	CARBONDALE		SANDY SHALE	16.0	123.0	
229.7	CARBONDALE		SANDY SHALE	29.0	139.0	
200.7	CARBONDALE	BRIAR HILL	COAL	1.5	168.0	
199.2	CARBONDALE		SHALE/UNDERCLAY	1.5	169.5	
197.7	CARBONDALE		SHALY SANDSTONE	35.0	171.0	GRAY
162.7	CARBONDALE		BLACK SHALE	4.0	206.0	
158.7	CARBONDALE	DYKERSBURG	SANDY SHALE	15.0	210.0	
143.7	CARBONDALE	SPRINGFIELD	COAL	5.2	225.0	
138.5	CARBONDALE		SHALE	2.5	230.2	VERT FRAC
136.1	CARBONDALE		SANDY SHALE	4.4	232.6	

MAPID: 16526035000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456834 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.763457 **DATE COLLECTED:** 0 / 0 / 1994

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 235.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-81-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	4.0	0.0	
-	PLEISTOCENE		CLAY	5.0	4.0	YL
-	PLEISTOCENE		CLAY	21.0	9.0	GRAY
-	PLEISTOCENE		CLAY	40.0	30.0	BR
-	CARBONDALE		SANDY SHALE	14.0	70.0	
-	CARBONDALE		SANDSTONE	3.5	84.0	GRAY
-	CARBONDALE		COAL	0.5	87.5	
-	CARBONDALE		SHALY SANDSTONE	4.0	88.0	GRAY
-	CARBONDALE		SANDY SHALE	3.0	92.0	
-	CARBONDALE		BLACK SHALE	1.0	95.0	
-	CARBONDALE	BRERETON	LIMESTONE	6.5	96.0	BLACK
-	CARBONDALE	ANNA	BLACK SHALE	2.5	102.5	
-	CARBONDALE	HERRIN	COAL	3.5	105.0	
-	CARBONDALE		SHALE	1.5	108.5	
-	CARBONDALE		SANDY SHALE	8.0	110.0	
-	CARBONDALE		SANDSTONE	10.0	118.0	GRAY
-	CARBONDALE		SANDY SHALE	18.0	128.0	
-	CARBONDALE		SANDY SHALE	22.0	146.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	168.0	
-	CARBONDALE		SHALE	1.5	169.5	
-	CARBONDALE		SHALY SANDSTONE	36.0	171.0	GRAY
-	CARBONDALE		BLACK SHALE	4.0	207.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	211.0	
-	CARBONDALE	SPRINGFIELD	COAL	0.5	224.0	
-	CARBONDALE	SPRINGFIELD	PYRITE	0.0	224.5	BAND
-	CARBONDALE	SPRINGFIELD	COAL	4.5	224.5	
-	CARBONDALE		UNDERCLAY	1.9	228.9	
-	CARBONDALE		SANDY SHALE	4.2	230.8	

MAPID: 16526036000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456828 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.764379 **DATE COLLECTED:** 0 / 0 / 1994

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 239.5 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-82-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	4.0	0.0	
-	PLEISTOCENE		CLAY	4.0	4.0	YL
-	PLEISTOCENE		CLAY	61.0	8.0	BR
-	CARBONDALE		SANDSTONE	3.0	69.0	BR
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	72.0	
-	CARBONDALE		SHALY SANDSTONE	11.0	75.0	GRAY
-	CARBONDALE		SANDSTONE	13.0	86.0	GRAY
-	CARBONDALE		BLACK SHALE	4.0	99.0	
-	CARBONDALE	BRERETON	LIMESTONE	6.5	103.0	BLACK
-	CARBONDALE	ANNA	BLACK SHALE	1.5	109.5	
-	CARBONDALE	HERRIN	COAL	3.5	111.0	
-	CARBONDALE		SHALE/UNDERCLAY	1.5	114.5	
-	CARBONDALE		SANDY SHALE	9.0	116.0	
-	CARBONDALE		SANDSTONE	11.0	125.0	GRAY
-	CARBONDALE		SANDY SHALE	17.0	136.0	
-	CARBONDALE		SANDY SHALE	22.0	153.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	175.0	
-	CARBONDALE		SHALE/UNDERCLAY	1.5	176.5	
-	CARBONDALE		SHALY SANDSTONE	2.0	178.0	GRAY
-	CARBONDALE		SANDSTONE	6.0	180.0	GRAY
-	CARBONDALE		SHALY SANDSTONE	27.0	186.0	GRAY
-	CARBONDALE		BLACK SHALE	3.0	213.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	13.5	216.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.2	229.5	
-	CARBONDALE	SPRINGFIELD	PYRITE	0.1	232.7	BAND
-	CARBONDALE	SPRINGFIELD	COAL	1.8	232.8	
-	CARBONDALE		UNDERCLAY	2.0	234.5	
-	CARBONDALE		SANDY SHALE	3.0	236.5	

MAPID: 16526037000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456886 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.757431 **DATE COLLECTED:** 0 / 0 / 1994

SURFACE ELEVATION (FT.): 369.1 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-83-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.1	PLEISTOCENE		SOIL	4.0	0.0	
365.1	PLEISTOCENE		CLAY	2.0	4.0	YL
363.1	PLEISTOCENE		CLAY	8.0	6.0	GRAY
355.1	PLEISTOCENE		SANDY CLAY	5.0	14.0	BR
350.1	PLEISTOCENE		CLAY	3.0	19.0	GRAY
347.1	PLEISTOCENE		SANDY CLAY	1.0	22.0	BR
346.1	CARBONDALE		SHALE	1.0	23.0	
345.1	CARBONDALE		SANDY SHALE	1.0	24.0	
344.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	25.0	GRAY
337.6	CARBONDALE		SHALE	2.5	31.5	
335.1	CARBONDALE		SANDSTONE	7.0	34.0	
328.1	CARBONDALE		SANDY SHALE	1.0	41.0	
327.1	CARBONDALE		SANDSTONE	4.0	42.0	GRAY
323.1	CARBONDALE		SANDY SHALE	6.0	46.0	
317.1	CARBONDALE		SANDSTONE	8.0	52.0	
309.1	CARBONDALE		SHALE	2.0	60.0	
307.1	CARBONDALE	BRERETON	LIMESTONE	3.5	62.0	BLACK
303.6	CARBONDALE	ANNA	BLACK SHALE	2.0	65.5	
301.6	CARBONDALE	HERRIN	COAL	3.5	67.5	
298.1	CARBONDALE		UNDERCLAY	2.0	71.0	
296.1	CARBONDALE		SANDY SHALE	26.0	73.0	
270.1	CARBONDALE		SHALE	3.0	99.0	
267.1	CARBONDALE		SANDY SHALE	26.0	102.0	
241.1	CARBONDALE	BRIAR HILL	COAL	1.5	128.0	
239.6	CARBONDALE		SHALE	4.5	129.5	
235.1	CARBONDALE		SANDSTONE	24.0	134.0	
211.1	CARBONDALE		SANDY SHALE	3.0	158.0	
208.1	CARBONDALE		BLACK SHALE	3.0	161.0	
205.1	CARBONDALE		SANDY SHALE	5.0	164.0	
200.1	CARBONDALE	DYKERSBURG	SANDY SHALE	8.9	169.0	
191.2	CARBONDALE	DYKERSBURG	SANDY SHALE	0.1	177.9	
191.1	CARBONDALE	DYKERSBURG	SANDY SHALE	0.2	178.0	
190.9	CARBONDALE	DYKERSBURG	SHALE	0.2	178.2	BROKEN; DK
190.8	CARBONDALE	SPRINGFIELD	COAL	2.3	178.3	
188.5	CARBONDALE	SPRINGFIELD	COAL	0.8	180.6	VERT FRAC
187.7	CARBONDALE	SPRINGFIELD	COAL	0.8	181.4	
187.0	CARBONDALE	SPRINGFIELD	COAL	0.8	182.1	VERT FRAC
186.2	CARBONDALE		UNDERCLAY	1.0	182.9	
185.2	CARBONDALE		UNDERCLAY	0.4	183.9	BROKEN-UP

184.8	CARBONDALE	SANDSTONE	3.7	184.3	
181.1	CARBONDALE	SANDY LIMESTONE	1.0	188.0	BROKEN

MAPID: 16526214000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.465682 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.773816 **DATE COLLECTED:** 9 / 1 / 1992

SURFACE ELEVATION (FT.): 361.8 **LOGGED (FT.):** 290.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-07 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.8	PLEISTOCENE		CLAY	36.6	0.0	
325.2			GRAY SHALE	2.4	36.6	
322.8			SANDSTONE	17.5	39.0	FINE WITH SCATTERED LIMY BANDS
305.3			GRAY SHALE	13.5	56.5	WITH LIMESTONE NODULES
291.8			SHALE	4.5	70.0	WITH SIDERITE; DARK GRAY
287.3			BLACK SHALE	1.3	74.5	WITH COAL BANDS
286.0			SHALE	0.6	75.8	LIGHT GREEN
285.4			LIMESTONE	1.9	76.4	
283.5			CALCAREOUS SHALE	1.2	78.3	GREEN
282.3			SHALE	6.3	79.5	SLIGHTLY CALCAREOUS
276.0			BLACK SHALE	0.9	85.8	
275.1			GRAY SHALE	15.9	86.7	
259.2	CARBONDALE	DANVILLE	COAL	1.9	102.6	
257.3	CARBONDALE		GRAY SHALE	7.5	104.5	
249.8	CARBONDALE		SANDY SHALE	2.7	112.0	
247.1	CARBONDALE	BANKSTON FORK	LIMESTONE	0.4	114.7	LIGHT GRAY AND TAN
246.7	CARBONDALE		GRAY SHALE	7.8	115.1	
239.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	122.8	LIGHT GRAY & TAN
231.7	CARBONDALE		GRAY SHALE	2.4	130.1	
229.3	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	132.5	LIGHT GRAY FINE
224.8	CARBONDALE		SANDY SHALE	7.0	137.0	DARK GRAY HARD
217.8	CARBONDALE		SILTY SHALE	2.0	144.0	
215.8	CARBONDALE		GRAY SHALE	9.0	146.0	
206.8	CARBONDALE		BLACK SHALE	1.0	155.0	
205.8	CARBONDALE		GRAY SHALE	5.7	156.0	
200.1	CARBONDALE	HERRIN	COAL	2.9	161.7	
197.2	CARBONDALE	HERRIN	BLACK SHALE	0.1	164.6	BLUE BAND
197.1	CARBONDALE	HERRIN	COAL	1.4	164.7	
195.7	CARBONDALE		UNDERCLAY	1.9	166.1	
193.8	CARBONDALE		SANDSTONE	17.0	168.0	FINE WITH SOME LS BANDS
176.8	CARBONDALE		GRAY SHALE	29.0	185.0	
147.8	CARBONDALE		CALCAREOUS SHALE	0.7	214.0	
147.1	CARBONDALE	BRIAR HILL	COAL	1.7	214.7	
145.4	CARBONDALE	DYKERSBURG	GRAY SHALE	19.1	216.4	
126.3	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	235.5	
125.8	CARBONDALE	DYKERSBURG	GRAY SHALE	9.0	236.0	
116.8	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	245.0	SILTY
114.8	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	247.0	

112.8	CARBONDALE	DYKERSBURG	GRAY SHALE	34.5	249.0	SLIGHT SILTY
78.3	CARBONDALE	SPRINGFIELD	COAL	4.6	283.5	
73.7	CARBONDALE		UNDERCLAY	1.9	288.1	

MAPID: 16500191000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.468196 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.769929 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 273.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
288.0	CARBONDALE	DANVILLE	COAL	2.0	82.0	
283.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	87.0	
265.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	105.0	
256.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	5.0	114.0	
226.0	CARBONDALE	HERRIN	COAL	4.6	144.0	
213.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	20.0	157.0	
171.0	CARBONDALE	BRIAR HILL	COAL	2.0	199.0	
102.0	CARBONDALE	SPRINGFIELD	COAL	4.8	268.0	

MAPID: 16500191000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.468196 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.769929 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 147.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
314.4	MODESTO	PIASA	LIMESTONE	3.0	55.6	
311.4	MODESTO		SHALE	23.0	58.6	
288.4	CARBONDALE	DANVILLE	COAL	2.0	81.6	
286.4	CARBONDALE		CLAYSTONE	3.0	83.6	
283.4	CARBONDALE	GALUM	SHALE & SANDSTONE	12.0	86.6	
271.4	CARBONDALE		CARBONACEOUS SHALE	2.7	98.6	
268.7	CARBONDALE	ALLENBY	COAL	1.0	101.3	
267.7	CARBONDALE		CLAYSTONE	2.3	102.3	
265.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	104.6	
258.4	CARBONDALE	LAWSON	SHALE	2.0	111.6	
256.4	CARBONDALE	LAWSON	SANDSTONE	5.0	113.6	
251.4	CARBONDALE	LAWSON	GRAY SHALE	14.0	118.6	
237.4	CARBONDALE		BLACK SHALE	2.4	132.6	
235.0	CARBONDALE	BRERETON	LIMESTONE	7.0	135.0	
228.0	CARBONDALE	ANNA	BLACK SHALE	2.0	142.0	
226.0	CARBONDALE	HERRIN	COAL	3.7	144.0	

MAPID: 16500191000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.468196 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.769929 **DATE COLLECTED:** 10 / 23 / 1905

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 273.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #23 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	34.0	0.0	
336.0			SAND	3.0	34.0	LOG HAS SAND
333.0	MODESTO		SHALE	15.0	37.0	
318.0	MODESTO	DEGRAFF	COAL	1.0	52.0	
317.0	MODESTO		UNDERCLAY	3.0	53.0	
314.0	MODESTO	PIASA	LIMESTONE	3.0	56.0	
311.0	MODESTO		SHALE	11.0	59.0	
300.0	MODESTO		SHALE	12.0	70.0	
288.0	CARBONDALE	DANVILLE	COAL	2.0	82.0	
286.0	CARBONDALE		UNDERCLAY	3.0	84.0	
283.0	CARBONDALE		SANDSTONE	7.0	87.0	
276.0	CARBONDALE		SANDY SHALE	5.0	94.0	
271.0	CARBONDALE		COAL	0.7	99.0	
270.3	CARBONDALE		UNDERCLAY	2.0	99.7	
268.3	CARBONDALE	ALLENBY	COAL	1.0	101.7	
267.3	CARBONDALE		UNDERCLAY	2.3	102.7	
265.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	105.0	
258.0	CARBONDALE		SHALE	2.0	112.0	
256.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	114.0	
251.0	CARBONDALE	ANVIL ROCK	SHALE	14.0	119.0	
237.0	CARBONDALE		BLACK SHALE	2.4	133.0	
234.6	CARBONDALE	BRERETON	LIMESTONE	7.0	135.4	
227.6	CARBONDALE	ANNA	BLACK SHALE	2.0	142.4	
225.6	CARBONDALE	HERRIN	COAL	3.6	144.4	
222.0	CARBONDALE		UNDERCLAY	4.0	148.0	
218.0	CARBONDALE		SHALE	5.0	152.0	
213.0	CARBONDALE		SANDSTONE	20.0	157.0	
193.0	CARBONDALE		SHALE	18.0	177.0	
175.0	CARBONDALE		BLACK SHALE	4.0	195.0	
171.0	CARBONDALE	BRIAR HILL	COAL	2.0	199.0	
169.0	CARBONDALE		UNDERCLAY	3.0	201.0	
166.0	CARBONDALE		SHALE	20.0	204.0	
146.0	CARBONDALE		BLACK SHALE	4.0	224.0	
142.0	CARBONDALE		SANDY SHALE	2.0	228.0	
140.0	CARBONDALE		SHALE	20.0	230.0	
120.0	CARBONDALE		BLACK SHALE	18.2	250.0	
101.8	CARBONDALE	SPRINGFIELD	COAL	4.8	268.2	

MAPID: 16500641000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 8' S line, 25' E line of SW NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.468292 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.764431 **DATE COLLECTED:** 0 / 0 / 1936

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3			SOIL	4.0	0.0	TOP SOIL
365.3			CLAY	21.0	4.0	
344.3	MODESTO		GRAY SHALE	5.0	25.0	
339.3	MODESTO		GRAY SHALE	7.0	30.0	
332.3	MODESTO		SANDSTONE	1.0	37.0	
331.3	MODESTO		GRAY SHALE	25.0	38.0	
306.3	MODESTO		SANDSTONE	5.0	63.0	
301.3	MODESTO		GRAY SANDSTONE	4.0	68.0	
297.3	CARBONDALE	DANVILLE	COAL	1.0	72.0	
296.3	CARBONDALE		UNDERCLAY	2.5	73.0	
293.8	CARBONDALE		COAL	1.0	75.5	
292.8	CARBONDALE		GRAY SHALE	5.5	76.5	
287.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	82.0	
279.8	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	89.5	
274.3	CARBONDALE		GRAY SHALE	14.0	95.0	
260.3	CARBONDALE		DARK SHALE	6.0	109.0	
254.3	CARBONDALE	BRERETON	LIMESTONE	4.5	115.0	
249.8	CARBONDALE	ANNA	BLACK SHALE	2.0	119.5	
247.8	CARBONDALE	HERRIN	COAL	4.9	121.5	
242.9	CARBONDALE		UNDERCLAY	1.6	126.4	
241.3	CARBONDALE		SANDSTONE	20.0	128.0	
221.3	CARBONDALE		GRAY SHALE	4.0	148.0	
217.3	CARBONDALE		DARK GRAY SHALE	23.7	152.0	
193.6	CARBONDALE	BRIAR HILL	COAL	1.7	175.7	
192.0	CARBONDALE		DARK GRAY SHALE	17.7	177.3	
174.3	CARBONDALE		DARK GRAY SHALE	5.0	195.0	
169.3	CARBONDALE		LIMESTONE	1.0	200.0	
168.3	CARBONDALE	DYKERSBURG	DARK GRAY SHALE	29.0	201.0	
139.3	CARBONDALE	DYKERSBURG	GRAY SHALE	13.6	230.0	
125.7	CARBONDALE	SPRINGFIELD	COAL	4.8	243.6	
121.0	CARBONDALE		UNDERCLAY	2.7	248.3	

MAPID: 16526571000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.466502 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.763285 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.3 **LOGGED (FT.):** 251.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-102 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	8.0		
361.3	PLEISTOCENE		SANDY CLAY	2.0	8.0	GRAY
359.3	PLEISTOCENE		SANDY CLAY	7.0	10.0	BROWN
352.3	PLEISTOCENE		SANDY CLAY	1.0	17.0	GREEN
351.3	SHELBURN		SANDSTONE	3.0	18.0	
348.3	SHELBURN		GRAY SANDSTONE	10.0	21.0	
338.3	SHELBURN		SILTSTONE	10.0	31.0	
328.3	SHELBURN		SANDY SHALE	9.0	41.0	
319.3	SHELBURN		CALCAREOUS SHALE	1.6	50.0	
317.7	SHELBURN		LIMESTONE	0.2	51.6	
317.5	SHELBURN	DANVILLE	COAL	2.3	51.8	
315.2	SHELBURN		GRAY SHALE	5.6	54.1	
309.6	SHELBURN		CALCAREOUS SHALE	0.5	59.7	
309.0	SHELBURN		SHALE	0.8	60.3	
308.3	SHELBURN		SANDY SHALE	6.7	61.0	
301.6	SHELBURN		BLACK SHALE	0.2	67.7	
301.5	SHELBURN		COAL	0.2	67.8	
301.3	SHELBURN		UNDERCLAY	0.6	68.0	
300.7	SHELBURN		UNDERCLAY	2.2	68.6	SHALEY
298.5	SHELBURN	ALLENBY	COAL	0.5	70.8	
298.0	SHELBURN		UNDERCLAY	1.1	71.3	
296.9	SHELBURN		GRAY SHALE	1.2	72.4	
295.7	SHELBURN		SANDSTONE	1.0	73.6	
294.7	SHELBURN	BANKSTON FORK	LIMESTONE	7.9	74.6	
286.8	SHELBURN		BLACK SHALE	0.2	82.5	
286.6	SHELBURN	ANVIL ROCK	CALCAREOUS SANDSTONE	2.6	82.7	
284.1	SHELBURN	ANVIL ROCK	SANDSTONE	3.8	85.2	
280.3	SHELBURN	ANVIL ROCK	SHALY SANDSTONE	12.2	89.0	
268.1	SHELBURN		BLACK SHALE	0.7	101.2	
267.4	SHELBURN		SANDY SHALE	5.0	101.9	
262.4	SHELBURN	BRERETON	LIMESTONE	0.2	106.9	
262.2	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	1.4	107.1	SHALEY
260.8	SHELBURN	BRERETON	LIMESTONE AND BLACK SHALE	1.6	108.5	
259.2	SHELBURN	BRERETON	LIMESTONE	3.7	110.1	
255.5	SHELBURN	BRERETON	CALCAREOUS SHALE	0.1	113.8	
255.4	SHELBURN	BRERETON	LIMESTONE	1.0	113.9	
254.4	CARBONDALE	ANNA	BLACK SHALE	0.3	114.9	

254.1	CARBONDALE	HERRIN	COAL	5.6	115.2	
248.5	CARBONDALE		SHALE	0.1	120.8	
248.4	CARBONDALE		UNDERCLAY	1.2	120.9	
247.2	CARBONDALE		CALCAREOUS SHALE	4.3	122.1	
242.9	CARBONDALE		CALCAREOUS SANDSTONE	2.6	126.4	
240.3	CARBONDALE		SANDSTONE	19.5	129.0	
220.8	CARBONDALE		SANDY SHALE	24.4	148.5	
196.5	CARBONDALE	BRIAR HILL	COAL	1.8	172.8	
194.7	CARBONDALE		UNDERCLAY	0.1	174.6	
194.6	CARBONDALE		SANDY SHALE	0.3	174.7	
194.3	CARBONDALE		SANDY DARK SHALE	13.8	175.0	
180.5	CARBONDALE		SANDY SHALE	0.9	188.8	
179.6	CARBONDALE		SANDY DARK SHALE	0.6	189.7	
179.0	CARBONDALE		SANDY SHALE	0.2	190.3	
178.8	CARBONDALE		SANDY DARK SHALE	0.2	190.5	
178.6	CARBONDALE		SANDY SHALE	0.4	190.7	
178.2	CARBONDALE		SHALY SANDSTONE	0.8	191.1	
177.4	CARBONDALE	ST. DAVID	LIMESTONE	1.3	191.9	NODULAR
176.1	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	193.2	
175.3	CARBONDALE		CALCAREOUS SHALE	1.0	194.0	
174.3	CARBONDALE		CALCAREOUS SHALE	1.0	195.0	
173.3	CARBONDALE		SANDY SHALE	2.0	196.0	
171.7	CARBONDALE		SANDY SHALE	37.4	197.6	
134.3	CARBONDALE	SPRINGFIELD	COAL	4.9	235.0	
129.5	CARBONDALE		UNDERCLAY	2.9	239.8	SHALEY
126.6	CARBONDALE		SHALY LIMESTONE	0.3	242.7	
126.3	CARBONDALE		SANDSTONE	5.7	243.0	
120.6	CARBONDALE		SANDY SHALE	2.3	248.7	

MAPID: 16500192000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.477833 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.755235 **DATE COLLECTED:** 10 / 11 / 1905

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 255.6 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #10 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	35.0	0.0	
333.0			SHALE	15.0	35.0	
318.0			BLACK SHALE	9.0	50.0	
309.0	CARBONDALE	DANVILLE	COAL	1.0	59.0	CORRELATION UNCERTAIN
308.0	CARBONDALE		SHALE	14.0	60.0	
294.0	CARBONDALE		LIMESTONE	2.0	74.0	
292.0	CARBONDALE		UNDERCLAY	5.0	76.0	
287.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	81.0	
278.0	CARBONDALE		UNDERCLAY	3.0	90.0	
275.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	93.0	
268.0	CARBONDALE		SHALE	16.0	100.0	
252.0	CARBONDALE		BLACK SHALE	2.0	116.0	
250.0	CARBONDALE	BRERETON	LIMESTONE	7.0	118.0	
243.0	CARBONDALE	ANNA	BLACK SHALE	2.8	125.0	
240.2	CARBONDALE	HERRIN	COAL	3.0	127.8	
237.2	CARBONDALE	HERRIN	UNDERCLAY	0.3	130.8	
237.0	CARBONDALE	HERRIN	COAL	0.5	131.0	
236.5	CARBONDALE		UNDERCLAY	2.5	131.5	
234.0	CARBONDALE		SANDSTONE	10.0	134.0	
224.0	CARBONDALE		SHALE	12.0	144.0	
212.0	CARBONDALE		SANDY SHALE	27.0	156.0	
185.0	CARBONDALE	BRIAR HILL	COAL	1.0	183.0	
184.0	CARBONDALE		UNDERCLAY	1.0	184.0	
183.0	CARBONDALE		SANDSTONE	5.0	185.0	
178.0	CARBONDALE		SHALE	14.0	190.0	
164.0	CARBONDALE		BLACK SHALE	4.0	204.0	
160.0	CARBONDALE		BLACK SHALE	3.0	208.0	
157.0	CARBONDALE	DYKERSBURG	SHALE	17.0	211.0	
140.0	CARBONDALE	DYKERSBURG	BLACK SHALE	22.5	228.0	
117.5	CARBONDALE	SPRINGFIELD	COAL	4.6	250.5	
112.9	CARBONDALE		UNDERCLAY	0.5	255.1	

MAPID: 16500192000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.477833 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.755235 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.0	CARBONDALE	DANVILLE	COAL	1.0	59.0	
287.0	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	81.0	
275.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	93.0	
240.0	CARBONDALE	HERRIN	COAL	3.8	128.0	
234.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	10.0	134.0	
185.0	CARBONDALE	BRIAR HILL	COAL	1.0	183.0	
183.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	5.0	185.0	
118.0	CARBONDALE	SPRINGFIELD	COAL	4.6	250.0	

MAPID: 16503542000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.47182 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.757991 **DATE COLLECTED:** 5 / 6 / 1968

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 273.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 111E **WELL TYPE:** Coal Test

COMMENT: CORE#: C 6753

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			CLAY	23.0	0.0	YELLOW SURFACE CLAY
347.0	MODESTO		LIGHT SHALE	6.0	23.0	
341.0	MODESTO		SANDSTONE	10.0	29.0	WITH SHALE BANDS
331.0	MODESTO		SANDY SHALE	20.0	39.0	
311.0	MODESTO		LIMESTONE	3.0	59.0	
308.0	MODESTO		SANDY SHALE	4.0	62.0	
304.0	MODESTO		BLACK SHALE	3.5	66.0	
300.5	MODESTO		GRAY SHALE	11.5	69.5	
289.0	CARBONDALE	DANVILLE	COAL	0.6	81.0	
288.4	CARBONDALE	DANVILLE	COAL	1.0	81.6	
287.4	CARBONDALE		UNDERCLAY	3.0	82.6	
284.4	CARBONDALE		GRAY SANDSTONE	5.4	85.6	
279.0	CARBONDALE		DARK GRAY SHALE	5.5	91.0	
273.5	CARBONDALE		COAL	0.5	96.5	
273.0	CARBONDALE		GRAY SHALE	4.0	97.0	
269.0	CARBONDALE	ALLENBY	COAL	1.0	101.0	
268.0	CARBONDALE		GRAY SHALE	2.0	102.0	
266.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	104.0	
259.0	CARBONDALE		GRAY SHALE	0.5	111.0	
258.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	6.5	111.5	
252.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	118.0	
234.0	CARBONDALE	CONANT	BLUE LIMESTONE	0.8	136.0	
233.2	CARBONDALE		BLACK SHALE	1.3	136.8	
232.0	CARBONDALE	BRERETON	BLUE LIMESTONE	6.0	138.0	
226.0	CARBONDALE	ANNA	BLACK SHALE	1.0	144.0	
225.0	CARBONDALE	ANNA	BLACK SHALE	0.5	145.0	
224.5	CARBONDALE	HERRIN	COAL	4.7	145.5	
219.8	CARBONDALE		UNDERCLAY	3.8	150.2	
216.0	CARBONDALE		SANDSTONE	7.0	154.0	
209.0	CARBONDALE		SANDY SHALE	21.0	161.0	
188.0	CARBONDALE		SANDSTONE	4.0	182.0	
184.0	CARBONDALE		SANDY SHALE	18.0	186.0	
166.0	CARBONDALE	BRIAR HILL	COAL	1.5	204.0	
164.5	CARBONDALE	DYKERSBURG	SANDY SHALE	5.5	205.5	
159.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	11.0	211.0	
148.0	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	222.0	
143.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	227.0	
141.0	CARBONDALE	DYKERSBURG	SANDY SHALE	23.0	229.0	
118.0	CARBONDALE	DYKERSBURG	SANDY SHALE	9.7	252.0	

108.3	CARBONDALE	DYKERSBURG	SANDY SHALE	6.8	261.7
101.5	CARBONDALE	SPRINGFIELD	COAL	4.3	268.5
97.2	CARBONDALE		UNDERCLAY	0.5	272.8

MAPID: 16503542000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.47182 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.757991 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 150.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.5	MODESTO	PIASA	LIMESTONE	3.0	59.5	
337.5	MODESTO		SHALE	19.0	62.5	
318.5	CARBONDALE	DANVILLE	COAL	1.6	81.5	
316.9	CARBONDALE		CLAYSTONE	3.0	83.1	
313.9	CARBONDALE		SHALE	15.4	86.1	
298.5	CARBONDALE	ALLENBY	COAL	1.0	101.5	
297.5	CARBONDALE		GRAY SHALE	2.0	102.5	
295.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	104.5	
288.5	CARBONDALE	LAWSON	GRAY SHALE	0.5	111.5	
288.0	CARBONDALE	LAWSON	SANDSTONE	6.5	112.0	
281.5	CARBONDALE	LAWSON	SILTY SHALE	18.0	118.5	
263.5	CARBONDALE	CONANT	LIMESTONE	0.8	136.5	
262.7	CARBONDALE		BLACK SHALE	1.3	137.3	
261.5	CARBONDALE	BRERETON	LIMESTONE	6.0	138.5	
255.5	CARBONDALE	ANNA	BLACK SHALE	1.5	144.5	
254.0	CARBONDALE	HERRIN	COAL	4.7	146.0	

MAPID: 16503544000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.467023 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.759825 **DATE COLLECTED:** 4 / 24 / 1968

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 225.7 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 109E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			CLAY	16.0	0.0	
355.0			LIGHT SHALE	3.0	16.0	
352.0			SANDSTONE	1.0	19.0	
351.0			LIGHT SHALE	3.0	20.0	
348.0			BROWN SHALE	9.0	23.0	
339.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	32.0	
331.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	32.5	40.0	
298.5	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	72.5	
295.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.0	76.0	
276.0	CARBONDALE	CONANT	LIMESTONE	0.3	95.0	
275.7	CARBONDALE		DARK SHALE	3.2	95.3	
272.5	CARBONDALE	BRERETON	BLUE LIMESTONE	5.0	98.5	
267.5	CARBONDALE	ANNA	BLACK SHALE	1.3	103.5	
266.2	CARBONDALE	HERRIN	COAL	4.0	104.8	
262.2	CARBONDALE		UNDERCLAY	4.2	108.8	
258.0	CARBONDALE		SANDSTONE	12.0	113.0	
246.0	CARBONDALE		SANDY SHALE	40.5	125.0	
205.5	CARBONDALE	BRIAR HILL	COAL	1.5	165.5	
204.0	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	167.0	
201.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	170.0	
198.0	CARBONDALE	DYKERSBURG	SANDY SHALE	16.0	173.0	
182.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	189.0	
180.0	CARBONDALE	DYKERSBURG	SANDY SHALE	29.3	191.0	
150.7	CARBONDALE	SPRINGFIELD	COAL	4.8	220.3	
145.8	CARBONDALE		UNDERCLAY	0.5	225.2	
145.3	CARBONDALE		UNCLASSIFIED	0.0	225.7	CORE #: C 6751

MAPID: 16503546000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.467061 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.752576 **DATE COLLECTED:** 5 / 1 / 1968

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 207.6 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 110E **WELL TYPE:** Coal Test

COMMENT: CORE #: C 6752

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			CLAY	18.0	0.0	YELLOW SURFACE CLAY
350.0			MUDSTONE	24.5	18.0	BLUE MUD W/ YELLOW CLAY STREAKS
325.5	CARBONDALE	ALLENBY	COAL	1.0	42.5	SMUT
324.5	CARBONDALE		LIGHT SHALE	3.0	43.5	
321.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	46.5	
316.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	51.8	
313.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.2	54.8	
308.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.5	60.0	WITH ROCK BANDS
284.5	CARBONDALE		DARK SHALE	2.0	83.5	
282.5	CARBONDALE	BRERETON	BLUE LIMESTONE	4.8	85.5	
277.7	CARBONDALE	ANNA	BLACK SHALE	1.0	90.3	
276.7	CARBONDALE	ANNA	BLACK SHALE	0.5	91.3	
276.2	CARBONDALE	HERRIN	COAL	4.2	91.8	
272.1	CARBONDALE		UNDERCLAY	4.6	95.9	
267.5	CARBONDALE		GRAY SANDSTONE	8.0	100.5	
259.5	CARBONDALE		SANDY SHALE	31.5	108.5	WITH ROCK BANDS
228.0	CARBONDALE		SANDY SHALE	11.0	140.0	
217.0	CARBONDALE	BRIAR HILL	COAL	1.5	151.0	
215.5	CARBONDALE	DYKERSBURG	SANDY SHALE	8.5	152.5	
207.0	CARBONDALE	DYKERSBURG	GRAY SANDSTONE	22.0	161.0	
185.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	183.0	
183.0	CARBONDALE	DYKERSBURG	GRAY SHALE	18.0	185.0	
165.0	CARBONDALE	DYKERSBURG	GRAY SHALE	2.6	203.0	
162.4	CARBONDALE	SPRINGFIELD	COAL	2.0	205.6	

MAPID: 16526067000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.480485 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.751112 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 307.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP WG-2-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		SILT & CLAY	70.0	0.0	
295.0	MODESTO		GRAY SHALE	10.5	70.0	CLAYEY
284.5	MODESTO	DEGRAFF	COAL	0.5	80.5	
284.0	MODESTO		CLAYSTONE	2.0	81.0	
282.0	MODESTO		CALCAREOUS SHALE	2.0	83.0	GRAY GREEN
280.0	MODESTO		SANDY SHALE	6.0	85.0	
274.0	MODESTO		BLACK SHALE & COAL	2.0	91.0	
272.0	MODESTO		CLAYSTONE	7.0	93.0	
265.0	MODESTO		SILTY SHALE	3.5	100.0	
261.5	CARBONDALE	DANVILLE	COAL	1.0	103.5	
260.5	CARBONDALE		SILTY SHALE	1.5	104.5	
259.0	CARBONDALE		SANDY SHALE	4.0	106.0	
255.0	CARBONDALE		SANDSTONE	4.0	110.0	MEDIUM GRAY
251.0	CARBONDALE		SANDY SHALE	11.0	114.0	
240.0	CARBONDALE		SANDSTONE	10.0	125.0	GRAY TO LIGHT BROWN FRIABLE
230.0	CARBONDALE		CALCAREOUS CLAYSTONE	2.0	135.0	
228.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	137.0	BUFF-BROWN; HARD
225.5	CARBONDALE		SANDY SHALE	12.5	139.5	
213.0	CARBONDALE		SILTY SHALE	4.0	152.0	
209.0	CARBONDALE		SHALE	13.1	156.0	WITH SANDSTONE STREAKS, RIPPLES, BURROWS
195.9	CARBONDALE		SILTY SHALE	0.2	169.1	
195.7	CARBONDALE		CALCAREOUS BLACK SHALE	0.6	169.3	FOSSILIFEROUS
195.1	CARBONDALE	CONANT	ARGILLACEOUS LIMESTONE	0.5	169.9	
194.7	CARBONDALE	JAMESTOWN	BLACK SHALE & COAL	1.3	170.3	
193.4	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	6.6	171.6	BLUE GRAY; FOSSILIFEROUS
186.7	CARBONDALE	ANNA	BLACK SHALE & COAL	1.6	178.3	
185.2	CARBONDALE	HERRIN	COAL	4.5	179.8	
180.7	CARBONDALE		CLAYSTONE	2.0	184.3	
178.7	CARBONDALE		SANDSTONE	6.0	186.3	WITH SHALE STREAKS
172.7	CARBONDALE		SANDY SHALE	4.7	192.3	WITH SANDSTONE STREAKS AND LAMS, GREEN
168.0	CARBONDALE		SANDY SHALE	47.0	197.0	
121.0	CARBONDALE	BRIAR HILL	COAL	1.8	244.0	
119.2	CARBONDALE	DYKERSBURG	SILTY SHALE	6.2	245.8	
113.0	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	252.0	
105.0	CARBONDALE	DYKERSBURG	SILTY SHALE	12.5	260.0	
92.5	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	1.5	272.5	

91.0	CARBONDALE	DYKERSBURG	SILTY SHALE	17.2	274.0	
73.8	CARBONDALE	SPRINGFIELD	COAL	4.8	291.2	
69.0	CARBONDALE		CLAYSTONE	2.8	296.0	
66.3	CARBONDALE		SHALE	8.3	298.7	WITH SANDSTONE LAMS, X-BEDS, GRAY-GREEN

MAPID: 16526215000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1040' N line, 1760' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.478778 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.757742 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.7 **LOGGED (FT.):** 246.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-13 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.7	PLEISTOCENE		SOIL	6.0	0.0	
360.7	PLEISTOCENE		SANDY CLAY	10.0	6.0	
350.7	MODESTO		GRAY SHALE	10.0	16.0	WITH COAL STREAK AT 24
340.7	MODESTO		SANDSTONE	2.0	26.0	
338.7	MODESTO		SHALE	7.0	28.0	
331.7	MODESTO		LIMESTONE	2.0	35.0	BLACK
329.7	MODESTO		BLACK SHALE	2.0	37.0	
327.7	MODESTO		GRAY SHALE	11.0	39.0	
316.7	MODESTO		COAL	0.5	50.0	
316.2	MODESTO		SANDY SHALE	3.0	50.5	
313.2	MODESTO		SANDSTONE	1.0	53.5	
312.2	MODESTO		SANDY SHALE	2.0	54.5	
310.2	MODESTO		SHALE	3.0	56.5	
307.2	CARBONDALE	DANVILLE	COAL	0.5	59.5	
306.7	CARBONDALE		SANDY SHALE	3.0	60.0	
303.7	CARBONDALE		SANDSTONE	6.0	63.0	
297.7	CARBONDALE		SHALE	2.0	69.0	
295.7	CARBONDALE	ALLENBY	COAL	0.5	71.0	
295.2	CARBONDALE		SHALE	2.0	71.5	
293.2	CARBONDALE		SANDY SHALE	1.0	73.5	
292.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	74.5	
287.2	CARBONDALE		SANDY SHALE	5.0	79.5	GRAY
282.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	84.5	
277.2	CARBONDALE		SANDY SHALE	3.0	89.5	
274.2	CARBONDALE		GRAY SHALE	6.0	92.5	
268.2	CARBONDALE		SHALE	8.0	98.5	DARK
260.2	CARBONDALE		CALCAREOUS SHALE	1.0	106.5	
259.2	CARBONDALE	BRERETON	LIMESTONE	7.0	107.5	
252.2	CARBONDALE	ANNA	SHALE	3.0	114.5	DARK
249.2	CARBONDALE	HERRIN	COAL	5.0	117.5	
244.2	CARBONDALE		UNDERCLAY	2.0	122.5	
242.2	CARBONDALE		SANDY SHALE	5.0	124.5	
237.2	CARBONDALE		SANDSTONE	5.0	129.5	
232.2	CARBONDALE		SANDY SHALE	3.0	134.5	
229.2	CARBONDALE		SANDSTONE	3.0	137.5	
226.2	CARBONDALE		SANDY SHALE	19.0	140.5	
207.2	CARBONDALE		SHALE	4.0	159.5	
203.2	CARBONDALE		SANDY SHALE	13.5	163.5	
189.7	CARBONDALE	BRIAR HILL	COAL	0.5	177.0	

189.2	CARBONDALE		SHALE	1.0	177.5	DARK
188.2	CARBONDALE		SANDY SHALE	11.0	178.5	
177.2	CARBONDALE		SHALE	4.0	189.5	
173.2	CARBONDALE		SANDSTONE	3.0	193.5	
170.2	CARBONDALE		SANDY SHALE	3.0	196.5	
167.2	CARBONDALE	ST. DAVID	LIMESTONE	11.5	199.5	DARK
155.7	CARBONDALE	TURNER MINE	SHALE	2.5	211.0	DARK
153.2	CARBONDALE	DYKERSBURG	GRAY SHALE	15.0	213.5	
138.2	CARBONDALE	DYKERSBURG	UNKNOWN	8.5	228.5	CORED 230-246
129.7	CARBONDALE	SPRINGFIELD	COAL	4.5	237.0	
125.2	CARBONDALE		UNKNOWN	4.5	241.5	

MAPID: 16526216000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1900' S line, 600' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.482992 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.751341 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.4 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-13MW-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.4	PLEISTOCENE		SOIL	4.0	0.0	BROWN
363.4	PLEISTOCENE		CLAY	56.0	4.0	
307.4	MODESTO		SANDY SHALE	10.0	60.0	GRAY
297.4	MODESTO		GRAY SHALE	12.0	70.0	
285.4	MODESTO	DEGRAFF	COAL	0.6	82.0	
284.8	MODESTO		UNDERCLAY	3.4	82.6	
281.4	MODESTO	PIASA	ARGILLACEOUS LIMESTONE	3.0	86.0	
278.4	MODESTO		GRAY SHALE	5.0	89.0	
273.4	MODESTO		SHALE	2.0	94.0	DARK
271.4	MODESTO		UNDERCLAY	4.0	96.0	
267.4	MODESTO		SHALE	5.0	100.0	DARK
262.4	CARBONDALE	DANVILLE	COAL	1.0	105.0	
261.4	CARBONDALE		GRAY SHALE	7.0	106.0	
254.4	CARBONDALE		SANDSTONE	3.0	113.0	GRAY
251.4	CARBONDALE		SANDY SHALE	13.0	116.0	GRAY
238.4	CARBONDALE		SANDSTONE	3.0	129.0	GRAY
235.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	132.0	
232.4	CARBONDALE		SANDY SHALE	5.0	135.0	GRAY, FIRM
227.4	CARBONDALE		SANDY SHALE	28.0	140.0	GRAY
199.4	CARBONDALE	BRERETON	LIMESTONE	5.0	168.0	DARK

MAPID: 16526217000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 100' S line, 2840' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.475037 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.746199 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.7 **LOGGED (FT.):** 318.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-23-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.7	PLEISTOCENE		SOIL	3.0	0.0	SILTY CLAY
364.7	PLEISTOCENE		CLAY	17.0	3.0	
347.7	PLEISTOCENE		SILTY CLAYSTONE	73.0	20.0	
274.7			COAL	1.0	93.0	
273.7			GRAY SHALE	21.0	94.0	
252.7	CARBONDALE	DANVILLE	COAL	1.0	115.0	
251.7	CARBONDALE		SANDSTONE	2.0	116.0	
249.7	CARBONDALE		SANDY SHALE	20.0	118.0	WITH SANDSTONE BEDS
229.7	CARBONDALE		GRAY SHALE	8.0	138.0	
221.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	146.0	
216.7	CARBONDALE		CLAYSTONE	3.0	151.0	BLUE-GREEN
213.7	CARBONDALE		SANDY SHALE	6.0	154.0	GRAY; FIRM
207.7	CARBONDALE		SHALE	11.0	160.0	
196.7	CARBONDALE		SHALY SANDSTONE	8.0	171.0	
188.7	CARBONDALE	BRERETON	LIMESTONE & SHALE	4.0	179.0	
184.7	CARBONDALE	ANNA	BLACK SHALE	4.0	183.0	
180.7	CARBONDALE	ENERGY	CLAYSTONE	1.5	187.0	GRAY
179.2	CARBONDALE	HERRIN	COAL	3.8	188.5	
175.4	CARBONDALE		UNDERCLAY	3.7	192.3	
171.7	CARBONDALE		SILTY SHALE	4.0	196.0	
167.7	CARBONDALE		GRAY SHALE	49.5	200.0	
118.2	CARBONDALE	BRIAR HILL	COAL	1.5	249.5	
116.7	CARBONDALE		GRAY SHALE	14.0	251.0	
102.7	CARBONDALE		SANDY SHALE	5.0	265.0	
97.7	CARBONDALE		GRAY SHALE	11.0	270.0	
86.7	CARBONDALE		BLACK SHALE	0.5	281.0	
86.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	281.5	
85.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	282.5	
83.2	CARBONDALE	DYKERSBURG	GRAY SHALE	15.5	284.5	
67.7	CARBONDALE	DYKERSBURG	SHALE	2.6	300.0	DARK
65.1	CARBONDALE	SPRINGFIELD	COAL	4.9	302.6	
60.2	CARBONDALE		UNDERCLAY	5.5	307.5	
54.7	CARBONDALE		SHALE	5.0	313.0	WITH LIMESTONE

MAPID: 16526218000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.472184 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.753445 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.8 **LOGGED (FT.):** 400.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-25-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.8	PLEISTOCENE		SILT	19.0	0.0	
348.8			SANDSTONE	8.0	19.0	RED FRACTURED
340.8			SANDSTONE	34.0	27.0	BROWN FRACTURED
306.8			SANDSTONE	8.0	61.0	RED FRACTURED
298.8			SANDSTONE	13.0	69.0	GRAY FRACTURED
285.8			SANDSTONE	55.0	82.0	RED, FRACTURED
230.8			SANDSTONE	48.0	137.0	BROWN, FRACTURED
182.8			SANDSTONE	57.0	185.0	GRAY, FRACTURED
125.8			SANDSTONE	59.0	242.0	RED, FRACTURED
66.8			SANDSTONE	17.0	301.0	BROWN, FRACTURED
49.8			SANDY SHALE	4.0	318.0	
45.8			COAL	0.7	322.0	SEAM UNIDENTIFIED
45.1			SHALE	2.3	322.7	LIGHT GRAY
42.8			SANDSTONE	33.0	325.0	GRAY, HARD
9.8			SANDY SHALE	6.0	358.0	GRAY
3.8			SANDSTONE	36.0	364.0	BROWN, VERY HARD

MAPID: 16500193000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.458981 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.751791 **DATE COLLECTED:** 12 / 30 / 1905

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 183.1 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., DANFORTH #25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	70.0	0.0	
298.0			SANDSTONE	12.0	70.0	
286.0			SHALE	8.0	82.0	
278.0			BLACK SHALE	2.0	90.0	
276.0	CARBONDALE		SHALE	18.0	92.0	
258.0	CARBONDALE		SANDSTONE	11.0	110.0	
247.0	CARBONDALE		COAL	1.0	121.0	
246.0	CARBONDALE		UNDERCLAY	2.0	122.0	
244.0	CARBONDALE		SANDSTONE	4.0	124.0	
240.0	CARBONDALE	ALLENBY	COAL	2.0	128.0	
238.0	CARBONDALE		UNDERCLAY	3.0	130.0	
235.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	133.0	
228.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	28.0	140.0	
200.0	CARBONDALE		BLACK SHALE	1.0	168.0	
199.0	CARBONDALE	BRERETON	LIMESTONE	4.0	169.0	
195.0	CARBONDALE	ENERGY	SHALE	3.0	173.0	
192.0	CARBONDALE	HERRIN	COAL	5.1	176.0	
186.9	CARBONDALE		UNDERCLAY	2.0	181.1	

MAPID: 16503545000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.464694 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.758038 **DATE COLLECTED:** 4 / 18 / 1968

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 217.3 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 108E **WELL TYPE:** Coal Test

COMMENT: CORE#: C 6750

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.0			CLAY	9.0	0.0	SURFACE CLAY
390.0			SHALE	19.0	9.0	YELLOW AND LIGHT SHALE
371.0			SANDY SHALE	15.0	28.0	
356.0			BROWN LIMESTONE	0.5	43.0	
355.5			SANDY SHALE	1.5	43.5	
354.0			BROWN LIMESTONE	0.5	45.0	
353.5			GRAY SHALE	11.0	45.5	WITH SS BANDS
342.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	56.5	
337.5	CARBONDALE		GRAY SHALE	2.0	61.5	
335.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.5	63.5	
309.0	CARBONDALE	BRERETON	LIMESTONE	6.5	90.0	
302.5	CARBONDALE	ANNA	BLACK SHALE	0.5	96.5	
302.0	CARBONDALE	ANNA	BLACK SHALE	1.0	97.0	
301.0	CARBONDALE	HERRIN	COAL	4.2	98.0	
296.8	CARBONDALE		UNDERCLAY	4.8	102.2	
292.0	CARBONDALE		SANDSTONE	15.0	107.0	
277.0	CARBONDALE		GRAY SANDSTONE	20.0	122.0	WITH SHALE BANDS
257.0	CARBONDALE		SANDY SHALE	15.0	142.0	
242.0	CARBONDALE	BRIAR HILL	COAL	1.5	157.0	
240.5	CARBONDALE	DYKERSBURG	SANDSTONE	20.0	158.5	
220.5	CARBONDALE	DYKERSBURG	SANDY SHALE	4.5	178.5	
216.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	183.0	
214.0	CARBONDALE	DYKERSBURG	SANDY SHALE	17.7	185.0	
196.3	CARBONDALE	DYKERSBURG	SANDY SHALE	9.5	202.7	
186.8	CARBONDALE	SPRINGFIELD	COAL	4.6	212.2	
182.2	CARBONDALE		UNDERCLAY	0.5	216.8	

MAPID: 16503545000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.464694 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.758038 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 102.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
324.5	CARBONDALE		SHALE & SANDSTONE	11.0	45.5	
313.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	56.5	
308.5	CARBONDALE	LAWSON	GRAY SHALE	2.0	61.5	
306.5	CARBONDALE	LAWSON	SILTY SHALE	26.5	63.5	
280.0	CARBONDALE	BRERETON	LIMESTONE	6.5	90.0	
273.5	CARBONDALE	ANNA	BLACK SHALE	1.5	96.5	
272.0	CARBONDALE	HERRIN	COAL	4.2	98.0	

MAPID: 16526000000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456698 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.746381 **DATE COLLECTED:** 0 / 0 / 1994

SURFACE ELEVATION (FT.): 368.1 **LOGGED (FT.):** 311.5 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-32-93 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.1	PLEISTOCENE		SOIL	7.0	0.0	
361.1	PLEISTOCENE		CLAY	41.0	7.0	GRAY
320.1	PLEISTOCENE		CLAY	5.0	48.0	GR
315.1	MODESTO		SANDY SHALE	15.0	53.0	
300.1	MODESTO		SHALE	16.0	68.0	
284.1	MODESTO		COAL	1.0	84.0	
283.1	MODESTO		SANDY SHALE	10.0	85.0	
273.1	MODESTO		BLACK SHALE	2.0	95.0	
271.1	MODESTO		SHALE	9.0	97.0	
262.1	CARBONDALE	DANVILLE	COAL	1.0	106.0	
261.1	CARBONDALE		SHALE	2.0	107.0	
259.1	CARBONDALE		SHALE	6.0	109.0	
253.1	CARBONDALE		SANDSTONE	3.0	115.0	GRAY
250.1	CARBONDALE		SANDSTONE	8.0	118.0	
242.1	CARBONDALE	ALLENBY	COAL	0.5	126.0	
241.6	CARBONDALE		SANDSTONE	1.5	126.5	
240.1	CARBONDALE		SANDY SHALE	9.0	128.0	
231.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	137.0	
228.1	CARBONDALE		SANDY SHALE	12.0	140.0	
216.1	CARBONDALE		SANDY SHALE	4.0	152.0	
212.1	CARBONDALE		SANDSTONE	25.0	156.0	GRAY
187.1	CARBONDALE	BRERETON	LIMESTONE	3.0	181.0	
184.1	CARBONDALE		SHALE	2.0	184.0	
182.1	CARBONDALE	ENERGY	SANDSTONE	1.0	186.0	
181.1	CARBONDALE	ENERGY	SANDY SHALE	3.0	187.0	
178.1	CARBONDALE	HERRIN	COAL	3.5	190.0	
174.6	CARBONDALE		UNDERCLAY	1.5	193.5	
173.1	CARBONDALE		SANDY SHALE	6.0	195.0	
167.1	CARBONDALE		SANDSTONE	31.0	201.0	
136.1	CARBONDALE		SANDY SHALE	8.0	232.0	MOSTLY SANDSTONE
128.1	CARBONDALE		SANDY SHALE	9.0	240.0	
119.1	CARBONDALE		CALCAREOUS SHALE	2.0	249.0	
117.1	CARBONDALE		SANDSTONE	2.0	251.0	
115.1	CARBONDALE	BRIAR HILL	COAL	1.5	253.0	
113.6	CARBONDALE		SANDY SHALE	4.5	254.5	
109.1	CARBONDALE		SANDSTONE	11.0	259.0	
98.1	CARBONDALE		SANDY SHALE	10.0	270.0	
88.1	CARBONDALE		SHALE	4.5	280.0	
83.6	CARBONDALE		SHALE	0.5	284.5	

83.1	CARBONDALE		SHALE	1.8	285.0
81.3	CARBONDALE		BLACK SHALE	2.4	286.8
79.0	CARBONDALE	DYKERSBURG	SHALE	10.2	289.1
68.8	CARBONDALE	DYKERSBURG	SHALE	0.7	299.3
68.1	CARBONDALE	SPRINGFIELD	COAL	4.0	300.0
64.1	CARBONDALE	SPRINGFIELD	COAL	1.4	304.0
62.7	CARBONDALE		UNDERCLAY	1.7	305.4
61.1			LIMESTONE	4.5	307.0

MAPID: 16526001000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456928 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.750458 **DATE COLLECTED:** 3 / 21 / 1994

SURFACE ELEVATION (FT.): 367.1 **LOGGED (FT.):** 286.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-46-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.1	PLEISTOCENE		SOIL	8.0	0.0	
359.1	PLEISTOCENE		CLAY	16.0	8.0	BR
343.1	PLEISTOCENE		CLAY	40.0	24.0	GR
303.1	PLEISTOCENE		SANDY CLAY	5.0	64.0	GR
298.1	MODESTO		SANDSTONE	3.0	69.0	
295.1	MODESTO		SANDSTONE	3.0	72.0	
292.1	MODESTO		SANDSTONE	2.0	75.0	
290.1	MODESTO		SANDY SHALE	1.0	77.0	
289.1	MODESTO		SHALE	2.0	78.0	
287.1	MODESTO		BLACK SHALE	4.0	80.0	
283.1	CARBONDALE	DANVILLE	COAL	1.0	84.0	
282.1	CARBONDALE		SANDY SHALE	9.0	85.0	
273.1	CARBONDALE		SANDSTONE	18.0	94.0	
255.1	CARBONDALE		SANDY SHALE	2.0	112.0	
253.1	CARBONDALE		SANDSTONE	4.0	114.0	
249.1	CARBONDALE		SANDY SHALE	7.0	118.0	
242.1	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	125.0	
235.1	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	132.0	
228.1	CARBONDALE	ANVIL ROCK	SANDSTONE/LIMESTONE	17.0	139.0	
211.1	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	156.0	
208.1	CARBONDALE		SANDY SHALE	2.0	159.0	
206.1	CARBONDALE	BRERETON	LIMESTONE	4.5	161.0	BLACK
201.6	CARBONDALE	BRERETON	SHALY LIMESTONE	2.0	165.5	DK
199.6	CARBONDALE	HERRIN	COAL	4.5	167.5	
195.1	CARBONDALE		UNDERCLAY	3.0	172.0	
192.1	CARBONDALE		SANDSTONE	20.0	175.0	
172.1	CARBONDALE		SANDY SHALE	23.0	195.0	
149.1	CARBONDALE		SANDSTONE	6.0	218.0	
143.1	CARBONDALE		SANDY SHALE	5.0	224.0	
138.1	CARBONDALE	BRIAR HILL	COAL	1.5	229.0	5A
136.6	CARBONDALE		UNDERCLAY	2.5	230.5	
134.1	CARBONDALE		SANDY SHALE	3.0	233.0	
131.1	CARBONDALE		SANDSTONE	6.0	236.0	
125.1	CARBONDALE		SANDY SHALE	3.0	242.0	
122.1	CARBONDALE		SANDSTONE	12.0	245.0	
110.1	CARBONDALE		SANDY SHALE	4.0	257.0	
106.1	CARBONDALE		BLACK SHALE	6.0	261.0	
100.1	CARBONDALE	DYKERSBURG	SHALE	11.0	267.0	
89.1	CARBONDALE	SPRINGFIELD	COAL	4.5	278.0	

84.6	CARBONDALE	UNDERCLAY	2.5	282.5
82.1	CARBONDALE	CALCAREOUS SHALE	1.0	285.0

MAPID: 16526002000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456934 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.750726 **DATE COLLECTED:** 3 / 21 / 1994

SURFACE ELEVATION (FT.): 366.2 **LOGGED (FT.):** 281.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-47-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.2	PLEISTOCENE		SOIL	8.0	0.0	
358.2	PLEISTOCENE		SANDY CLAY	15.0	8.0	BR
343.2	PLEISTOCENE		CLAY	39.0	23.0	GR
304.2	PLEISTOCENE		SAND	5.0	62.0	LOOSE
299.2	PLEISTOCENE		SANDY CLAY	3.0	67.0	
296.2	MODESTO		SANDSTONE	8.0	70.0	
288.2	MODESTO		SHALE	12.0	78.0	
276.2	CARBONDALE	DANVILLE	COAL	1.0	90.0	
275.2	CARBONDALE		SHALY SANDSTONE	5.0	91.0	
270.2	CARBONDALE		SANDY SHALE	7.0	96.0	MOSTLY SS
263.2	CARBONDALE		SANDSTONE	10.0	103.0	
253.2	CARBONDALE		SANDSTONE	4.0	113.0	
249.2	CARBONDALE		SANDY SHALE	7.5	117.0	
241.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	124.5	
237.2	CARBONDALE		SANDSTONE	7.0	129.0	
230.2	CARBONDALE		SANDY SHALE	3.0	136.0	
227.2	CARBONDALE		SANDSTONE	3.0	139.0	
224.2	CARBONDALE		SANDY SHALE	11.0	142.0	
213.2	CARBONDALE		SANDSTONE	5.0	153.0	
208.2	CARBONDALE	BRERETON	LIMESTONE	4.5	158.0	BLACK
203.7	CARBONDALE	BRERETON	SHALY LIMESTONE	2.0	162.5	DK
201.7	CARBONDALE	HERRIN	COAL	4.5	164.5	
197.2	CARBONDALE		UNDERCLAY	3.0	169.0	
194.2	CARBONDALE		SANDSTONE	3.0	172.0	
191.2	CARBONDALE		LIMESTONE	2.0	175.0	
189.2	CARBONDALE		SANDSTONE	17.0	177.0	
172.2	CARBONDALE		SANDY SHALE	28.5	194.0	
143.7	CARBONDALE	BRIAR HILL	COAL	1.5	222.5	5A
142.2	CARBONDALE		UNDERCLAY	2.0	224.0	
140.2	CARBONDALE		SANDY SHALE	12.0	226.0	
128.2	CARBONDALE		SANDSTONE	8.0	238.0	
120.2	CARBONDALE		SANDY SHALE	13.0	246.0	
107.2	CARBONDALE		BLACK SHALE	6.0	259.0	
101.2	CARBONDALE	DYKERSBURG	SHALE	8.5	265.0	
92.7	CARBONDALE	SPRINGFIELD	COAL	4.5	273.5	
88.2	CARBONDALE		UNDERCLAY	2.0	278.0	
86.2	CARBONDALE		CALCAREOUS SHALE	1.0	280.0	

MAPID: 16526003000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45693 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.751029 **DATE COLLECTED:** 3 / 22 / 1994

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 274.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-48-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0	PLEISTOCENE		SOIL	8.0	0.0	
358.0	PLEISTOCENE		SANDY CLAY	53.0	8.0	BR
305.0	PLEISTOCENE		SAND	9.0	61.0	LOOSE
296.0	MODESTO		SANDSTONE	7.0	70.0	
289.0	MODESTO		SHALE	2.0	77.0	DK
287.0	MODESTO		SANDY SHALE	11.0	79.0	
276.0	CARBONDALE	DANVILLE	COAL	1.0	90.0	
275.0	CARBONDALE		SHALE	3.0	91.0	
272.0	CARBONDALE		SANDSTONE	10.0	94.0	
262.0	CARBONDALE		SANDY SHALE	4.0	104.0	
258.0	CARBONDALE		SANDSTONE	6.0	108.0	
252.0	CARBONDALE		SANDY SHALE	2.0	114.0	
250.0	CARBONDALE		SANDSTONE	7.0	116.0	
243.0	CARBONDALE		SHALE	1.0	123.0	
242.0	CARBONDALE		SANDY SHALE	2.0	124.0	
240.0	CARBONDALE		SANDSTONE	2.0	126.0	
238.0	CARBONDALE		SANDY SHALE	17.0	128.0	
221.0	CARBONDALE		SANDSTONE	3.0	145.0	
218.0	CARBONDALE		SANDY SHALE	3.0	148.0	
215.0	CARBONDALE	BRERETON	LIMESTONE	4.5	151.0	BLACK
210.5	CARBONDALE	ANNA	CALCAREOUS SHALE	2.5	155.5	
208.0	CARBONDALE	HERRIN	COAL	4.5	158.0	
203.5	CARBONDALE		UNDERCLAY	1.5	162.5	
202.0	CARBONDALE		SANDY SHALE	4.0	164.0	
198.0	CARBONDALE		SANDSTONE	12.0	168.0	
186.0	CARBONDALE		SANDY SHALE	37.0	180.0	
149.0	CARBONDALE	BRIAR HILL	COAL	1.5	217.0	
147.5	CARBONDALE		SANDY SHALE	1.5	218.5	
146.0	CARBONDALE		SANDSTONE	8.0	220.0	
138.0	CARBONDALE		SANDY SHALE	21.0	228.0	
117.0	CARBONDALE		BLACK SHALE	2.0	249.0	
115.0	CARBONDALE		SANDY SHALE	2.0	251.0	
113.0	CARBONDALE		BLACK SHALE	2.0	253.0	
111.0	CARBONDALE	DYKERSBURG	SHALE	13.0	255.0	
98.0	CARBONDALE	SPRINGFIELD	SHALY COAL	4.5	268.0	
93.5	CARBONDALE		UNDERCLAY	1.0	272.5	
92.5	CARBONDALE		CALCAREOUS SHALE	0.5	273.5	

MAPID: 16526004000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45693 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.751289 **DATE COLLECTED:** 3 / 22 / 1994

SURFACE ELEVATION (FT.): 366.2 **LOGGED (FT.):** 264.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-49-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.2	PLEISTOCENE		SOIL	8.0	0.0	
358.2	PLEISTOCENE		SANDY CLAY	14.0	8.0	GRAY
344.2	PLEISTOCENE		CLAY	43.0	22.0	BR
301.2	PLEISTOCENE		SAND	3.0	65.0	LOOSE
298.2	MODESTO		SANDSTONE	3.0	68.0	
295.2	MODESTO		SHALE	15.0	71.0	
280.2	CARBONDALE	DANVILLE	COAL	1.0	86.0	
279.2	CARBONDALE		SANDY SHALE	4.0	87.0	
275.2	CARBONDALE		SANDSTONE	8.0	91.0	
267.2	CARBONDALE		SANDY SHALE	5.0	99.0	
262.2	CARBONDALE		SANDSTONE	5.0	104.0	
257.2	CARBONDALE	ALLENBY	COAL	1.0	109.0	
256.2	CARBONDALE		SHALE	4.0	110.0	
252.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	114.0	
247.7	CARBONDALE		SANDSTONE	8.5	118.5	
239.2	CARBONDALE		SANDY SHALE	16.0	127.0	
223.2	CARBONDALE		SANDSTONE	4.5	143.0	
218.7	CARBONDALE	BRERETON	LIMESTONE	5.5	147.5	BLACK
213.2	CARBONDALE	ANNA	CALCAREOUS SHALE	1.5	153.0	
211.7	CARBONDALE	HERRIN	COAL	5.0	154.5	
206.7	CARBONDALE		UNDERCLAY	3.5	159.5	
203.2	CARBONDALE		SANDY SLATE	4.0	163.0	
199.2	CARBONDALE		SANDSTONE	7.0	167.0	
192.2	CARBONDALE		SANDY LIMESTONE	2.0	174.0	
190.2	CARBONDALE		SANDSTONE	8.0	176.0	
182.2	CARBONDALE		SANDY SHALE	8.0	184.0	
174.2	CARBONDALE		SANDSTONE	11.0	192.0	
163.2	CARBONDALE		SANDY SHALE	9.0	203.0	
154.2	CARBONDALE	BRIAR HILL	COAL	1.5	212.0	
152.7	CARBONDALE		UNDERCLAY	1.5	213.5	
151.2	CARBONDALE		SANDY SHALE	6.0	215.0	
145.2	CARBONDALE		SANDSTONE	7.0	221.0	
138.2	CARBONDALE		SANDSTONE	14.0	228.0	
124.2	CARBONDALE		SHALE	3.0	242.0	DK
121.2	CARBONDALE	DYKERSBURG	SANDY SHALE	11.0	245.0	
110.2	CARBONDALE	SPRINGFIELD	COAL	4.5	256.0	
105.7	CARBONDALE		UNDERCLAY	1.5	260.5	
104.2	CARBONDALE		CALCAREOUS SHALE	2.0	262.0	

MAPID: 16526005000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456929 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.751576 **DATE COLLECTED:** 3 / 22 / 1994

SURFACE ELEVATION (FT.): 366.4 **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-50-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.4	PLEISTOCENE		SOIL	8.0	0.0	
358.4	PLEISTOCENE		SANDY CLAY	47.0	8.0	BR
311.4	PLEISTOCENE		SAND	5.0	55.0	LOOSE
306.4	MODESTO		SHALY SANDSTONE	14.0	60.0	
292.4	MODESTO		SHALE	3.0	74.0	
289.4	CARBONDALE	DANVILLE	COAL	1.0	77.0	
288.4	CARBONDALE		SANDY SHALE	8.0	78.0	
280.4	CARBONDALE		SANDSTONE	8.0	86.0	
272.4	CARBONDALE		SANDY SHALE	3.0	94.0	
269.4	CARBONDALE	ALLENBY	COAL	1.0	97.0	
268.4	CARBONDALE		SANDY SHALE	8.0	98.0	
260.4	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	106.0	
252.9	CARBONDALE		SANDY SHALE	2.5	113.5	
250.4	CARBONDALE		SANDSTONE	7.0	116.0	
243.4	CARBONDALE		SANDY SHALE	14.0	123.0	
229.4	CARBONDALE		SANDSTONE	3.0	137.0	
226.4	CARBONDALE		SANDY SHALE	3.0	140.0	
223.4	CARBONDALE	BRERETON	LIMESTONE	5.0	143.0	BLACK
218.4	CARBONDALE	ANNA	CALCAREOUS SHALE	2.0	148.0	
216.4	CARBONDALE	HERRIN	COAL	5.5	150.0	
210.9	CARBONDALE		UNDERCLAY	2.0	155.5	
208.9	CARBONDALE		SANDY SHALE	1.5	157.5	
207.4	CARBONDALE		SANDSTONE	4.0	159.0	
203.4	CARBONDALE		SANDSTONE/LIMESTONE	3.0	163.0	
200.4	CARBONDALE		SANDSTONE	43.5	166.0	
156.9	CARBONDALE	BRIAR HILL	COAL	1.5	209.5	5A
155.4	CARBONDALE		UNDERCLAY	2.0	211.0	213
153.4	CARBONDALE		SANDY SHALE	4.0	213.0	
149.4	CARBONDALE		SANDSTONE	10.0	217.0	
139.4	CARBONDALE		SANDY SHALE	14.0	227.0	
125.4	CARBONDALE		BLACK SHALE	3.0	241.0	
122.4	CARBONDALE		SHALY SANDSTONE	3.0	244.0	GRAY
119.4	CARBONDALE		BLACK SHALE	2.0	247.0	
117.4	CARBONDALE	DYKERSBURG	SHALE	10.5	249.0	
106.9	CARBONDALE	SPRINGFIELD	COAL	5.0	259.5	#5
101.9	CARBONDALE		UNDERCLAY	1.5	264.5	
100.4	CARBONDALE		CALCAREOUS SHALE	1.0	266.0	

MAPID: 16526006000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456911 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.751879 **DATE COLLECTED:** 3 / 23 / 1994

SURFACE ELEVATION (FT.): 367.3 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-51-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.3	PLEISTOCENE		SOIL	8.0	0.0	
359.3	PLEISTOCENE		CLAY	7.0	8.0	BR
352.3	PLEISTOCENE		SANDY CLAY	8.0	15.0	GRAY
344.3	PLEISTOCENE		SANDY CLAY	24.0	23.0	BR
320.3	MODESTO		SANDSTONE	11.0	47.0	LOOSE; BR
309.3	MODESTO		SHALE	5.0	58.0	
304.3	MODESTO		SANDY SHALE	2.0	63.0	
302.3	MODESTO		SHALE	11.0	65.0	
291.3	CARBONDALE	DANVILLE	COAL	1.0	76.0	
290.3	CARBONDALE		SANDY SHALE	10.0	77.0	
280.3	CARBONDALE		SANDSTONE	5.0	87.0	
275.3	CARBONDALE		SANDY SHALE	2.0	92.0	
273.3	CARBONDALE		SANDSTONE	3.0	94.0	
270.3	CARBONDALE		SANDY SHALE	1.0	97.0	
269.3	CARBONDALE	ALLENBY	COAL	0.5	98.0	
268.8	CARBONDALE		SANDY SHALE	4.5	98.5	
264.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	103.0	
258.8	CARBONDALE		SANDY SHALE	1.5	108.5	
257.3	CARBONDALE		SANDSTONE	9.0	110.0	
248.3	CARBONDALE		SANDY SHALE	14.0	119.0	
234.3	CARBONDALE		SANDSTONE	2.0	133.0	
232.3	CARBONDALE		SANDY SHALE	3.0	135.0	
229.3	CARBONDALE		SHALE	1.0	138.0	DK
228.3	CARBONDALE	BRERETON	LIMESTONE	4.5	139.0	BLACK
223.8	CARBONDALE	BRERETON	SHALY LIMESTONE	2.0	143.5	BLACK
221.8	CARBONDALE	HERRIN	COAL	4.5	145.5	
217.3	CARBONDALE		UNDERCLAY	2.0	150.0	
215.3	CARBONDALE		SANDY SHALE	4.0	152.0	
211.3	CARBONDALE		SANDSTONE	9.0	156.0	
202.3	CARBONDALE		SANDY SHALE	9.0	165.0	
193.3	CARBONDALE		SANDSTONE	9.0	174.0	
184.3	CARBONDALE		SANDY SHALE	24.0	183.0	
160.3	CARBONDALE	BRIAR HILL	COAL	1.5	207.0	
158.8	CARBONDALE		SANDY SHALE	2.5	208.5	
156.3	CARBONDALE		SANDSTONE	13.0	211.0	
143.3	CARBONDALE		SHALY SANDSTONE	14.0	224.0	
129.3	CARBONDALE		SHALE	3.0	238.0	DK
126.3	CARBONDALE		SHALE	2.0	241.0	
124.3	CARBONDALE		BLACK SHALE	3.0	243.0	

121.3	CARBONDALE	DYKERSBURG	SHALE	9.0	246.0
112.3	CARBONDALE	SPRINGFIELD	COAL	4.5	255.0
107.8	CARBONDALE		UNDERCLAY	2.5	259.5
105.3	CARBONDALE		CALCAREOUS SHALE	1.0	262.0

MAPID: 16526007000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456911 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.752128 **DATE COLLECTED:** 3 / 23 / 1994

SURFACE ELEVATION (FT.): 367.6 **LOGGED (FT.):** 260.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-52-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.6	PLEISTOCENE		SOIL	8.0	0.0	
359.6	PLEISTOCENE		SANDY CLAY	6.0	8.0	BR
353.6	PLEISTOCENE		SANDY CLAY	8.0	14.0	GRAY
345.6	PLEISTOCENE		SANDY CLAY	22.0	22.0	BR
323.6	PLEISTOCENE		SAND	5.0	44.0	LOOSE; BR
318.6	PLEISTOCENE		SANDY CLAY	7.0	49.0	
311.6	MODESTO		SANDY SHALE	2.0	56.0	
309.6	MODESTO		BLACK SHALE	2.0	58.0	
307.6	MODESTO		SHALE	11.0	60.0	
296.6	CARBONDALE	DANVILLE	COAL	1.0	71.0	
295.6	CARBONDALE		SHALE	3.0	72.0	
292.6	CARBONDALE		SANDY SHALE	6.0	75.0	
286.6	CARBONDALE		SANDSTONE	6.0	81.0	
280.6	CARBONDALE		SANDY SHALE	2.0	87.0	
278.6	CARBONDALE		SANDSTONE	4.0	89.0	
274.6	CARBONDALE		SANDSTONE	3.0	93.0	GRAY
271.6	CARBONDALE	ALLENBY	COAL	0.5	96.0	
271.1	CARBONDALE		SANDY SHALE	1.5	96.5	
269.6	CARBONDALE	BANKSTON FORK	SANDY LIMESTONE	3.0	98.0	
266.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	101.0	
263.1	CARBONDALE		SANDY SHALE	3.5	104.5	
259.6	CARBONDALE		SANDSTONE	10.0	108.0	
249.6	CARBONDALE		SANDY SHALE	5.0	118.0	
244.6	CARBONDALE		SANDSTONE	9.0	123.0	
235.6	CARBONDALE		SANDY SHALE	3.0	132.0	
232.6	CARBONDALE	BRERETON	LIMESTONE	4.0	135.0	BLACK
228.6	CARBONDALE	ANNA	BLACK SHALE	2.0	139.0	
226.6	CARBONDALE	HERRIN	COAL	5.0	141.0	
221.6	CARBONDALE		UNDERCLAY	2.0	146.0	
219.6	CARBONDALE		SANDY SHALE	4.0	148.0	
215.6	CARBONDALE		SANDSTONE	17.0	152.0	
198.6	CARBONDALE		SANDY SHALE	13.0	169.0	
185.6	CARBONDALE		SANDSTONE	10.0	182.0	
175.6	CARBONDALE		SANDY SHALE	10.0	192.0	
165.6	CARBONDALE	BRIAR HILL	COAL	1.5	202.0	
164.1	CARBONDALE		SANDY SHALE	2.5	203.5	
161.6	CARBONDALE		SANDSTONE	14.0	206.0	
147.6	CARBONDALE		SANDY SHALE	14.0	220.0	
133.6	CARBONDALE		SHALE	6.0	234.0	DK

127.6	CARBONDALE	DYKERSBURG	SHALE	10.5	240.0
117.1	CARBONDALE	SPRINGFIELD	COAL	4.0	250.5
113.1	CARBONDALE		UNDERCLAY	1.5	254.5
111.6	CARBONDALE		CALCAREOUS SHALE	4.0	256.0

MAPID: 16526008000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.752387 **DATE COLLECTED:** 3 / 23 / 1994

SURFACE ELEVATION (FT.): 367.5 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC 53-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.5	PLEISTOCENE		SOIL	8.0	0.0	
359.5	PLEISTOCENE		CLAY	4.0	8.0	BR
355.5	PLEISTOCENE		CLAY	10.0	12.0	GRAY
345.5	PLEISTOCENE		SANDY CLAY	23.0	22.0	BR
322.5	PLEISTOCENE		SANDY CLAY	4.0	45.0	BR
318.5	PLEISTOCENE		SANDY CLAY	4.0	49.0	GR
314.5	MODESTO		SANDY SHALE	17.0	53.0	
297.5	CARBONDALE	DANVILLE	COAL	1.0	70.0	
296.5	CARBONDALE		SANDY SHALE	5.0	71.0	
291.5	CARBONDALE		SANDSTONE	8.0	76.0	
283.5	CARBONDALE		SANDY SHALE	4.0	84.0	
279.5	CARBONDALE		SANDSTONE	2.0	88.0	
277.5	CARBONDALE	ALLENBY	COAL	1.0	90.0	
276.5	CARBONDALE		SANDY SHALE	5.0	91.0	
271.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	96.0	
267.0	CARBONDALE		SANDY SHALE	5.5	100.5	
261.5	CARBONDALE		SANDSTONE	6.0	106.0	
255.5	CARBONDALE		SANDY SHALE	12.0	112.0	
243.5	CARBONDALE		SANDSTONE	5.0	124.0	
238.5	CARBONDALE		SANDY SHALE	2.0	129.0	
236.5	CARBONDALE	BRERETON	LIMESTONE	4.0	131.0	BLACK
232.5	CARBONDALE	ANNA	BLACK SHALE	2.0	135.0	
230.5	CARBONDALE	HERRIN	COAL	4.0	137.0	
226.5	CARBONDALE		UNDERCLAY	2.0	141.0	
224.5	CARBONDALE		SANDY SHALE	2.0	143.0	
222.5	CARBONDALE		SANDSTONE	37.0	145.0	
185.5	CARBONDALE		SANDY SHALE	16.5	182.0	
169.0	CARBONDALE	BRIAR HILL	COAL	1.5	198.5	
167.5	CARBONDALE		SANDY SHALE	2.0	200.0	
165.5	CARBONDALE		SANDSTONE	3.0	202.0	
162.5	CARBONDALE		SANDY SHALE	5.0	205.0	
157.5	CARBONDALE		SANDSTONE	5.0	210.0	
152.5	CARBONDALE		SANDY SHALE	15.0	215.0	
137.5	CARBONDALE		BLACK SHALE	4.0	230.0	
133.5	CARBONDALE	DYKERSBURG	SHALE	14.0	234.0	
119.5	CARBONDALE	SPRINGFIELD	COAL	4.0	248.0	
115.5	CARBONDALE		UNDERCLAY	2.0	252.0	
113.5	CARBONDALE		CALCAREOUS SHALE	1.0	254.0	

MAPID: 16526009000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.752658 **DATE COLLECTED:** 3 / 24 / 1994

SURFACE ELEVATION (FT.): 367.7 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-54-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.7	PLEISTOCENE		SOIL	8.0	0.0	
359.7	PLEISTOCENE		SANDY CLAY	6.0	8.0	BR
353.7	PLEISTOCENE		CLAY	7.0	14.0	GRAY
346.7	PLEISTOCENE		CLAY	22.0	21.0	BR
324.7	PLEISTOCENE		LOESS	5.0	43.0	BR
319.7	MODESTO		SHALE	5.0	48.0	
314.7	MODESTO		SANDY SHALE	11.0	53.0	
303.7	CARBONDALE	DANVILLE	COAL	1.0	64.0	
302.7	CARBONDALE		SANDY SHALE	2.0	65.0	
300.7	CARBONDALE		SANDSTONE	13.0	67.0	
287.7	CARBONDALE		SANDY SHALE	3.0	80.0	
284.7	CARBONDALE		COAL	1.0	83.0	
283.7	CARBONDALE		SANDY SHALE	1.0	84.0	
282.7	CARBONDALE		SANDSTONE	5.0	85.0	
277.7	CARBONDALE		SHALY COAL	1.0	90.0	BLACK
276.7	CARBONDALE		SANDY SHALE	3.0	91.0	
273.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	94.0	
267.7	CARBONDALE		SANDY SHALE	6.0	100.0	
261.7	CARBONDALE		SANDSTONE	6.0	106.0	
255.7	CARBONDALE		SANDY SHALE	12.0	112.0	
243.7	CARBONDALE		SANDSTONE	5.0	124.0	
238.7	CARBONDALE		SHALE	2.0	129.0	DK
236.7	CARBONDALE	BRERETON	LIMESTONE	4.0	131.0	BLACK
232.7	CARBONDALE	ANNA	BLACK SHALE	2.0	135.0	
230.7	CARBONDALE	HERRIN	COAL	4.5	137.0	
226.2	CARBONDALE		UNDERCLAY	1.5	141.5	
224.7	CARBONDALE		SANDY SHALE	3.0	143.0	
221.7	CARBONDALE		SANDSTONE	52.0	146.0	
169.7	CARBONDALE	BRIAR HILL	COAL	1.5	198.0	
168.2	CARBONDALE		SANDY SHALE	2.5	199.5	
165.7	CARBONDALE		SANDSTONE	11.0	202.0	
154.7	CARBONDALE		SANDY SHALE	14.0	213.0	
140.7	CARBONDALE		SHALE	4.0	227.0	DK
136.7	CARBONDALE		SHALE	2.0	231.0	
134.7	CARBONDALE		BLACK SHALE	2.0	233.0	
132.7	CARBONDALE	DYKERSBURG	SHALE	10.5	235.0	
122.2	CARBONDALE	SPRINGFIELD	COAL	4.5	245.5	
117.7	CARBONDALE		UNDERCLAY	2.0	250.0	
115.7	CARBONDALE		CALCAREOUS SHALE	2.0	252.0	

MAPID: 16526010000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456916 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.752937 **DATE COLLECTED:** 3 / 24 / 1994

SURFACE ELEVATION (FT.): 367.4 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-55-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.4	PLEISTOCENE		SOIL	8.0	0.0	
359.4	PLEISTOCENE		CLAY	4.0	8.0	BR
355.4	PLEISTOCENE		SANDY CLAY	9.0	12.0	GRAY
346.4	PLEISTOCENE		CLAY	20.0	21.0	BR
326.4	PLEISTOCENE		SAND	2.0	41.0	LOOSE; BR
324.4	PLEISTOCENE		SANDY CLAY	5.0	43.0	GRAY
319.4			SHALE	9.0	48.0	
310.4			SANDY SHALE	11.0	57.0	
299.4			SANDSTONE	5.0	68.0	
294.4			SANDY SHALE	2.0	73.0	
292.4			SANDSTONE	8.0	75.0	
284.4			SANDY SHALE	3.0	83.0	
281.4			SANDSTONE	3.0	86.0	
278.4			COAL	1.0	89.0	
277.4			SANDY SHALE	4.5	90.0	
272.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	94.5	
267.9	CARBONDALE		SANDY SHALE	2.5	99.5	
265.4	CARBONDALE		SANDSTONE	7.0	102.0	
258.4	CARBONDALE		SANDY SHALE	10.0	109.0	
248.4	CARBONDALE		SANDSTONE	11.0	119.0	
237.4	CARBONDALE	BRERETON	LIMESTONE	4.5	130.0	BLACK
232.9	CARBONDALE	ANNA	BLACK SHALE	2.0	134.5	
230.9	CARBONDALE	HERRIN	COAL	5.0	136.5	
225.9	CARBONDALE		UNDERCLAY	2.0	141.5	
223.9	CARBONDALE		SANDY SHALE	2.5	143.5	
221.4	CARBONDALE		SANDSTONE	28.0	146.0	
193.4	CARBONDALE		SANDY SHALE	22.5	174.0	
170.9	CARBONDALE	BRIAR HILL	COAL	1.5	196.5	
169.4	CARBONDALE		SANDY SHALE	6.0	198.0	
163.4	CARBONDALE		SANDSTONE	14.0	204.0	
149.4	CARBONDALE		SANDY SHALE	12.0	218.0	
137.4	CARBONDALE		BLACK SHALE	4.0	230.0	
133.4	CARBONDALE	DYKERSBURG	SHALE	12.0	234.0	
121.4	CARBONDALE	SPRINGFIELD	COAL	4.0	246.0	
117.4	CARBONDALE		UNDERCLAY	2.0	250.0	
115.4	CARBONDALE		CALCAREOUS SHALE	2.0	252.0	

MAPID: 16526011000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456912 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.75321 **DATE COLLECTED:** 3 / 24 / 1994

SURFACE ELEVATION (FT.): 367.6 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-56-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.6	PLEISTOCENE		SOIL	8.0	0.0	
359.6	PLEISTOCENE		CLAY	6.0	8.0	BR
353.6	PLEISTOCENE		CLAY	6.0	14.0	GRAY
347.6	PLEISTOCENE		CLAY	12.0	20.0	BR
335.6	PLEISTOCENE		SANDY CLAY	6.0	32.0	GR
329.6	MODESTO		SANDSTONE	3.0	38.0	BR
326.6	MODESTO		SHALE	3.0	41.0	
323.6	MODESTO		SHALE	2.0	44.0	BR
321.6	MODESTO		SANDSTONE	5.0	46.0	BR
316.6	MODESTO		SHALE	2.0	51.0	GR
314.6	MODESTO		SHALE	3.0	53.0	
311.6	MODESTO		SANDY SHALE	5.0	56.0	
306.6	CARBONDALE	DANVILLE	COAL	1.0	61.0	
305.6	CARBONDALE		SANDY SHALE	10.0	62.0	
295.6	CARBONDALE		SANDSTONE	10.0	72.0	
285.6	CARBONDALE		COAL	1.0	82.0	
284.6	CARBONDALE		SANDY SHALE	2.0	83.0	
282.6	CARBONDALE		SANDSTONE	1.0	85.0	
281.6	CARBONDALE		SANDY SHALE	2.0	86.0	
279.6	CARBONDALE		COAL	1.0	88.0	
278.6	CARBONDALE		SANDY SHALE	4.5	89.0	
274.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	93.5	
268.6	CARBONDALE		SANDY SHALE	4.0	99.0	
264.6	CARBONDALE		SANDSTONE	9.0	103.0	
255.6	CARBONDALE		SANDY SHALE	6.0	112.0	
249.6	CARBONDALE		SANDSTONE	8.0	118.0	
241.6	CARBONDALE		SANDY SHALE	2.0	126.0	
239.6	CARBONDALE		BLACK SHALE	1.0	128.0	
238.6	CARBONDALE	BRERETON	LIMESTONE	6.0	129.0	BLACK
232.6	CARBONDALE	ANNA	BLACK SHALE	2.0	135.0	
230.6	CARBONDALE	HERRIN	COAL	4.0	137.0	
226.6	CARBONDALE		UNDERCLAY	2.0	141.0	
224.6	CARBONDALE		SANDY SHALE	1.0	143.0	
223.6	CARBONDALE		SANDSTONE	28.0	144.0	
195.6	CARBONDALE		SANDY SHALE	23.5	172.0	
172.1	CARBONDALE	BRIAR HILL	COAL	1.5	195.5	
170.6	CARBONDALE		SANDY SHALE	4.0	197.0	
166.6	CARBONDALE		SANDSTONE	10.0	201.0	
156.6	CARBONDALE		SANDY SHALE	15.0	211.0	

141.6	CARBONDALE		SHALE	3.0	226.0	DK
138.6	CARBONDALE		LIMESTONE	2.0	229.0	GRAY
136.6	CARBONDALE		LIMESTONE	3.0	231.0	BLACK
133.6	CARBONDALE		SHALE	3.0	234.0	DK
130.6	CARBONDALE	DYKERSBURG	SHALE	9.0	237.0	
121.6	CARBONDALE	DYKERSBURG	SHALE	0.5	246.0	DK
121.1	CARBONDALE	SPRINGFIELD	COAL	3.5	246.5	
117.6	CARBONDALE		UNDERCLAY	2.0	250.0	
115.6	CARBONDALE		CALCAREOUS SHALE	2.0	252.0	

MAPID: 16526012000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456909 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.753481 **DATE COLLECTED:** 3 / 25 / 1994

SURFACE ELEVATION (FT.): 367.5 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-57-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.5	PLEISTOCENE		SOIL	8.0	0.0	
359.5	PLEISTOCENE		CLAY	6.0	8.0	BR
353.5	PLEISTOCENE		CLAY	6.0	14.0	GRAY
347.5	PLEISTOCENE		SANDY CLAY	13.0	20.0	BR
334.5	MODESTO		SANDSTONE	6.0	33.0	BR
328.5	MODESTO		SANDSTONE	5.0	39.0	GRAY
323.5	MODESTO		SHALE	3.0	44.0	
320.5	MODESTO		SANDY SHALE	9.0	47.0	
311.5	CARBONDALE	DANVILLE	COAL	1.0	56.0	
310.5	CARBONDALE		SANDY SHALE	5.0	57.0	
305.5	CARBONDALE		SANDSTONE	1.0	62.0	
304.5	CARBONDALE		COAL	0.5	63.0	
304.0	CARBONDALE		SHALE	1.5	63.5	
302.5	CARBONDALE		COAL	1.0	65.0	
301.5	CARBONDALE		SANDY SHALE	2.0	66.0	
299.5	CARBONDALE		SANDSTONE	2.0	68.0	
297.5	CARBONDALE		SANDY SHALE	10.0	70.0	
287.5	CARBONDALE		SANDSTONE	6.0	80.0	
281.5	CARBONDALE		SANDY SHALE	3.0	86.0	
278.5	CARBONDALE		COAL	1.0	89.0	
277.5	CARBONDALE		SANDY SHALE	4.0	90.0	
273.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	94.0	
268.5	CARBONDALE		SHALE	2.0	99.0	
266.5	CARBONDALE		SANDSTONE	4.0	101.0	
262.5	CARBONDALE		SANDY SHALE	19.0	105.0	
243.5	CARBONDALE		SANDSTONE	2.0	124.0	
241.5	CARBONDALE		SANDY SHALE	3.0	126.0	
238.5	CARBONDALE	BRERETON	LIMESTONE	4.5	129.0	BLACK
234.0	CARBONDALE	ANNA	BLACK SHALE	2.0	133.5	
232.0	CARBONDALE	HERRIN	COAL	4.5	135.5	
227.5	CARBONDALE		UNDERCLAY	1.0	140.0	
226.5	CARBONDALE		SANDY SHALE	2.0	141.0	
224.5	CARBONDALE		SANDSTONE	12.0	143.0	
212.5	CARBONDALE		SANDY SHALE	4.0	155.0	
208.5	CARBONDALE		SANDSTONE	30.0	159.0	
178.5	CARBONDALE		SANDY SHALE	8.0	189.0	
170.5	CARBONDALE	BRIAR HILL	COAL	1.5	197.0	
169.0	CARBONDALE		SANDY SHALE	1.5	198.5	
167.5	CARBONDALE		SANDSTONE	12.0	200.0	

155.5	CARBONDALE		SANDY SHALE	16.0	212.0
139.5	CARBONDALE		BLACK SHALE	8.0	228.0
131.5	CARBONDALE	DYKERSBURG	SHALE	12.0	236.0
119.5	CARBONDALE	SPRINGFIELD	COAL	4.0	248.0
115.5	CARBONDALE		UNDERCLAY	2.0	252.0
113.5	CARBONDALE		CALCAREOUS SHALE	1.0	254.0

MAPID: 16526013000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456908 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.753759 **DATE COLLECTED:** 3 / 25 / 1994

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-58-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0	PLEISTOCENE		SOIL	7.0	0.0	
361.0	PLEISTOCENE		CLAY	5.0	7.0	BR
356.0	PLEISTOCENE		CLAY	10.0	12.0	GRAY
346.0	PLEISTOCENE		CLAY	2.0	22.0	BR
344.0	PLEISTOCENE		SAND	15.0	24.0	BR
329.0	PLEISTOCENE		CLAY	4.0	39.0	GR
325.0	MODESTO		SHALE	5.0	43.0	
320.0	MODESTO		SANDSTONE	6.0	48.0	
314.0	MODESTO		SANDY SHALE	10.0	54.0	
304.0	MODESTO		SANDSTONE	3.0	64.0	
301.0	CARBONDALE	DANVILLE	COAL	1.0	67.0	
300.0	CARBONDALE		SANDY SHALE	6.0	68.0	
294.0	CARBONDALE		SANDSTONE	10.5	74.0	
283.5	CARBONDALE	ALLENBY	COAL	0.5	84.5	
283.0	CARBONDALE		SANDY SHALE	10.0	85.0	
273.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	95.0	
267.5	CARBONDALE		SANDY SHALE	1.5	100.5	
266.0	CARBONDALE		SANDSTONE	15.0	102.0	
251.0	CARBONDALE		SANDY SHALE	5.0	117.0	
246.0	CARBONDALE		SANDSTONE	5.0	122.0	
241.0	CARBONDALE		SANDY SHALE	3.0	127.0	
238.0	CARBONDALE	BRERETON	LIMESTONE/CHERT	4.5	130.0	BLACK
233.5	CARBONDALE	ANNA	BLACK SHALE	2.0	134.5	
231.5	CARBONDALE	HERRIN	COAL	4.5	136.5	
227.0	CARBONDALE		UNDERCLAY	2.0	141.0	
225.0	CARBONDALE		SANDSTONE	15.0	143.0	
210.0	CARBONDALE		SANDY SHALE	11.0	158.0	
199.0	CARBONDALE		SANDSTONE	25.0	169.0	
174.0	CARBONDALE		SANDY SHALE	2.5	194.0	
171.5	CARBONDALE	BRIAR HILL	COAL	1.5	196.5	
170.0	CARBONDALE		SANDY SHALE	2.0	198.0	
168.0	CARBONDALE		SANDSTONE	10.0	200.0	
158.0	CARBONDALE		SANDY SHALE	2.0	210.0	
156.0	CARBONDALE		SANDSTONE	3.0	212.0	
153.0	CARBONDALE		SANDY SHALE	11.0	215.0	
142.0	CARBONDALE		SHALE	4.0	226.0	DK
138.0	CARBONDALE		SHALE	2.0	230.0	
136.0	CARBONDALE		BLACK SHALE	3.0	232.0	
133.0	CARBONDALE	DYKERSBURG	SHALE	11.5	235.0	

121.5	CARBONDALE	SPRINGFIELD	COAL	3.5	246.5
118.0	CARBONDALE		UNDERCLAY	1.5	250.0
116.5	CARBONDALE		CALCAREOUS SHALE	1.5	251.5

MAPID: 16526014000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456908 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.754027 **DATE COLLECTED:** 3 / 25 / 1994

SURFACE ELEVATION (FT.): 368.1 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-59-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.1	PLEISTOCENE		SOIL	7.0	0.0	
361.1	PLEISTOCENE		CLAY	4.0	7.0	BR
357.1	PLEISTOCENE		CLAY	9.0	11.0	GRAY
348.1	PLEISTOCENE		SAND	10.0	20.0	BR
338.1	PLEISTOCENE		SANDY CLAY	4.0	30.0	BR
334.1	PLEISTOCENE		CLAY	2.0	34.0	GRAY
332.1			SANDSTONE	11.0	36.0	BR
321.1			SHALE	7.0	47.0	
314.1			SANDY SHALE	10.0	54.0	
304.1			SANDSTONE	14.0	64.0	
290.1			SANDSTONE	8.5	78.0	
281.6	CARBONDALE	ALLENBY	COAL	0.5	86.5	
281.1	CARBONDALE		SANDY SHALE	3.0	87.0	
278.1	CARBONDALE		SHALE	5.0	90.0	
273.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	95.0	
267.1	CARBONDALE		SANDY SHALE	2.0	101.0	
265.1	CARBONDALE		SANDSTONE	9.0	103.0	
256.1	CARBONDALE		SANDY SHALE	14.0	112.0	
242.1	CARBONDALE		SANDSTONE	3.0	126.0	
239.1	CARBONDALE		SANDY SHALE	2.0	129.0	
237.1	CARBONDALE		BLACK SHALE	0.5	131.0	
236.6	CARBONDALE	BRERETON	LIMESTONE	6.0	131.5	BLACK
230.6	CARBONDALE	ANNA	BLACK SHALE	1.5	137.5	
229.1	CARBONDALE	HERRIN	COAL	4.5	139.0	
224.6	CARBONDALE		UNDERCLAY	1.5	143.5	
223.1	CARBONDALE		SANDY SHALE	2.0	145.0	
221.1	CARBONDALE		SANDSTONE	24.0	147.0	
197.1	CARBONDALE		SANDY SHALE	25.0	171.0	
172.1	CARBONDALE		SHALE	2.0	196.0	
170.1	CARBONDALE	BRIAR HILL	COAL	1.5	198.0	
168.6	CARBONDALE		SANDY SHALE	2.5	199.5	
166.1	CARBONDALE		SANDSTONE	6.0	202.0	
160.1	CARBONDALE		SANDY SHALE	4.0	208.0	
156.1	CARBONDALE		SANDSTONE	6.0	212.0	
150.1	CARBONDALE		SANDY SHALE	10.0	218.0	
140.1	CARBONDALE		SHALE	3.0	228.0	
137.1	CARBONDALE		SHALE	3.0	231.0	
134.1	CARBONDALE		BLACK SHALE	2.0	234.0	
132.1	CARBONDALE	DYKERSBURG	SHALE	13.0	236.0	

119.1	CARBONDALE	SPRINGFIELD	COAL	4.0	249.0
115.1	CARBONDALE		UNDERCLAY	2.0	253.0
113.1	CARBONDALE		SHALY LIMESTONE	1.0	255.0

MAPID: 16526015000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.754312 **DATE COLLECTED:** 3 / 25 / 1994

SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 244.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-60-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.4	PLEISTOCENE		SOIL	7.0	0.0	
361.4	PLEISTOCENE		SANDY CLAY	5.0	7.0	BR
356.4	PLEISTOCENE		SAND	17.0	12.0	BR
339.4	PLEISTOCENE		CLAY	2.0	29.0	GRAY
337.4	PLEISTOCENE		SAND	3.0	31.0	BR
334.4	PLEISTOCENE		CLAY	1.0	34.0	GR
333.4			SANDSTONE	6.0	35.0	BR
327.4			SHALE	2.0	41.0	
325.4			SANDSTONE	4.0	43.0	
321.4			SHALE	3.0	47.0	
318.4			SANDY SHALE	10.0	50.0	
308.4			SANDSTONE	9.0	60.0	
299.4			SANDY SHALE	18.0	69.0	
281.4	CARBONDALE	ALLENBY	COAL	1.0	87.0	
280.4	CARBONDALE		SHALE	4.0	88.0	
276.4	CARBONDALE		SANDY SHALE	2.0	92.0	
274.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	94.0	
270.4	CARBONDALE		SANDY SHALE	4.0	98.0	
266.4	CARBONDALE		SANDSTONE	10.0	102.0	
256.4	CARBONDALE		SANDY SHALE	8.0	112.0	
248.4	CARBONDALE		SANDSTONE	4.0	120.0	
244.4	CARBONDALE		SANDY SHALE	4.0	124.0	
240.4	CARBONDALE		SHALE	1.0	128.0	DK
239.4	CARBONDALE	BRERETON	LIMESTONE	5.0	129.0	BLACK
234.4	CARBONDALE	ANNA	BLACK SHALE	2.0	134.0	
232.4	CARBONDALE	HERRIN	COAL	4.5	136.0	
227.9	CARBONDALE		UNDERCLAY	1.5	140.5	
226.4	CARBONDALE		SANDY SHALE	3.0	142.0	
223.4	CARBONDALE		SANDSTONE	12.0	145.0	
211.4	CARBONDALE		SANDY SHALE	12.0	157.0	
199.4	CARBONDALE		SANDSTONE	7.0	169.0	
192.4	CARBONDALE		SANDY SHALE	4.0	176.0	
188.4	CARBONDALE		SANDSTONE	6.0	180.0	
182.4	CARBONDALE		SANDY SHALE	4.0	186.0	
178.4	CARBONDALE	BRIAR HILL	COAL	1.5	190.0	
176.9	CARBONDALE		SANDY SHALE	4.5	191.5	
172.4	CARBONDALE		SANDSTONE	14.0	196.0	
158.4	CARBONDALE		SANDY SHALE	7.0	210.0	
151.4	CARBONDALE		SHALE	3.0	217.0	DK

148.4	CARBONDALE		SHALE	2.0	220.0	
146.4	CARBONDALE		BLACK SHALE	3.0	222.0	
143.4	CARBONDALE		SHALE	5.0	225.0	
138.4	CARBONDALE		SHALE	2.0	230.0	DK
136.4	CARBONDALE	DYKERSBURG	SHALE	4.0	232.0	
132.4	CARBONDALE	SPRINGFIELD	COAL	4.0	236.0	
128.4	CARBONDALE		UNDERCLAY	2.0	240.0	
126.4	CARBONDALE		CALCAREOUS SHALE	2.0	242.0	

MAPID: 16526016000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.754582 **DATE COLLECTED:** 3 / 30 / 1994

SURFACE ELEVATION (FT.): 369.2 **LOGGED (FT.):** 232.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-61-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.2	PLEISTOCENE		SOIL	8.0	0.0	
361.2	PLEISTOCENE		SANDY CLAY	2.0	8.0	BR
359.2			SANDSTONE	21.0	10.0	BR
338.2			SANDY SHALE	5.0	31.0	
333.2			SANDSTONE	4.0	36.0	
329.2			SHALY SANDSTONE	15.0	40.0	GRAY
314.2			SANDSTONE	9.0	55.0	
305.2	CARBONDALE	ALLENBY	COAL	1.0	64.0	
304.2	CARBONDALE		SHALE	3.0	65.0	
301.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	68.0	
295.2	CARBONDALE		SHALE	2.0	74.0	
293.2	CARBONDALE		SANDSTONE	6.0	76.0	
287.2	CARBONDALE		SANDY SHALE	15.0	82.0	
272.2	CARBONDALE		SANDSTONE	4.0	97.0	
268.2	CARBONDALE		SHALE	3.0	101.0	
265.2	CARBONDALE		SANDSTONE	3.0	104.0	
262.2	CARBONDALE		SANDY SHALE	3.0	107.0	
259.2	CARBONDALE		CALCAREOUS SHALE	1.0	110.0	
258.2	CARBONDALE	BRERETON	LIMESTONE	6.0	111.0	DK
252.2	CARBONDALE	ANNA	BLACK SHALE	2.0	117.0	
250.2	CARBONDALE	HERRIN	COAL	4.5	119.0	
245.7	CARBONDALE		UNDERCLAY	1.5	123.5	
244.2	CARBONDALE		SANDY SHALE	3.0	125.0	
241.2	CARBONDALE		SANDSTONE	5.0	128.0	
236.2	CARBONDALE		SANDY SHALE	9.0	133.0	
227.2	CARBONDALE		SANDSTONE	4.0	142.0	
223.2	CARBONDALE		SANDY SHALE	7.0	146.0	
216.2	CARBONDALE		SANDSTONE	17.0	153.0	
199.2	CARBONDALE		SANDY SHALE	6.0	170.0	
193.2	CARBONDALE	BRIAR HILL	COAL	1.5	176.0	
191.7	CARBONDALE		SANDY SHALE	1.5	177.5	
190.2	CARBONDALE		SANDSTONE	5.0	179.0	
185.2	CARBONDALE		SANDY SHALE	5.0	184.0	
180.2	CARBONDALE		SANDSTONE	9.0	189.0	
171.2	CARBONDALE		SANDY SHALE	7.0	198.0	
164.2	CARBONDALE		SHALE	3.0	205.0	DK
161.2	CARBONDALE		SHALE	2.0	208.0	
159.2	CARBONDALE		BLACK SHALE	2.0	210.0	
157.2	CARBONDALE	DYKERSBURG	SHALE	12.5	212.0	

144.7	CARBONDALE	SPRINGFIELD	COAL	4.0	224.5
140.7	CARBONDALE		UNDERCLAY	2.0	228.5
138.7	CARBONDALE		CALCAREOUS SHALE	1.5	230.5

MAPID: 16526017000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.75485 **DATE COLLECTED:** 3 / 30 / 1994

SURFACE ELEVATION (FT.): 371.5 **LOGGED (FT.):** 231.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-62-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.5	PLEISTOCENE		SOIL	8.0	0.0	
363.5	PLEISTOCENE		SAND	2.0	8.0	BR
361.5	PLEISTOCENE		CLAY	1.0	10.0	GRAY
360.5	PLEISTOCENE		SAND	2.0	11.0	BR
358.5	PLEISTOCENE		CLAY	7.0	13.0	GRAY
351.5	PLEISTOCENE		CLAY	6.0	20.0	RED
345.5	PLEISTOCENE		SAND	2.0	26.0	BR
343.5	PLEISTOCENE		CLAY	3.0	28.0	GRAY
340.5			SOFT SHALE	7.0	31.0	
333.5			SANDSTONE	4.0	38.0	
329.5			SANDSTONE	6.0	42.0	BROKEN; BR
323.5			SHALE	2.0	48.0	
321.5			SANDSTONE	6.0	50.0	
315.5			SHALE	6.0	56.0	
309.5			SHALE	13.0	62.0	
296.5			SANDSTONE	2.0	75.0	
294.5			SHALE	3.0	77.0	
291.5			SHALE	2.0	80.0	DK
289.5	CARBONDALE	BRERETON	LIMESTONE	7.0	82.0	BLACK
282.5	CARBONDALE	ANNA	BLACK SHALE	2.5	89.0	
280.0	CARBONDALE	HERRIN	COAL	3.0	91.5	
277.0	CARBONDALE		UNDERCLAY	1.5	94.5	
275.5	CARBONDALE		SANDY SHALE	8.0	96.0	
267.5	CARBONDALE		SANDSTONE	7.0	104.0	
260.5	CARBONDALE		SANDY SHALE	2.0	111.0	
258.5	CARBONDALE		SANDSTONE	5.0	113.0	
253.5	CARBONDALE		SANDY SHALE	8.0	118.0	
245.5	CARBONDALE		SHALE	23.0	126.0	
222.5	CARBONDALE	BRIAR HILL	COAL	1.5	149.0	
221.0	CARBONDALE		SANDY SHALE	7.5	150.5	
213.5	CARBONDALE		SANDSTONE	5.0	158.0	
208.5	CARBONDALE		SANDY SHALE	4.0	163.0	
204.5	CARBONDALE		SHALE	21.0	167.0	
183.5	CARBONDALE		SHALE	2.0	188.0	DK
181.5	CARBONDALE		SHALY SANDSTONE	19.0	190.0	GRAY
162.5	CARBONDALE		SHALE	3.0	209.0	DK
159.5	CARBONDALE	DYKERSBURG	SHALE	12.0	212.0	
147.5	CARBONDALE	SPRINGFIELD	COAL	3.0	224.0	
144.5	CARBONDALE	SPRINGFIELD	SHALE	0.5	227.0	

144.0	CARBONDALE	SPRINGFIELD	COAL	0.5	227.5
143.5	CARBONDALE		UNDERCLAY	2.0	228.0
141.5	CARBONDALE		CALCAREOUS SHALE	1.0	230.0

MAPID: 16526018000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456909 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.755134 **DATE COLLECTED:** 3 / 30 / 1994

SURFACE ELEVATION (FT.): 369.9 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-63-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.9	PLEISTOCENE		SOIL	8.0	0.0	
361.9	PLEISTOCENE		SANDY CLAY	2.0	8.0	BR
359.9	PLEISTOCENE		SAND	2.0	10.0	RED
357.9	PLEISTOCENE		CLAY	2.0	12.0	GRAY
355.9			COAL	1.0	14.0	
354.9			UNDERCLAY	8.0	15.0	GRAY
346.9			SANDSTONE	2.0	23.0	BR
344.9			LIMESTONE	1.5	25.0	
343.4			SANDSTONE	0.5	26.5	BR
342.9			GRAY SHALE	2.0	27.0	
340.9			SANDSTONE	3.0	29.0	GRAY
337.9			SHALE	2.0	32.0	
335.9			SANDSTONE	4.0	34.0	GRAY
331.9			SANDY SHALE	12.0	38.0	
319.9			SANDSTONE	3.0	50.0	
316.9			SANDY SHALE	3.0	53.0	
313.9	CARBONDALE	BRERETON	LIMESTONE	8.0	56.0	BLACK
305.9	CARBONDALE	ANNA	BLACK SHALE	2.0	64.0	
303.9	CARBONDALE	HERRIN	COAL	4.0	66.0	
299.9	CARBONDALE		UNDERCLAY	2.0	70.0	
297.9	CARBONDALE		SANDY SHALE	2.0	72.0	
295.9	CARBONDALE		SANDSTONE	1.0	74.0	
294.9	CARBONDALE		SANDY SHALE	1.0	75.0	
293.9	CARBONDALE		SANDSTONE	12.0	76.0	
281.9	CARBONDALE		SANDY SHALE	5.0	88.0	
276.9	CARBONDALE		SANDSTONE	19.0	93.0	
257.9	CARBONDALE		SANDY SHALE	11.0	112.0	
246.9	CARBONDALE	BRIAR HILL	COAL	1.5	123.0	
245.4	CARBONDALE		SANDY SHALE	1.5	124.5	
243.9	CARBONDALE		SANDSTONE	3.0	126.0	
240.9	CARBONDALE		SANDY SHALE	1.0	129.0	
239.9	CARBONDALE		SANDSTONE	9.0	130.0	
230.9	CARBONDALE		SANDY SHALE	7.0	139.0	
223.9	CARBONDALE		SHALE	2.0	146.0	
221.9	CARBONDALE		SHALE	4.0	148.0	DK
217.9	CARBONDALE	DYKERSBURG	SHALE	14.0	152.0	
203.9	CARBONDALE	SPRINGFIELD	COAL	3.5	166.0	
200.4	CARBONDALE		UNDERCLAY	2.5	169.5	
197.9	CARBONDALE		CALCAREOUS SHALE	1.0	172.0	

MAPID: 16526019000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456902 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.755402 **DATE COLLECTED:** 3 / 30 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 168.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-64-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	8.0	0.0	
360.9	PLEISTOCENE		SANDY CLAY	8.0	8.0	BR
352.9			SANDSTONE	9.0	16.0	BR
343.9			SHALE	4.0	25.0	
339.9			SANDY SHALE	2.0	29.0	
337.9			SANDSTONE	8.0	31.0	
329.9			SANDY SHALE	2.0	39.0	
327.9	CARBONDALE	BRERETON	LIMESTONE	6.0	41.0	BLACK
321.9	CARBONDALE	ANNA	BLACK SHALE	2.0	47.0	
319.9	CARBONDALE	HERRIN	COAL	4.5	49.0	
315.4	CARBONDALE		UNDERCLAY	1.5	53.5	
313.9	CARBONDALE		SANDY SHALE	2.0	55.0	
311.9	CARBONDALE		SANDSTONE	7.0	57.0	
304.9	CARBONDALE		SANDY SHALE	6.0	64.0	
298.9	CARBONDALE		SANDSTONE	16.0	70.0	
282.9	CARBONDALE		SANDY SHALE	22.0	86.0	
260.9	CARBONDALE		SHALE	5.0	108.0	
255.9	CARBONDALE	BRIAR HILL	COAL	1.5	113.0	
254.4	CARBONDALE		SANDY SHALE	5.5	114.5	
248.9	CARBONDALE		SANDSTONE	16.0	120.0	
232.9	CARBONDALE		SANDY SHALE	8.0	136.0	
224.9	CARBONDALE		SHALE	4.0	144.0	DK
220.9	CARBONDALE	DYKERSBURG	SHALE	14.0	148.0	
206.9	CARBONDALE	SPRINGFIELD	COAL	3.5	162.0	
203.4	CARBONDALE		UNDERCLAY	1.5	165.5	
201.9	CARBONDALE		SANDSTONE/LIMESTONE	1.0	167.0	

MAPID: 16526020000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456894 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.755678 **DATE COLLECTED:** 3 / 31 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 165.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-65-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	7.0	0.0	
361.9	PLEISTOCENE		CLAY	5.0	7.0	BR
356.9	PLEISTOCENE		SANDY CLAY	19.0	12.0	BR
337.9	CARBONDALE		SANDSTONE	8.5	31.0	BR
329.4	CARBONDALE	BRERETON	LIMESTONE	4.5	39.5	BLACK
324.9	CARBONDALE	ANNA	BLACK SHALE	2.0	44.0	
322.9	CARBONDALE	HERRIN	COAL	4.0	46.0	
318.9	CARBONDALE		UNDERCLAY	2.0	50.0	
316.9	CARBONDALE		SANDY SHALE	3.0	52.0	
313.9	CARBONDALE		SANDSTONE	6.0	55.0	
307.9	CARBONDALE		SANDY SHALE	2.0	61.0	
305.9	CARBONDALE		SANDSTONE	17.0	63.0	
288.9	CARBONDALE		SANDY SHALE	2.0	80.0	
286.9	CARBONDALE		SANDSTONE	11.0	82.0	
275.9	CARBONDALE		SANDY SHALE	8.0	93.0	
267.9	CARBONDALE		SHALE	8.0	101.0	
259.9	CARBONDALE		SHALE	1.0	109.0	DK
258.9	CARBONDALE	BRIAR HILL	COAL	1.5	110.0	
257.4	CARBONDALE		SANDY SHALE	1.5	111.5	
255.9	CARBONDALE		SANDSTONE	5.0	113.0	
250.9	CARBONDALE		SANDY SHALE	3.0	118.0	
247.9	CARBONDALE		SANDSTONE	3.0	121.0	
244.9	CARBONDALE		SANDY SHALE	12.0	124.0	
232.9	CARBONDALE		SANDY SHALE	3.0	136.0	
229.9	CARBONDALE		SHALE	5.0	139.0	
224.9	CARBONDALE		BLACK SHALE	2.0	144.0	
222.9	CARBONDALE	DYKERSBURG	SANDY SHALE	13.0	146.0	
209.9	CARBONDALE	SPRINGFIELD	COAL	3.5	159.0	
206.4	CARBONDALE		UNDERCLAY	1.5	162.5	
204.9	CARBONDALE		SANDY SHALE	1.0	164.0	

MAPID: 16526021000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456897 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.755946 **DATE COLLECTED:** 3 / 31 / 1994

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 166.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-66-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	PLEISTOCENE		SOIL	7.0	0.0	
362.0	PLEISTOCENE		SANDY CLAY	8.0	7.0	BR
354.0	PLEISTOCENE		CLAY	5.0	15.0	GRAY
349.0	PLEISTOCENE		CLAY	22.0	20.0	BR
327.0	PLEISTOCENE		SANDY CLAY	6.5	42.0	BR
320.5	CARBONDALE	ANNA	BLACK SHALE	1.5	48.5	
319.0	CARBONDALE	HERRIN	COAL	4.0	50.0	
315.0	CARBONDALE		UNDERCLAY	2.0	54.0	
313.0	CARBONDALE		SANDY SHALE	1.0	56.0	
312.0	CARBONDALE		SANDSTONE	1.0	57.0	
311.0	CARBONDALE		SANDY SHALE	1.0	58.0	
310.0	CARBONDALE		SANDSTONE	5.0	59.0	
305.0	CARBONDALE		SANDY SHALE	7.0	64.0	
298.0	CARBONDALE		SANDSTONE	19.0	71.0	
279.0	CARBONDALE		SANDY SHALE	19.0	90.0	
260.0	CARBONDALE		SHALE	3.0	109.0	
257.0	CARBONDALE	BRIAR HILL	COAL	1.5	112.0	
255.5	CARBONDALE		SANDY SHALE	1.5	113.5	
254.0	CARBONDALE		SANDSTONE	3.0	115.0	
251.0	CARBONDALE		SANDY SHALE	2.0	118.0	
249.0	CARBONDALE		SANDSTONE	16.0	120.0	
233.0	CARBONDALE		SANDY SHALE	6.0	136.0	
227.0	CARBONDALE		SHALE	4.0	142.0	DK
223.0	CARBONDALE		SHALE	9.0	146.0	
214.0	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	155.0	
209.0	CARBONDALE	SPRINGFIELD	COAL	3.5	160.0	
205.5	CARBONDALE		UNDERCLAY	1.5	163.5	
204.0	CARBONDALE		SANDY SHALE	1.0	165.0	

MAPID: 16526022000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.45689 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.756205 **DATE COLLECTED:** 3 / 31 / 1994

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 171.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-67-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	PLEISTOCENE		SOIL	7.0	0.0	
362.0	PLEISTOCENE		SANDY CLAY	3.0	7.0	BR
359.0	PLEISTOCENE		CLAY	4.0	10.0	GR
355.0	PLEISTOCENE		SANDY CLAY	9.0	14.0	GRAY
346.0	PLEISTOCENE		CLAY	13.0	23.0	BR
333.0	PLEISTOCENE		SAND	6.0	36.0	BR
327.0	CARBONDALE		SANDSTONE	4.0	42.0	BR
323.0	CARBONDALE		BLACK SHALE	0.5	46.0	
322.5	CARBONDALE	BRERETON	LIMESTONE	4.5	46.5	BLACK
318.0	CARBONDALE	ANNA	BLACK SHALE	2.0	51.0	
316.0	CARBONDALE	HERRIN	COAL	4.5	53.0	
311.5	CARBONDALE		UNDERCLAY	1.5	57.5	
310.0	CARBONDALE		SANDY SHALE	1.5	59.0	
308.5	CARBONDALE		SANDSTONE	19.5	60.5	
289.0	CARBONDALE		SANDY SHALE	4.0	80.0	
285.0	CARBONDALE		SANDSTONE	6.0	84.0	
279.0	CARBONDALE		SANDY SHALE	7.0	90.0	
272.0	CARBONDALE		SHALE	7.0	97.0	
265.0	CARBONDALE		SANDY SHALE	5.0	104.0	
260.0	CARBONDALE		SHALE	4.5	109.0	
255.5	CARBONDALE	BRIAR HILL	COAL	1.5	113.5	
254.0	CARBONDALE		SANDY SHALE	3.0	115.0	
251.0	CARBONDALE		SANDY SHALE	17.0	118.0	
234.0	CARBONDALE		SANDY SHALE	5.9	135.0	
228.1	CARBONDALE		SHALE	2.7	140.9	
225.4	CARBONDALE		SHALE	1.8	143.6	DK
223.6	CARBONDALE		CALCAREOUS SHALE	1.4	145.4	
222.2	CARBONDALE		SHALE	1.8	146.8	DK
220.4	CARBONDALE		SHALE	0.6	148.6	DK
219.8	CARBONDALE		SANDY SHALE	5.8	149.2	
214.0	CARBONDALE	DYKERSBURG	SANDY SHALE	6.4	155.0	
207.6	CARBONDALE	DYKERSBURG	SHALE	0.8	161.4	
206.8	CARBONDALE	DYKERSBURG	SHALE	0.2	162.2	VERT FRACT
206.6	CARBONDALE	DYKERSBURG	SHALE	0.3	162.4	FRACT; BK
206.3	CARBONDALE	SPRINGFIELD	COAL	4.5	162.7	
201.9	CARBONDALE		UNDERCLAY	1.3	167.1	
200.6	CARBONDALE		UNDERCLAY	0.1	168.4	FRACT
200.5	CARBONDALE		UNDERCLAY	0.4	168.5	
200.1	CARBONDALE		UNDERCLAY	0.2	168.9	BROKEN-UP

199.9	CARBONDALE	SANDY LIMESTONE	1.4	169.1	
198.5	CARBONDALE	SANDSTONE	0.2	170.5	FRACT
198.3	CARBONDALE	SANDSTONE	0.3	170.7	

MAPID: 16526023000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456691 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.753644 **DATE COLLECTED:** 4 / 1 / 1994

SURFACE ELEVATION (FT.): 368.8 **LOGGED (FT.):** 169.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-68-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.8	PLEISTOCENE		SOIL	7.0	0.0	
361.8	PLEISTOCENE		SANDY CLAY	18.0	7.0	BR
343.8			SANDSTONE	7.0	25.0	BR
336.8			SANDSTONE	1.5	32.0	GRAY
335.3			SHALE	0.5	33.5	
334.8			SANDY SHALE	6.0	34.0	
328.8			SANDSTONE	3.2	40.0	
325.6			SHALE	2.3	43.2	
323.3			SHALE	0.1	45.5	FRACT; DK
323.2			CALCAREOUS SHALE	1.4	45.6	
321.8	CARBONDALE	BRERETON	LIMESTONE	4.8	47.0	
317.0	CARBONDALE	ANNA	BLACK SHALE	0.6	51.8	
316.4	CARBONDALE	ANNA	SHALE	0.1	52.4	FRACT; BK
316.4	CARBONDALE	ANNA	BLACK SHALE	0.5	52.4	
315.9	CARBONDALE	ANNA	SHALE	0.3	52.9	FRACT; BK
315.6	CARBONDALE	ANNA	BLACK SHALE	0.3	53.2	
315.3	CARBONDALE	ANNA	BLACK SHALE	0.4	53.5	
314.9	CARBONDALE	HERRIN	COAL	1.1	53.9	
313.9	CARBONDALE	HERRIN	PYRITE	0.4	54.9	
313.5	CARBONDALE	HERRIN	COAL	1.5	55.3	
312.0	CARBONDALE	HERRIN	SHALE	0.1	56.8	BAND
311.9	CARBONDALE	HERRIN	COAL	0.2	56.9	
311.7	CARBONDALE	HERRIN	SHALE	0.1	57.1	BAND
311.6	CARBONDALE	HERRIN	COAL	1.0	57.2	
310.6	CARBONDALE		UNDERCLAY	1.2	58.2	
309.4	CARBONDALE		UNDERCLAY	0.3	59.4	FRACT
309.1	CARBONDALE		UNDERCLAY	0.5	59.7	
308.6	CARBONDALE		UNDERCLAY	0.5	60.2	FRACT
308.1	CARBONDALE		UNDERCLAY	0.7	60.7	
307.4	CARBONDALE		LIMESTONE	0.8	61.4	FRACT
306.6	CARBONDALE		SANDSTONE	2.9	62.2	
303.8	CARBONDALE		SANDY SHALE	0.1	65.0	
303.7	CARBONDALE		SANDY SHALE	0.5	65.1	
303.2	CARBONDALE		SANDSTONE	0.6	65.6	FRACT
302.6	CARBONDALE		CALCAREOUS SHALE	2.0	66.2	
300.6	CARBONDALE		SANDSTONE/LIMESTONE	0.8	68.2	FRACTURED
299.8	CARBONDALE		CALCAREOUS SHALE	0.2	69.0	FRACTURED AND BROKEN UP
299.6	CARBONDALE		SANDY SHALE	3.3	69.2	
296.3	CARBONDALE		SANDY SHALE	16.5	72.5	

279.8	CARBONDALE		SANDY SHALE	20.0	89.0	
259.8	CARBONDALE		SANDY SHALE	1.4	109.0	
258.4	CARBONDALE	BRIAR HILL	COAL	1.7	110.4	
256.7	CARBONDALE		UNDERCLAY	1.2	112.1	
255.5	CARBONDALE		SANDSTONE	1.3	113.3	
254.2	CARBONDALE		SANDY SHALE	0.8	114.6	
253.4	CARBONDALE		SANDY SHALE	7.3	115.4	
246.1	CARBONDALE		SANDSTONE	0.7	122.7	
245.4	CARBONDALE		SANDY SHALE	0.3	123.4	
245.1	CARBONDALE		SANDSTONE	1.5	123.7	
243.6	CARBONDALE		SANDY SHALE	3.8	125.2	
239.8	CARBONDALE		SANDY SHALE	11.3	129.0	
228.5	CARBONDALE		SANDY SHALE	0.9	140.3	
227.6	CARBONDALE		SHALE	0.8	141.2	DK
226.8	CARBONDALE		SHALE	0.1	142.0	DK
226.7	CARBONDALE		SHALE	0.6	142.1	DK
226.1	CARBONDALE		LIMESTONE	1.0	142.7	
225.1	CARBONDALE		LIMESTONE	0.0	143.7	BROKEN
225.1	CARBONDALE		LIMESTONE	0.4	143.7	
224.7	CARBONDALE		SHALY LIMESTONE	2.1	144.1	BLACK
222.6	CARBONDALE	DYKERSBURG	SHALE	2.8	146.2	
219.8	CARBONDALE	DYKERSBURG	SHALE	11.0	149.0	
208.8	CARBONDALE	DYKERSBURG	SHALE	0.3	160.0	
208.5	CARBONDALE	DYKERSBURG	BLACK SHALE	0.2	160.3	
208.3	CARBONDALE	SPRINGFIELD	COAL	3.8	160.5	
204.6	CARBONDALE	SPRINGFIELD	PYRITE	0.1	164.2	BAND
204.5	CARBONDALE	SPRINGFIELD	COAL	0.8	164.3	
203.7	CARBONDALE		UNDERCLAY	2.0	165.1	BROKEN-UP
201.7	CARBONDALE		SANDSTONE/LIMESTONE	2.0	167.1	

MAPID: 16526024000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456889 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.756746 **DATE COLLECTED:** 4 / 18 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 179.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-69-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	7.0	0.0	
361.9	PLEISTOCENE		SANDY CLAY	4.0	7.0	BR
357.9	PLEISTOCENE		SAND	4.0	11.0	BR
353.9	PLEISTOCENE		CLAY	3.0	15.0	GRAY
350.9	PLEISTOCENE		SAND	9.0	18.0	BR
341.9			SANDSTONE	1.0	27.0	GRAY
340.9			SANDSTONE	2.0	28.0	
338.9			SHALE	0.5	30.0	
338.4			SANDY SHALE	0.9	30.5	
337.5			SANDY SHALE	0.3	31.4	
337.2			SANDY SHALE	6.9	31.7	
330.3			SANDSTONE	1.7	38.6	
328.6			SANDY SHALE	7.2	40.3	
321.4			SANDY SHALE	1.7	47.5	
319.7			CALCAREOUS SHALE	0.7	49.2	
319.1			BLACK SHALE	0.6	49.8	
318.5			CALCAREOUS SHALE	0.8	50.4	
317.7	CARBONDALE	BRERETON	LIMESTONE	2.4	51.2	
315.3	CARBONDALE		SANDY SHALE	2.4	53.6	LOOSING FLUID VERT FRAC
312.9	CARBONDALE		LIMESTONE	0.2	56.0	
312.7	CARBONDALE	ANNA	BLACK SHALE	1.8	56.2	
310.9	CARBONDALE	HERRIN	COAL	0.6	58.0	
310.3	CARBONDALE	HERRIN	PYRITE	0.1	58.6	BAND
310.2	CARBONDALE	HERRIN	COAL	2.1	58.7	
308.1	CARBONDALE	HERRIN	PYRITE	0.0	60.8	BAND
308.1	CARBONDALE	HERRIN	COAL	0.2	60.8	
307.9	CARBONDALE	HERRIN	PYRITE	0.1	61.0	BAND
307.8	CARBONDALE	HERRIN	COAL	0.1	61.1	
307.7	CARBONDALE	HERRIN	PYRITE	0.0	61.2	BAND
307.7	CARBONDALE	HERRIN	COAL	1.1	61.2	
306.6	CARBONDALE		UNDERCLAY	1.7	62.3	
304.9	CARBONDALE		UNDERCLAY & LIMESTONE	2.2	64.0	
302.7	CARBONDALE		CALCAREOUS SHALE	1.3	66.2	
301.4	CARBONDALE		SANDY LIMESTONE	0.7	67.5	
300.7	CARBONDALE		SANDSTONE	5.1	68.2	
295.6	CARBONDALE		SANDSTONE	7.2	73.3	
288.4	CARBONDALE		SANDSTONE/LIMESTONE	0.2	80.5	
288.2	CARBONDALE		SANDY SHALE	1.7	80.7	

286.5	CARBONDALE		CALCAREOUS SHALE	0.1	82.4	
286.4	CARBONDALE		SANDY SHALE	5.0	82.5	
281.4	CARBONDALE		SANDY SHALE	20.0	87.5	
261.4	CARBONDALE		SANDY SHALE	10.5	107.5	
250.9	CARBONDALE	BRIAR HILL	COAL	1.6	118.0	
249.2	CARBONDALE		BLACK SHALE	0.0	119.7	
249.2	CARBONDALE		UNDERCLAY	0.2	119.7	
249.0	CARBONDALE		SANDY SHALE	7.6	119.9	
241.4	CARBONDALE		SANDSTONE	0.5	127.5	
240.9	CARBONDALE		SANDSTONE	0.1	128.0	
240.8	CARBONDALE		SANDSTONE	0.5	128.1	
240.3	CARBONDALE		SANDY SHALE	0.3	128.6	
240.0	CARBONDALE		SANDSTONE	2.1	128.9	
238.0	CARBONDALE		SANDY SHALE	1.8	130.9	
236.2	CARBONDALE		SANDY SHALE	14.9	132.7	
221.4	CARBONDALE		SHALE	1.9	147.5	DK
219.5	CARBONDALE		SHALE	0.2	149.4	BROKEN; DK
219.3	CARBONDALE		SHALE	0.5	149.6	
218.8	CARBONDALE		LIMESTONE	1.6	150.1	
217.2	CARBONDALE		LIMESTONE	0.9	151.7	VERT FRAC
216.3	CARBONDALE		LIMESTONE	0.6	152.6	BROKEN-UP; DK
215.7	CARBONDALE		BLACK SHALE	1.6	153.2	
214.1	CARBONDALE	DYKERSBURG	SHALE	8.2	154.8	
205.9	CARBONDALE	DYKERSBURG	SHALE	4.5	163.0	
201.4	CARBONDALE	DYKERSBURG	SHALE	0.4	167.5	
201.0	CARBONDALE	DYKERSBURG	SHALE	0.1	167.9	
200.9	CARBONDALE	SPRINGFIELD	COAL	3.1	168.0	
197.9	CARBONDALE	SPRINGFIELD	COAL	0.5	171.0	VERT FRAC
197.4	CARBONDALE	SPRINGFIELD	COAL	1.1	171.5	
196.4	CARBONDALE		UNDERCLAY	1.8	172.5	BROKEN-UP
194.6	CARBONDALE		SANDSTONE	4.7	174.3	

MAPID: 16526025000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456899 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.757045 **DATE COLLECTED:** 4 / 18 / 1994

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 181.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-70-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		SOIL	10.0	0.0	
360.0	PLEISTOCENE		CLAY	2.0	10.0	BR
358.0	PLEISTOCENE		CLAY	2.0	12.0	GRAY
356.0	CARBONDALE		SANDSTONE	7.0	14.0	BR
349.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	21.0	
348.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.3	22.0	GRAY
346.7	CARBONDALE	BANKSTON FORK	LIMESTONE	0.3	23.3	FRACT
346.4	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	23.6	GRAY
344.9	CARBONDALE	BANKSTON FORK	LIMESTONE	0.1	25.1	BROKEN; BR
344.8	CARBONDALE	BANKSTON FORK	LIMESTONE	0.7	25.2	GRAY
344.1	CARBONDALE	BANKSTON FORK	LIMESTONE	0.0	25.9	WASH
344.1	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	25.9	GRAY
343.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.2	27.0	FRACT
342.8	CARBONDALE	BANKSTON FORK	LIMESTONE	0.2	27.2	GRAY
342.6	CARBONDALE	BANKSTON FORK	LIMESTONE	0.7	27.4	BR
341.9	CARBONDALE	BANKSTON FORK	LIMESTONE	0.7	28.1	GRAY
341.2	CARBONDALE	BANKSTON FORK	LIMESTONE	0.3	28.8	GRAY
341.0	CARBONDALE		SANDSTONE	0.2	29.0	
340.8	CARBONDALE		SANDY SHALE	1.3	29.2	
339.5	CARBONDALE		SANDY SHALE	3.9	30.5	
335.7	CARBONDALE		SANDSTONE	0.8	34.3	
334.8	CARBONDALE		BLACK SHALE	0.0	35.2	
334.8	CARBONDALE		SANDSTONE	1.4	35.2	
333.4	CARBONDALE		SANDY SHALE	6.5	36.6	
327.0	CARBONDALE		SANDY SHALE	6.9	43.0	
320.1	CARBONDALE		LIMESTONE	0.5	49.9	
319.6	CARBONDALE		CALCAREOUS SHALE	0.5	50.4	
319.1	CARBONDALE	BRERETON	LIMESTONE	0.8	50.9	DK
318.3	CARBONDALE	BRERETON	LIMESTONE	1.8	51.7	VERT FRAC
316.5	CARBONDALE	BRERETON	LIMESTONE	3.7	53.5	
312.8	CARBONDALE	ANNA	BLACK SHALE	1.5	57.2	
311.4	CARBONDALE	HERRIN	COAL	0.6	58.6	
310.8	CARBONDALE	HERRIN	PYRITE	0.0	59.2	BAND
310.8	CARBONDALE	HERRIN	COAL	0.9	59.2	VERT FRAC
309.9	CARBONDALE	HERRIN	COAL	1.4	60.1	
308.5	CARBONDALE	HERRIN	PYRITE	0.0	61.5	BAND
308.5	CARBONDALE	HERRIN	COAL	1.0	61.5	
307.5	CARBONDALE	HERRIN	COAL	0.8	62.5	
306.7	CARBONDALE		UNDERCLAY	1.7	63.3	

305.0	CARBONDALE		UNDERCLAY	1.0	65.0	BROKEN
304.0	CARBONDALE		UNDERCLAY	0.4	66.0	
303.6	CARBONDALE		UNDERCLAY	1.1	66.4	VERT FRAC
302.5	CARBONDALE		SANDSTONE	1.2	67.5	
301.3	CARBONDALE		SANDSTONE	7.7	68.7	
293.6	CARBONDALE		SHALY SANDSTONE	5.6	76.4	
288.0	CARBONDALE		SANDSTONE	0.4	82.0	FRACT
287.6	CARBONDALE		SANDSTONE	0.1	82.4	
287.5	CARBONDALE		SANDY SHALE	20.0	82.5	
267.5	CARBONDALE		SANDY SHALE	17.4	102.5	
250.1	CARBONDALE	BRIAR HILL	PYRITE	0.1	119.9	BAND
250.0	CARBONDALE	BRIAR HILL	COAL	1.9	120.0	
248.2	CARBONDALE		SANDSTONE	0.7	121.8	
247.5	CARBONDALE		SANDY SHALE	8.9	122.5	
238.6	CARBONDALE		SANDSTONE	2.1	131.4	
236.5	CARBONDALE		SANDY SHALE	9.0	133.5	
227.5	CARBONDALE		SANDY SHALE	3.3	142.5	
224.2	CARBONDALE		SHALE	0.2	145.8	DK
224.0	CARBONDALE		SANDY SHALE	4.6	146.0	
219.4	CARBONDALE		SANDY SHALE	0.5	150.6	
218.9	CARBONDALE		SANDY SHALE	0.8	151.1	
218.1	CARBONDALE		SHALE	0.9	151.9	VERT FRAC; BK
217.2	CARBONDALE		SHALE	0.6	152.8	
216.7	CARBONDALE		LIMESTONE	1.0	153.3	GRAY
215.7	CARBONDALE		CALCAREOUS SHALE	2.2	154.3	
213.5	CARBONDALE	DYKERSBURG	SHALE	6.1	156.5	
207.5	CARBONDALE	DYKERSBURG	SHALE	4.4	162.5	
203.1	CARBONDALE	DYKERSBURG	SHALE	3.1	166.9	
200.0	CARBONDALE	DYKERSBURG	SHALE	0.1	170.0	BROKEN
199.9	CARBONDALE	DYKERSBURG	SHALE	0.3	170.1	
199.7	CARBONDALE	SPRINGFIELD	COAL	1.9	170.3	
197.8	CARBONDALE	SPRINGFIELD	COAL	0.7	172.2	
197.1	CARBONDALE	SPRINGFIELD	COAL	0.5	172.9	
196.6	CARBONDALE	SPRINGFIELD	PYRITE	0.2	173.4	BAND
196.5	CARBONDALE	SPRINGFIELD	COAL	0.4	173.5	
196.1	CARBONDALE	SPRINGFIELD	COAL	0.4	173.9	VERT FRAC
195.7	CARBONDALE	SPRINGFIELD	COAL	0.7	174.3	
195.0	CARBONDALE		UNDERCLAY	0.6	175.0	
194.4	CARBONDALE		UNDERCLAY	0.2	175.6	BROKEN
194.2	CARBONDALE		SANDSTONE/LIMESTONE	0.5	175.8	
193.7	CARBONDALE		SANDSTONE/LIMESTONE	4.7	176.3	

MAPID: 16526026000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456884 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.756628 **DATE COLLECTED:** 4 / 19 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 175.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-71-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	7.0	0.0	
361.9	PLEISTOCENE		CLAY	3.0	7.0	GRAY
358.9	PLEISTOCENE		CLAY	10.0	10.0	BR
348.9	PLEISTOCENE		CLAY	2.0	20.0	GRAY
346.9			SANDSTONE	4.0	22.0	BR
342.9			SANDSTONE	10.0	26.0	GRAY
332.9			SHALE	2.0	36.0	
330.9			SANDY SHALE	4.0	38.0	
326.9			SANDSTONE	5.0	42.0	GRAY
321.9			SHALE	2.0	47.0	DK
319.9	CARBONDALE	BRERETON	LIMESTONE	6.0	49.0	
313.9	CARBONDALE	ANNA	CALCAREOUS SHALE	2.0	55.0	
311.9	CARBONDALE	HERRIN	COAL	5.0	57.0	
306.9	CARBONDALE		UNDERCLAY	2.0	62.0	
304.9	CARBONDALE		SANDY SHALE	4.0	64.0	
300.9	CARBONDALE		SANDSTONE	2.0	68.0	
298.9	CARBONDALE		SHALY SANDSTONE	7.0	70.0	
291.9	CARBONDALE		SANDY SHALE	5.0	77.0	
286.9	CARBONDALE		SANDSTONE	3.0	82.0	
283.9	CARBONDALE		SHALY SANDSTONE	33.0	85.0	
250.9	CARBONDALE		BLACK SHALE	0.5	118.0	
250.4	CARBONDALE	BRIAR HILL	COAL	0.5	118.5	
249.9	CARBONDALE		SHALE	2.0	119.0	
247.9	CARBONDALE		SANDSTONE	3.0	121.0	
244.9	CARBONDALE		SANDY SHALE	22.0	124.0	
222.9	CARBONDALE		SHALE	2.0	146.0	DK
220.9	CARBONDALE		SANDY SHALE	3.0	148.0	
217.9	CARBONDALE		BLACK SHALE	2.0	151.0	
215.9	CARBONDALE	DYKERSBURG	SHALE	13.5	153.0	
202.4	CARBONDALE	SPRINGFIELD	COAL	4.0	166.5	
198.4	CARBONDALE		UNDERCLAY	1.5	170.5	
196.9	CARBONDALE		SANDY LIMESTONE	3.0	172.0	

MAPID: 16526027000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456898 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.75636 **DATE COLLECTED:** 4 / 19 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 169.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-72-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	4.0	0.0	
364.9	PLEISTOCENE		CLAY	5.0	4.0	GRAY
359.9	PLEISTOCENE		CLAY	6.0	9.0	BR
353.9	PLEISTOCENE		CLAY	13.0	15.0	GRAY
340.9	PLEISTOCENE		CLAY	7.0	28.0	BR
333.9	PLEISTOCENE		SANDY CLAY	4.0	35.0	BR
329.9	CARBONDALE		SHALE	2.0	39.0	
327.9	CARBONDALE		SANDSTONE	2.0	41.0	BR
325.9	CARBONDALE		SHALE	3.0	43.0	
322.9	CARBONDALE	BRERETON	LIMESTONE	5.0	46.0	
317.9	CARBONDALE	ANNA	BLACK SHALE	1.5	51.0	
316.4	CARBONDALE	HERRIN	COAL	4.0	52.5	
312.4	CARBONDALE		UNDERCLAY	2.0	56.5	
310.4	CARBONDALE		SANDY SHALE	6.5	58.5	
303.9	CARBONDALE		SANDY SHALE	7.0	65.0	
296.9	CARBONDALE		SANDY SHALE	13.0	72.0	
283.9	CARBONDALE		SANDSTONE	8.0	85.0	
275.9	CARBONDALE		SANDY SHALE	14.0	93.0	
261.9	CARBONDALE		SHALE	7.5	107.0	
254.4	CARBONDALE	BRIAR HILL	COAL	1.5	114.5	
252.9	CARBONDALE		SANDY SHALE	2.0	116.0	
250.9	CARBONDALE		SANDSTONE	6.0	118.0	
244.9	CARBONDALE		SANDY SHALE	2.0	124.0	
242.9	CARBONDALE		SANDSTONE	8.0	126.0	
234.9	CARBONDALE		SANDY SHALE	7.0	134.0	
227.9	CARBONDALE		SHALE	2.0	141.0	DK
225.9	CARBONDALE		SHALE	5.0	143.0	
220.9	CARBONDALE		SHALE	1.0	148.0	
219.9	CARBONDALE		BLACK SHALE	2.0	149.0	
217.9	CARBONDALE		SHALE	2.0	151.0	
215.9	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	153.0	
205.9	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	163.0	
205.4	CARBONDALE	SPRINGFIELD	COAL	4.5	163.5	
200.9	CARBONDALE		UNDERCLAY	1.0	168.0	

MAPID: 16526028000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456886 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.756509 **DATE COLLECTED:** 4 / 19 / 1994

SURFACE ELEVATION (FT.): 368.8 **LOGGED (FT.):** 170.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-73-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.8	PLEISTOCENE		SOIL	4.0	0.0	
364.8	PLEISTOCENE		CLAY	6.0	4.0	GRAY
358.8	PLEISTOCENE		CLAY	14.0	10.0	BR
344.8	PLEISTOCENE		SAND	5.0	24.0	BR
339.8	PLEISTOCENE		CLAY	3.0	29.0	GY'
336.8	CARBONDALE		SHALY SANDSTONE	4.0	32.0	GRAY
332.8	CARBONDALE		SANDSTONE	11.0	36.0	
321.8	CARBONDALE		SHALE	2.0	47.0	DK
319.8	CARBONDALE	BRERETON	LIMESTONE	4.5	49.0	
315.3	CARBONDALE	ANNA	BLACK SHALE	2.0	53.5	
313.3	CARBONDALE	HERRIN	COAL	4.0	55.5	
309.3	CARBONDALE		UNDERCLAY	2.0	59.5	
307.3	CARBONDALE		SANDY SHALE	3.5	61.5	
303.8	CARBONDALE		SANDSTONE	5.0	65.0	
298.8	CARBONDALE		SANDY SHALE	24.0	70.0	
274.8	CARBONDALE		SANDY SHALE	21.5	94.0	
253.3	CARBONDALE	BRIAR HILL	COAL	1.5	115.5	
251.8	CARBONDALE		SANDY SHALE	2.0	117.0	
249.8	CARBONDALE		SANDSTONE	5.0	119.0	
244.8	CARBONDALE		SANDY SHALE	5.0	124.0	
239.8	CARBONDALE		SANDSTONE	3.0	129.0	
236.8	CARBONDALE		SANDY SHALE	12.0	132.0	
224.8	CARBONDALE		SHALE	4.0	144.0	
220.8	CARBONDALE		SANDY SHALE	2.0	148.0	
218.8	CARBONDALE		BLACK SHALE	1.5	150.0	
217.3	CARBONDALE	DYKERSBURG	SHALE	13.5	151.5	
203.8	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	165.0	
203.3	CARBONDALE	SPRINGFIELD	COAL	4.0	165.5	
199.3	CARBONDALE		UNDERCLAY	0.5	169.5	

MAPID: 16526029000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456941 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.749089 **DATE COLLECTED:** 4 / 20 / 1994

SURFACE ELEVATION (FT.): 366.5 **LOGGED (FT.):** 312.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-74-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.5	PLEISTOCENE		SOIL	10.0	0.0	
356.5	PLEISTOCENE		CLAY	5.0	10.0	GY/BR
351.5	PLEISTOCENE		CLAY	26.0	15.0	BR
325.5	PLEISTOCENE		CLAY	4.0	41.0	GRAY
321.5	PLEISTOCENE		CLAY	19.0	45.0	BR
302.5	PLEISTOCENE		SANDY CLAY	4.0	64.0	GRAY
298.5	MODESTO		SANDY SHALE	2.0	68.0	
296.5	MODESTO		SANDSTONE	5.0	70.0	
291.5	MODESTO		SANDY SHALE	0.2	75.0	
291.3	MODESTO		SANDY SHALE	0.1	75.2	
291.2	MODESTO		SANDY SHALE	0.8	75.3	
290.5	MODESTO		SANDY SHALE	0.0	76.0	
290.5	MODESTO		SANDY SHALE	0.4	76.0	
290.1	MODESTO		SANDY SHALE	5.1	76.4	
285.0	MODESTO		SIDERITE	10.3	81.5	BANDS
274.7	MODESTO		BLACK SHALE	0.7	91.8	
274.0	MODESTO		SHALE	0.4	92.5	VERT FRAC; BK
273.6	MODESTO		COAL	0.1	92.9	STRKS
273.5	MODESTO		UNDERCLAY	2.0	93.0	FRACT
271.5	MODESTO		LIMESTONE	0.1	95.0	
271.4	MODESTO		LIMESTONE	0.1	95.1	BROKEN
271.3	MODESTO		LIMESTONE	1.0	95.2	
270.3	MODESTO		LIMESTONE	0.1	96.2	BROKEN
270.2	MODESTO		LIMESTONE	0.4	96.3	
269.9	MODESTO		LIMESTONE	0.0	96.6	BROKEN
269.8	MODESTO		LIMESTONE	1.1	96.7	BROKEN
268.7	MODESTO		SANDSTONE/LIMESTONE	3.7	97.8	
265.1	MODESTO		BLACK SHALE	1.6	101.4	
263.5	MODESTO		SHALE	0.5	103.0	BROKEN; BK
263.0	MODESTO		BLACK SHALE	1.2	103.5	
261.8	MODESTO		SHALE	0.6	104.7	VERT FRAC; BK
261.2	MODESTO		SHALE	7.3	105.3	
253.9	MODESTO		SIDERITE	0.1	112.6	BAND
253.8	MODESTO		SHALE	1.1	112.7	
252.7	MODESTO		SIDERITE	0.1	113.8	BAND
252.5	MODESTO		SANDY SHALE	1.0	114.0	
251.5	MODESTO		SANDY SHALE	0.4	115.0	
251.1	MODESTO		SANDY SHALE	0.1	115.4	
251.1	MODESTO		BLACK SHALE	0.8	115.4	

250.3	MODESTO		BLACK SHALE	0.0	116.2	
250.3	CARBONDALE	DANVILLE	COAL	0.3	116.2	
250.0	CARBONDALE	DANVILLE	PYRITE	0.0	116.5	BAND
249.9	CARBONDALE	DANVILLE	COAL	1.5	116.6	
248.5	CARBONDALE		SANDY SHALE	6.0	118.0	
242.5	CARBONDALE		SANDY SHALE	2.0	124.0	
240.5	CARBONDALE		SANDSTONE	3.7	126.0	
236.8	CARBONDALE		SANDY SHALE	3.9	129.7	
232.9	CARBONDALE		BLACK SHALE	0.4	133.6	
232.5	CARBONDALE		UNDERCLAY	0.5	134.0	
232.0	CARBONDALE		UNDERCLAY	0.5	134.5	BROKEN
231.5	CARBONDALE		UNDERCLAY	0.4	135.0	BROKEN
231.1	CARBONDALE		UNDERCLAY	0.6	135.4	
230.5	CARBONDALE		SANDSTONE	3.1	136.0	
227.5	CARBONDALE		SHALY SANDSTONE	1.7	139.0	
225.8	CARBONDALE		SANDSTONE	0.1	140.7	
225.7	CARBONDALE		CALCAREOUS SANDSTONE	0.0	140.8	BAND
225.7	CARBONDALE		BLACK SHALE	0.5	140.8	
225.2	CARBONDALE	ALLENBY	COAL	0.7	141.3	
224.5	CARBONDALE		UNDERCLAY	2.2	142.0	BROKEN
222.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	144.2	WT
215.1	CARBONDALE		SANDY SHALE	0.2	151.4	
215.0	CARBONDALE		SANDY SHALE	3.5	151.5	
211.5	CARBONDALE		SANDY SHALE	0.2	155.0	
211.3	CARBONDALE		SANDSTONE	0.2	155.2	WASHED
211.1	CARBONDALE		SANDSTONE	0.7	155.4	
210.4	CARBONDALE		SANDY SHALE	0.5	156.1	
209.9	CARBONDALE		SANDSTONE	1.4	156.6	
208.6	CARBONDALE		SANDSTONE	0.0	157.9	
208.6	CARBONDALE		SANDSTONE	3.2	157.9	
205.4	CARBONDALE		SANDY SHALE	5.7	161.1	
199.7	CARBONDALE		SANDY SHALE	8.2	166.8	
191.5	CARBONDALE		SANDY SHALE	1.1	175.0	
190.4	CARBONDALE		SANDY SHALE	0.0	176.1	
190.4	CARBONDALE		SANDY SHALE	0.4	176.1	
189.9	CARBONDALE		SANDY SHALE	0.0	176.6	
189.9	CARBONDALE		SANDY SHALE	0.2	176.6	
189.8	CARBONDALE		SANDY SHALE	2.2	176.7	
187.6	CARBONDALE		BLACK SHALE	0.8	178.9	
186.8	CARBONDALE		CALCAREOUS SHALE	1.2	179.7	
185.6	CARBONDALE	BRERETON	LIMESTONE	5.3	180.9	
180.3	CARBONDALE	ANNA	SHALE/COAL	2.2	186.2	
178.1	CARBONDALE	HERRIN	COAL	0.5	188.4	
177.7	CARBONDALE	HERRIN	PYRITE	0.1	188.8	BAND
177.6	CARBONDALE	HERRIN	COAL	2.5	188.9	
175.1	CARBONDALE	HERRIN	BLACK SHALE	0.1	191.4	
175.0	CARBONDALE	HERRIN	COAL	0.1	191.5	

174.9	CARBONDALE	HERRIN	BLACK SHALE	0.1	191.6	
174.8	CARBONDALE	HERRIN	COAL	0.5	191.7	VERT FRAC
174.3	CARBONDALE	HERRIN	COAL	0.3	192.2	
174.0	CARBONDALE	HERRIN	PYRITE	0.0	192.5	BAND
174.0	CARBONDALE	HERRIN	COAL	0.2	192.5	
173.8	CARBONDALE	HERRIN	PYRITE	0.1	192.7	BAND
173.7	CARBONDALE	HERRIN	COAL	0.1	192.8	
173.7	CARBONDALE		UNDERCLAY	2.2	192.8	BROKEN
171.5	CARBONDALE		SANDY SHALE	1.8	195.0	
169.7	CARBONDALE		SOFT SHALE	1.0	196.8	
168.7	CARBONDALE		SANDSTONE	3.8	197.8	
164.9	CARBONDALE		SANDY SHALE	0.8	201.6	
164.1	CARBONDALE		SANDY SHALE	0.5	202.4	
163.6	CARBONDALE		SANDSTONE	0.8	202.9	
162.8	CARBONDALE		SANDSTONE	0.7	203.7	BROKEN
162.1	CARBONDALE		SANDSTONE	0.7	204.4	
161.4	CARBONDALE		SANDY SHALE	3.8	205.1	
157.7	CARBONDALE		SANDSTONE	2.4	208.8	
155.3	CARBONDALE		SANDSTONE	0.2	211.2	BROKEN
155.1	CARBONDALE		SANDSTONE	0.3	211.4	
154.8	CARBONDALE		SANDSTONE	1.1	211.7	BROKEN
153.7	CARBONDALE		SANDSTONE	1.4	212.8	BROKEN
152.3	CARBONDALE		SANDSTONE	0.8	214.2	
151.5	CARBONDALE		SANDSTONE	0.2	215.0	BROKEN
151.3	CARBONDALE		SANDSTONE	0.2	215.2	
151.1	CARBONDALE		SANDSTONE	0.0	215.4	WASHED
151.1	CARBONDALE		SANDSTONE	0.3	215.4	
150.8	CARBONDALE		SANDSTONE	0.0	215.7	WASHED
150.8	CARBONDALE		SANDSTONE	0.5	215.7	
150.3	CARBONDALE		SANDSTONE	0.0	216.2	WASHED
150.2	CARBONDALE		SANDSTONE	0.1	216.3	
150.1	CARBONDALE		SANDSTONE	0.1	216.4	WASHED
150.0	CARBONDALE		SANDSTONE	6.9	216.5	
143.1	CARBONDALE		SANDY SHALE	10.6	223.4	
132.5	CARBONDALE		SANDY SHALE	0.4	234.0	
132.1	CARBONDALE		SANDSTONE	0.2	234.4	
131.9	CARBONDALE		SANDY SHALE	10.4	234.6	
121.5	CARBONDALE		SANDY SHALE	1.2	245.0	VERTICAL FRACTURE
120.3	CARBONDALE		SHALE/COAL	3.1	246.2	
117.2	CARBONDALE	BRIAR HILL	PYRITE	0.1	249.3	
117.1	CARBONDALE	BRIAR HILL	COAL	0.1	249.4	
117.0	CARBONDALE	BRIAR HILL	PYRITE	0.0	249.5	
116.9	CARBONDALE	BRIAR HILL	COAL	1.5	249.6	
115.5	CARBONDALE		SANDY SHALE	2.4	251.0	
113.1	CARBONDALE		SANDSTONE	0.6	253.4	
112.5	CARBONDALE		SANDSTONE	0.5	254.0	
112.0	CARBONDALE		SANDSTONE	0.0	254.5	WASHED
112.0	CARBONDALE		SANDSTONE	0.2	254.5	

111.8	CARBONDALE		SANDSTONE	0.0	254.7	WASHED
111.8	CARBONDALE		SANDSTONE	0.5	254.7	
111.3	CARBONDALE		SANDSTONE	1.0	255.2	WASHED
110.3	CARBONDALE		SHALY SANDSTONE	2.8	256.2	
107.5	CARBONDALE		SANDY SHALE	15.0	259.0	
92.5	CARBONDALE		SANDY SHALE	4.5	274.0	
88.0	CARBONDALE		BLACK SHALE	0.1	278.5	
87.9	CARBONDALE		SANDY SHALE	0.4	278.6	
87.5	CARBONDALE		SANDY SHALE	1.2	279.0	
86.3	CARBONDALE		SANDY SHALE	0.8	280.2	
85.5	CARBONDALE		SANDY SHALE	1.7	281.0	
83.8	CARBONDALE		SANDY SHALE	0.1	282.7	
83.7	CARBONDALE		SANDY SHALE	0.4	282.8	
83.3	CARBONDALE		LIMESTONE	1.1	283.2	
82.2	CARBONDALE		CALCAREOUS SHALE	0.3	284.3	
81.9	CARBONDALE		CALCAREOUS SHALE	0.9	284.6	
81.0	CARBONDALE		LIMESTONE	0.7	285.5	
80.3	CARBONDALE		CALCAREOUS SHALE	0.4	286.2	
79.9	CARBONDALE		SANDY SHALE	7.4	286.6	
72.5	CARBONDALE	DYKERSBURG	SANDY SHALE	5.2	294.0	
67.3	CARBONDALE	DYKERSBURG	SHALE	0.3	299.2	BROKEN; DK
67.1	CARBONDALE	SPRINGFIELD	COAL	4.4	299.4	
62.7	CARBONDALE		UNDERCLAY	1.5	303.8	
61.2	CARBONDALE		UNDERCLAY	1.8	305.3	BROKEN
59.4	CARBONDALE		CALCAREOUS SHALE	0.1	307.1	
59.3	CARBONDALE		SANDSTONE	4.8	307.2	

MAPID: 16526030000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456884 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.757848 **DATE COLLECTED:** 4 / 25 / 1994

SURFACE ELEVATION (FT.): 368.8 **LOGGED (FT.):** 197.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-75-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.8	PLEISTOCENE		SOIL	4.0	0.0	
364.8	PLEISTOCENE		CLAY	2.0	4.0	BR
362.8	PLEISTOCENE		CLAY	8.0	6.0	GRAY
354.8	PLEISTOCENE		CLAY	11.0	14.0	GRAY
343.8	PLEISTOCENE		SANDY CLAY	9.0	25.0	RED
334.8	CARBONDALE		SHALY SANDSTONE	2.0	34.0	GRAY
332.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	36.0	
329.8	CARBONDALE		SHALY SANDSTONE	14.0	39.0	GRAY
315.8	CARBONDALE		SHALE	12.0	53.0	
303.8	CARBONDALE		BLACK SHALE	2.0	65.0	
301.8	CARBONDALE	BRERETON	LIMESTONE	5.0	67.0	BLACK
296.8	CARBONDALE	ANNA	BLACK SHALE	2.0	72.0	
294.8	CARBONDALE	HERRIN	COAL	4.0	74.0	
290.8	CARBONDALE		SOFT SHALE	2.0	78.0	
288.8	CARBONDALE		SHALY SANDSTONE	4.0	80.0	GRAY
284.8	CARBONDALE		SANDSTONE	2.0	84.0	
282.8	CARBONDALE		SHALY SANDSTONE	24.0	86.0	GRAY
258.8	CARBONDALE		SANDY SHALE	25.0	110.0	
233.8	CARBONDALE	BRIAR HILL	COAL	1.5	135.0	
232.3	CARBONDALE		SOFT SHALE	1.5	136.5	
230.8	CARBONDALE		SANDY SHALE	4.0	138.0	
226.8	CARBONDALE		SANDSTONE	16.0	142.0	
210.8	CARBONDALE		SANDY SHALE	6.0	158.0	
204.8	CARBONDALE		SHALE	3.0	164.0	
201.8	CARBONDALE		BLACK SHALE	4.0	167.0	
197.8	CARBONDALE	DYKERSBURG	SANDY SHALE	15.9	171.0	
181.9	CARBONDALE	SPRINGFIELD	COAL	4.7	186.9	
177.2	CARBONDALE		SHALE	0.8	191.6	
176.4	CARBONDALE		SANDSTONE	4.6	192.4	

MAPID: 16526032000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456864 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.760664 **DATE COLLECTED:** 4 / 27 / 1994

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 225.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-78-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		SOIL	4.0	0.0	
364.9	PLEISTOCENE		CLAY	11.0	4.0	YL
353.9	PLEISTOCENE		CLAY	6.0	15.0	GRAY
347.9	PLEISTOCENE		SANDY CLAY	5.0	21.0	GRAY
342.9	PLEISTOCENE		CLAY	19.0	26.0	BR
323.9	CARBONDALE		SANDY SHALE	2.5	45.0	
321.4	CARBONDALE	ALLENBY	COAL	0.5	47.5	
320.9	CARBONDALE		SANDY SHALE	7.0	48.0	
313.9	CARBONDALE	BANKSTON FORK	SANDY LIMESTONE	7.0	55.0	
306.9	CARBONDALE		SANDY SHALE	8.0	62.0	
298.9	CARBONDALE		SANDY SHALE	11.0	70.0	
287.9	CARBONDALE		SANDSTONE	3.0	81.0	BR
284.9	CARBONDALE		SANDY SHALE	6.0	84.0	
278.9	CARBONDALE	BRERETON	LIMESTONE	3.0	90.0	BLACK
275.9	CARBONDALE	ANNA	BLACK SHALE	2.0	93.0	
273.9	CARBONDALE	HERRIN	COAL	4.5	95.0	
269.4	CARBONDALE		SHALE/UNDERCLAY	3.5	99.5	
265.9	CARBONDALE		SANDY SHALE	14.0	103.0	
251.9	CARBONDALE		SANDSTONE/LIMESTONE	2.0	117.0	
249.9	CARBONDALE		SANDY SHALE	19.0	119.0	
230.9	CARBONDALE		SANDY SHALE	23.0	138.0	
207.9	CARBONDALE	BRIAR HILL	COAL	1.5	161.0	
206.4	CARBONDALE		SHALE/UNDERCLAY	1.5	162.5	
204.9	CARBONDALE		SHALY SANDSTONE	12.0	164.0	GRAY
192.9	CARBONDALE		SANDY SHALE	8.0	176.0	
184.9	CARBONDALE		SHALE	6.0	184.0	
178.9	CARBONDALE		BLACK SHALE	3.0	190.0	
175.9	CARBONDALE		SHALE	4.0	193.0	
171.9	CARBONDALE		BLACK SHALE	3.0	197.0	
168.9	CARBONDALE	DYKERSBURG	SANDY SHALE	16.5	200.0	
152.4	CARBONDALE	SPRINGFIELD	COAL	5.2	216.5	
147.2	CARBONDALE		UNDERCLAY	3.0	221.7	
144.2	CARBONDALE		CALCAREOUS SHALE	0.3	224.7	

MAPID: 16526033000C **VERSION:** 1 **PROJECT:** NCRDS94

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456851 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.76158 **DATE COLLECTED:** 4 / 27 / 1994

SURFACE ELEVATION (FT.): 368.6 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: GOFF & PRUITT DRILLING, INC. AC-79-94 **WELL TYPE:** Coal Test

COMMENT: ARCLAR-BIG RIDGE/MAP; X-SEC IN COAL SECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.6	PLEISTOCENE		SOIL	4.0	0.0	
364.6	PLEISTOCENE		CLAY	6.0	4.0	YL
358.6	PLEISTOCENE		CLAY	2.0	10.0	BR
356.6	PLEISTOCENE		CLAY	16.0	12.0	GRAY
340.6	PLEISTOCENE		SANDY CLAY	23.0	28.0	GRAY
317.6	CARBONDALE		SANDY SHALE	6.0	51.0	
311.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	57.0	
307.6	CARBONDALE		SANDY SHALE	8.0	61.0	
299.6	CARBONDALE		SANDY SHALE	5.0	69.0	
294.6	CARBONDALE		SANDSTONE	5.0	74.0	BR
289.6	CARBONDALE		SHALY SANDSTONE	7.0	79.0	GRAY
282.6	CARBONDALE		SANDY SHALE	7.0	86.0	
275.6	CARBONDALE	BRERETON	LIMESTONE	5.0	93.0	BLACK
270.6	CARBONDALE	ANNA	BLACK SHALE	1.5	98.0	
269.1	CARBONDALE	HERRIN	COAL	5.0	99.5	
264.1	CARBONDALE		SHALE/UNDERCLAY	2.5	104.5	
261.6	CARBONDALE		SANDY SHALE	5.0	107.0	
256.6	CARBONDALE		SANDSTONE	4.0	112.0	BR
252.6	CARBONDALE		SANDY SHALE	21.0	116.0	
231.6	CARBONDALE		SANDY SHALE	28.5	137.0	
203.1	CARBONDALE	BRIAR HILL	COAL	1.5	165.5	
201.6	CARBONDALE		SHALE/UNDERCLAY	2.0	167.0	
199.6	CARBONDALE		SHALY SANDSTONE	12.0	169.0	GRAY
187.6	CARBONDALE		SANDY SHALE	7.0	181.0	
180.6	CARBONDALE		SHALE	15.0	188.0	
165.6	CARBONDALE		LIMESTONE	3.0	203.0	BLACK
162.6	CARBONDALE		BLACK SHALE	2.0	206.0	
160.6	CARBONDALE	DYKERSBURG	SHALE	11.6	208.0	
149.0	CARBONDALE	SPRINGFIELD	COAL	5.4	219.6	
143.6	CARBONDALE		UNDERCLAY	1.1	225.0	
142.6	CARBONDALE		SANDY SHALE	4.0	226.0	

MAPID: 16526219000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.449837 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.755575 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 221.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 106E **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	CLAY
-	PLEISTOCENE		MUD	70.0	17.0	BLUE
-			SANDSTONE	5.0	87.0	WHITE
-			SHALE	31.0	92.0	SOFT
-			LIMESTONE	0.5	123.0	WHITE
-			SHALE	1.0	123.5	
-			LIMESTONE	10.5	124.5	WHITE
-			SHALE	2.0	135.0	SOFT
-			SANDSTONE	2.0	137.0	WHITE; HARD
-			SANDY SHALE	7.5	139.0	GRAY; SOFT
-			LIMESTONE	3.0	146.5	BLUE
-			SHALE	14.7	149.5	LIGHT; VERY SOFT
-			COAL	1.7	164.2	
-			UNDERCLAY	1.5	165.8	
-			SHALE	7.7	167.3	LIGHT; SOFT
-			SHALE	20.0	175.0	WHITE; SOFT
-			SANDSTONE	15.0	195.0	WHITE
-			SHALE	11.5	210.0	WHITE; SOFT

MAPID: 16526220000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.457844 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.756347 **DATE COLLECTED:** 4 / 15 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 181.3 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 107E **WELL TYPE:** Coal Test

COMMENT: PERMIT 2226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	YELLOW CLAY WITH BLUE STREAKS
-	PLEISTOCENE		CLAYSTONE & SHALE	7.0	12.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	19.0	WHITE
-	CARBONDALE		SHALE	2.0	25.0	WHITE
-	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	27.0	WHITE
-	CARBONDALE	ANVIL ROCK	SANDSTONE	21.5	36.0	DARK
-	CARBONDALE	BRERETON	LIMESTONE	6.0	57.5	BLUE
-	CARBONDALE	ANNA	BLACK SHALE	1.7	63.5	LOG SHOWS TENTHS & ARE ACTUALLY INCHES
-	CARBONDALE	HERRIN	COAL	4.7	65.2	
-	CARBONDALE		UNDERCLAY	4.2	69.8	
-	CARBONDALE		SANDSTONE	15.0	74.0	WHITE
-	CARBONDALE		SANDY SHALE	37.0	89.0	GRAY
-	CARBONDALE	BRIAR HILL	COAL	1.5	126.0	
-	CARBONDALE		SANDY SHALE	6.5	127.5	
-	CARBONDALE		SANDSTONE	7.0	134.0	
-	CARBONDALE		SANDY SHALE	18.0	141.0	GRAY
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	159.0	
-	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	161.5	GRAY
-	CARBONDALE	SPRINGFIELD	COAL	5.1	175.5	
-	CARBONDALE		UNDERCLAY	0.7	180.6	

MAPID: 16526221000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 480' N line, 20' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.465551 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.757482 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 220.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-30-93 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226;NEV,2; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0	PLEISTOCENE		SOIL	6.0	0.0	
392.0	PLEISTOCENE		SANDY CLAY	4.0	6.0	
388.0	PLEISTOCENE		CLAY	13.0	10.0	
375.0	CARBONDALE		SANDSTONE	1.0	23.0	
374.0	CARBONDALE		CLAYSTONE	8.0	24.0	
366.0	CARBONDALE		SANDSTONE	1.0	32.0	
365.0	CARBONDALE		GRAY SHALE	2.0	33.0	
363.0	CARBONDALE		SANDY SHALE	20.0	35.0	GRAY
343.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	55.0	LIGHT GRAY
337.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	61.0	
331.0	CARBONDALE		SANDY SHALE	16.0	67.0	GRAY
315.0	CARBONDALE		SANDSTONE	4.0	83.0	
311.0	CARBONDALE	BRERETON	LIMESTONE	9.0	87.0	BLACK
302.0	CARBONDALE	ANNA	BLACK SHALE	1.5	96.0	
300.5	CARBONDALE	HERRIN	COAL	4.5	97.5	
296.0	CARBONDALE		UNDERCLAY	6.0	102.0	
290.0	CARBONDALE		SANDY SHALE	4.0	108.0	
286.0	CARBONDALE		SANDSTONE	6.0	112.0	
280.0	CARBONDALE		SANDY SHALE	12.0	118.0	
268.0	CARBONDALE		SANDSTONE	28.0	130.0	
240.0	CARBONDALE	BRIAR HILL	COAL	1.5	158.0	
238.5	CARBONDALE		SANDY SHALE	20.3	159.5	
218.2	CARBONDALE		SANDY SHALE	0.2	179.8	WITH BLACK SHALE STREAKS
218.0	CARBONDALE		SANDY SHALE	2.0	180.0	
216.0	CARBONDALE		SHALE	0.4	182.0	DARK
215.6	CARBONDALE		SANDY SHALE	0.4	182.4	
215.2	CARBONDALE		SHALE	1.5	182.8	DARK
213.7	CARBONDALE		GRAY SHALE	0.6	184.3	
213.1	CARBONDALE	ST. DAVID	LIMESTONE	0.8	184.9	GRAY
212.4	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	0.6	185.6	
211.8	CARBONDALE	DYKERSBURG	SHALE	1.3	186.2	DARK
210.5	CARBONDALE	DYKERSBURG	GRAY SHALE	25.8	187.5	
184.7	CARBONDALE	SPRINGFIELD	COAL	4.6	213.3	
180.1	CARBONDALE		UNDERCLAY	2.1	217.9	

MAPID: 16526222000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** 460' N line, 20' W line

QUADRANGLE: ELDORADO **LONGITUDE:** -88.465501 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.759279 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.5 **LOGGED (FT.):** 220.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-31-93 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.5	PLEISTOCENE		SOIL	5.0	0.0	
368.5	PLEISTOCENE		SANDY CLAY	7.0	5.0	
361.5	CARBONDALE		SANDSTONE	19.0	12.0	
342.5	CARBONDALE		SANDY SHALE	7.0	31.0	
335.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	38.0	
332.5	CARBONDALE	BANKSTON FORK	SHALE	1.0	41.0	
331.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	42.0	
329.5	CARBONDALE		SANDY SHALE	3.0	44.0	
326.5	CARBONDALE		GRAY SHALE	11.0	47.0	
315.5	CARBONDALE		SANDY SHALE	4.0	58.0	
311.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	62.0	
309.5	CARBONDALE		SANDY SHALE	3.0	64.0	
306.5	CARBONDALE		GRAY SHALE	16.0	67.0	
290.5	CARBONDALE		SANDSTONE	3.0	83.0	
287.5	CARBONDALE		BLACK SHALE	3.0	86.0	
284.5	CARBONDALE	BRERETON	LIMESTONE	6.0	89.0	BLACK
278.5	CARBONDALE	ANNA	BLACK SHALE	1.5	95.0	
277.0	CARBONDALE	HERRIN	COAL	4.5	96.5	
272.5	CARBONDALE		UNDERCLAY	5.0	101.0	
267.5	CARBONDALE		SANDSTONE	4.0	106.0	
263.5	CARBONDALE		SANDY SHALE	46.0	110.0	
217.5	CARBONDALE	BRIAR HILL	COAL	1.5	156.0	
216.0	CARBONDALE		GRAY SHALE	7.1	157.5	
208.9	CARBONDALE		SHALE	0.3	164.6	DARK
208.7	CARBONDALE		GRAY SHALE	11.9	164.8	
196.8	CARBONDALE		SHALE	0.8	176.7	DARK
196.0	CARBONDALE		CALCAREOUS SHALE	0.5	177.5	FOSSILIFEROUS
195.5	CARBONDALE		LIMESTONE	5.2	178.0	
190.3	CARBONDALE		LIMESTONE/CHERT	0.2	183.2	
190.1	CARBONDALE		LIMESTONE	2.8	183.4	
187.3	CARBONDALE		LIMESTONE/CHERT	0.4	186.2	
186.9	CARBONDALE		LIMESTONE	0.9	186.6	
186.0	CARBONDALE		CALCAREOUS SHALE	0.7	187.5	
185.3	CARBONDALE		LIMESTONE	1.0	188.2	
184.3	CARBONDALE	TURNER MINE	SHALE	1.1	189.2	DARK
183.2	CARBONDALE	DYKERSBURG	SANDY SHALE	5.1	190.3	
178.1	CARBONDALE	DYKERSBURG	GRAY SHALE	14.9	195.4	
163.3	CARBONDALE	DYKERSBURG	SHALE	0.3	210.2	
163.0	CARBONDALE	SPRINGFIELD	COAL	4.8	210.5	

158.2	CARBONDALE	UNDERCLAY	4.1	215.3
154.2	CARBONDALE	CALCAREOUS SHALE	0.7	219.3

MAPID: 16526223000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.456874 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.75975 **DATE COLLECTED:** 4 / 26 / 1994

SURFACE ELEVATION (FT.): 368.8 **LOGGED (FT.):** 217.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-77-94 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.8	PLEISTOCENE		SOIL	4.0	0.0	
364.8	PLEISTOCENE		CLAY	38.0	4.0	
326.8	PLEISTOCENE		SANDY CLAY	4.5	42.0	
322.3	CARBONDALE	ALLENBY	COAL	0.5	46.5	TOP ERODED
321.8	CARBONDALE		SANDY SHALE	5.0	47.0	
316.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	52.0	LIGHT, SANDY
310.8	CARBONDALE		SANDY SHALE	2.0	58.0	GRAY
308.8	CARBONDALE		SANDSTONE	2.0	60.0	HARD
306.8	CARBONDALE		SHALY SANDSTONE	3.0	62.0	GRAY
303.8	CARBONDALE		SANDY SHALE	3.0	65.0	DARK GRAY
300.8	CARBONDALE		SANDSTONE	1.0	68.0	HARD
299.8	CARBONDALE		SANDY SHALE	2.0	69.0	DARK GRAY
297.8	CARBONDALE		SANDSTONE	1.0	71.0	HARD
296.8	CARBONDALE		SHALE	3.0	72.0	DARK GRAY
293.8	CARBONDALE		SANDSTONE	5.0	75.0	
288.8	CARBONDALE		SANDSTONE	4.0	80.0	
284.8	CARBONDALE	BRERETON	LIMESTONE	4.5	84.0	BLACK
280.3	CARBONDALE	ANNA	BLACK SHALE	1.5	88.5	
278.8	CARBONDALE	HERRIN	COAL	3.5	90.0	
275.3	CARBONDALE		GRAY SHALE	2.5	93.5	SOFT
272.8	CARBONDALE		SANDY SHALE	2.0	96.0	
270.8	CARBONDALE		SANDSTONE	1.0	98.0	HARD
269.8	CARBONDALE		SHALY SANDSTONE	5.0	99.0	
264.8	CARBONDALE		SANDY LIMESTONE	5.0	104.0	HARD, GRAY
259.8	CARBONDALE		SANDY SHALE	44.5	109.0	
215.3	CARBONDALE	BRIAR HILL	COAL	1.5	153.5	
213.8	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	155.0	SOFT
211.8	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	157.0	HARD, BROWN
207.8	CARBONDALE	DYKERSBURG	SANDY SHALE	26.0	161.0	DARK GRAY
181.8	CARBONDALE	DYKERSBURG	BLACK SHALE	3.0	187.0	
178.8	CARBONDALE	DYKERSBURG	SHALE	2.0	190.0	DARK GRAY
176.8	CARBONDALE	DYKERSBURG	BLACK SHALE	4.0	192.0	
172.8	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	196.0	
160.8	CARBONDALE	SPRINGFIELD	COAL	5.2	208.0	
155.6	CARBONDALE		UNDERCLAY	2.3	213.2	
153.4	CARBONDALE		CALCAREOUS SHALE	1.6	215.4	

MAPID: 16500194000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.4326 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.756583 **DATE COLLECTED:** 0 / 0 / 1927

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 181.8 **LOG TYPE:** Drillers Log

SOURCE: WASSON COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCLASSIFIED	20.0	0.0	GAP IN LOG FROM SURFACE UNTIL 20'
360.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	20.0	
359.0	CARBONDALE		UNCLASSIFIED	25.0	21.0	GAP IN LOG FROM 21'-46'
334.0	CARBONDALE	BRERETON	LIMESTONE	2.0	46.0	CAP ROCK FOR (#6) COAL
332.0	CARBONDALE		UNCLASSIFIED	4.0	48.0	GAP IN LOG FROM 48'-52'
328.0	CARBONDALE	HERRIN	COAL	5.0	52.0	
323.0	CARBONDALE		UNCLASSIFIED	119.9	57.0	GAP IN LOG FROM 57'-176'11" (5-A IN GAP)
203.1	CARBONDALE	SPRINGFIELD	COAL	4.8	176.9	

MAPID: 16500195000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.445247 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.755624 **DATE COLLECTED:** 6 / 2 / 1909

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log

SOURCE: W. M. BRIDGETT **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	20.0	0.0	
350.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	20.0	
349.0	CARBONDALE		BLACK SHALE	9.7	21.0	
339.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	30.7	
333.3	CARBONDALE		BLACK SHALE	10.0	36.7	
323.3	CARBONDALE	BRERETON	LIMESTONE	2.0	46.7	
321.3	CARBONDALE	ANNA	BLACK SHALE	2.0	48.7	
319.3	CARBONDALE	ENERGY	BLACK SHALE	2.0	50.7	
317.3	CARBONDALE	HERRIN	COAL	5.0	52.7	
312.3	CARBONDALE		UNDERCLAY	3.0	57.7	
309.3	CARBONDALE		SANDSTONE	20.3	60.7	
289.0	CARBONDALE		SANDSTONE/SHALE	34.0	81.0	
255.0	CARBONDALE		BLACK SHALE	8.0	115.0	
247.0	CARBONDALE	BRIAR HILL	COAL	2.3	123.0	
244.7	CARBONDALE		UNDERCLAY	2.0	125.3	
242.7	CARBONDALE		CALCAREOUS SHALE	2.0	127.3	
240.7	CARBONDALE		BLACK SHALE	12.7	129.3	
228.0	CARBONDALE		SANDY SHALE	4.5	142.0	
223.5	CARBONDALE		LIMESTONE	3.0	146.5	
220.5	CARBONDALE	DYKERSBURG	SANDY SHALE	6.0	149.5	
214.5	CARBONDALE	DYKERSBURG	SHALE	12.5	155.5	
202.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.5	168.0	
199.5	CARBONDALE	DYKERSBURG	BLACK SHALE	6.4	170.5	
193.1	CARBONDALE	SPRINGFIELD	COAL	4.8	176.9	
188.2	CARBONDALE		UNDERCLAY	2.3	181.8	

MAPID: 16500195000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.445247 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.755624 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
317.0	CARBONDALE	HERRIN	COAL	5.0	53.0	
247.0	CARBONDALE	BRIAR HILL	COAL	2.3	123.0	
193.0	CARBONDALE	SPRINGFIELD	COAL	4.8	177.0	

MAPID: 16501242000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 680' N line, 655' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.431454 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.751984 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 57.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #97 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	14.5	0.0	
405.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.3	14.5	
404.2	CARBONDALE		SHALE	6.3	15.8	
398.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	22.0	
393.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	27.0	
385.0	CARBONDALE		SANDY SHALE	10.8	35.0	
374.2	CARBONDALE	BRERETON	LIMESTONE	3.8	45.8	
370.4	CARBONDALE	ANNA	BLACK SHALE	2.5	49.6	
367.9	CARBONDALE	HERRIN	COAL	4.3	52.1	.33' BAND AT 54.83
363.7	CARBONDALE		UNDERCLAY	1.2	56.3	

MAPID: 16501243000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 670' N line, 5' E line of SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429147 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.74839 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #102 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	35.5	0.0	
349.5	CARBONDALE		SHALE	44.5	35.5	T.D.

MAPID: 16501244000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 50' N line, 50' E line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.438508 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753695 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 410.9 **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #48 **WELL TYPE:** Coal Test
COMMENT: JOHN F. BILLMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.9			UNCONSOLIDATED	7.0	0.0	
403.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	26.0	7.0	
377.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.5	33.0	
369.4	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	41.5	
360.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.8	50.0	
349.1	CARBONDALE	BRERETON	LIMESTONE	6.5	61.8	
342.6	CARBONDALE	ANNA	BLACK SHALE	1.8	68.3	
340.8	CARBONDALE	HERRIN	COAL	4.3	70.1	W/ BAND AND SULFUR (.16' THICK)
336.5	CARBONDALE		UNDERCLAY	1.1	74.4	

MAPID: 16501246000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 50' S line, 30' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44283 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753953 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 372.2 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #51 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN F. BILLMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.2			UNCONSOLIDATED	4.0	0.0	
368.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	4.0	
357.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	15.0	
344.2	CARBONDALE	BRERETON	LIMESTONE	4.8	28.0	
339.4	CARBONDALE	ANNA	BLACK SHALE	1.3	32.8	
338.1	CARBONDALE	HERRIN	COAL	4.5	34.1	W/SULFUR AND RASH BANDS; TOT. COAL 3.67'
333.6	CARBONDALE		UNDERCLAY	1.4	38.6	

MAPID: 16501247000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 15' S line, 50' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442725 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.750222 **DATE COLLECTED:** 2 / 0 / 1905
SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 80.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #54 **WELL TYPE:** Coal Test
COMMENT: JOHN BILLMAN FARM, CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9			UNCONSOLIDATED	17.0	0.0	
351.9	CARBONDALE		SHALE	10.5	17.0	
341.4	CARBONDALE		UNKNOWN	1.0	27.5	LOG HAS SMUT
340.4	CARBONDALE		SHALE	2.8	28.5	
337.6	CARBONDALE		CALCAREOUS SHALE	3.3	31.3	
334.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.2	34.5	
331.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.3	37.7	
322.9	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	46.0	
311.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	57.0	
300.9	CARBONDALE	BRERETON	LIMESTONE	4.8	68.0	
296.1	CARBONDALE	ANNA	BLACK SHALE	2.3	72.8	
293.8	CARBONDALE	HERRIN	COAL	4.4	75.1	W/ .17' THICK BAND
289.4	CARBONDALE		UNDERCLAY	1.0	79.5	

MAPID: 16501250000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.436052 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.755666 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 373.6 **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #58 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN F. BILLMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.6			UNCONSOLIDATED	13.0	0.0	
360.6	CARBONDALE		SHALE	8.0	13.0	
352.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.5	21.0	
345.1	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	28.5	
341.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.5	32.0	
331.1	CARBONDALE	BRERETON	LIMESTONE	0.6	42.5	
330.5	CARBONDALE	ANNA	BLACK SHALE	1.9	43.1	
328.6	CARBONDALE		SHALE	4.0	45.0	
324.6	CARBONDALE	HERRIN	COAL	3.8	49.0	W/ .42' BAND
320.8	CARBONDALE		UNDERCLAY	2.2	52.8	

MAPID: 16501251000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440616 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.752011 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 376.5 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #59 **WELL TYPE:** Coal Test
COMMENT: JOHN F. BILLMAN FARM, CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.5			UNCONSOLIDATED	30.0	0.0	
346.5	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	30.0	
336.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	40.0	
333.5	CARBONDALE	ANVIL ROCK	SANDSTONE	2.5	43.0	
331.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	45.5	
326.0	CARBONDALE	ANNA	BLACK SHALE	1.5	50.5	
324.5	CARBONDALE	ENERGY	SHALE	4.6	52.0	
319.9	CARBONDALE	HERRIN	COAL	4.5	56.6	W/ SULFUR AND BANDS; TOTAL COAL 4.25'
315.4	CARBONDALE		UNDERCLAY	1.9	61.1	

MAPID: 16501252000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 40' S line, 20' E line of SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.433807 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753963 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 391.7 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #60 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN F. BILLMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.7			UNCONSOLIDATED	18.5	0.0	
373.2	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	18.5	
365.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.3	26.0	
355.4	CARBONDALE		SHALE	0.8	36.3	
354.7	CARBONDALE	BRERETON	LIMESTONE	5.3	37.0	
349.4	CARBONDALE	ANNA	BLACK SHALE	1.1	42.3	
348.4	CARBONDALE	HERRIN	COAL	4.4	43.3	.25' BAND AT 46.42
343.9	CARBONDALE		UNDERCLAY	1.3	47.8	

MAPID: 16501253000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440642 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.755647 **DATE COLLECTED:** 2 / 0 / 1905
SURFACE ELEVATION (FT.): 369.8 **LOGGED (FT.):** 56.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #61 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN. F. BILL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.8			UNCONSOLIDATED	13.0	0.0	
356.8	CARBONDALE		SHALE	7.0	13.0	
349.8	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	20.0	
339.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	30.0	
326.8	CARBONDALE	BRERETON	LIMESTONE	5.0	43.0	
321.8	CARBONDALE	ANNA	BLACK SHALE	1.5	48.0	
320.3	CARBONDALE	HERRIN	COAL	4.9	49.5	W/ SULFUR AND BAND .34' THICK AT 59.92
315.4	CARBONDALE		UNDERCLAY	1.6	54.4	

MAPID: 16501254000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 12' N line, 6' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.442943 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.757419 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 368.7 **LOGGED (FT.):** 67.6 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #62 **WELL TYPE:** Coal Test
COMMENT: JOHN F. BILLMAN FARM, CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.7			UNCONSOLIDATED	61.0	0.0	
307.7	CARBONDALE	ANNA	BLACK SHALE	0.8	61.0	
306.9	CARBONDALE	HERRIN	COAL	3.2	61.8	
303.8	CARBONDALE	HERRIN	SHALE	0.2	64.9	
303.6	CARBONDALE	HERRIN	COAL	1.3	65.1	
302.3	CARBONDALE		UNDERCLAY	1.2	66.4	

MAPID: 16501255000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.43145 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.759317 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #109 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL, L.M. RAGSDALE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	15.0	0.0	
360.0	CARBONDALE		SHALE	6.5	15.0	
353.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	21.5	
348.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.0	27.0	
340.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	35.0	
336.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	39.0	
332.0	CARBONDALE		SANDY SHALE	9.5	43.0	
322.5	CARBONDALE	BRERETON	LIMESTONE	3.8	52.5	
318.7	CARBONDALE	ANNA	BLACK SHALE	2.9	56.3	
315.8	CARBONDALE	HERRIN	COAL	4.3	59.2	.17' BAND AT 62.09
311.5	CARBONDALE		UNDERCLAY	1.5	63.5	

MAPID: 16503547000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 400' E line of NE NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.439727 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.753828 **DATE COLLECTED:** 5 / 21 / 1968

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 184.9 **LOG TYPE:** Drillers Log

SOURCE: SAHARA COAL CO. 114E **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			CLAY	7.0	0.0	
398.0	CARBONDALE		SANDY SHALE	5.0	7.0	
393.0	CARBONDALE		SANDSTONE	9.0	12.0	
384.0	CARBONDALE		SANDY SHALE	3.0	21.0	
381.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	24.0	
375.3	CARBONDALE		GRAY SHALE	3.0	29.7	
372.3	CARBONDALE	ANVIL ROCK	SANDSTONE	17.8	32.7	
354.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.5	50.5	WITH ROCK BANDS
346.0	CARBONDALE		GRAY SHALE	3.5	59.0	
342.5	CARBONDALE	BRERETON	BLUE LIMESTONE	0.5	62.5	
342.0	CARBONDALE	ANNA	BLACK SHALE	3.7	63.0	
338.3	CARBONDALE	ANNA	BLACK SHALE	0.3	66.7	
338.0	CARBONDALE	ENERGY	GRAY SHALE	0.6	67.0	
337.4	CARBONDALE	HERRIN	COAL	4.4	67.6	
333.0	CARBONDALE		UNDERCLAY	0.3	72.0	
332.7	CARBONDALE		UNDERCLAY	3.7	72.3	
329.0	CARBONDALE		SANDSTONE	18.0	76.0	
311.0	CARBONDALE		GRAY SANDSTONE	3.0	94.0	WITH SHALE BANDS
308.0	CARBONDALE		SANDY SHALE	32.0	97.0	
276.0	CARBONDALE	BRIAR HILL	COAL	1.0	129.0	
275.0	CARBONDALE	DYKERSBURG	SANDY SHALE	1.5	130.0	
273.5	CARBONDALE	DYKERSBURG	SANDSTONE	15.5	131.5	
258.0	CARBONDALE	DYKERSBURG	SANDY SHALE	24.0	147.0	
234.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	171.0	
232.0	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	173.0	
229.0	CARBONDALE	DYKERSBURG	GRAY SHALE	4.3	176.0	
224.7	CARBONDALE	SPRINGFIELD	COAL	4.6	180.3	
220.2	CARBONDALE		UNDERCLAY	0.5	184.8	-5" TO MATCH DEPTH ON LOG

MAPID: 16503547000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 400' E line of NE NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.439727 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.753828 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 72.4 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.6	CARBONDALE		SHALE & SANDSTONE	17.0	7.4	
385.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	24.4	
379.9	CARBONDALE	LAWSON	GRAY SHALE	3.0	30.1	
376.9	CARBONDALE	LAWSON	SANDSTONE	17.8	33.1	
359.1	CARBONDALE	LAWSON	SILTY SHALE	8.5	50.9	
350.6	CARBONDALE	LAWSON	GRAY SHALE	3.5	59.4	
347.1	CARBONDALE	BRERETON	LIMESTONE	0.5	62.9	
346.6	CARBONDALE	ANNA	BLACK SHALE	4.0	63.4	
342.6	CARBONDALE	ENERGY	GRAY SHALE	0.6	67.4	
342.0	CARBONDALE	HERRIN	COAL	4.4	68.0	

MAPID: 16523980000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1980' S line, 330' W line of SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44636 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.751993 **DATE COLLECTED:** 9 / 8 / 1975
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 47.6 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 518-QC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	10.0	0.0	SOIL AND CLAY
359.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	10.0	
358.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	11.0	
354.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	15.0	
342.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	27.0	
332.0	CARBONDALE		LIMESTONE	0.3	37.0	
331.7	CARBONDALE		CALCAREOUS SHALE	0.2	37.3	
331.5	CARBONDALE		GRAY SHALE	0.3	37.5	
331.2	CARBONDALE		CALCAREOUS SHALE	0.3	37.8	
330.9	CARBONDALE		GRAY SHALE	0.6	38.1	
330.3	CARBONDALE	BRERETON	LIMESTONE	0.6	38.7	
329.7	CARBONDALE	ANNA	BLACK SHALE	2.0	39.3	
327.7	CARBONDALE	ENERGY	GRAY SHALE	1.5	41.3	
326.2	CARBONDALE	HERRIN	COAL	4.3	42.8	
321.9	CARBONDALE		UNDERCLAY	0.5	47.1	

MAPID: 16523984000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1650' S line, 1320' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.44291 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.751097 **DATE COLLECTED:** 9 / 3 / 1975
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 74.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 270-QC **WELL TYPE:** Coal Test
COMMENT: 1650' FROM S/L, 1320' FROM W/L OF SEC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	16.0	0.0	SURFACE CLAY
353.0			CLAY	22.0	16.0	
331.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	38.0	
319.0	CARBONDALE		DARK GRAY SHALE	7.8	50.0	
311.2	CARBONDALE		GRAY SHALE	1.2	57.8	
310.0	CARBONDALE		LIMESTONE	0.4	59.0	
309.6	CARBONDALE		DARK GRAY SHALE	1.4	59.4	
308.2	CARBONDALE	BRERETON	LIMESTONE	5.2	60.8	
303.0	CARBONDALE	ANNA	BLACK SHALE	2.0	66.0	
301.0	CARBONDALE	HERRIN	COAL	4.7	68.0	
296.3	CARBONDALE		UNDERCLAY	1.5	72.7	

MAPID: 16523986000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' N line, 0' E line of SW SW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.436045 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.75566 **DATE COLLECTED:** 9 / 2 / 1975
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 52.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 329-QC **WELL TYPE:** Coal Test
COMMENT: ON NE CORNER OF SW1/4, SW1/4, NE1/4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	19.0	0.0	SURFACE CLAY
-	CARBONDALE		GRAY SANDSTONE	11.9	19.0	
-	CARBONDALE		GRAY SILTSTONE	10.4	30.9	
-	CARBONDALE		LIMESTONE	0.4	41.3	
-	CARBONDALE		DARK GRAY SHALE	4.3	41.7	
-	CARBONDALE	HERRIN	COAL	4.5	46.0	
-	CARBONDALE		UNDERCLAY	1.5	50.5	

MAPID: 16523987000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.440667 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.755631 **DATE COLLECTED:** 8 / 27 / 1975
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 56.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 370-QC **WELL TYPE:** Coal Test
COMMENT: 1980' FROM N/L, 1980 FROM W/L OF SEC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	18.5	0.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	18.5	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	22.5	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	36.0	
-	CARBONDALE	BRERETON	LIMESTONE	5.5	42.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	47.5	
-	CARBONDALE	HERRIN	COAL	4.9	49.5	
-	CARBONDALE		UNDERCLAY	2.0	54.4	

MAPID: 16523988000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1980' N line, 660' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.431442 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.755661 **DATE COLLECTED:** 9 / 5 / 1975
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 386-QC **WELL TYPE:** Coal Test
COMMENT: CENTER OF SE1/4 - NE1/4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			CLAY	17.0	0.0	SURFACE CLAY
378.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.6	17.0	
373.4	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.4	21.6	
366.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	29.0	
351.0	CARBONDALE		BLACK SHALE	1.5	44.0	
349.5	CARBONDALE	BRERETON	LIMESTONE	8.5	45.5	
341.0	CARBONDALE	HERRIN	COAL	4.7	54.0	
336.3	CARBONDALE		UNDERCLAY	2.3	58.7	

MAPID: 16523990000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE SW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.441774 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.752908 **DATE COLLECTED:** 9 / 4 / 1975

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 74.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1948-QC **WELL TYPE:** Coal Test

COMMENT: NO ELEVATION GIVEN. ISGS CORE# C-11487

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	14.5	0.0	SURFACE CLAY
-			CLAY	2.0	14.5	LT TAN CLAY AND SILT
-	CARBONDALE	ANVIL ROCK	SANDSTONE	0.4	16.5	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.0	16.9	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	0.4	17.9	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.8	18.3	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	0.3	20.1	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	10.0	20.4	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	0.3	30.4	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	7.5	30.7	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	0.4	38.2	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.5	38.6	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	39.1	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	0.6	45.5	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	46.1	
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	6.5	49.0	WITH SOME SS STREAKS
-	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	1.3	55.5	WITH PEBBLES OF SANDSTONE
-	CARBONDALE	ANVIL ROCK	SILTY CLAYSTONE	0.4	56.8	
-	CARBONDALE	ANVIL ROCK	UNDERCLAY	1.2	57.2	WITH PEBBLES OF SANDSTONE
-	CARBONDALE	ANVIL ROCK	BLACK SHALE	0.9	58.4	
-	CARBONDALE	ANVIL ROCK	CALCAREOUS SHALE	1.7	59.3	
-	CARBONDALE	BRERETON	LIMESTONE	2.7	61.0	ARGILLACEOUS LIMESTONE
-	CARBONDALE	BRERETON	LIMESTONE	1.8	63.7	DOLOMITIC LIMESTONE
-	CARBONDALE	BRERETON	LIMESTONE	1.9	65.5	ARGILLACEOUS LIMESTONE
-	CARBONDALE	ANNA	BLACK SHALE	1.1	67.4	
-	CARBONDALE	HERRIN	COAL	4.7	68.5	
-	CARBONDALE		UNDERCLAY	1.1	73.2	

MAPID: 16526224000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.439403 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.750341 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.3 **LOGGED (FT.):** 174.4 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 1230QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.3	PLEISTOCENE		CLAY	24.7	0.0	SOFT
346.6	CARBONDALE		SANDY SHALE	5.9	24.7	BROWN
340.7	CARBONDALE	ANVIL ROCK	SANDSTONE	8.1	30.6	GRAY
332.6	CARBONDALE		SANDY SHALE	6.4	38.7	GRAY
326.2	CARBONDALE	BRERETON	LIMESTONE	3.4	45.1	BLACK
322.8	CARBONDALE	ANNA	BLACK SHALE	2.4	48.5	
320.5	CARBONDALE	HERRIN	COAL	4.4	50.8	
316.0	CARBONDALE		SANDY SHALE	5.5	55.3	
310.5	CARBONDALE		SANDSTONE	21.3	60.8	
289.3	CARBONDALE		SANDY SHALE	32.5	82.0	GRAY
256.8	CARBONDALE	BRIAR HILL	COAL	1.7	114.5	
255.2	CARBONDALE	DYKERSBURG	SANDSTONE	1.9	116.1	
253.3	CARBONDALE	DYKERSBURG	SANDY SHALE	38.8	118.0	WITH SANDSTONE BAND, GRAY
214.5	CARBONDALE	DYKERSBURG	BLACK SHALE	2.6	156.8	
211.9	CARBONDALE	DYKERSBURG	GRAY SHALE	10.0	159.4	
201.9	CARBONDALE	SPRINGFIELD	COAL	4.2	169.4	
197.8	CARBONDALE		SANDY SHALE	0.9	173.5	LIGHT GRAY

MAPID: 16526225000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.438422 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.752977 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.3 **LOGGED (FT.):** 170.6 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 1232QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.3	PLEISTOCENE		UNCONSOLIDATED	2.7	0.0	CLAY
399.6	CARBONDALE		SANDY SHALE	9.2	2.7	
390.4	CARBONDALE		SHALE	4.6	11.9	LIGNITE, GRAY, SANDY
385.8	CARBONDALE	ANVIL ROCK	SANDSTONE	23.4	16.5	
362.4	CARBONDALE		GRAY SHALE	2.5	39.9	
359.9	CARBONDALE	CONANT	LIMESTONE	0.7	42.4	
359.2	CARBONDALE	JAMESTOWN	SHALE	1.2	43.1	DARK GRAY
358.0	CARBONDALE	BRERETON	LIMESTONE	6.9	44.3	
351.1	CARBONDALE	ANNA	BLACK SHALE	0.9	51.2	
350.3	CARBONDALE	HERRIN	COAL	4.2	52.0	
346.1	CARBONDALE		SANDY SHALE	6.5	56.2	LIGHT GRAY
339.6	CARBONDALE		SANDSTONE	23.1	62.7	
316.5	CARBONDALE		SANDY SHALE	26.0	85.8	GRAY
290.5	CARBONDALE	BRIAR HILL	COAL	1.7	111.8	
288.9	CARBONDALE		SANDY SHALE	36.9	113.4	
252.0	CARBONDALE		GRAY SHALE	3.5	150.3	
248.5	CARBONDALE	ST. DAVID	LIMESTONE	1.7	153.8	WITH SHALE
246.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	155.5	
244.5	CARBONDALE	DYKERSBURG	SHALE	5.6	157.8	
238.9	CARBONDALE	SPRINGFIELD	COAL	4.6	163.4	
234.3	CARBONDALE		UNDERCLAY	2.6	168.0	

MAPID: 16526226000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.438083 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.755643 **DATE COLLECTED:** 9 / 14 / 1993

SURFACE ELEVATION (FT.): 376.5 **LOGGED (FT.):** 182.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-28-93 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.5	PLEISTOCENE		SOIL	5.0	0.0	
371.5	PLEISTOCENE		CLAY	5.0	5.0	
366.5	PLEISTOCENE		SANDY CLAY	7.0	10.0	
359.5	PLEISTOCENE		LIMESTONE	0.5	17.0	
359.0	PLEISTOCENE		SANDSTONE	2.5	17.5	RED, LOOSE
356.5	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	20.0	GRAY
332.5	CARBONDALE		SANDY SHALE	9.0	44.0	
323.5	CARBONDALE		GRAY SHALE	1.5	53.0	
322.0	CARBONDALE		SANDY SHALE	1.0	54.5	
321.0	CARBONDALE	BRERETON	LIMESTONE	4.5	55.5	DARK
316.5	CARBONDALE	ANNA	SHALE	2.0	60.0	DARK
314.5	CARBONDALE	HERRIN	COAL	4.5	62.0	
310.0	CARBONDALE		UNDERCLAY	3.5	66.5	
306.5	CARBONDALE		SANDSTONE	22.0	70.0	
284.5	CARBONDALE		SANDY SHALE	4.0	92.0	
280.5	CARBONDALE		SANDSTONE	6.0	96.0	
274.5	CARBONDALE		SANDY SHALE	2.0	102.0	
272.5	CARBONDALE		SANDSTONE	2.0	104.0	
270.5	CARBONDALE		SANDY SHALE	6.0	106.0	
264.5	CARBONDALE		SANDSTONE	9.0	112.0	
255.5	CARBONDALE	BRIAR HILL	COAL	1.5	121.0	
254.0	CARBONDALE		SANDY SHALE	3.6	122.5	
250.4	CARBONDALE		SANDSTONE	1.7	126.1	
248.7	CARBONDALE		SANDY SHALE	14.7	127.8	
234.0	CARBONDALE		SANDSTONE	1.8	142.5	
232.2	CARBONDALE		SANDY SHALE	0.7	144.3	
231.5	CARBONDALE		SANDSTONE	0.9	145.0	
230.6	CARBONDALE		SANDY SHALE	18.3	145.9	
212.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	164.2	GRAY
211.3	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	0.2	165.2	
211.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	165.4	
208.8	CARBONDALE	DYKERSBURG	GRAY SHALE	9.2	167.7	
199.6	CARBONDALE	SPRINGFIELD	COAL	4.5	176.9	
195.1	CARBONDALE		GRAY SHALE	0.6	181.4	

MAPID: 16526274000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.444088 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.754719 **DATE COLLECTED:** 4 / 6 / 1968
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 149.6 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY 105E **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	YELLOW CLAY
-	PLEISTOCENE		CLAY	7.0	17.0	BLUE
-	PLEISTOCENE		CLAY	13.0	24.0	YELLOW
-	CARBONDALE		SHALE	3.0	37.0	
-	CARBONDALE		SANDSTONE	22.5	40.0	WHITE
-	CARBONDALE		SANDY SHALE	29.8	62.5	GRAY
-	CARBONDALE	BRIAR HILL	COAL	1.8	92.3	
-	CARBONDALE		SANDSTONE	3.0	94.0	
-	CARBONDALE		SANDY SHALE	36.5	97.0	SANDSTONE
-	CARBONDALE	ST. DAVID	LIMESTONE	0.5	133.5	NUMBERS SHOWN ON ORIGINAL LOG AS TENTHS
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	134.0	ARE ACTUALLY INCHES
-	CARBONDALE	DYKERSBURG	GRAY SHALE	7.9	136.5	
-	CARBONDALE	SPRINGFIELD	COAL	4.7	144.4	
-	CARBONDALE		UNDERCLAY	0.5	149.1	

MAPID: 16590863000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.438336 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753834 **DATE COLLECTED:** 4 / 15 / 1982
SURFACE ELEVATION (FT.): 387.8 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2744QB **WELL TYPE:** Coal Test
COMMENT: PERMIT #104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.8	PLEISTOCENE		CLAY	16.8	0.0	
371.0	PLEISTOCENE		SANDY CLAY	8.2	16.8	
362.8	CARBONDALE		SANDY SHALE	12.7	25.0	
350.1	CARBONDALE	BRERETON	LIMESTONE	4.4	37.7	DARK
345.7	CARBONDALE	ANNA	BLACK SHALE	1.5	42.1	
344.2	CARBONDALE	HERRIN	COAL	4.6	43.6	
339.6	CARBONDALE		UNDERCLAY	2.0	48.2	
337.6	CARBONDALE		SANDSTONE	0.8	50.2	GRAY

MAPID: 16590873000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 9 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.436437 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754107 **DATE COLLECTED:** 9 / 14 / 1993

SURFACE ELEVATION (FT.): 394.4 **LOGGED (FT.):** 180.1 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-29-93 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.4	PLEISTOCENE		SOIL	6.0	0.0	
388.4	PLEISTOCENE		SANDY CLAY	7.0	6.0	
381.4	PLEISTOCENE		CLAY	7.0	13.0	
374.4	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	20.0	
360.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	34.0	
358.4	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	36.0	
352.4	CARBONDALE	BRERETON	LIMESTONE	15.0	42.0	BLACK
337.4	CARBONDALE	ANNA	BLACK SHALE	1.0	57.0	
336.4	CARBONDALE	HERRIN	COAL	4.0	58.0	
332.4	CARBONDALE		GRAY SHALE	5.0	62.0	
327.4	CARBONDALE		SANDSTONE	13.0	67.0	
314.4	CARBONDALE		SANDY SHALE	20.0	80.0	
294.4	CARBONDALE		SANDSTONE	8.0	100.0	
286.4	CARBONDALE		SANDY SHALE	10.0	108.0	
276.4	CARBONDALE	BRIAR HILL	COAL	1.5	118.0	
274.9	CARBONDALE		SANDY SHALE	19.2	119.5	
255.7	CARBONDALE		SHALE	1.3	138.7	DARK GRAY
254.4	CARBONDALE		SHALE	0.5	140.0	
253.9	CARBONDALE		GRAY SHALE	14.6	140.5	
239.3	CARBONDALE		SHALE	0.2	155.1	
239.1	CARBONDALE		GRAY SHALE	3.9	155.3	
235.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	159.2	
234.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	159.7	
232.4	CARBONDALE	DYKERSBURG	GRAY SHALE	9.0	162.0	
223.4	CARBONDALE	SPRINGFIELD	COAL	4.5	171.0	
218.9	CARBONDALE		UNDERCLAY	3.8	175.5	
215.1	CARBONDALE		SANDSTONE	0.7	179.3	

MAPID: 16500196000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: ELDORADO **LONGITUDE:** -88.422204 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.759302 **DATE COLLECTED:** 12 / 22 / 1905

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 208.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #28 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	20.0	0.0	
360.0	CARBONDALE		SANDSTONE	5.0	20.0	
355.0	CARBONDALE	ALLENBY	COAL	2.0	25.0	
353.0	CARBONDALE		UNDERCLAY	1.0	27.0	
352.0	CARBONDALE		SHALE	4.0	28.0	
348.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	32.0	
342.0	CARBONDALE		SHALE	10.0	38.0	
332.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	48.0	
320.0	CARBONDALE		BLACK SHALE	7.0	60.0	
313.0	CARBONDALE	BRERETON	LIMESTONE	5.0	67.0	
308.0	CARBONDALE	ANNA	BLACK SHALE	3.0	72.0	
305.0	CARBONDALE	HERRIN	COAL	4.5	75.0	
300.5	CARBONDALE		UNDERCLAY	3.5	79.5	
297.0	CARBONDALE		SHALE	4.0	83.0	
293.0	CARBONDALE		SANDSTONE	43.0	87.0	
250.0	CARBONDALE		SHALE	17.0	130.0	
233.0	CARBONDALE	BRIAR HILL	COAL	2.0	147.0	
231.0	CARBONDALE		UNDERCLAY	3.0	149.0	
228.0	CARBONDALE		SANDSTONE	18.0	152.0	
210.0	CARBONDALE		SHALE	4.0	170.0	
206.0	CARBONDALE		BLACK SHALE	3.0	174.0	
203.0	CARBONDALE		BLACK SHALE	17.0	177.0	
186.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	194.0	
184.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	196.0	
181.0	CARBONDALE	TURNER MINE	LIMESTONE	1.0	199.0	POSSIBLY A CONCRETION
180.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	200.0	
177.6	CARBONDALE	SPRINGFIELD	COAL	4.6	202.4	
173.0	CARBONDALE		UNDERCLAY	1.0	207.0	

MAPID: 16500196000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.422204 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.759302 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 208.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
305.0	CARBONDALE	HERRIN	COAL	4.5	75.0	
233.0	CARBONDALE	BRIAR HILL	COAL	2.0	147.0	
178.0	CARBONDALE	SPRINGFIELD	COAL	4.6	202.0	

MAPID: 16500329800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.416325 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.749296 **DATE COLLECTED:** 0 / 0 / 1947
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 20.0 **LOG TYPE:**
SOURCE: MINE NOTES-COTTAGE GROVE C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	15.0		
-	CARBONDALE	HERRIN	COAL	5.0		

MAPID: 16500993000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 0' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419874 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.75748 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 43.8 **LOG TYPE:** Survey Core Study
SOURCE: TERTELING BROS 23A **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.3	CARBONDALE	LAWSON	SHALE & SILTSTONE	23.3	9.7	
357.0	CARBONDALE	BRERETON	CALCAREOUS SHALE	0.4	33.0	
356.6	CARBONDALE	ANNA	BLACK SHALE	2.2	33.4	
354.4	CARBONDALE	ENERGY	DARK GRAY SHALE	4.4	35.6	
350.0	CARBONDALE	HERRIN	COAL	3.8	40.0	

MAPID: 16500994000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' N line, 0' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.415271 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.761102 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 79.6 **LOG TYPE:** Survey Core Study
SOURCE: TERTELING BROS 26 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.4	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	7.1	34.6	
333.3	CARBONDALE	LAWSON	SHALE & SILTSTONE	25.7	41.7	
307.6	CARBONDALE	BRERETON	CALCAREOUS SHALE	0.5	67.4	
307.1	CARBONDALE	ANNA	BLACK SHALE	2.4	67.9	
304.7	CARBONDALE	ENERGY	DARK GRAY SHALE	4.7	70.3	
300.0	CARBONDALE	HERRIN	COAL	4.6	75.0	

MAPID: 16501256000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 400' S line, 270' W line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.428199 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.751341 **DATE COLLECTED:** 1 / 1 / 1950
SURFACE ELEVATION (FT.): 410.7 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #1 **WELL TYPE:** Coal Test
COMMENT: DIAMOND DRILL, L. ALVEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.7			UNCONSOLIDATED	14.0	0.0	
396.7	CARBONDALE		SHALE	10.0	14.0	
386.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	24.0	
376.7	CARBONDALE		SHALE	1.0	34.0	
375.7	CARBONDALE	BRERETON	LIMESTONE	7.0	35.0	
368.7	CARBONDALE	ANNA	BLACK SHALE	0.9	42.0	
367.8	CARBONDALE		UNKNOWN	0.1	42.9	LOG HAS "SULPHUR"; PROBABLY PYRITE
367.7	CARBONDALE	HERRIN	COAL	4.3	43.0	W/ SULFUR AND BAND; TOTAL COAL 3.99
363.4	CARBONDALE		UNDERCLAY	1.7	47.3	

MAPID: 16501257000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 150' S line, 720' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.427001 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.754281 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #2 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, L. ALVEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.0			UNCONSOLIDATED	17.0	0.0	
371.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	17.0	
364.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	24.0	
361.0	CARBONDALE		SHALE	2.5	27.0	
358.5	CARBONDALE	BRERETON	LIMESTONE	3.5	29.5	
355.0	CARBONDALE	ANNA	BLACK SHALE	3.0	33.0	
352.0	CARBONDALE	HERRIN	COAL	4.1	36.0	BONEY UPPER .5'; W/ .17 BAND AT 38.83
347.9	CARBONDALE		UNDERCLAY	0.9	40.1	

MAPID: 16501258000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 45' S line, 585' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.426513 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.750356 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 403.5 **LOGGED (FT.):** 27.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #3 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, A. ALVEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.5			UNCONSOLIDATED	14.5	0.0	
389.0	CARBONDALE	BRERETON	LIMESTONE	3.8	14.5	
385.2	CARBONDALE		SHALE	0.5	18.3	
384.7	CARBONDALE	ANNA	BLACK SHALE	2.7	18.8	
382.1	CARBONDALE	HERRIN	COAL	3.6	21.4	.17' BAND AT
378.5	CARBONDALE		UNDERCLAY	2.0	25.0	

MAPID: 16501259000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 10' S line, 15' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.429089 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.7539 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 378.8 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #63 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.8			UNCONSOLIDATED	30.0	0.0	
348.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	30.0	
334.8	CARBONDALE		SHALE	2.2	44.0	
332.6	CARBONDALE	BRERETON	LIMESTONE	3.8	46.2	
328.8	CARBONDALE	ANNA	BLACK SHALE	1.8	50.0	
327.0	CARBONDALE	HERRIN	COAL	4.3	51.8	.35' BAND AT 54.66
322.6	CARBONDALE		UNDERCLAY	0.8	56.2	

MAPID: 16501260000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 675' S line, 1310' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424577 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.748458 **DATE COLLECTED:** 4 / 0 / 1905
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 84.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #100 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, L. ALVEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0			UNCONSOLIDATED	9.0	0.0	
416.0			SANDY SHALE	6.0	9.0	
410.0			SANDY SHALE	6.0	15.0	
404.0			COAL	0.5	21.0	W/ RASH
403.5			SANDY SHALE	5.0	21.5	
398.5	CARBONDALE		COAL	0.9	26.5	
397.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.1	27.4	
385.5	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	39.5	
375.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.0	50.0	
352.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.8	73.0	
349.2	CARBONDALE		SHALE	2.1	75.8	
347.1	CARBONDALE	HERRIN	COAL	4.6	77.9	W/ .33' BAND AT 80.41
342.5	CARBONDALE		UNDERCLAY	1.5	82.5	

MAPID: 16501260000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 675' S line, 1310' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424577 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.748458 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 84.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	9.0	0.0	
411.0			ROCK	17.5	9.0	
393.5			COAL	0.9	26.5	
392.6			ROCK	50.5	27.4	
342.1	CARBONDALE	HERRIN	COAL	4.6	77.9	
337.5	CARBONDALE		ROCK	1.5	82.5	

MAPID: 16501261000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1135' S line, 1045' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.414142 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.749698 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 434.8 **LOGGED (FT.):** 37.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #4 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, BERRRY ESTATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.8			UNCONSOLIDATED	12.0	0.0	
422.8	CARBONDALE		SHALE	6.0	12.0	
416.8	CARBONDALE		SHALE	10.5	18.0	
406.3	CARBONDALE	BRERETON	LIMESTONE	1.5	28.5	
404.8	CARBONDALE	ANNA	BLACK SHALE	2.3	30.0	
402.5	CARBONDALE	HERRIN	COAL	4.5	32.3	W/ SULFUR AND BAND; TOTAL COAL 4.25'
398.0			UNDERCLAY	0.8	36.8	

MAPID: 16501261000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1135' S line, 1045' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.414142 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.749698 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 37.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	12.0	0.0	
408.0			ROCK	19.8	12.0	
388.2	CARBONDALE	HERRIN	COAL	5.2	31.8	

MAPID: 16501262000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 15' N line, 10' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410593 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.75378 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 397.9 **LOGGED (FT.):** 56.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #6 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, BERRY ESTATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.9			UNCONSOLIDATED	10.0	0.0	
387.9	CARBONDALE		SANDY SHALE	4.0	10.0	
383.9	CARBONDALE		SHALE	6.0	14.0	
377.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	20.0	
373.9	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	24.0	
364.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	33.0	
353.9	CARBONDALE	BRERETON	LIMESTONE	6.5	44.0	
347.4	CARBONDALE	ANNA	BLACK SHALE	0.8	50.5	
346.6	CARBONDALE	HERRIN	COAL	4.6	51.3	BONEY UPPER .25'; .25' SULF/BAND AT 54.5
342.1	CARBONDALE		UNDERCLAY	0.7	55.8	

MAPID: 16501263000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' N line, 15' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410611 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753767 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 62.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #8 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, BERRY ESTATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.3			UNCONSOLIDATED	10.0	0.0	
402.3	CARBONDALE		SHALE	11.0	10.0	
391.3	CARBONDALE		SHALE	9.0	21.0	
382.3	CARBONDALE		SHALE	3.0	30.0	
379.3	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	33.0	
373.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	39.0	
363.3	CARBONDALE	BRERETON	LIMESTONE	7.5	49.0	
355.8	CARBONDALE	ANNA	BLACK SHALE	0.7	56.5	
355.1	CARBONDALE	HERRIN	COAL	4.5	57.2	BONEY UPPER .25'; W/ .17' BAND AT 60.34'
350.6	CARBONDALE		UNDERCLAY	0.8	61.7	

MAPID: 16501264000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412894 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.752016 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 50.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #76 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, BERRY ESTATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0			UNCONSOLIDATED	6.0	0.0	
413.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.0	6.0	
393.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	26.0	
380.0	CARBONDALE	BRERETON	LIMESTONE	2.0	39.0	
378.0	CARBONDALE	ANNA	BLACK SHALE	2.0	41.0	
376.0	CARBONDALE	HERRIN	COAL	4.6	43.0	W/ SULFUR AND BAND (.25') AT 46.17
371.4	CARBONDALE		UNDERCLAY	2.4	47.6	LOG HAS "CLAY"

MAPID: 16501265000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 12' S line, 5' E line of NE SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410532 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.750221 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 410.5 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #78 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, BERRY ESTATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.5			UNCONSOLIDATED	9.0	0.0	
401.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	9.0	
397.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	13.0	
391.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	19.0	
381.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.5	29.0	
376.0	CARBONDALE	BRERETON	LIMESTONE	3.8	34.5	
372.2	CARBONDALE	ANNA	BLACK SHALE	1.6	38.3	
370.7	CARBONDALE		UNKNOWN	0.2	39.8	LOG HAS "SULPHER"; PROBABLY PYRITE
370.5	CARBONDALE	HERRIN	COAL	4.5	40.0	BONEY UPPER .25'; .08' BAND AT 43.17
366.0	CARBONDALE		UNDERCLAY	1.5	44.5	LOG HAS "CLAY"

MAPID: 16501266000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 35' S line, 30' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41998 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.757577 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 384.8 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #21 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, MARION FOX FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.8			UNCONSOLIDATED	22.5	0.0	
362.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.5	22.5	
357.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.7	27.0	
343.1	CARBONDALE		SHALE	4.4	41.7	
338.7	CARBONDALE	BRERETON	LIMESTONE	2.7	46.1	
336.0	CARBONDALE	ANNA	BLACK SHALE	2.4	48.8	
333.6	CARBONDALE	HERRIN	COAL	4.7	51.2	W/ SULFUR AND BAND; TOTAL COAL AT 4.42
328.9	CARBONDALE		UNDERCLAY	1.2	55.9	LOG HAS "CLAY"

MAPID: 16501267000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' N line, 35' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.420022 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761059 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 381.2 **LOGGED (FT.):** 84.7 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #22 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, MARION FOX FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.2			UNCONSOLIDATED	17.0	0.0	
364.2	CARBONDALE		SANDY SHALE	5.0	17.0	
359.2	CARBONDALE		SANDY SHALE	4.0	22.0	
355.2	CARBONDALE		SANDSTONE	5.0	26.0	
350.2	CARBONDALE		SHALE	3.5	31.0	
346.7	CARBONDALE		UNKNOWN	0.3	34.5	LOG HAS "RASH"
346.4	CARBONDALE		CLAYSTONE & SILTSTONE	2.3	34.8	LOG HAS "CLAY"
344.2	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	37.0	
336.7	CARBONDALE		CALCAREOUS SHALE	7.0	44.5	
329.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.0	51.5	
310.7	CARBONDALE		CALCAREOUS SHALE	2.0	70.5	
308.7	CARBONDALE	BRERETON	LIMESTONE	5.8	72.5	
302.9	CARBONDALE	ANNA	BLACK SHALE	0.7	78.3	
302.3	CARBONDALE	HERRIN	COAL	4.6	78.9	SULFUR AND BAND (.42' THICK) AT 81.92
297.7	CARBONDALE		UNDERCLAY	1.2	83.5	LOG HAS "CLAY"

MAPID: 16501268000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' S line, 3' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424501 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.757548 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 54.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #64 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, MARION FOX FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0			UNCONSOLIDATED	13.5	0.0	
367.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	13.5	
366.0	CARBONDALE		SANDY SHALE	4.0	15.0	
362.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	19.0	
354.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.8	27.0	
338.2	CARBONDALE	ANNA	BLACK SHALE	3.4	42.8	
334.8	CARBONDALE	ENERGY	SHALE	2.4	46.2	
332.4	CARBONDALE		UNKNOWN	0.1	48.6	LOG HAS SULFUR; PROBABLY PYRITE
332.3	CARBONDALE	HERRIN	COAL	4.0	48.7	W/ SULFUR AND BAND; TOTAL COAL 3.67
328.3	CARBONDALE		UNDERCLAY	1.3	52.7	LOG HAS "CLAY"

MAPID: 16501269000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 15' N line, 15' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424476 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761082 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 371.6 **LOGGED (FT.):** 77.2 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #65 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, MARION FOX

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.6			UNCONSOLIDATED	27.0	0.0	
344.6	CARBONDALE		SHALE	5.8	27.0	
338.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	32.8	
333.3	CARBONDALE		SHALE	4.8	38.3	
328.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	21.7	43.1	
306.8	CARBONDALE	BRERETON	LIMESTONE	4.3	64.8	
302.5	CARBONDALE	ANNA	BLACK SHALE	2.7	69.1	
299.8	CARBONDALE	HERRIN	COAL	2.8	71.8	
297.1	CARBONDALE	HERRIN		0.2	74.5	
296.9	CARBONDALE	HERRIN	COAL	1.3	74.7	
295.6	CARBONDALE		CLAYSTONE	1.2	76.0	

MAPID: 16501270000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.422183 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759307 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 372.2 **LOGGED (FT.):** 66.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #67 **WELL TYPE:** Coal Test
COMMENT: MARION FOX FARM, CHURN DRILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.2			UNCONSOLIDATED	13.0	0.0	
359.2	CARBONDALE		SHALE	4.0	13.0	
355.2	CARBONDALE		SHALE	3.2	17.0	
352.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.2	20.2	
350.9	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	1.5	21.3	
349.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	22.8	
344.4	CARBONDALE		SHALE	4.2	27.8	
340.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.0	32.0	
318.2	CARBONDALE	ANNA	BLACK SHALE	2.3	54.0	
315.9	CARBONDALE	ENERGY	SHALE	4.7	56.3	
311.2	CARBONDALE	HERRIN	COAL	4.3	61.0	W/ .08' THICK BAND AT 64.09
306.9	CARBONDALE		UNDERCLAY	1.2	65.3	LOG HAS "CLAY"

MAPID: 16501271000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 10' W line of NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424485 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759301 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 63.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #70 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, MARION FOX FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	27.0	0.0	
346.0	CARBONDALE		SHALE	4.0	27.0	
342.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	20.3	31.0	
321.7	CARBONDALE	BRERETON	LIMESTONE	4.9	51.3	
316.7	CARBONDALE	ANNA	BLACK SHALE	1.9	56.3	
314.8	CARBONDALE	HERRIN	COAL	4.2	58.2	W/ SULFUR, BAND AND RASH; TOT. COAL 3.51
310.7	CARBONDALE		UNDERCLAY	1.2	62.3	LOG HAS "CLAY"

MAPID: 16501272000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.42221 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.755663 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 387.7 **LOGGED (FT.):** 51.3 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #73 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, MARION FOX FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.7			UNCONSOLIDATED	23.3	0.0	
364.4	CARBONDALE		SHALE	4.3	23.3	
360.2	CARBONDALE	ANVIL ROCK	SANDSTONE	7.8	27.5	
352.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	35.3	
347.4	CARBONDALE		SHALE	2.3	40.3	
345.1	CARBONDALE	BRERETON	LIMESTONE	0.3	42.6	
344.8	CARBONDALE	ANNA	BLACK SHALE	1.9	42.9	
342.9	CARBONDALE	ENERGY	SHALE	0.8	44.8	
342.0	CARBONDALE	HERRIN	COAL	4.5	45.7	W/ SULFUR AND BANDS; TOTAL COAL 4.17
337.5	CARBONDALE		UNDERCLAY	1.2	50.2	LOG HAS "CLAY"

MAPID: 16501273000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 30' N line, 5' W line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.424477 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753777 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 396.5 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #5 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.5			UNCONSOLIDATED	11.0	0.0	
385.5	CARBONDALE	ANVIL ROCK	SANDSTONE	28.7	11.0	
356.8	CARBONDALE	CONANT	LIMESTONE	0.7	39.7	CORRELATION UNCERTAIN
356.2	CARBONDALE		SHALE	0.4	40.3	
355.7	CARBONDALE		BLACK SHALE	2.4	40.8	
353.3	CARBONDALE		SHALE	0.7	43.2	
352.7	CARBONDALE	HERRIN	COAL	2.3	43.8	
350.4	CARBONDALE	HERRIN	UNKNOWN	0.2	46.1	LOG HAS "BAND"
350.2	CARBONDALE	HERRIN	COAL	0.8	46.3	
349.4	CARBONDALE		UNDERCLAY	1.9	47.1	LOG HAS "CLAY"

MAPID: 16501274000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' N line, 35' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419971 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.753792 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 417.9 **LOGGED (FT.):** 72.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #7 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.9			UNCONSOLIDATED	15.0	0.0	
402.9	CARBONDALE	ANVIL ROCK	SANDSTONE	47.0	15.0	
355.9	CARBONDALE	BRERETON	LIMESTONE	1.8	62.0	
354.1	CARBONDALE	ANNA	BLACK SHALE	2.7	63.8	
351.5	CARBONDALE	HERRIN	COAL	4.3	66.4	W/ BAND AND SULFUR; TOTAL COAL 3.92
347.1	CARBONDALE		UNDERCLAY	1.3	70.8	LOG HAS "CLAY"

MAPID: 16501275000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 735' S line, 585' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421871 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.752247 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 402.4 **LOGGED (FT.):** 45.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #9 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.4			UNCONSOLIDATED	13.0	0.0	
389.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	13.0	
384.4	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	18.0	
372.9	CARBONDALE		SHALE	1.5	29.5	
371.4	CARBONDALE	BRERETON	LIMESTONE	7.3	31.0	
364.1	CARBONDALE	ANNA	BLACK SHALE	1.1	38.3	
363.1	CARBONDALE	HERRIN	COAL	4.4	39.3	W/ SULFUR AND BANDS; TOTAL COAL 4.0'
358.7	CARBONDALE		UNDERCLAY	1.8	43.7	

MAPID: 16501276000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 60' S line, 30' E line of NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419931 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.750379 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 419.2 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #12 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.2			UNCONSOLIDATED	7.0	0.0	
412.2	CARBONDALE	ANVIL ROCK	SANDSTONE	14.5	7.0	
397.7	CARBONDALE		SHALE	8.0	21.5	
389.7	CARBONDALE		CALCAREOUS SHALE	2.0	29.5	
387.7	CARBONDALE	BRERETON	LIMESTONE	7.3	31.5	
380.4	CARBONDALE	ANNA	BLACK SHALE	0.5	38.8	
379.9	CARBONDALE	HERRIN	COAL	4.2	39.3	W/ BAND; COAL TOTAL 3.91'
375.7	CARBONDALE		UNDERCLAY	1.5	43.5	

MAPID: 16501277000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.41748 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.752018 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 431.2 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #66 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.2			UNCONSOLIDATED	11.0	0.0	
420.2	CARBONDALE		SANDSTONE/SHALE	8.0	11.0	
412.2	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	19.0	
380.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	51.0	
376.2	CARBONDALE	BRERETON	LIMESTONE	2.8	55.0	
373.4	CARBONDALE	ANNA	BLACK SHALE	1.3	57.8	
372.1	CARBONDALE	HERRIN	COAL	2.8	59.1	
369.3	CARBONDALE	HERRIN	UNKNOWN	0.2	61.9	LOG HAS "BAND"
369.1	CARBONDALE	HERRIN	COAL	1.3	62.1	
367.9	CARBONDALE		UNDERCLAY	1.7	63.3	

MAPID: 16501278000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 440' S line, 6' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.415201 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.751414 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #75 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, O.T. HURLEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.0			UNCONSOLIDATED	5.0	0.0	
424.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	5.0	
411.0	CARBONDALE		SHALE	8.0	18.0	
403.0	CARBONDALE		SHALE	1.0	26.0	
402.0	CARBONDALE	BRERETON	LIMESTONE	5.0	27.0	
397.0	CARBONDALE	ANNA	BLACK SHALE	2.2	32.0	
394.8	CARBONDALE	HERRIN	COAL	4.3	34.2	W/ SULFUR AND BAND (.33') AT 37.09
390.5	CARBONDALE		UNDERCLAY	1.5	38.5	

MAPID: 16501279000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 25' N line, 5' W line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.415219 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.7574 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 386.9 **LOGGED (FT.):** 63.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #10 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, ROBERT MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.9			UNCONSOLIDATED	17.0	0.0	
369.9	CARBONDALE		SHALE	7.0	17.0	
362.9	CARBONDALE		SHALE	4.0	24.0	
358.9	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	28.0	
348.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	38.0	
335.9	CARBONDALE	BRERETON	LIMESTONE	5.5	51.0	
330.4	CARBONDALE	ANNA	BLACK SHALE	1.6	56.5	
328.8	CARBONDALE		UNKNOWN	0.5	58.1	LOG HAS "HARD ROCK"
328.3	CARBONDALE	HERRIN	COAL	4.4	58.6	W/ .08' BAND AT 61.58
323.9	CARBONDALE		UNDERCLAY	0.5	63.0	

MAPID: 16501280000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' N line, 10' E line of SE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410636 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.7574 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 378.8 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #11 **WELL TYPE:** Coal Test
COMMENT: CURN DRILL, ROBERT MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.8			UNCONSOLIDATED	27.0	0.0	
351.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	27.0	
348.8	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	30.0	
343.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	35.0	
330.8	CARBONDALE	BRERETON	LIMESTONE	6.0	48.0	
324.8	CARBONDALE	ANNA	BLACK SHALE	1.0	54.0	
323.8	CARBONDALE		UNKNOWN	0.2	55.0	LOG HAS SULFUR; PROBABLY PYRITE
323.6	CARBONDALE	HERRIN	COAL	2.9	55.2	
320.7	CARBONDALE	HERRIN	UNKNOWN	0.2	58.1	LOG HAS "BAND"
320.5	CARBONDALE	HERRIN	COAL	1.1	58.3	
319.5	CARBONDALE		UNDERCLAY	0.7	59.3	

MAPID: 16501281000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 600' E line of SE NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.412665 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.755639 **DATE COLLECTED:** 0 / 0 / 1950

SURFACE ELEVATION (FT.): 392.5 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #13 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL, ROBERT MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.5			UNCONSOLIDATED	8.0	0.0	
384.5	CARBONDALE		SHALE	9.5	8.0	
375.0	CARBONDALE		SANDSTONE	2.5	17.5	
372.5	CARBONDALE		SHALE	14.0	20.0	
358.5	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	34.0	
353.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	39.0	
342.5	CARBONDALE		CALCAREOUS SHALE	2.3	50.0	
340.2	CARBONDALE	BRERETON	LIMESTONE	4.7	52.3	
335.5	CARBONDALE	ANNA	BLACK SHALE	2.0	57.0	
333.5	CARBONDALE	HERRIN	COAL	4.4	59.0	BONEY UP. 25';RASH&BAND (.59')COAL=3.84'
329.1	CARBONDALE		UNDERCLAY	0.6	63.4	

MAPID: 16501282000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 710' W line of SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.417394 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.755651 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 399.5 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO., #79 **WELL TYPE:** Coal Test

COMMENT: CHURN DRILL, ROBERT MUENSTERMAN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.5			UNCONSOLIDATED	12.0	0.0	
387.5	CARBONDALE		SHALE	5.0	12.0	
382.5	CARBONDALE		UNKNOWN	0.3	17.0	LOG HAS "SMUT"
382.2	CARBONDALE		SHALE	4.9	17.3	
377.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	22.3	
372.2	CARBONDALE		SHALE	8.3	27.3	
364.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	35.5	
359.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	40.5	
352.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.9	47.0	
343.6	CARBONDALE	BRERETON	LIMESTONE	0.7	55.9	
342.9	CARBONDALE	ANNA	BLACK SHALE	3.1	56.6	
339.8	CARBONDALE	HERRIN	COAL	0.0	59.7	HERRIN COAL NOT PRESENT
339.8	CARBONDALE		SHALE	2.8	59.7	
337.0	CARBONDALE		SANDY SHALE	2.5	62.5	
334.5	CARBONDALE		CALCAREOUS SHALE	6.0	65.0	
328.5	CARBONDALE		SHALE	3.0	71.0	
325.5	CARBONDALE		CALCAREOUS SHALE	6.0	74.0	

MAPID: 16501283000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' N line, 15' E line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.415324 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761048 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 374.8 **LOGGED (FT.):** 81.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #25 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, JESS RISTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.8			UNCONSOLIDATED	25.5	0.0	
349.3	CARBONDALE		SANDSTONE	5.0	25.5	
344.3	CARBONDALE		SANDY SHALE	2.7	30.5	
341.6	CARBONDALE	ALLENBY	COAL	0.3	33.2	
341.4	CARBONDALE		SHALE	4.4	33.4	
337.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	37.8	
330.9	CARBONDALE		SHALE	5.6	43.9	
325.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.7	49.5	
306.6	CARBONDALE		CALCAREOUS SHALE	0.3	68.2	
306.3	CARBONDALE		BLACK SHALE	2.5	68.5	
303.8	CARBONDALE		SHALE	4.9	71.0	
298.9	CARBONDALE	HERRIN	COAL	4.3	75.9	W/ SULFUR AND BANDS; TOTAL COAL 3.99
294.6	CARBONDALE		UNDERCLAY	1.3	80.2	

MAPID: 16501284000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of NW NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.417593 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759297 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 390.1 **LOGGED (FT.):** 83.1 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #74 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JESSE RISTER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.1			UNCONSOLIDATED	9.0	0.0	
381.1	CARBONDALE		SHALE	13.5	9.0	
367.6	CARBONDALE		SHALE	11.0	22.5	
356.6	CARBONDALE		UNKNOWN	0.3	33.5	LOG HAS "RASH"
356.3	CARBONDALE		SHALE	4.3	33.8	
352.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.3	38.1	
344.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.2	45.4	
337.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.5	52.6	
321.0	CARBONDALE	BRERETON	LIMESTONE	1.0	69.1	
320.0	CARBONDALE	ANNA	BLACK SHALE	2.4	70.1	
317.6	CARBONDALE	ANNA	SHALE	5.1	72.5	
312.5	CARBONDALE	HERRIN	COAL	4.2	77.6	W/ SULFUR & BANDS; TOTAL COAL 3.74'
308.4	CARBONDALE		UNDERCLAY	1.3	81.7	

MAPID: 16501285000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.412962 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759275 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #77 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JESS RISTER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	16.0	0.0	
360.0	CARBONDALE		SANDY SHALE	5.8	16.0	
354.2	CARBONDALE		UNKNOWN	0.3	21.8	LOG HAS SMUT
353.8	CARBONDALE		SHALE	3.3	22.2	
350.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	25.5	
349.4	CARBONDALE	BANKSTON FORK	SHALE	0.8	26.6	
348.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.4	27.3	
344.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.3	31.7	
337.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.5	39.0	
318.5	CARBONDALE		BLACK SHALE	3.2	57.5	
315.3	CARBONDALE		SHALE	4.3	60.7	
311.0	CARBONDALE	HERRIN	COAL	4.6	65.0	W/ SULFUR & BAND; TOTAL COAL 4.26'
306.4	CARBONDALE		UNDERCLAY	1.4	69.6	

MAPID: 16502579000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421003 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.75476 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 395.5 **LOGGED (FT.):** 1450.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
23.5	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	372.0	
-86.5	SPOON	DAVIS	UNCLASSIFIED	-	482.0	
-1054.5	BASE OF PENN.		UNCLASSIFIED	-	1450.0	

MAPID: 16502579000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421003 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.75476 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2360.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.0	CARBONDALE	BRERETON	LIMESTONE	-	112.0	
-1211.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1610.0	
-1565.0			LIMESTONE	-	1964.0	
-1961.0		BASE BARLOW	LIMESTONE	-	2360.0	

MAPID: 16502579000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.421003 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.75476 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2977.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., FOX MARION **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
146.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	250.0	
93.0	CARBONDALE	SURVANT	COAL	1.8	303.0	
21.0	CARBONDALE	COLCHESTER	COAL	0.5	375.0	
-11.0	CARBONDALE	DEKOVEN	COAL	3.0	407.0	
-11.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	407.0	
-37.0	CARBONDALE	DAVIS	COAL	4.0	433.0	
-92.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	488.0	75% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-104.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	500.0	
-139.0	TRADEWATER	MT. RORAH	COAL	1.2	535.0	

MAPID: 16502715000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423327 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.749313 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2927.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., RAGSDALE **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
211.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	215.0	
161.0	CARBONDALE	SURVANT	COAL	1.4	265.0	
91.0	CARBONDALE	COLCHESTER	COAL	0.5	335.0	
44.0	CARBONDALE	DEKOVEN	COAL	3.5	382.0	
44.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	382.0	
21.0	CARBONDALE	DAVIS	COAL	3.8	405.0	
-39.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	465.0	66% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-52.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	478.0	
-87.0	TRADEWATER	MT. RORAH	COAL	1.2	513.0	

MAPID: 16502715000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423327 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.749313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.0 **LOGGED (FT.):** 2340.0 **LOG TYPE:**
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1143.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1569.0	
-1502.0			LIMESTONE	-	1928.0	
-1914.0		BASE BARLOW	LIMESTONE	-	2340.0	

MAPID: 16503425000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416343 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.752927 **DATE COLLECTED:** 9 / 0 / 1962
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2951.0 **LOG TYPE:** Electric Log
SOURCE: CAHABA OIL CO., HURLEY OSCAR T 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	250.0	
121.0	CARBONDALE	SURVANT	COAL	0.6	302.0	
48.0	CARBONDALE	COLCHESTER	COAL	0.5	375.0	
10.0	CARBONDALE	DEKOVEN	COAL	3.0	413.0	
10.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	413.0	
-17.0	CARBONDALE	DAVIS	COAL	4.0	440.0	
-70.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	493.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-85.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	508.0	

MAPID: 16503425000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416343 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.752927 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 2356.0 **LOG TYPE:**
SOURCE: CAHABA OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1185.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1608.0	
-1531.0			LIMESTONE	-	1954.0	
-1933.0		BASE BARLOW	LIMESTONE	-	2356.0	

MAPID: 16524922000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 805' N line, 2362' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418785 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758901 **DATE COLLECTED:** 5 / 12 / 1954
SURFACE ELEVATION (FT.): 392.4 **LOGGED (FT.):** 38.6 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0154QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.4			UNCONSOLIDATED	21.5	0.0	
370.9			LIMESTONE	5.7	21.5	
365.2			SHALE	3.5	27.2	
361.7			SANDSTONE	8.0	30.7	

MAPID: 16525677000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1312' N line, 2645' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419748 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.757511 **DATE COLLECTED:** 9 / 15 / 1954
SURFACE ELEVATION (FT.): 385.5 **LOGGED (FT.):** 60.8 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0300QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.5			UNCONSOLIDATED	24.0	0.0	
361.5			SHALE	24.4	24.0	SANDY
337.1			SHALE	4.8	48.4	
332.3	CARBONDALE	HERRIN	COAL	4.5	53.2	0.2FT CL PARTING
327.8	CARBONDALE		UNDERCLAY	3.1	57.7	

MAPID: 16525678000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 642' N line, 2629' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419716 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759351 **DATE COLLECTED:** 9 / 15 / 1954
SURFACE ELEVATION (FT.): 380.5 **LOGGED (FT.):** 74.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0301QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.5			UNCONSOLIDATED	16.7	0.0	
363.8			SANDSTONE	7.0	16.7	BROWN, SANDY
356.8			SHALE	5.0	23.7	GRAY
351.8			LIMESTONE	5.9	28.7	
345.9			SHALE	8.3	34.6	
337.6			SANDSTONE	5.0	42.9	
332.7			SHALE	13.8	47.8	
318.8			LIMESTONE	3.7	61.7	
315.2			SHALE	2.1	65.3	SLATE
313.1	CARBONDALE	HERRIN	COAL	4.8	67.4	
308.3	CARBONDALE		UNDERCLAY	2.3	72.2	

MAPID: 16525679000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 3' N line, 2614' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419683 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.761122 **DATE COLLECTED:** 1 / 7 / 1955
SURFACE ELEVATION (FT.): 389.1 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0302QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.1			UNCONSOLIDATED	32.1	0.0	
357.0			SANDSTONE	4.4	32.1	
352.7			SHALE	4.7	36.4	
348.0			LIMESTONE	6.2	41.1	
341.8			SHALE	3.9	47.3	
338.0			SANDSTONE	20.5	51.1	
317.4			SHALE	4.1	71.7	
313.3			LIMESTONE	4.4	75.8	
308.9			SHALE	1.4	80.2	SLATE
307.5	CARBONDALE	HERRIN	COAL	4.3	81.6	
303.3	CARBONDALE		UNDERCLAY	1.2	85.8	

MAPID: 16525680000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1326' N line, 2330' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418658 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.757471 **DATE COLLECTED:** 1 / 7 / 1955
SURFACE ELEVATION (FT.): 389.1 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0394QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.1			UNCONSOLIDATED	21.1	0.0	
368.0			LIMESTONE	6.0	21.1	
362.0			SHALE	2.6	27.1	SANDY
359.4			SHALE	5.6	29.7	
353.8			SHALE	15.6	35.3	SANDY
338.2			SHALE	1.1	50.9	
337.1			LIMESTONE	4.8	52.0	
332.3			SHALE	2.7	56.8	SLATE
329.6	CARBONDALE	HERRIN	COAL	4.6	59.5	
325.0			UNDERCLAY	0.9	64.1	

MAPID: 16525681000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1330' N line, 1990' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.417482 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.757458 **DATE COLLECTED:** 1 / 19 / 1955
SURFACE ELEVATION (FT.): 388.9 **LOGGED (FT.):** 70.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0395QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.9			UNCONSOLIDATED	26.3	0.0	
362.6			LIMESTONE	4.4	26.3	
358.2			SHALE	3.2	30.7	
355.0			SANDSTONE	11.4	33.9	
343.6			SHALE	10.0	45.3	
333.6			LIMESTONE	0.3	55.3	
333.3			SHALE	1.2	55.6	
332.1			LIMESTONE	7.0	56.8	
325.1			SHALE	1.4	63.8	SLATE
323.7	CARBONDALE	HERRIN	COAL	4.0	65.2	0.22 SH PARTING
319.7	CARBONDALE		UNDERCLAY	1.3	69.2	

MAPID: 16525682000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1333' N line, 1665' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416358 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.757445 **DATE COLLECTED:** 1 / 13 / 1955
SURFACE ELEVATION (FT.): 387.8 **LOGGED (FT.):** 68.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0396QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.8			UNCONSOLIDATED	22.5	0.0	
365.3			LIMESTONE	2.4	22.5	
362.9			SHALE	1.4	24.9	
361.5			LIMESTONE	2.4	26.3	
359.1			SHALE	7.2	28.7	
351.9			SANDSTONE	11.0	35.9	
340.9			SHALE	10.4	46.9	
330.5			LIMESTONE	4.6	57.3	
325.9			SHALE	1.4	61.9	SLATE
324.5	CARBONDALE	HERRIN	COAL	4.7	63.3	
319.8	CARBONDALE		UNDERCLAY	0.7	68.0	

MAPID: 16525683000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 992' N line, 2642' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419749 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.75839 **DATE COLLECTED:** 2 / 8 / 1955
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 66.3 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0512QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.5			UNCONSOLIDATED	23.5	0.0	
360.0			LIMESTONE	3.1	23.5	
356.9			SHALE	8.8	26.6	
348.1			SANDSTONE	8.0	35.4	
340.1			SHALE	11.2	43.4	
328.9			LIMESTONE	3.1	54.6	
325.7			SHALE	2.6	57.8	SLATE
323.1	CARBONDALE	HERRIN	COAL	4.5	60.4	
318.6	CARBONDALE		UNDERCLAY	1.4	64.9	

MAPID: 16525684000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 996' N line, 2337' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418694 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758377 **DATE COLLECTED:** 2 / 9 / 1955
SURFACE ELEVATION (FT.): 387.8 **LOGGED (FT.):** 77.8 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0513QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.8			UNCONSOLIDATED	20.8	0.0	
367.0			SANDSTONE	1.2	20.8	
365.8			SHALE	1.3	22.0	BROWN SANDY
364.5			SHALE	3.1	23.3	GRAY
361.4			COAL	0.3	26.4	
361.1			SHALE	3.9	26.7	
357.1			LIMESTONE	6.2	30.7	
350.9			SHALE	9.3	36.9	
341.7			SANDSTONE	5.6	46.1	
336.0			SHALE	10.7	51.8	
325.3			LIMESTONE	5.1	62.5	
320.2			SHALE	2.6	67.6	SLATE
317.6	CARBONDALE	HERRIN	COAL	4.5	70.2	
313.1	CARBONDALE		UNDERCLAY	3.1	74.7	

MAPID: 16525685000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 915' N line, 2001' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.417536 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758597 **DATE COLLECTED:** 2 / 26 / 1981
SURFACE ELEVATION (FT.): 398.1 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 0516QC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.1			UNCONSOLIDATED	36.0	0.0	
362.1			SHALE	7.0	36.0	
355.1			LIMESTONE	7.0	43.0	
348.1			SHALE	24.5	50.0	SANDY GRAY
323.6			SHALE	2.7	74.5	SLATE BLACK
320.9			SHALE	4.2	77.2	GRAY
316.7	CARBONDALE	HERRIN	COAL	4.2	81.4	
312.5	CARBONDALE		UNDERCLAY	1.4	85.6	

MAPID: 16525687000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 314' N line, 2666' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419855 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.760252 **DATE COLLECTED:** 8 / 5 / 1980
SURFACE ELEVATION (FT.): 388.6 **LOGGED (FT.):** 86.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 1586QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.6			UNCONSOLIDATED	30.7	0.0	
357.9			SANDSTONE	5.0	30.7	
352.9			SHALE	5.6	35.7	
347.3			LIMESTONE	5.5	41.3	
341.8			SHALE	8.5	46.8	
333.3			SANDSTONE	2.0	55.3	
331.3			SHALE	15.9	57.3	
315.4			LIMESTONE	5.3	73.2	
310.1			SHALE	1.9	78.5	SLATE
308.3	CARBONDALE	HERRIN	COAL	4.4	80.3	
303.9	CARBONDALE		UNDERCLAY	1.9	84.7	

MAPID: 16525688000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 960' N line, 1666' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416373 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758469 **DATE COLLECTED:** 3 / 28 / 1981
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2568QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.5			UNCONSOLIDATED	19.0	0.0	
364.5			SHALE	5.2	19.0	
359.3			LIMESTONE	6.8	24.2	
352.5			SHALE	25.3	31.0	
327.2			LIMESTONE	5.7	56.3	
321.5			SHALE	2.4	62.0	SLATE
319.1	CARBONDALE	HERRIN	COAL	4.6	64.4	
314.5	CARBONDALE		UNDERCLAY	1.0	69.0	

MAPID: 16525689000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 628' N line, 1668' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416392 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759381 **DATE COLLECTED:** 3 / 30 / 1981
SURFACE ELEVATION (FT.): 381.6 **LOGGED (FT.):** 70.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2569QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.6			UNCONSOLIDATED	21.0	0.0	
360.6	SHELBURN	DANVILLE	COAL	0.5	21.0	
360.1	SHELBURN		SHALE	5.0	21.5	
355.1	SHELBURN	BANKSTON FORK	LIMESTONE	5.5	26.5	
349.6	SHELBURN		SHALE	25.0	32.0	
324.6	SHELBURN	BRERETON	LIMESTONE	4.8	57.0	
319.8			SHALE	3.2	61.8	SLATE
316.6	CARBONDALE	HERRIN	COAL	4.3	65.0	
312.3	CARBONDALE		UNDERCLAY	1.1	69.3	

MAPID: 16525690000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 326' N line, 1659' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.416372 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.76021 **DATE COLLECTED:** 3 / 31 / 1981
SURFACE ELEVATION (FT.): 376.2 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2570QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.2			UNCONSOLIDATED	23.0	0.0	
353.2			LIMESTONE	6.0	23.0	
347.2			SHALE	23.0	29.0	
324.2			LIMESTONE	9.3	52.0	
314.9			SHALE	1.5	61.3	SLATE
313.4	CARBONDALE	HERRIN	COAL	4.3	62.8	
309.1	CARBONDALE		UNDERCLAY	1.9	67.1	

MAPID: 16525691000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 317' N line, 1974' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.417461 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.760237 **DATE COLLECTED:** 4 / 1 / 1981
SURFACE ELEVATION (FT.): 380.9 **LOGGED (FT.):** 77.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2571QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.9			UNCONSOLIDATED	28.0	0.0	
352.9			SHALE	6.0	28.0	
346.9			LIMESTONE	7.4	34.0	
339.5			SHALE	24.6	41.4	
314.9			LIMESTONE	2.3	66.0	
312.6			SHALE	1.3	68.3	SLATE BLACK
311.3			SHALE	2.1	69.6	GRAY
309.2	CARBONDALE	HERRIN	COAL	4.7	71.7	
304.5	CARBONDALE		UNDERCLAY	0.6	76.4	

MAPID: 16525692000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 314' N line, 2299' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418586 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.76025 **DATE COLLECTED:** 4 / 2 / 1981
SURFACE ELEVATION (FT.): 387.8 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2572QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.8			UNCONSOLIDATED	26.5	0.0	
361.3			SHALE	11.8	26.5	
349.5			COAL	0.5	38.3	
349.0			SHALE	4.6	38.8	
344.4			LIMESTONE	5.6	43.4	
338.8			SHALE	25.3	49.0	
313.5			LIMESTONE	0.7	74.3	
312.8			SHALE	2.2	75.0	
310.6			SHALE	4.1	77.2	
306.5	CARBONDALE	HERRIN	COAL	4.4	81.3	
302.1	CARBONDALE		UNDERCLAY	1.3	85.7	

MAPID: 16525693000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 632' N line, 2313' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418623 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759376 **DATE COLLECTED:** 4 / 3 / 1981
SURFACE ELEVATION (FT.): 389.8 **LOGGED (FT.):** 101.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2573QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.8			UNCONSOLIDATED	29.0	0.0	
360.8			SHALE	12.0	29.0	
348.8			LIMESTONE	4.0	41.0	
344.8			SHALE	17.5	45.0	
327.3			LIMESTONE	3.1	62.5	
324.2			SHALE	4.3	65.6	
319.9			COAL	0.6	69.9	
319.3			LIMESTONE	19.4	70.5	INTRUSION
299.9	CARBONDALE	HERRIN	COAL	1.3	89.9	
298.6	CARBONDALE		SHALE	9.8	91.2	

MAPID: 16525694000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 705' N line, 2320' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418643 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759176 **DATE COLLECTED:** 4 / 6 / 1981
SURFACE ELEVATION (FT.): 389.2 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2574QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.2			UNCONSOLIDATED	27.5	0.0	
361.7			SHALE	8.2	27.5	
353.5			COAL	0.5	35.7	
353.0			SHALE	4.0	36.2	
349.0			LIMESTONE	6.1	40.2	
342.9			SHALE	25.3	46.3	SANDY
317.6			LIMESTONE	3.1	71.6	
314.5			SHALE	2.7	74.7	SLATE
311.8			COAL	2.6	77.4	WITH LS AND CALCITE
309.2			UNDERCLAY	3.0	80.0	

MAPID: 16525695000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 763' N line, 2314' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418622 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759017 **DATE COLLECTED:** 4 / 7 / 1981
SURFACE ELEVATION (FT.): 389.1 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2575QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.1			UNCONSOLIDATED	33.0	0.0	
356.1			COAL	0.5	33.0	
355.6			SHALE	4.8	33.5	
350.8			LIMESTONE	6.2	38.3	
344.6			SHALE	25.8	44.5	
318.8			LIMESTONE	3.3	70.3	
315.5			SHALE	2.4	73.6	SLATE
313.1	CARBONDALE	HERRIN	COAL	4.4	76.0	
308.7	CARBONDALE		UNDERCLAY	0.6	80.4	

MAPID: 16525696000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 684' N line, 2248' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418398 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759231 **DATE COLLECTED:** 4 / 8 / 1981
SURFACE ELEVATION (FT.): 392.5 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2576QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.5			UNCONSOLIDATED	30.5	0.0	
362.0			SHALE	8.5	30.5	
353.5			COAL	0.5	39.0	
353.0			SHALE	2.8	39.5	
350.2			LIMESTONE	7.2	42.3	
343.0			SHALE	25.6	49.5	
317.4			LIMESTONE	0.8	75.1	
316.6			SHALE	3.6	75.9	SLATE
313.0			SHALE	0.7	79.5	
312.3	CARBONDALE	HERRIN	COAL	4.6	80.2	
307.7	CARBONDALE		UNDERCLAY	1.2	84.8	

MAPID: 16525697000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 606' N line, 2246' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418391 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759445 **DATE COLLECTED:** 4 / 9 / 1981
SURFACE ELEVATION (FT.): 393.4 **LOGGED (FT.):** 88.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2577QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.4			UNCONSOLIDATED	26.6	0.0	
366.8			SHALE	12.2	26.6	
354.6			COAL	0.5	38.8	
354.1			SHALE	4.7	39.3	
349.4			LIMESTONE	7.0	44.0	
342.4			SHALE	26.5	51.0	
315.9			LIMESTONE	1.7	77.5	
314.2			SHALE	3.3	79.2	SLATE
310.9	CARBONDALE	HERRIN	COAL	4.5	82.5	
306.4	CARBONDALE		UNDERCLAY	1.0	87.0	

MAPID: 16525698000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 568' N line, 2327' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418675 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759552 **DATE COLLECTED:** 4 / 10 / 1981
SURFACE ELEVATION (FT.): 390.5 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2578QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.5			UNCONSOLIDATED	30.8	0.0	
359.7			SHALE	7.2	30.8	
352.5			COAL	0.5	38.0	
352.0			SHALE	3.8	38.5	
348.2			LIMESTONE	7.5	42.3	
340.7			SHALE	24.2	49.8	
316.5			LIMESTONE	3.2	74.0	
313.3			SHALE	3.9	77.2	SLATE
309.4	CARBONDALE	HERRIN	COAL	4.4	81.1	
305.0	CARBONDALE		UNDERCLAY	1.5	85.5	

MAPID: 16525699000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 610' N line, 2380' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418854 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759437 **DATE COLLECTED:** 4 / 15 / 1981
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 84.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2579QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	28.7	0.0	
358.3			SHALE	10.0	28.7	
348.3			LIMESTONE	6.3	38.7	
342.0			SHALE	25.5	45.0	SANDY
316.5			LIMESTONE	5.7	70.5	
310.8			SHALE	1.8	76.2	SLATE
309.0	CARBONDALE	HERRIN	COAL	4.4	78.0	
304.6	CARBONDALE		UNDERCLAY	1.6	82.4	

MAPID: 16525700000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 544' N line, 2359' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418786 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759618 **DATE COLLECTED:** 4 / 16 / 1981
SURFACE ELEVATION (FT.): 389.2 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2580QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.2			UNCONSOLIDATED	30.5	0.0	
358.7			SHALE	7.7	30.5	
351.0			COAL	0.5	38.2	
350.5			SHALE	3.6	38.7	
346.9			LIMESTONE	4.7	42.3	
342.2			SHALE	26.0	47.0	
316.2			LIMESTONE	4.6	73.0	
311.6			SHALE	2.5	77.6	SLATE
309.1	CARBONDALE	HERRIN	COAL	4.4	80.1	
304.7	CARBONDALE		UNDERCLAY	1.5	84.5	

MAPID: 16525701000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 666' N line, 2382' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418861 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759283 **DATE COLLECTED:** 4 / 23 / 1981
SURFACE ELEVATION (FT.): 386.4 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2583QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.4			UNCONSOLIDATED	30.5	0.0	
355.9			SHALE	2.6	30.5	
353.3			COAL	0.6	33.1	
352.7			SHALE	3.8	33.7	
348.9			LIMESTONE	5.5	37.5	
343.4			SHALE	25.5	43.0	
317.9			LIMESTONE	4.5	68.5	
313.4			SHALE	2.9	73.0	SLATE
310.5	CARBONDALE	HERRIN	COAL	4.5	75.9	
306.0	CARBONDALE		UNDERCLAY	0.6	80.4	

MAPID: 16525702000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 727' N line, 2365' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418799 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759115 **DATE COLLECTED:** 4 / 24 / 1981
SURFACE ELEVATION (FT.): 386.8 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2584QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.8			UNCONSOLIDATED	28.0	0.0	
358.8			SHALE	3.0	28.0	
355.8			COAL	0.5	31.0	
355.3			SHALE	4.2	31.5	
351.1			LIMESTONE	6.5	35.7	
344.6			SHALE	25.3	42.2	
319.3			LIMESTONE	4.1	67.5	
315.2			SHALE	3.0	71.6	SLATE
312.2	CARBONDALE	HERRIN	COAL	4.5	74.6	
307.7	CARBONDALE		UNDERCLAY	0.9	79.1	

MAPID: 16525703000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 731' N line, 2276' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418491 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759105 **DATE COLLECTED:** 4 / 27 / 1981
SURFACE ELEVATION (FT.): 391.1 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2585QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.1			UNCONSOLIDATED	28.0	0.0	
363.1			SHALE	7.0	28.0	
356.1			LIMESTONE	3.0	35.0	
353.1			SHALE	20.0	38.0	
333.1			LIMESTONE	0.5	58.0	
332.6			SHALE	3.5	58.5	
329.1			LIMESTONE	33.0	62.0	INTRUSION
296.1	CARBONDALE	HERRIN	COAL	1.8	95.0	
294.3	CARBONDALE		UNDERCLAY	0.2	96.8	

MAPID: 16525704000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 777' N line, 2250' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418401 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758978 **DATE COLLECTED:** 4 / 28 / 1981
SURFACE ELEVATION (FT.): 392.1 **LOGGED (FT.):** 100.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2586QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.1			UNCONSOLIDATED	30.0	0.0	
362.1	SHELBURN		SHALE	5.0	30.0	
357.1	SHELBURN	BANKSTON FORK	LIMESTONE	2.0	35.0	
355.1	SHELBURN		SHALE	22.3	37.0	
332.8	SHELBURN		LIMESTONE	0.3	59.3	
332.5	SHELBURN		SHALE	4.1	59.6	SLATE
328.4	SHELBURN		LIMESTONE	31.0	63.7	INTRUSION
297.4	SHELBURN		UNDERCLAY	5.5	94.7	

MAPID: 16525705000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 815' N line, 2298' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418563 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.758874 **DATE COLLECTED:** 4 / 29 / 1981
SURFACE ELEVATION (FT.): 389.5 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2587QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
389.5			UNCONSOLIDATED	26.6	0.0	
362.9			SHALE	6.1	26.6	
356.8			COAL	0.5	32.7	
356.3			SHALE	3.8	33.2	
352.5			LIMESTONE	6.8	37.0	
345.7			SHALE	25.7	43.8	
320.0			LIMESTONE	2.7	69.5	
317.3			SHALE	3.2	72.2	SLATE
314.1	CARBONDALE	HERRIN	COAL	4.4	75.4	
309.7	CARBONDALE		UNDERCLAY	1.2	79.8	

MAPID: 16525706000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 739' N line, 2208' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418256 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.75908 **DATE COLLECTED:** 4 / 30 / 1981
SURFACE ELEVATION (FT.): 394.3 **LOGGED (FT.):** 86.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2588QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.3			UNCONSOLIDATED	28.3	0.0	
366.0			SHALE	9.7	28.3	
356.3			COAL	0.6	38.0	
355.7			SHALE	3.8	38.6	
351.9			LIMESTONE	7.0	42.4	
344.9			SHALE	27.2	49.4	
317.7			LIMESTONE	1.3	76.6	
316.4			SHALE	1.0	77.9	SLATE
315.4			SHALE	2.6	78.9	
312.8	CARBONDALE	HERRIN	COAL	4.3	81.5	
308.5	CARBONDALE		UNDERCLAY	0.7	85.8	

MAPID: 16525707000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 648' N line, 2241' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418374 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.75933 **DATE COLLECTED:** 5 / 1 / 1981
SURFACE ELEVATION (FT.): 393.2 **LOGGED (FT.):** 87.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2589QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.2			UNCONSOLIDATED	27.0	0.0	
366.2			SHALE	11.5	27.0	
354.7			COAL	0.5	38.5	
354.2			SHALE	5.0	39.0	
349.2			LIMESTONE	5.5	44.0	
343.7			SHALE	27.5	49.5	
316.2			SHALE	2.5	77.0	SLATE
313.7			SHALE	2.2	79.5	
311.5	CARBONDALE	HERRIN	COAL	4.5	81.7	
307.0	CARBONDALE		UNDERCLAY	0.8	86.2	

MAPID: 16525708000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 526' N line, 2270' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418478 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759668 **DATE COLLECTED:** 5 / 5 / 1981
SURFACE ELEVATION (FT.): 392.3 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2590QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.3			UNCONSOLIDATED	27.3	0.0	
365.0			SHALE	13.1	27.3	
351.9			COAL	0.5	40.4	
351.4			SHALE	5.1	40.9	
346.3			LIMESTONE	5.0	46.0	
341.3			SHALE	28.3	51.0	
313.0			LIMESTONE	1.7	79.3	
311.3			SHALE	3.0	81.0	SLATE
308.3	CARBONDALE	HERRIN	COAL	4.4	84.0	
303.9	CARBONDALE		UNDERCLAY	1.6	88.4	

MAPID: 16525709000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 481' N line, 2322' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418658 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759791 **DATE COLLECTED:** 5 / 6 / 1981
SURFACE ELEVATION (FT.): 392.9 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2591QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.9			UNCONSOLIDATED	26.0	0.0	
366.9			SHALE	14.6	26.0	
352.3			COAL	0.5	40.6	
351.8			SHALE	2.9	41.1	
348.9			LIMESTONE	7.4	44.0	
341.5			SHALE	25.6	51.4	
315.9			LIMESTONE	4.4	77.0	
311.5			SHALE	2.6	81.4	SLATE
308.9	CARBONDALE	HERRIN	COAL	4.4	84.0	
304.5	CARBONDALE		UNDERCLAY	1.6	88.4	
302.9	CARBONDALE		SANDSTONE	1.0	90.0	

MAPID: 16525710000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 479' N line, 2385' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418876 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759796 **DATE COLLECTED:** 5 / 7 / 1981
SURFACE ELEVATION (FT.): 391.2 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2592QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.2			UNCONSOLIDATED	28.0	0.0	
363.2			SHALE	13.0	28.0	
350.2			LIMESTONE	6.5	41.0	
343.7			SHALE	26.0	47.5	
317.7			LIMESTONE	5.1	73.5	
312.6			SHALE	2.0	78.6	SLATE
310.6			LIMESTONE	19.4	80.6	INTRUSION?

MAPID: 16525711000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 419' N line, 2419' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.418997 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.759961 **DATE COLLECTED:** 5 / 8 / 1981
SURFACE ELEVATION (FT.): 388.2 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2593QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.2			UNCONSOLIDATED	29.0	0.0	
359.2			SHALE	10.3	29.0	
348.9			COAL	0.5	39.3	
348.4			SHALE	2.8	39.8	
345.6			LIMESTONE	5.9	42.6	
339.7			SHALE	26.5	48.5	
313.2			LIMESTONE	3.5	75.0	
309.7			SHALE	2.3	78.5	SLATE
307.4	CARBONDALE	HERRIN	COAL	4.6	80.8	
302.8	CARBONDALE		UNDERCLAY	3.1	85.4	
299.7	CARBONDALE		SANDSTONE	1.5	88.5	

MAPID: 16525712000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 362' N line, 2450' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419104 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.760118 **DATE COLLECTED:** 5 / 13 / 1981
SURFACE ELEVATION (FT.): 388.3 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2594QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.3			UNCONSOLIDATED	30.3	0.0	
358.0			SHALE	8.1	30.3	
349.9			COAL	0.5	38.4	
349.4			SHALE	3.4	38.9	
346.0			LIMESTONE	6.2	42.3	
339.8			SHALE	27.5	48.5	
312.3			LIMESTONE	3.6	76.0	
308.7			SHALE	2.4	79.6	SLATE
306.3	CARBONDALE	HERRIN	COAL	3.5	82.0	
302.8	CARBONDALE		UNDERCLAY	3.5	85.5	
299.3	CARBONDALE		SANDSTONE	1.0	89.0	

MAPID: 16525713000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 306' N line, 2480' E line
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419212 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.760271 **DATE COLLECTED:** 5 / 5 / 1981
SURFACE ELEVATION (FT.): 387.9 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL COMPANY 2595QB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.9			UNCONSOLIDATED	27.0	0.0	
360.9			SHALE	11.6	27.0	
349.3			COAL	0.5	38.6	
348.8			SHALE	3.9	39.1	
344.9			LIMESTONE	5.7	43.0	
339.2			SHALE	25.8	48.7	
313.4			LIMESTONE	4.5	74.5	
308.9			SHALE	2.5	79.0	SLATE
306.4	CARBONDALE	HERRIN	COAL	3.6	81.5	
302.8	CARBONDALE		UNDERCLAY	2.9	85.1	
299.9	CARBONDALE		SANDSTONE	2.0	88.0	

MAPID: 16526227000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.418694 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754752 **DATE COLLECTED:** 5 / 21 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 185.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 114E **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	YELLOW CLAY
-	CARBONDALE		SANDY SHALE	5.0	7.0	
-	CARBONDALE		SANDSTONE	9.0	12.0	BROWN
-	CARBONDALE		SANDY SHALE	3.0	21.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	24.0	WHITE
-	CARBONDALE		GRAY SHALE	3.0	29.7	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	17.8	32.7	WHITE
-	CARBONDALE		SANDY SHALE	8.5	50.5	
-	CARBONDALE		GRAY SHALE	3.5	59.0	
-	CARBONDALE	BRERETON	LIMESTONE	0.5	62.5	BLUE
-	CARBONDALE	ANNA	BLACK SHALE	4.0	63.0	
-	CARBONDALE	ENERGY	GRAY SHALE	0.7	67.0	
-	CARBONDALE	HERRIN	COAL	4.4	67.7	
-	CARBONDALE		UNDERCLAY	4.0	72.1	
-	CARBONDALE		SANDSTONE	18.0	76.1	WHITE
-	CARBONDALE		SANDSTONE	3.0	94.1	WITH SHALE
-	CARBONDALE		SANDY SHALE	32.0	97.1	
-	CARBONDALE	BRIAR HILL	COAL	1.0	129.1	
-	CARBONDALE		SANDY SHALE	1.5	130.1	
-	CARBONDALE		SANDSTONE	15.5	131.6	
-	CARBONDALE		SANDY SHALE	24.0	147.1	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	171.1	NOTE:
-	CARBONDALE	DYKERSBURG	GRAY SHALE	7.3	173.1	NUMBERS SHOWN ON ORIGINAL LOG AS TENTHS
-	CARBONDALE	SPRINGFIELD	COAL	4.6	180.4	ARE ACTUALLY INCHES
-	CARBONDALE		UNDERCLAY	0.5	185.0	

MAPID: 16526228000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: ELDORADO **LONGITUDE:** -88.418694 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754752 **DATE COLLECTED:** 5 / 24 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 155.7 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 115E **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	13.8	0.0	YELLOW CLAY
-	CARBONDALE		SHALE	2.0	13.8	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	12.3	15.8	
-	CARBONDALE		GRAY SHALE	2.0	28.0	
-	CARBONDALE	BRERETON	LIMESTONE	7.3	30.0	BLUE
-	CARBONDALE	ANNA	BLACK SHALE	1.4	37.3	
-	CARBONDALE	HERRIN	COAL	4.2	38.7	
-	CARBONDALE		UNDERCLAY	4.2	42.8	
-	CARBONDALE		SANDSTONE	14.0	47.0	WHITE
-	CARBONDALE		SANDSTONE	39.5	61.0	SHALE BANDS
-	CARBONDALE	BRIAR HILL	COAL	1.5	100.5	
-	CARBONDALE		SANDY SHALE	1.5	102.0	
-	CARBONDALE		SANDSTONE	20.5	103.5	
-	CARBONDALE		SANDY SHALE	19.5	124.0	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.0	143.5	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	144.5	
-	CARBONDALE	DYKERSBURG	GRAY SHALE	2.8	147.5	
-	CARBONDALE	SPRINGFIELD	COAL	4.6	150.3	
-	CARBONDALE		UNDERCLAY	0.8	154.9	

MAPID: 16526229000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1100' S line, 2500' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.420443 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.74962 **DATE COLLECTED:** 8 / 19 / 1986

SURFACE ELEVATION (FT.): 368.3 **LOGGED (FT.):** 102.1 **LOG TYPE:** Drillers Log

SOURCE: EQUALITY MINING CO. 2786QEC **WELL TYPE:** Coal Test

COMMENT: PERMIT 230

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.3	PLEISTOCENE		CLAY	4.0	0.0	
364.3	PLEISTOCENE		SANDY CLAY	2.0	4.0	
362.3	PLEISTOCENE		CLAY	4.0	6.0	
358.3	PLEISTOCENE		SANDY CLAY	4.0	10.0	
354.3	PLEISTOCENE		CLAY	3.1	14.0	
351.2	MODESTO		SHALE	6.5	17.1	BROWN
344.7	MODESTO		GRAY SHALE	3.4	23.6	
341.3	CARBONDALE	DANVILLE	COAL	1.7	27.0	
339.6	CARBONDALE		SANDSTONE	5.3	28.7	GRAY
334.3	CARBONDALE		GRAY SHALE	3.1	34.0	
331.2	CARBONDALE		SANDSTONE	0.2	37.1	
331.0	CARBONDALE		SHALE	5.0	37.3	DARK
326.0	CARBONDALE		GRAY SHALE	8.8	42.3	
317.2	CARBONDALE	ALLENBY	COAL	0.1	51.1	
317.1	CARBONDALE		GRAY SHALE	1.1	51.2	
316.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	52.3	GRAY
310.8	CARBONDALE		GRAY SHALE	2.0	57.5	
308.8	CARBONDALE	ANVIL ROCK	SANDSTONE	2.4	59.5	
306.4	CARBONDALE		SHALE	5.3	61.9	DARK
301.1	CARBONDALE		SANDY SHALE	10.0	67.2	DARK
291.1	CARBONDALE		SANDY SHALE	6.4	77.2	GRAY
284.7	CARBONDALE	BRERETON	LIMESTONE	3.6	83.6	DARK
281.1	CARBONDALE	ANNA	SHALE	2.9	87.2	DARK
278.2	CARBONDALE	HERRIN	COAL	4.4	90.1	
273.8	CARBONDALE		UNDERCLAY	0.6	94.5	
273.2	CARBONDALE		GRAY SHALE	0.9	95.1	
272.3	CARBONDALE		SANDSTONE	5.3	96.0	GRAY
267.0	CARBONDALE		SANDY SHALE	0.8	101.3	

MAPID: 16526230000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.429002 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.757905 **DATE COLLECTED:** 9 / 3 / 1992

SURFACE ELEVATION (FT.): 377.2 **LOGGED (FT.):** 167.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY CS-08 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.2	PLEISTOCENE		CLAY	29.8	0.0	
347.4	CARBONDALE		SILTY SHALE	1.2	29.8	WEATHERED
346.2	CARBONDALE		SILTY SHALE	5.5	31.0	GRAY
340.7	CARBONDALE		GRAY SHALE	7.3	36.5	WITH SILTY BANDS
333.4	CARBONDALE		CALCAREOUS SHALE	0.4	43.8	DARK GRAY
333.0	CARBONDALE	BRERETON	LIMESTONE	3.6	44.2	DARK GRAY
329.4	CARBONDALE	ANNA	BLACK SHALE	1.8	47.8	
327.6	CARBONDALE	HERRIN	COAL	4.6	49.6	
323.0	CARBONDALE		UNDERCLAY	6.3	54.2	
316.7	CARBONDALE		SANDSTONE	5.5	60.5	SHALEY WITH SOME LS BANDS
311.2	CARBONDALE		SILTSTONE	11.0	66.0	
300.2	CARBONDALE		SANDSTONE	8.5	77.0	
291.7	CARBONDALE		SILTY SHALE	25.7	85.5	
266.0	CARBONDALE	BRIAR HILL	COAL	1.6	111.2	
264.4	CARBONDALE		GRAY SHALE	4.7	112.8	
259.7	CARBONDALE		SANDSTONE	6.5	117.5	WITH MANY THICK LS BANDS
253.2	CARBONDALE		SILTY SHALE	11.0	124.0	FINE SANDSTONE INTERBEDS
242.2	CARBONDALE		SILTY SHALE	11.5	135.0	
230.7	CARBONDALE		GRAY SHALE	5.0	146.5	
225.7	CARBONDALE	ST. DAVID	ARGILLACEOUS LIMESTONE	1.3	151.5	
224.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	152.8	
221.9	CARBONDALE	DYKERSBURG	GRAY SHALE	5.4	155.3	
216.5	CARBONDALE	SPRINGFIELD	COAL	4.7	160.7	
211.8	CARBONDALE		UNDERCLAY	1.6	165.4	

MAPID: 16526231000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.427997 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.760226 **DATE COLLECTED:** 8 / 26 / 1986
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 74.9 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. MW18 **WELL TYPE:** Water Well
COMMENT: PERMIT 230; PEABODY 230; PEABODY LOC.A-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	26.2	0.0	
-	MODESTO		SANDSTONE	3.9	26.2	
-	MODESTO		GRAY SHALE	6.8	30.1	
-	MODESTO		SANDSTONE	0.7	36.9	
-	CARBONDALE	DANVILLE	COAL	1.7	37.6	DARK & SHALE
-	CARBONDALE		SHALE	5.7	39.3	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	11.4	45.0	
-	CARBONDALE		SHALE	2.1	56.4	DARK
-	CARBONDALE		SANDY SHALE	4.7	58.5	
-	CARBONDALE		LIMESTONE	0.7	63.2	
-	CARBONDALE		SHALE	1.8	63.9	DARK
-	CARBONDALE		SHALE	3.7	65.7	
-	CARBONDALE	HERRIN	COAL	4.5	69.4	
-	CARBONDALE		UNDERCLAY	1.0	73.9	

MAPID: 16590858000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419848 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753846 **DATE COLLECTED:** 5 / 2 / 1983
SURFACE ELEVATION (FT.): 376.7 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2755QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.7	PLEISTOCENE		CLAY	35.4	0.0	
341.3	CARBONDALE		GRAY SHALE	10.3	35.4	
331.0	CARBONDALE	BRERETON	LIMESTONE	1.8	45.7	DARK
329.2	CARBONDALE	ANNA	BLACK SHALE	2.1	47.5	
327.1	CARBONDALE	ENERGY	GRAY SHALE	2.0	49.6	
325.1	CARBONDALE	HERRIN	COAL	4.3	51.6	
320.8	CARBONDALE		UNDERCLAY	4.4	55.9	
316.4	CARBONDALE	HIGGINSVILLE	LIMESTONE	0.7	60.3	GRAY

MAPID: 16590860000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419848 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753846 **DATE COLLECTED:** 5 / 16 / 1983
SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2767QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.3	PLEISTOCENE		CLAY	33.4	0.0	
336.9	CARBONDALE	ALLENBY	COAL	0.8	33.4	TOP ERODED
336.1	CARBONDALE		UNDERCLAY	1.6	34.2	
334.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	35.8	BROWN-GRAY
327.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.8	42.6	
301.9	CARBONDALE	BRERETON	LIMESTONE	3.0	68.4	DARK
298.9	CARBONDALE	ANNA	BLACK SHALE	3.1	71.4	
295.8	CARBONDALE	HERRIN	COAL	4.2	74.5	
291.6	CARBONDALE		UNDERCLAY	5.3	78.7	
286.3	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.0	84.0	GRAY

MAPID: 16590861000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.419848 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753846 **DATE COLLECTED:** 4 / 28 / 1981
SURFACE ELEVATION (FT.): 392.1 **LOGGED (FT.):** 100.2 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2586QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.1	PLEISTOCENE		CLAY	13.5	0.0	
378.6	PLEISTOCENE		SANDY CLAY	16.5	13.5	
362.1	CARBONDALE		GRAY SHALE	5.0	30.0	
357.1	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	35.0	BROWN
355.1	CARBONDALE	ANVIL ROCK	SANDSTONE	22.3	37.0	GRAY
332.8	CARBONDALE	BRERETON	LIMESTONE	0.3	59.3	DARK
332.5	CARBONDALE	ANNA	BLACK SHALE	4.1	59.6	
328.4	CARBONDALE		LIMESTONE	31.0	63.7	DARK
297.4	CARBONDALE		UNDERCLAY	5.5	94.7	

MAPID: 16500199000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**

QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:** 4 / 16 / 1909

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 299.0 **LOG TYPE:** Drillers Log

SOURCE: W.M. BRIDGETT, HOLE #2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0			UNCONSOLIDATED	13.0	0.0	
385.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	13.0	
372.0	CARBONDALE		BLACK SHALE	2.0	26.0	
370.0	CARBONDALE	BRERETON	LIMESTONE	3.2	28.0	
366.8	CARBONDALE	ANNA	BLACK SHALE	1.5	31.2	
365.3	CARBONDALE	HERRIN	COAL	4.2	32.7	
361.2	CARBONDALE		UNDERCLAY	3.0	36.8	
358.2	CARBONDALE		SANDY SHALE	10.0	39.8	
348.2	CARBONDALE		CALCAREOUS SHALE	22.0	49.8	
326.2	CARBONDALE		SHALE	25.4	71.8	
300.7	CARBONDALE		BLACK SHALE	1.0	97.3	
299.7	CARBONDALE	BRIAR HILL	COAL	3.2	98.3	
296.6	CARBONDALE		SHALE	7.6	101.4	
289.0	CARBONDALE		UNKNOWN	1.5	109.0	LOG HAS "VERY HARD ROCK"
287.5	CARBONDALE		BLACK SHALE	33.5	110.5	
254.0	CARBONDALE		BLACK SHALE	2.0	144.0	
252.0	CARBONDALE		UNKNOWN	0.5	146.0	
251.5	CARBONDALE		BLACK SHALE	1.5	146.5	
250.0	CARBONDALE		BLACK SHALE	2.0	148.0	
248.0	CARBONDALE	SPRINGFIELD	COAL	4.6	150.0	
243.4	CARBONDALE		UNDERCLAY	5.3	154.6	
238.2	CARBONDALE		SANDY SHALE	17.7	159.8	
220.5	CARBONDALE		SHALE	55.5	177.5	
165.0	CARBONDALE	EXCELLO	BLACK SHALE	6.5	233.0	
158.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	239.5	
157.0	CARBONDALE		UNDERCLAY	1.5	241.0	
155.5	CARBONDALE		SANDSTONE	7.0	242.5	
148.5	CARBONDALE		BLACK SHALE	31.0	249.5	
117.5	CARBONDALE	SURVANT	COAL	2.0	280.5	
115.5	CARBONDALE		BLACK SHALE	7.0	282.5	
108.5	CARBONDALE		SANDSTONE	6.0	289.5	
102.5	CARBONDALE		SANDY SHALE	3.5	295.5	

MAPID: 16500199000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 299.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	CARBONDALE	HERRIN	COAL	4.2	33.0	
300.0	CARBONDALE	BRIAR HILL	COAL	3.2	98.0	
248.0	CARBONDALE	SPRINGFIELD	COAL	4.6	150.0	
157.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	241.0	

MAPID: 16500847000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 300' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400264 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.754833 **DATE COLLECTED:** 6 / 0 / 1939
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1346.0 **LOG TYPE:** Electric Log
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
116.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	260.0	
47.0	SPOON	DAVIS	UNCLASSIFIED	-	329.0	
-970.0	BASE OF PENN.		UNCLASSIFIED	-	1346.0	

MAPID: 16500847000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 300' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400264 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.754833 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2324.0 **LOG TYPE:**
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1131.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1507.0	
-1554.0			LIMESTONE	-	1930.0	
-1948.0		BASE BARLOW	LIMESTONE	-	2324.0	

MAPID: 16500847000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 300' W line of NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.400264 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.754833 **DATE COLLECTED:** 6 / 0 / 1939
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3045.0 **LOG TYPE:** Electric Log
SOURCE: KINGWOOD OIL CO, ALLYN EZBON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	145.0	
176.0	CARBONDALE	SURVANT	COAL	1.8	200.0	
116.0	CARBONDALE	COLCHESTER	COAL	0.5	260.0	
73.0	CARBONDALE	DEKOVEN	COAL	3.5	303.0	
73.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	303.0	
46.0	CARBONDALE	DAVIS	COAL	4.0	330.0	
-9.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	385.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-24.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	400.0	
-69.0	TRADEWATER	MT. RORAH	COAL	1.2	445.0	

MAPID: 16501008000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' S line, 0' E line of SW NE SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.403561 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.750226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 16.9 **LOG TYPE:** Survey Core Study
SOURCE: TERTELING BROS 39 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.0	CARBONDALE	LAWSON	GRAY SHALE	7.3	0.0	
425.8	CARBONDALE		CALCAREOUS SHALE	0.5	7.2	
425.3	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	1.9	7.7	
423.4	CARBONDALE	ANNA	BLACK SHALE	2.6	9.6	
420.8	CARBONDALE	HERRIN	COAL	4.7	12.2	

MAPID: 16501286000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 160' S line, 30' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.406037 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.754308 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 402.8 **LOGGED (FT.):** 38.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #14 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.8			UNCONSOLIDATED	9.0	0.0	
393.8	CARBONDALE		SANDY SHALE	13.0	9.0	
380.8	CARBONDALE		SHALE	3.5	22.0	
377.3	CARBONDALE		SHALE	1.5	25.5	
375.8	CARBONDALE	BRERETON	LIMESTONE	4.5	27.0	
371.3	CARBONDALE	ANNA	BLACK SHALE	1.6	31.5	
369.7	CARBONDALE	HERRIN	COAL	4.7	33.1	W/ SULFUR & BAND; TOTAL COAL 4.33'
365.1	CARBONDALE		UNDERCLAY	0.8	37.7	

MAPID: 16501287000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 30' S line, 40' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.406018 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.750297 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 431.2 **LOGGED (FT.):** 47.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #15 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
431.2			UNCONSOLIDATED	6.0	0.0	
425.2	CARBONDALE		SANDY SHALE	12.0	6.0	
413.2	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	18.0	
405.2	CARBONDALE		SHALE	8.3	26.0	
396.9	CARBONDALE	BRERETON	LIMESTONE	5.3	34.3	
391.7	CARBONDALE		SHALE	0.5	39.5	
391.2	CARBONDALE	ANNA	BLACK SHALE	1.8	40.0	
389.4	CARBONDALE	HERRIN	COAL	4.5	41.8	W/ SULFUR & BAND; TOTAL COAL 4.33'
385.0	CARBONDALE		UNDERCLAY	1.3	46.2	

MAPID: 16501288000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 5' N line, 15' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.406027 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.757505 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 68.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #16 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	17.0	0.0	
356.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	17.0	
343.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	30.0	
330.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.0	43.0	
311.0	CARBONDALE	HERRIN	COAL	0.3	62.0	
310.7	CARBONDALE	HERRIN	UNKNOWN	0.3	62.3	LOG HAS "BAND"
310.4	CARBONDALE	HERRIN	COAL	0.9	62.6	
309.5	CARBONDALE		SANDY SHALE	4.5	63.5	

MAPID: 16501289000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 10' N line, 25' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.406107 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761142 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 79.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #17 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	30.0	0.0	
339.0	CARBONDALE		SHALE	16.0	30.0	
323.0	CARBONDALE		SHALE	6.0	46.0	
317.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	21.5	52.0	
295.5	CARBONDALE	HERRIN	COAL	1.9	73.5	LOG SAYS COAL IS "RASHY"
293.6	CARBONDALE		SANDY SHALE	3.6	75.4	

MAPID: 16501290000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 645' S line, 670' E line of NW SW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408232 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.75198 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 406.1 **LOGGED (FT.):** 47.6 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #18 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.1			UNCONSOLIDATED	10.0	0.0	
396.1	CARBONDALE		SHALE	4.0	10.0	
392.1	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	14.0	
372.1	CARBONDALE	BRERETON	LIMESTONE	6.2	34.0	
365.9	CARBONDALE	ANNA	BLACK SHALE	1.5	40.2	
364.4	CARBONDALE	HERRIN	COAL	4.7	41.7	W/ SULFUR AND BAND; TOTAL COAL 4.41'
359.7	CARBONDALE		UNDERCLAY	1.2	46.4	

MAPID: 16501291000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 10' N line, 15' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410591 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761063 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 371.8 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #19 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.8			UNCONSOLIDATED	24.0	0.0	
347.8	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	24.0	
345.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	26.0	
339.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.5	32.0	
317.3	CARBONDALE	BRERETON	LIMESTONE	2.5	54.5	
314.8	CARBONDALE	ANNA	BLACK SHALE	2.5	57.0	
312.3	CARBONDALE	HERRIN	COAL	4.2	59.5	W/ RASH; UP. .25' BONE; TOTAL COAL 3.83'
308.1	CARBONDALE		UNDERCLAY	1.3	63.7	

MAPID: 16501292000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 10' N line, 730' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408556 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.761099 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 370.6 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #20 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.6			UNCONSOLIDATED	46.0	0.0	
324.6	CARBONDALE		SANDY SHALE	3.0	46.0	
321.6	CARBONDALE		SANDSTONE	4.0	49.0	
317.6	CARBONDALE		SANDY SHALE	6.5	53.0	
311.1	CARBONDALE		SANDSTONE	8.5	59.5	
302.6	CARBONDALE		SANDY SHALE	10.0	68.0	
292.6	CARBONDALE		SANDY SHALE	16.0	78.0	

MAPID: 16501293000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 750' S line, 740' E line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408572 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759553 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #23 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.9			UNCONSOLIDATED	17.0	0.0	
354.9	CARBONDALE		SHALE	7.0	17.0	
347.9	CARBONDALE		SHALE	4.5	24.0	
343.4	CARBONDALE	BRERETON	LIMESTONE	2.5	28.5	
340.9	CARBONDALE	ANNA	BLACK SHALE	3.3	31.0	
337.6	CARBONDALE	HERRIN	COAL	2.8	34.3	
334.7	CARBONDALE	HERRIN	UNKNOWN	0.4	37.2	LOG HAS "BAND"
334.3	CARBONDALE	HERRIN	COAL	1.1	37.6	
333.2	CARBONDALE		UNDERCLAY	1.3	38.7	

MAPID: 16501294000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 570' N line, 15' W line of NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.410573 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.759517 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #24 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.2			UNCONSOLIDATED	34.0	0.0	
340.2	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	34.0	
335.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	39.0	
324.2	CARBONDALE		CALCAREOUS SHALE	1.0	50.0	
323.2	CARBONDALE	BRERETON	LIMESTONE	2.5	51.0	
320.7	CARBONDALE	ANNA	BLACK SHALE	3.0	53.5	
317.7	CARBONDALE	HERRIN	COAL	2.8	56.5	
314.9	CARBONDALE	HERRIN	UNKNOWN	0.1	59.3	LOG HAS "BAND"
314.8	CARBONDALE	HERRIN	COAL	1.3	59.4	
313.5	CARBONDALE		UNDERCLAY	1.3	60.7	

MAPID: 16501295000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 810' S line, 10' E line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.405989 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.756103 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 384.9 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #26 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.9			UNCONSOLIDATED	14.0	0.0	
370.9	CARBONDALE		SHALE	5.0	14.0	
365.9	CARBONDALE		SANDY SHALE	11.0	19.0	
354.9	CARBONDALE		SANDSTONE	7.5	30.0	
347.4	CARBONDALE		SANDY SHALE	8.5	37.5	
338.9	CARBONDALE		SANDY SHALE	17.0	46.0	

MAPID: 16501296000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 720' N line, 675' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.40823 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.755503 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 390.9 **LOGGED (FT.):** 48.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #27 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.9			UNCONSOLIDATED	9.0	0.0	
381.9	CARBONDALE		SHALE	7.0	9.0	
374.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	16.0	
370.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	15.0	20.0	
355.9	CARBONDALE	BRERETON	LIMESTONE	5.3	35.0	
350.6	CARBONDALE	ANNA	BLACK SHALE	1.5	40.3	
349.1	CARBONDALE	HERRIN	COAL	4.5	41.8	W/ SULFUR AND BAND; TOTAL COAL 4.25'
344.6	CARBONDALE		UNDERCLAY	1.8	46.3	

MAPID: 16501297000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 20' N line, 670' W line of SW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.408271 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.757433 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 385.1 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #29 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, RUAL THAXTON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.1			UNCONSOLIDATED	12.0	0.0	
373.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	12.0	
370.1	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	15.0	
363.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.5	22.0	
350.6	CARBONDALE		CALCAREOUS SHALE	2.0	34.5	
348.6	CARBONDALE	BRERETON	LIMESTONE	5.7	36.5	
342.9	CARBONDALE	ANNA	BLACK SHALE	0.9	42.2	
342.0	CARBONDALE	HERRIN	COAL	3.1	43.1	
338.9	CARBONDALE	HERRIN	UNKNOWN	0.2	46.2	LOG HAS "BAND"
338.8	CARBONDALE	HERRIN	COAL	1.3	46.3	
337.5	CARBONDALE		UNDERCLAY	1.4	47.6	

MAPID: 16526232000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' S line, 330' E line of SE SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.40234 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.746568 **DATE COLLECTED:** 8 / 22 / 1986
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 30.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. MW16 **WELL TYPE:** Water Well
COMMENT: PERMIT 230; PEABODY LOC. H-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	13.4	0.0	
-			SANDSTONE	16.6	13.4	

MAPID: 16526572000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.393082 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.76115 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 98.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-439 **WELL TYPE:** Coal Test
COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	14.0		
356.3	PLEISTOCENE		CLAY	11.0	14.0	
345.3	CARBONDALE		SANDY SHALE	9.0	25.0	
336.3	CARBONDALE		GRAY SANDSTONE	6.0	34.0	
330.3	CARBONDALE		SANDY SHALE	33.0	40.0	
297.3	CARBONDALE	ST. DAVID	LIMESTONE	0.2	73.0	
297.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	73.2	
294.3	CARBONDALE	SPRINGFIELD	COAL	4.5	76.0	
289.8	CARBONDALE		UNDERCLAY	3.5	80.5	
286.3	CARBONDALE		SHALY LIMESTONE	5.0	84.0	
281.3	CARBONDALE		SANDY SHALE	9.0	89.0	

MAPID: 16590856000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:** 12 / 3 / 1981
SURFACE ELEVATION (FT.): 372.7 **LOGGED (FT.):** 61.2 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2710QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.7	PLEISTOCENE		CLAY	37.0	0.0	
335.7	CARBONDALE		GRAY SHALE	7.0	37.0	
328.7	CARBONDALE	BRERETON	LIMESTONE	3.4	44.0	DARK
325.3	CARBONDALE	ANNA	BLACK SHALE	2.7	47.4	
322.6	CARBONDALE	HERRIN	COAL	4.2	50.1	
318.4	CARBONDALE		UNDERCLAY	5.1	54.3	
313.3	CARBONDALE		SANDSTONE	1.8	59.4	GRAY

MAPID: 16590857000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:** 11 / 5 / 1979
SURFACE ELEVATION (FT.): 391.1 **LOGGED (FT.):** 29.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2210QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.1	PLEISTOCENE		CLAY	21.5	0.0	
369.6	CARBONDALE	ANNA	BLACK SHALE	1.4	21.5	
368.2	CARBONDALE	HERRIN	COAL	4.1	22.9	
364.1	CARBONDALE		UNDERCLAY	2.0	27.0	

MAPID: 16590859000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:** 11 / 11 / 1981
SURFACE ELEVATION (FT.): 402.7 **LOGGED (FT.):** 26.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2668QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.7	PLEISTOCENE		CLAY	9.6	0.0	
393.1	CARBONDALE	HERRIN	COAL	4.7	9.6	TOP ERODED
388.4	CARBONDALE		UNDERCLAY	6.0	14.3	
382.4	CARBONDALE		SANDSTONE	5.7	20.3	GRAY

MAPID: 16590862000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: ELDORADO **LONGITUDE:** -88.401293 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.753912 **DATE COLLECTED:** 10 / 6 / 1981
SURFACE ELEVATION (FT.): 429.7 **LOGGED (FT.):** 27.0 **LOG TYPE:** Drillers Log
SOURCE: EQUALITY MINING CO 2600QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 104; EQUALITY 163

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
429.7	PLEISTOCENE		CLAY	11.5	0.0	
418.2	CARBONDALE	BRERETON	LIMESTONE	2.5	11.5	DARK
415.7	CARBONDALE	ANNA	BLACK SHALE	1.8	14.0	
413.9	CARBONDALE	HERRIN	COAL	4.1	15.8	
409.8	CARBONDALE		UNDERCLAY	5.1	19.9	
404.7	CARBONDALE		SANDSTONE	2.0	25.0	

MAPID: 16501414000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379414 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.751309 **DATE COLLECTED:** 6 / 0 / 1947
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2762.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., SPENCER EARL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
229.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	140.0	
177.0	CARBONDALE	SURVANT	COAL	2.0	192.0	
115.0	CARBONDALE	COLCHESTER	COAL	0.5	254.0	
69.0	CARBONDALE	DEKOVEN	COAL	3.0	300.0	
69.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	300.0	
46.0	CARBONDALE	DAVIS	COAL	4.0	323.0	
-6.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	375.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-23.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	392.0	
-56.0	TRADEWATER	MT. RORAH	COAL	1.2	425.0	

MAPID: 16501414000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: ELDORADO **LONGITUDE:** -88.379414 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.751309 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2237.0 **LOG TYPE:**
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1114.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1483.0	
-1462.0			LIMESTONE	-	1831.0	
-1868.0		BASE BARLOW	LIMESTONE	-	2237.0	

MAPID: 16502662000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386312 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.754949 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1319.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	239.0	
65.0	SPOON	DAVIS	UNCLASSIFIED	-	308.0	
-946.0	BASE OF PENN.		UNCLASSIFIED	-	1319.0	

MAPID: 16502662000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386312 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.754949 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2316.0 **LOG TYPE:**
SOURCE: WALTON HOWARD E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1110.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1483.0	
-1457.0			LIMESTONE	-	1830.0	
-1943.0		BASE BARLOW	LIMESTONE	-	2316.0	

MAPID: 16502662000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.386312 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.754949 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log
SOURCE: WALTON HOWARD E, SPENCER **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	120.0	
201.0	CARBONDALE	SURVANT	COAL	2.0	172.0	
134.0	CARBONDALE	COLCHESTER	COAL	0.5	239.0	
93.0	CARBONDALE	DEKOVEN	COAL	3.0	280.0	
93.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	280.0	
68.0	CARBONDALE	DAVIS	COAL	4.0	305.0	
13.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	360.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
1.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	372.0	
-33.0	TRADEWATER	MT. RORAH	COAL	1.5	406.0	

MAPID: 16502801000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.381678 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.749468 **DATE COLLECTED:** 1 / 0 / 1956
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2710.0 **LOG TYPE:** Electric Log
SOURCE: WAGGONER R W ETAL, CROSS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	105.0	
207.0	CARBONDALE	SURVANT	COAL	0.5	155.0	
134.0	CARBONDALE	COLCHESTER	COAL	0.5	228.0	
99.0	CARBONDALE	DEKOVEN	COAL	3.0	263.0	
99.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	263.0	
78.0	CARBONDALE	DAVIS	COAL	3.8	284.0	
29.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	333.0	85% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
12.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	350.0	
-23.0	TRADEWATER	MT. RORAH	COAL	1.2	385.0	

MAPID: 16502801000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.381678 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.749468 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2205.0 **LOG TYPE:**
SOURCE: WAGGONER R W ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1079.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1445.0	
-1440.0			LIMESTONE	-	1806.0	
-1839.0		BASE BARLOW	LIMESTONE	-	2205.0	

MAPID: 16526573000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.383724 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.757098 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.3 **LOGGED (FT.):** 158.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-436 **WELL TYPE:** Coal Test
COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	22.0		
350.3	PLEISTOCENE		CLAY	6.0	22.0	
344.3	PLEISTOCENE		SAND	10.0	28.0	
334.3	PLEISTOCENE		SANDY CLAY	24.0	38.0	
310.3	CARBONDALE		CALCAREOUS SHALE	1.0	62.0	W/ FOSSILS
309.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	63.0	
305.3	CARBONDALE	SPRINGFIELD	COAL	4.4	67.0	
300.9	CARBONDALE		UNDERCLAY	3.6	71.4	
297.3	CARBONDALE		SHALY LIMESTONE	2.0	75.0	
295.3	CARBONDALE		GRAY SANDSTONE	5.0	77.0	
290.3	CARBONDALE		SANDY SHALE	59.0	82.0	
231.3	CARBONDALE		BLACK SHALE	1.0	141.0	
230.3	CARBONDALE	HANOVER	LIMESTONE	1.0	142.0	
229.3	CARBONDALE	EXCELLO	BLACK SHALE	3.0	143.0	
226.3	CARBONDALE	HOUCHIN CREEK	COAL	1.9	146.0	
224.4	CARBONDALE		SANDY SHALE	10.1	147.9	

MAPID: 16526574000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.38762 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.75866 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.2 **LOGGED (FT.):** 58.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-437 **WELL TYPE:** Coal Test
COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.2	PLEISTOCENE		SANDY CLAY	13.0	0.0	
357.2	PLEISTOCENE		CLAY	17.0	13.0	
340.2	PLEISTOCENE		SANDY CLAY	7.0	30.0	
333.2	CARBONDALE		BLACK SHALE	2.0	37.0	
331.2	CARBONDALE		CALCAREOUS SHALE	1.0	39.0	W/ FOSSILS
330.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	40.0	
329.2	CARBONDALE	SPRINGFIELD	COAL	4.2	41.0	
325.0	CARBONDALE		UNDERCLAY	5.8	45.2	
319.2	CARBONDALE		SHALY LIMESTONE	1.0	51.0	
318.2	CARBONDALE		SANDY SHALE	6.0	52.0	

MAPID: 16526575000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: ELDORADO **LONGITUDE:** -88.391549 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.76045 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.6 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-438 **WELL TYPE:** Coal Test
COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	7.0		
371.6	CARBONDALE		BROWN SHALE	6.0	7.0	
365.6	CARBONDALE		BROWN SHALE	8.0	13.0	SANDY
357.6	CARBONDALE		SANDY SHALE	9.0	21.0	
348.6	CARBONDALE	BRIAR HILL	COAL	2.5	30.0	
346.1	CARBONDALE		SANDY SHALE	32.5	32.5	
313.6	CARBONDALE	ST. DAVID	LIMESTONE	1.0	65.0	
312.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	66.0	
309.6	CARBONDALE	SPRINGFIELD	COAL	5.3	69.0	
304.3	CARBONDALE		UNDERCLAY	2.7	74.3	
301.6	CARBONDALE		SHALY LIMESTONE	1.0	77.0	

MAPID: 16500080401M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387884 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.733467 **DATE COLLECTED:** 7 / 5 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 33.3 **LOG TYPE:**
SOURCE: MINE NOTES-J. SIMON, VINEYARD C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	28.8		
-	CARBONDALE	SPRINGFIELD	COAL	4.5		
-	CARBONDALE		ROCK	-		

MAPID: 16500080403M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.389035 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732547 **DATE COLLECTED:** 8 / 8 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 27.7 **LOG TYPE:**
SOURCE: MINE NOTES-J. SIMON **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	23.1		
-	CARBONDALE	SPRINGFIELD	COAL	4.6		

MAPID: 16500080402M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.38673 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732569 **DATE COLLECTED:** 7 / 5 / 1956
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 32.7 **LOG TYPE:**
SOURCE: MINE NOTES-J. SIMON, VINEYARD C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	28.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16500228603M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW NE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.375246 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735397 **DATE COLLECTED:** 0 / 0 / 1957
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-RICHARDSON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 16500330000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.39134 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732528 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-LOGAN-REYNOLDS C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNKNOWN	0.0	0.0	

MAPID: 16501415000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.381635 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.743968 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1760.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT: WELL FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1129.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1488.0	
-1401.0			LIMESTONE	-	1760.0	

MAPID: 16501416000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.38158 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.736704 **DATE COLLECTED:** 11 / 0 / 1945
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2612.0 **LOG TYPE:** Electric Log
SOURCE: BAKER, B. A., HOLBROOK J B HEIRS 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	SURVANT	COAL	1.8	86.0	
226.0	CARBONDALE	COLCHESTER	COAL	0.5	144.0	
170.0	CARBONDALE	DEKOVEN	COAL	3.0	200.0	
170.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	200.0	
150.0	CARBONDALE	DAVIS	COAL	3.5	220.0	
92.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	278.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
76.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	294.0	
44.0	TRADEWATER	MT. RORAH	COAL	1.5	326.0	

MAPID: 16501416000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.38158 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.736704 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2229.0 **LOG TYPE:**
SOURCE: BAKER, B. A. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1089.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1459.0	
-1430.0			LIMESTONE	-	1800.0	
-1859.0		BASE BARLOW	LIMESTONE	-	2229.0	

MAPID: 16502379000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.383943 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.745758 **DATE COLLECTED:** 11 / 0 / 1952
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1227.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	150.0	
138.0	SPOON	DAVIS	UNCLASSIFIED	-	220.0	
-869.0	BASE OF PENN.		UNCLASSIFIED	-	1227.0	

MAPID: 16502379000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.383943 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.745758 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2126.0 **LOG TYPE:**
SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1030.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1388.0	
-1379.0			LIMESTONE	-	1737.0	
-1768.0		BASE BARLOW	LIMESTONE	-	2126.0	

MAPID: 16502379000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.383943 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.745758 **DATE COLLECTED:** 11 / 0 / 1952
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2630.0 **LOG TYPE:** Electric Log
SOURCE: MCBRIDE, W. C., INC., BEVERLY DAVID T **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.0	CARBONDALE	COLCHESTER	COAL	0.5	150.0	
160.0	CARBONDALE	DEKOVEN	COAL	3.0	198.0	
160.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	198.0	
138.0	CARBONDALE	DAVIS	COAL	4.0	220.0	
85.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	273.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
68.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	290.0	
34.0	TRADEWATER	MT. RORAH	COAL	0.5	324.0	

MAPID: 16503621000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SE SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.379887 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.739896 **DATE COLLECTED:** 8 / 11 / 1969
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN RIDER, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	30.0	0.0	
330.0			ROCK	25.0	30.0	
305.0			COAL	3.0	55.0	
302.0			ROCK	22.0	58.0	

MAPID: 16523934000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NE SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387915 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.742541 **DATE COLLECTED:** 3 / 12 / 1976
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	22.0	0.0	
358.0			ROCK	48.0	22.0	
310.0			COAL	3.0	70.0	
307.0			ROCK	27.0	73.0	

MAPID: 16500330300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397678 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732913 **DATE COLLECTED:** 0 / 0 / 1946
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 44.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-ROCKY BRANCH C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	40.0	0.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	40.0	

MAPID: 16500330100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395953 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734296 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 47.6 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SILAS MOORE MINE **WELL TYPE:** Underground mine
COMMENT: MINED INTO SEC. 23

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			ROCK	43.0	0.0	
347.0	CARBONDALE	SPRINGFIELD	COAL	4.6	43.0	

MAPID: 16500330200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE NW SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404026 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734216 **DATE COLLECTED:** 0 / 0 / 1953
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-REGENHARDT&SOUTHERN CONST C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 16501298000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1360' S line, 5' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401167 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.735715 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 418.4 **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #40 **WELL TYPE:** Coal Test
COMMENT: JAMES MCKENNA FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
418.4			UNCONSOLIDATED	8.0	0.0	
410.4	CARBONDALE		SANDY SHALE	8.0	8.0	
402.4	CARBONDALE		SANDY SHALE	27.0	16.0	
375.4	CARBONDALE		SANDY SHALE	18.5	43.0	
356.9	CARBONDALE		CALCAREOUS SHALE	4.3	61.5	
352.6	CARBONDALE		COAL	1.2	65.8	
351.4	CARBONDALE		SANDY SHALE	4.0	67.0	
347.4	CARBONDALE		SANDSTONE	4.5	71.0	

MAPID: 16501298000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1360' S line, 5' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401167 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735715 **DATE COLLECTED:** 9 / 11 / 1972
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 75.5 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	8.0	0.0	
372.0			ROCK	57.8	8.0	
314.2	CARBONDALE		COAL	1.2	65.8	
313.0	CARBONDALE		ROCK	8.5	67.0	

MAPID: 16503300000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395397 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.742031 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2185.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1062.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1440.0	
-1417.0			LIMESTONE	-	1795.0	
-1807.0		BASE BARLOW	LIMESTONE	-	2185.0	

MAPID: 16523926000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.406363 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738771 **DATE COLLECTED:** 11 / 12 / 1975
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 140.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	11.0	0.0	
369.0			ROCK	99.0	11.0	
270.0			COAL	4.0	110.0	
266.0			ROCK	26.0	114.0	

MAPID: 16500201000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.417428 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.741072 **DATE COLLECTED:** 0 / 0 / 1906

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 241.2 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., #177 **WELL TYPE:** Coal Test

COMMENT: E.M. SMITH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			UNCONSOLIDATED	22.0	0.0	
357.0			SANDSTONE	5.0	22.0	
352.0			SANDSTONE & MUDSTONE	10.0	27.0	
342.0			SHALE	3.5	37.0	
338.5			BLACK SHALE	2.5	40.5	
336.0			UNDERCLAY	4.0	43.0	
332.0			CALCAREOUS SHALE	13.5	47.0	
318.5			LIMESTONE	1.5	60.5	
317.0			SANDY SHALE	10.0	62.0	
307.0			SHALE	6.0	72.0	
301.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	78.0	
294.5	CARBONDALE		CALCAREOUS SHALE	6.5	84.5	
288.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	91.0	
276.0	CARBONDALE		BLACK SHALE	18.0	103.0	
258.0	CARBONDALE	HERRIN	COAL	4.7	121.0	
253.3	CARBONDALE		UNDERCLAY	4.3	125.7	
249.0	CARBONDALE		SANDSTONE	29.0	130.0	
220.0	CARBONDALE		SANDY SHALE	14.0	159.0	
206.0	CARBONDALE		BLACK SHALE	11.0	173.0	
195.0	CARBONDALE	BRIAR HILL	COAL	1.5	184.0	
193.5	CARBONDALE		UNDERCLAY	2.0	185.5	
191.5	CARBONDALE		SANDY SHALE	2.5	187.5	
189.0	CARBONDALE		SANDSTONE	2.0	190.0	
187.0	CARBONDALE		BLACK SHALE	29.0	192.0	
158.0	CARBONDALE		BLACK SHALE	4.0	221.0	
154.0	CARBONDALE		BLACK SHALE	11.0	225.0	
143.0	CARBONDALE	SPRINGFIELD	COAL	4.2	236.0	
138.8	CARBONDALE		UNDERCLAY	1.0	240.2	

MAPID: 16500201000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.417428 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.741072 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 241.2 **LOG TYPE:** Survey Core Study
SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			UNCONSOLIDATED	22.0	0.0	
357.0			ROCK	99.0	22.0	
258.0	CARBONDALE	HERRIN	COAL	4.7	121.0	
253.3	CARBONDALE		ROCK	58.3	125.7	
195.0	CARBONDALE	BRIAR HILL	COAL	1.5	184.0	
193.5	CARBONDALE		ROCK	50.5	185.5	
143.0	CARBONDALE	SPRINGFIELD	COAL	4.2	236.0	
138.8	CARBONDALE		ROCK	1.0	240.2	

MAPID: 16500202000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NE NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412158 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.738752 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 212.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	HERRIN	COAL	4.6	91.0	
227.0	CARBONDALE	BRIAR HILL	COAL	2.0	148.0	
170.0	CARBONDALE	SPRINGFIELD	COAL	4.6	205.0	

MAPID: 16500202000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NE NE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412158 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.738752 **DATE COLLECTED:** 4 / 28 / 1909

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 211.8 **LOG TYPE:** Survey Core Study

SOURCE: BRIDGETT C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	39.0	0.0	
336.0			ROCK	51.9	39.0	
284.1	CARBONDALE	HERRIN	COAL	4.6	90.9	
279.5	CARBONDALE		ROCK	52.5	95.5	
227.0	CARBONDALE	BRIAR HILL	COAL	2.0	148.0	
225.0	CARBONDALE		ROCK	55.1	150.0	
169.9	CARBONDALE	SPRINGFIELD	COAL	4.6	205.1	
165.3	CARBONDALE		ROCK	2.2	209.7	

MAPID: 16500202000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NE NE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412158 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.738752 **DATE COLLECTED:** 4 / 28 / 1909

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 211.8 **LOG TYPE:** Drillers Log

SOURCE: W.M. BRIDGETT, #1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	39.0	0.0	
336.0	CARBONDALE		SANDSTONE	3.0	39.0	
333.0	CARBONDALE		UNDERCLAY	4.8	42.0	
328.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.4	46.8	
324.7	CARBONDALE		UNDERCLAY	1.8	50.3	
323.0	CARBONDALE		BLACK SHALE	29.4	52.0	
293.6	CARBONDALE		BLACK SHALE	2.5	81.4	
291.1	CARBONDALE		BLACK SHALE	7.0	83.9	
284.1	CARBONDALE	HERRIN	COAL	4.6	90.9	
279.5	CARBONDALE		UNDERCLAY	4.5	95.5	
275.0	CARBONDALE		SANDSTONE	24.0	100.0	
251.0	CARBONDALE		SANDY SHALE	21.0	124.0	
230.0	CARBONDALE		BLACK SHALE	3.0	145.0	
227.0	CARBONDALE	BRIAR HILL	COAL	2.0	148.0	
225.0	CARBONDALE		SANDY SHALE	46.0	150.0	
179.0	CARBONDALE		BLACK SHALE	3.6	196.0	
175.4	CARBONDALE		BLACK SHALE	5.5	199.6	
169.9	CARBONDALE	SPRINGFIELD	COAL	4.6	205.1	
165.3	CARBONDALE		UNDERCLAY	2.2	209.7	

MAPID: 16501299000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 660' S line, 5' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.42445 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.741091 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 375.1 **LOGGED (FT.):** 92.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #42 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN R. BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.1			UNCONSOLIDATED	36.0	0.0	
339.1			SANDY SHALE	3.0	36.0	
336.1			SHALE	1.2	39.0	
334.9	CARBONDALE	ALLENBY	COAL	0.5	40.2	
334.4	CARBONDALE		UNDERCLAY	2.3	40.7	
332.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	43.0	
326.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	48.8	
322.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.5	52.5	
318.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	57.0	
309.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	66.0	
296.1	CARBONDALE	BRERETON	LIMESTONE	0.5	79.0	
295.6	CARBONDALE	ANNA	BLACK SHALE	1.5	79.5	
294.1	CARBONDALE	ENERGY	SHALE	5.0	81.0	
289.1	CARBONDALE		UNKNOWN	0.1	86.0	LOG HAS SULFUR; PROBABLY PYRITE
289.0	CARBONDALE	HERRIN	COAL	3.0	86.1	
286.0	CARBONDALE	HERRIN	UNKNOWN	0.1	89.1	LOG HAS "BAND"
285.9	CARBONDALE	HERRIN	COAL	1.5	89.2	
284.4	CARBONDALE		UNDERCLAY	1.3	90.7	

MAPID: 16501299000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 660' S line, 5' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.42445 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.741091 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	35.0	0.0	
345.0			ROCK	4.2	35.0	
340.8			COAL	0.5	39.2	
340.3			ROCK	45.4	39.7	
294.9	CARBONDALE	HERRIN	COAL	4.6	85.1	
290.3	CARBONDALE		ROCK	1.3	89.7	

MAPID: 16501300000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 480' N line, 75' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424194 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.745268 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 30.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #46 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN R. BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3			UNCONSOLIDATED	5.0	0.0	
406.3	CARBONDALE		SANDSTONE	8.0	5.0	
398.3	CARBONDALE		SHALE	4.0	13.0	
394.3	CARBONDALE		SANDY SHALE	10.0	17.0	
384.3			UNCLASSIFIED	3.0	27.0	OPENING; DRILLED INTO "OLD WORKS"

MAPID: 16501301000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423878 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746135 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 27.7 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	5.0	0.0	
435.0			ROCK	22.8	5.0	
412.2	CARBONDALE	HERRIN	COAL	4.5	27.8	
407.7			ROCK	1.9	32.3	

MAPID: 16501302000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 55' N line, 580' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.422445 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.746436 **DATE COLLECTED:** 2 / 0 / 1905
SURFACE ELEVATION (FT.): 449.8 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #49 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN R. BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.8			UNCONSOLIDATED	5.0	0.0	
444.8	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	5.0	
434.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.0	15.0	
410.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.0	39.0	
386.8	CARBONDALE	HERRIN	COAL	0.3	63.0	RAFTED COAL?
386.5	CARBONDALE	HERRIN	SANDY SHALE	0.8	63.3	SHALE PARTING
385.8	CARBONDALE	HERRIN	COAL	0.5	64.0	RAFTED COAL?
385.3	CARBONDALE	HERRIN	SANDY SHALE	2.0	64.5	SHALE PARTING?
383.3	CARBONDALE		COAL	1.3	66.5	
382.0	CARBONDALE		SANDY SHALE	11.3	67.8	
370.8	CARBONDALE		SANDSTONE	6.0	79.0	

MAPID: 16501303000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 10' N line, 990' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.425683 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.746571 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 419.7 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #52 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.7			UNCONSOLIDATED	5.0	0.0	
414.7	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	5.0	
401.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.5	18.0	
388.2	CARBONDALE	BRERETON	LIMESTONE	3.0	31.5	
385.2	CARBONDALE		SHALE	5.0	34.5	
380.2	CARBONDALE	ANNA	BLACK SHALE	1.0	39.5	
379.2	CARBONDALE	HERRIN	COAL	4.7	40.5	W/ SULFUR AND BAND; TOTAL COAL 4.42'
374.5	CARBONDALE		UNDERCLAY	1.8	45.2	

MAPID: 16501303000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 10' N line, 990' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.425683 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746571 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 40.5 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	5.0	0.0	
415.0			ROCK	35.5	5.0	
379.5	CARBONDALE	HERRIN	COAL	4.7	40.5	
374.8	CARBONDALE		ROCK	1.8	45.2	

MAPID: 16501304000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 650' N line, 650' E line of NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.426711 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.744806 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 401.4 **LOGGED (FT.):** 50.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #53 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN R. BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.4			UNCONSOLIDATED	7.0	0.0	
394.4	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	7.0	
378.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.5	23.0	
364.9	CARBONDALE	BRERETON	LIMESTONE	6.3	36.5	
358.6	CARBONDALE	ANNA	BLACK SHALE	1.7	42.8	
357.0	CARBONDALE	HERRIN	COAL	3.0	44.4	
354.0	CARBONDALE	HERRIN	UNKNOWN	0.2	47.4	LOG HAS "BAND"
353.8	CARBONDALE	HERRIN	COAL	1.2	47.6	
352.6	CARBONDALE		UNDERCLAY	1.3	48.8	

MAPID: 16501304000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 650' N line, 650' E line of NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.426711 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.744806 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 44.4 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	7.0	0.0	
393.0			ROCK	36.9	7.0	
356.1	CARBONDALE	HERRIN	COAL	4.3	43.9	
351.8	CARBONDALE		ROCK	1.3	48.2	

MAPID: 16501304000C **VERSION:** 3 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 650' N line, 650' E line of NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.426711 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.744806 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CORP. 53 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.0	CARBONDALE		SHALE & SANDSTONE	29.0	7.0	
364.0	CARBONDALE	BRERETON	LIMESTONE	6.3	36.0	
357.7	CARBONDALE	ANNA	BLACK SHALE	1.8	42.3	
356.0	CARBONDALE	HERRIN	COAL	3.0	44.0	

MAPID: 16501305000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423311 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.745679 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 445.9 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #55 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, JOHN R. BASINGER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
445.9			UNCONSOLIDATED	7.0	0.0	
438.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	7.0	
434.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.0	11.0	
418.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	21.5	27.0	
397.4	CARBONDALE	HERRIN	BONE COAL	0.2	48.5	
397.2	CARBONDALE	HERRIN	COAL	0.3	48.7	
396.9	CARBONDALE	HERRIN	SANDY SHALE	1.3	49.0	SHALE PARTING?
395.6	CARBONDALE	HERRIN	COAL	0.9	50.3	RAFTED COAL?
394.7	CARBONDALE		SANDY SHALE	5.8	51.2	
388.9	CARBONDALE		SANDSTONE	13.0	57.0	

MAPID: 16501306000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 15' N line, 300' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.411513 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.746515 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 60.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #44 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	14.0	0.0	
386.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	14.0	
379.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	23.0	21.0	
356.0	CARBONDALE		SHALE	0.4	44.0	
355.6	CARBONDALE	HERRIN	COAL	1.4	44.4	
354.2	CARBONDALE	HERRIN	BONE COAL	0.3	45.8	
353.9	CARBONDALE		SANDY SHALE	0.4	46.1	
353.5	CARBONDALE		SANDY SHALE	14.0	46.5	

MAPID: 16501306000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 15' N line, 300' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.411513 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746515 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 46.3 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	14.0	0.0	
386.0			ROCK	30.4	14.0	
355.6			COAL	1.8	44.4	
353.8			ROCK	14.5	46.2	

MAPID: 16501307000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 240' N line, 20' W line of NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.415061 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.745905 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 419.1 **LOGGED (FT.):** 49.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #45 **WELL TYPE:** Coal Test
COMMENT: VERNON SETEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.1			UNCONSOLIDATED	7.0	0.0	
412.1	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	7.0	
400.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	24.1	19.0	
376.0	CARBONDALE		CALCAREOUS SHALE	1.1	43.1	
374.9	CARBONDALE	HERRIN	COAL	1.2	44.2	
373.8	CARBONDALE		SANDY SHALE	4.2	45.3	

MAPID: 16503317000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423827 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.736977 **DATE COLLECTED:** 3 / 30 / 1958
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 71.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 118 **WELL TYPE:** Coal Test
COMMENT: DENSCH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			SAND/CLAY	21.3	0.0	
346.7	CARBONDALE	ANVIL ROCK	SANDSTONE	26.1	21.3	
320.6	CARBONDALE		SHALE	11.7	47.4	
308.9	CARBONDALE	BRERETON	LIMESTONE	5.4	59.1	
303.5	CARBONDALE	HERRIN	COAL	4.0	64.5	
299.5	CARBONDALE		SHALE	3.0	68.5	

MAPID: 16503317000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423827 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.736977 **DATE COLLECTED:** 5 / 30 / 1958
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 71.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			UNCONSOLIDATED	21.3	0.0	
346.7			ROCK	43.2	21.3	
303.5	CARBONDALE	HERRIN	COAL	4.0	64.5	
299.5			ROCK	3.0	68.5	

MAPID: 16524363000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 240' S line, 1056' W line of NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.416087 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.739894 **DATE COLLECTED:** 12 / 19 / 1980

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log

SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	9.0	0.0	
371.0			ROCK	75.0	9.0	
296.0			COAL	0.5	84.0	
295.5			ROCK	47.5	84.5	
248.0	CARBONDALE	SPRINGFIELD	COAL	4.5	132.0	
243.5	CARBONDALE		ROCK	57.5	136.5	
186.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	194.0	
184.0	CARBONDALE		ROCK	67.0	196.0	

MAPID: 16526233000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424392 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.735412 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.7 **LOGGED (FT.):** 179.3 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 1074QC **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.7	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	CLAY
344.7	CARBONDALE	ANVIL ROCK	SANDSTONE	22.8	22.0	
321.9	CARBONDALE		SANDY SHALE	9.0	44.8	
312.9	CARBONDALE		GRAY SHALE	1.1	53.8	
311.8	CARBONDALE	CONANT	LIMESTONE	1.0	54.9	
310.8	CARBONDALE	JAMESTOWN	SHALE	0.7	55.9	DARK GRAY
310.1	CARBONDALE	BRERETON	LIMESTONE	4.5	56.6	
305.6	CARBONDALE	ANNA	BLACK SHALE	1.0	61.1	
304.6	CARBONDALE	HERRIN	COAL	4.6	62.1	
300.0	CARBONDALE		UNDERCLAY	3.0	66.7	
297.0	CARBONDALE		SANDY SHALE	11.2	69.7	GRAY
285.8	CARBONDALE		SANDSTONE	14.2	80.9	GRAY
271.6	CARBONDALE		SANDY SHALE	25.9	95.1	GRAY
245.7	CARBONDALE		LIMESTONE	0.5	121.0	
245.2	CARBONDALE	BRIAR HILL	COAL	1.8	121.5	
243.4	CARBONDALE		SANDSTONE	8.6	123.3	GRAY
234.8	CARBONDALE		SANDY SHALE	17.0	131.9	GRAY
217.9	CARBONDALE		SANDSTONE	3.9	148.8	GRAY, HARD
214.0	CARBONDALE		SANDY SHALE	6.4	152.7	GRAY
207.6	CARBONDALE		GRAY SHALE	3.8	159.1	
203.9	CARBONDALE	ST. DAVID	LIMESTONE	0.4	162.8	
203.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	163.2	
201.3	CARBONDALE	TURNER MINE	PYRITE	0.6	165.4	
200.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	166.0	
199.9	CARBONDALE	DYKERSBURG	GRAY SHALE	7.0	166.8	
192.9	CARBONDALE	SPRINGFIELD	COAL	4.3	173.8	
188.6	CARBONDALE		GRAY SHALE	1.2	178.1	

MAPID: 16526234000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1700' S line, 1300' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424565 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.736636 **DATE COLLECTED:** 4 / 13 / 1992

SURFACE ELEVATION (FT.): 368.5 **LOGGED (FT.):** 190.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-17-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.5	PLEISTOCENE		SOIL	4.0	0.0	
364.5	PLEISTOCENE		CLAY	13.0	4.0	
351.5	CARBONDALE		SANDSTONE	6.0	17.0	BROWN
345.5	CARBONDALE	ALLENBY	COAL	1.0	23.0	
344.5	CARBONDALE		SHALE	1.0	24.0	
343.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	25.0	DARK
340.5	CARBONDALE		BLACK SHALE	2.0	28.0	
338.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	30.0	GRAY
317.5	CARBONDALE		SILTSTONE	10.0	51.0	DARK, SHALEY
307.5	CARBONDALE		SHALE	3.0	61.0	DARK
304.5	CARBONDALE	BRERETON	LIMESTONE	4.0	64.0	DARK
300.5	CARBONDALE	ANNA	BLACK SHALE	1.0	68.0	
299.5	CARBONDALE	HERRIN	COAL	3.0	69.0	
296.5	CARBONDALE		GRAY SHALE	9.0	72.0	
287.5	CARBONDALE		SANDSTONE	9.0	81.0	
278.5	CARBONDALE		GRAY SHALE	6.0	90.0	
272.5	CARBONDALE		SANDSTONE	15.0	96.0	
257.5	CARBONDALE		SANDY SHALE	3.0	111.0	
254.5	CARBONDALE		SILTSTONE	17.0	114.0	GRAY, SHALEY
237.5	CARBONDALE	BRIAR HILL	COAL	2.0	131.0	
235.5	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	133.0	
232.5	CARBONDALE	DYKERSBURG	SILTSTONE	2.0	136.0	GRAY
230.5	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	138.0	
228.5	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	140.0	
226.5	CARBONDALE	DYKERSBURG	SANDY SHALE	8.0	142.0	GRAY
218.5	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	150.0	
215.5	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	153.0	
213.5	CARBONDALE	DYKERSBURG	GRAY SHALE	5.0	155.0	
208.5	CARBONDALE	DYKERSBURG	SANDY SHALE	1.0	160.0	
207.5	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	161.0	
203.5	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	165.0	
200.5	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	168.0	
198.5	CARBONDALE	DYKERSBURG	GRAY SHALE	9.0	170.0	
189.5	CARBONDALE	DYKERSBURG	BLACK SHALE	2.7	179.0	
186.8	CARBONDALE	SPRINGFIELD	COAL	4.7	181.7	
182.1	CARBONDALE		SHALE	3.6	186.4	DARK GRAY

MAPID: 16500203000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429644 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.73243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.0	CARBONDALE	HERRIN	COAL	4.3	40.0	
259.0	CARBONDALE	BRIAR HILL	COAL	2.7	106.0	
213.0	CARBONDALE	SPRINGFIELD	COAL	4.7	152.0	

MAPID: 16500203000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429644 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.73243 **DATE COLLECTED:** 5 / 16 / 1903
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Survey Core Study
SOURCE: BRIDGETT W M **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	8.5	0.0	
356.5			ROCK	32.0	8.5	
324.5	CARBONDALE	HERRIN	COAL	4.3	40.5	
320.2	CARBONDALE		ROCK	61.0	44.8	
259.2	CARBONDALE	BRIAR HILL	COAL	2.7	105.8	
256.5	CARBONDALE		ROCK	44.0	108.5	
212.5	CARBONDALE	SPRINGFIELD	COAL	4.7	152.5	
207.8	CARBONDALE		ROCK	2.8	157.2	

MAPID: 16500203000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429644 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.73243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log
SOURCE: W.M. BRIDGETT **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	8.5	0.0	
356.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.0	8.5	
334.5	CARBONDALE		BLACK SHALE	4.0	30.5	
330.5	CARBONDALE	BRERETON	LIMESTONE	5.0	34.5	
325.5	CARBONDALE	ANNA	BLACK SHALE	1.0	39.5	
324.5	CARBONDALE	HERRIN	COAL	4.3	40.5	
320.2	CARBONDALE		UNDERCLAY	2.2	44.8	
318.0	CARBONDALE		SANDSTONE	25.8	47.0	
292.2	CARBONDALE		SANDY SHALE	27.0	72.8	
265.2	CARBONDALE		BLACK SHALE	6.0	99.8	
259.2	CARBONDALE	BRIAR HILL	COAL	2.7	105.8	
256.5	CARBONDALE		SANDY SHALE	24.0	108.5	
232.5	CARBONDALE		SHALE	12.5	132.5	MAYBE SLATE
220.0	CARBONDALE		BLACK SHALE	2.5	145.0	
217.5	CARBONDALE		BLACK SHALE	5.0	147.5	
212.5	CARBONDALE	SPRINGFIELD	COAL	4.7	152.5	
207.8	CARBONDALE		UNDERCLAY	2.8	157.2	

MAPID: 16501880000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 35' N line, 15' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438367 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.739167 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 370.1 **LOGGED (FT.):** 86.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #43 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, IN ROAD IN CENTER SECT. 16

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.1			UNCONSOLIDATED	65.0	0.0	
305.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	65.0	
298.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	72.0	
288.1	CARBONDALE	HERRIN	COAL	1.9	82.0	
286.2	CARBONDALE		SANDSTONE	1.6	83.9	
284.6	CARBONDALE		SANDY SHALE	1.0	85.5	

MAPID: 16501880000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 35' N line, 15' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438367 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.739167 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 82.1 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	65.0	0.0	
305.0			ROCK	17.0	65.0	
288.0			COAL	1.9	82.0	
286.1			ROCK	2.6	83.9	

MAPID: 16503271000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 660' N line, 0' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438323 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.737444 **DATE COLLECTED:** 12 / 22 / 1958
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 100 **WELL TYPE:** Coal Test
COMMENT: EAST SIDE OF ROAD; ALVEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			CLAY	3.0	0.0	SOFT
372.0			SAND/CLAY	97.0	3.0	

MAPID: 16526235000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429374 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.73847 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.8 **LOGGED (FT.):** 194.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY 1034QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.8	PLEISTOCENE		UNCONSOLIDATED	32.5	0.0	CLAY
360.3	CARBONDALE		LIMESTONE	3.2	32.5	
357.1	CARBONDALE	ANVIL ROCK	SANDSTONE	23.5	35.7	
333.6	CARBONDALE		SANDY SHALE	8.4	59.2	GRAY, HARD
325.1	CARBONDALE		GRAY SHALE	2.0	67.7	
323.1	CARBONDALE	BRERETON	LIMESTONE	3.4	69.7	BLACK
319.7	CARBONDALE	ANNA	BLACK SHALE	1.4	73.1	
318.3	CARBONDALE	HERRIN	COAL	4.8	74.5	
313.5	CARBONDALE		SANDY SHALE	3.1	79.3	GRAY
310.4	CARBONDALE		SANDSTONE	42.8	82.4	
267.6	CARBONDALE		SANDY SHALE	13.2	125.2	
254.4	CARBONDALE	BRIAR HILL	COAL	1.2	138.4	
253.2	CARBONDALE		SANDY SHALE	0.4	139.6	GRAY
252.8	CARBONDALE		SANDSTONE	3.4	140.0	
249.4	CARBONDALE		SANDY SHALE	34.8	143.4	GRAY HARD
214.6	CARBONDALE	ST. DAVID	LIMESTONE	8.5	178.2	
206.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	186.8	
204.5	CARBONDALE	SPRINGFIELD	COAL	4.4	188.3	
200.1	CARBONDALE		UNDERCLAY	1.8	192.7	

MAPID: 16526236000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438088 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.731915 **DATE COLLECTED:** 3 / 2 / 1991

SURFACE ELEVATION (FT.): 369.8 **LOGGED (FT.):** 121.1 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-3-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.8	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0	SOILS AND CLAY
262.8	PLEISTOCENE		UNCONSOLIDATED	2.0	107.0	
260.8	CARBONDALE		GRAY SHALE	1.5	109.0	
259.3	CARBONDALE		GRAY SHALE	1.3	110.5	DARK
258.0	CARBONDALE		LIMESTONE	2.0	111.8	
256.0	CARBONDALE		GRAY SHALE	1.8	113.8	DARK
254.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	115.5	
253.5	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	116.3	
252.8	CARBONDALE	SPRINGFIELD	COAL	4.1	117.0	

MAPID: 16526237000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.447111 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738878 **DATE COLLECTED:** 4 / 8 / 1992

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 175.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-9-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		SOIL	4.0	0.0	
366.0	PLEISTOCENE		CLAY	24.0	4.0	
342.0	CARBONDALE		SANDSTONE	6.0	28.0	
336.0	CARBONDALE		GRAY SHALE	2.0	34.0	
334.0	CARBONDALE		BLACK SHALE	2.0	36.0	
332.0	CARBONDALE	BRERETON	LIMESTONE	5.0	38.0	BLACK WITH CHERT
327.0	CARBONDALE	ANNA	BLACK SHALE	2.0	43.0	
325.0	CARBONDALE	HERRIN	COAL	4.0	45.0	
321.0	CARBONDALE		SHALE	1.0	49.0	DARK
320.0	CARBONDALE		GRAY SHALE	5.0	50.0	
315.0	CARBONDALE		SANDY SHALE	3.0	55.0	LIGHT GREEN
312.0	CARBONDALE		SANDSTONE	3.0	58.0	
309.0	CARBONDALE		SANDY SHALE	3.0	61.0	GREEN
306.0	CARBONDALE		SANDSTONE	2.0	64.0	
304.0	CARBONDALE		CALCAREOUS SANDSTONE	1.0	66.0	
303.0	CARBONDALE		SANDSTONE	4.0	67.0	
299.0	CARBONDALE		SANDY SHALE	2.0	71.0	GREEN
297.0	CARBONDALE		SANDSTONE	22.0	73.0	
275.0	CARBONDALE		SILTSTONE	15.0	95.0	DARK GRAY
260.0	CARBONDALE		SHALE	7.0	110.0	DARK
253.0	CARBONDALE	BRIAR HILL	COAL	2.0	117.0	
251.0	CARBONDALE	DYKERSBURG	GRAY SHALE	5.0	119.0	
246.0	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	124.0	GRAY
243.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	127.0	
240.0	CARBONDALE	DYKERSBURG	SILTSTONE	20.0	130.0	DARK
220.0	CARBONDALE	DYKERSBURG	SANDY SHALE	2.0	150.0	
218.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	152.0	
216.0	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	154.0	
214.0	CARBONDALE	DYKERSBURG	GRAY SHALE	7.3	156.0	DARK
206.7	CARBONDALE	DYKERSBURG	BLACK SHALE	0.4	163.3	FRACTURED
206.3	CARBONDALE	SPRINGFIELD	COAL	4.9	163.7	
201.4	CARBONDALE		GRAY SHALE	2.8	168.6	DARK
198.6	CARBONDALE		LIMESTONE	3.6	171.4	

MAPID: 16526238000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.446071 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738896 **DATE COLLECTED:** 4 / 8 / 1992

SURFACE ELEVATION (FT.): 370.4 **LOGGED (FT.):** 168.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-10-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.4	PLEISTOCENE		SOIL	4.0	0.0	
366.4	PLEISTOCENE		CLAY	50.0	4.0	
316.4	CARBONDALE	HERRIN	COAL	3.0	54.0	SOFT DARK SHALE, TOP ERODED
313.4	CARBONDALE		SHALE	4.0	57.0	GREEN
309.4	CARBONDALE		SANDSTONE	5.0	61.0	BROWN
304.4	CARBONDALE		GRAY SHALE	2.0	66.0	SOFT
302.4	CARBONDALE		SANDSTONE	24.0	68.0	GRAY
278.4	CARBONDALE		SILTSTONE	16.0	92.0	SHALEY
262.4	CARBONDALE		SHALE	2.0	108.0	DARK
260.4	CARBONDALE	BRIAR HILL	COAL	3.0	110.0	
257.4	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	113.0	
255.4	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	115.0	
252.4	CARBONDALE	DYKERSBURG	SHALE	2.0	118.0	DARK GRAY
250.4	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	120.0	GRAY
242.4	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	128.0	GRAY
239.4	CARBONDALE	DYKERSBURG	GRAY SHALE	7.0	131.0	
232.4	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	138.0	GRAY
228.4	CARBONDALE	DYKERSBURG	SILTSTONE	4.0	142.0	DARK
224.4	CARBONDALE	DYKERSBURG	BLACK SHALE	4.0	146.0	
220.4	CARBONDALE	DYKERSBURG	GRAY SHALE	8.2	150.0	
212.2	CARBONDALE	SPRINGFIELD	COAL	4.7	158.2	
207.5	CARBONDALE		UNDERCLAY	3.7	162.9	
203.8	CARBONDALE		LIMESTONE	1.4	166.6	

MAPID: 16526239000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438421 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.736934 **DATE COLLECTED:** 4 / 8 / 1992
SURFACE ELEVATION (FT.): 371.2 **LOGGED (FT.):** 143.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-11-92 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.2	PLEISTOCENE		SOIL	4.0	0.0	
367.2	PLEISTOCENE		CLAY	70.0	4.0	
297.2	PLEISTOCENE		SANDY CLAY	7.0	74.0	
290.2	PLEISTOCENE		MUD	17.0	81.0	SOFT, GRAY
273.2	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	98.0	DARK
268.2	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	103.0	
261.2	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	110.0	DARK
257.2	CARBONDALE	DYKERSBURG	SILTSTONE	8.0	114.0	BLACK, SHALEY
249.2	CARBONDALE	DYKERSBURG	SHALE	1.0	122.0	DARK
248.2	CARBONDALE	DYKERSBURG	GRAY SHALE	2.9	123.0	
245.3	CARBONDALE	DYKERSBURG	BLACK SHALE	4.2	125.9	
241.1	CARBONDALE	DYKERSBURG	SHALE	7.2	130.1	DARK GRAY
233.9	CARBONDALE	SPRINGFIELD	COAL	4.4	137.3	
229.5	CARBONDALE		UNDERCLAY	1.3	141.7	

MAPID: 16526240000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.443138 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.731942 **DATE COLLECTED:** 4 / 9 / 1992
SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 130.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-13-92 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.9	PLEISTOCENE		SOIL	3.0	0.0	
368.9	PLEISTOCENE		SANDY CLAY	9.0	3.0	
359.9	PLEISTOCENE		CLAY	79.0	12.0	
280.9	CARBONDALE	DYKERSBURG	GRAY SHALE	0.2	91.0	SOFT
280.8	CARBONDALE	DYKERSBURG	SANDSTONE	3.9	91.1	
276.9	CARBONDALE	DYKERSBURG	SHALE	17.3	95.0	DARK GRAY TO BLACK
259.6	CARBONDALE	DYKERSBURG	BLACK SHALE	1.8	112.3	
257.8	CARBONDALE	DYKERSBURG	SHALE	1.1	114.1	DARK GRAY
256.7	CARBONDALE	DYKERSBURG	BLACK SHALE	2.9	115.2	
253.8	CARBONDALE	DYKERSBURG	GRAY SHALE	6.5	118.1	
247.3	CARBONDALE	SPRINGFIELD	COAL	4.5	124.6	
242.8	CARBONDALE		UNDERCLAY	0.9	129.1	

MAPID: 16526241000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.443138 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.731942 **DATE COLLECTED:** 4 / 10 / 1992

SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 142.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-14=92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.9	PLEISTOCENE		SOIL	4.0	0.0	
367.9	PLEISTOCENE		CLAY	79.0	4.0	
288.9	CARBONDALE	BRIAR HILL	COAL	3.0	83.0	DARK SHALE
285.9	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	86.0	
283.9	CARBONDALE	DYKERSBURG	SANDY SHALE	27.0	88.0	BLACK
256.9	CARBONDALE	DYKERSBURG	GRAY SHALE	1.6	115.0	
255.3	CARBONDALE	DYKERSBURG	BLACK SHALE	1.2	116.6	
254.1	CARBONDALE	DYKERSBURG	GRAY SHALE	1.0	117.8	
253.1	CARBONDALE	DYKERSBURG	BLACK SHALE	4.2	118.8	
248.9	CARBONDALE	DYKERSBURG	GRAY SHALE	7.8	123.0	
241.1	CARBONDALE	DYKERSBURG	BLACK SHALE	0.2	130.8	
240.9	CARBONDALE	SPRINGFIELD	COAL	4.6	131.0	
236.3	CARBONDALE		UNDERCLAY	0.4	135.6	
235.9	CARBONDALE		GRAY SHALE	6.0	136.0	

MAPID: 16526242000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433823 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738998 **DATE COLLECTED:** 4 / 10 / 1992

SURFACE ELEVATION (FT.): 372.2 **LOGGED (FT.):** 146.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-16-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.2	PLEISTOCENE		SOIL	5.0	0.0	
367.2	PLEISTOCENE		CLAY	38.0	5.0	
329.2	PLEISTOCENE		SANDY CLAY	5.0	43.0	
324.2	CARBONDALE		SANDSTONE	14.0	48.0	
310.2	CARBONDALE		SILTSTONE	1.0	62.0	DARK, SANDY
309.2	CARBONDALE		SANDY SHALE	13.0	63.0	
296.2	CARBONDALE		SANDSTONE	8.0	76.0	DARK
288.2	CARBONDALE		BLACK SHALE	3.0	84.0	
285.2	CARBONDALE	BRIAR HILL	COAL	1.0	87.0	
284.2	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	88.0	GRAY
276.2	CARBONDALE	DYKERSBURG	SILTSTONE	10.0	96.0	GRAY
266.2	CARBONDALE	DYKERSBURG	SANDSTONE	2.0	106.0	GRAY
264.2	CARBONDALE	DYKERSBURG	SANDY SHALE	19.0	108.0	DARK
245.2	CARBONDALE	DYKERSBURG	BLACK SHALE	2.6	127.0	
242.6	CARBONDALE	DYKERSBURG	GRAY SHALE	6.5	129.6	
236.1	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	136.1	
235.6	CARBONDALE	SPRINGFIELD	COAL	4.4	136.6	
231.2	CARBONDALE		GRAY SHALE	2.9	141.0	
228.3	CARBONDALE		LIMESTONE	2.1	143.9	

MAPID: 16526243000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' S line, 2640' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438269 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.739252 **DATE COLLECTED:** 4 / 14 / 1992
SURFACE ELEVATION (FT.): 371.3 **LOGGED (FT.):** 139.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-19-92 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.3	PLEISTOCENE		SOIL	3.0	0.0	
368.3	PLEISTOCENE		CLAY	65.0	3.0	
303.3	CARBONDALE		SHALE	10.0	68.0	DARK GRAY, SOFT
293.3	CARBONDALE		GRAY SHALE	1.0	78.0	
292.3	CARBONDALE	BRIAR HILL	COAL	1.0	79.0	
291.3	CARBONDALE	DYKERSBURG	SANDSTONE	4.0	80.0	
287.3	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	84.0	
283.3	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	88.0	
277.3	CARBONDALE	DYKERSBURG	GRAY SHALE	12.0	94.0	
265.3	CARBONDALE	DYKERSBURG	SILTSTONE	15.0	106.0	SHALEY
250.3	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	121.0	
248.3	CARBONDALE	DYKERSBURG	GRAY SHALE	7.8	123.0	
240.5	CARBONDALE	SPRINGFIELD	COAL	4.4	130.8	
236.1	CARBONDALE		UNDERCLAY	1.4	135.2	
234.7	CARBONDALE		LIMESTONE	2.4	136.6	

MAPID: 165274B0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NW SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.431981 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.742481 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 52.0 **LOG TYPE:** Drillers Log
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Coal Test
COMMENT: REPORTED BY LAND OWNER. NO LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	45.0	0.0	
335.0	CARBONDALE	HERRIN	COAL	4.5	45.0	
330.5	CARBONDALE		ROCK	-	49.5	
-	CARBONDALE	BRIAR HILL	COAL	2.5		
-	CARBONDALE		ROCK	-		

MAPID: 16500204000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.459675 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.733052 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	12.0	16.0	
344.0	CARBONDALE	HERRIN	COAL	5.3	51.0	
328.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	23.0	67.0	
274.0	CARBONDALE	BRIAR HILL	COAL	2.0	121.0	
266.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.0	129.0	
227.0	CARBONDALE	SPRINGFIELD	COAL	4.8	168.0	

MAPID: 16500204000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.459675 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.733052 **DATE COLLECTED:** 7 / 29 / 1905

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Survey Core Study

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	16.0	0.0	
379.0			ROCK	35.0	16.0	
344.0	CARBONDALE	HERRIN	COAL	5.3	51.0	
338.8	CARBONDALE		ROCK	65.0	56.2	
273.7	CARBONDALE	BRIAR HILL	COAL	2.0	121.3	
271.7	CARBONDALE		ROCK	45.0	123.3	
226.7	CARBONDALE	SPRINGFIELD	COAL	4.8	168.3	
222.0	CARBONDALE		ROCK	-	173.0	

MAPID: 16500204000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.459675 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.733052 **DATE COLLECTED:** 7 / 29 / 1905

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., WHOOLERY #11 **WELL TYPE:** Coal Test

COMMENT: ELEV. FROM BAR.; MUGGLE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	16.0	0.0	
379.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	16.0	
367.0	CARBONDALE		UNDERCLAY	2.0	28.0	
365.0	CARBONDALE		SHALE	10.0	30.0	
355.0	CARBONDALE		BLACK SHALE	5.0	40.0	
350.0	CARBONDALE	BRERETON	LIMESTONE	6.0	45.0	
344.0	CARBONDALE	HERRIN	COAL	5.3	51.0	
338.7	CARBONDALE		UNDERCLAY	3.0	56.3	
335.7	CARBONDALE		SHALE	8.0	59.3	
327.7	CARBONDALE		SANDSTONE	23.0	67.3	
304.7	CARBONDALE		SHALE	12.0	90.3	
292.7	CARBONDALE		BLACK SHALE	19.0	102.3	
273.7	CARBONDALE	BRIAR HILL	COAL	2.0	121.3	
271.7	CARBONDALE		UNDERCLAY	1.0	123.3	
270.7	CARBONDALE		SHALE	5.0	124.3	
265.7	CARBONDALE		SANDSTONE	6.0	129.3	
259.7	CARBONDALE		SHALE	17.0	135.3	
242.7	CARBONDALE		BLACK SHALE	3.0	152.3	
239.7	CARBONDALE		BLACK SHALE	1.0	155.3	
238.7	CARBONDALE		BLACK SHALE	4.0	156.3	
234.7	CARBONDALE		BLACK SHALE	8.0	160.3	
226.7	CARBONDALE	SPRINGFIELD	COAL	4.8	168.3	
222.0	CARBONDALE		UNDERCLAY	0.0	173.0	T.D.

MAPID: 16503186000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.455659 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.732684 **DATE COLLECTED:** 5 / 16 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 167.3 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 120 **WELL TYPE:** Coal Test

COMMENT: CORE DESC. BY W. SMITH & D.L. REINERTSEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCLASSIFIED	31.0	0.0	STARTED CORING AT 31'
369.0	CARBONDALE		SILTY SHALE	4.3	31.0	MICAEOUS, ALMOST SILTSTONE
364.7	CARBONDALE	ANVIL ROCK	CARBONACEOUS SANDSTONE	3.5	35.3	FINE GRAINED, MICAEOUS
361.2	CARBONDALE	ANVIL ROCK	SILTY SHALE	2.5	38.8	SIMILAR TO SH UNIT ABOVE
358.7	CARBONDALE		SHALE	1.0	41.3	FINE GRAINED
357.7	CARBONDALE		SHALE	1.5	42.3	FOSSILIFEROUS, ALMOST A LIMESTONE
356.2	CARBONDALE		SHALE	0.3	43.8	SPARINGLY FOSSILIFEROUS
355.8	CARBONDALE		UNCLASSIFIED	1.3	44.2	GAP IN DES., DRILL LOG HAS SH AS ABOVE
354.6	CARBONDALE	BRERETON	LIMESTONE	4.8	45.4	FOSSILIFEROUS, SHALY BASE
349.8	CARBONDALE	ANNA	BLACK SHALE	1.6	50.2	
348.2	CARBONDALE	HERRIN	COAL	4.3	51.8	W/ PYRITE, CLAY AND SH PARTINGS
344.0	CARBONDALE		SILTY CLAYSTONE	1.0	56.0	
343.0	CARBONDALE		SHALY SILTSTONE	3.0	57.0	
340.0	CARBONDALE		SILTSTONE	2.7	60.0	W/ LS NODULES (SMALL)
337.3	CARBONDALE		SANDSTONE	11.5	62.7	FINE-MED. GRAINED
325.8	CARBONDALE		SANDSTONE	2.3	74.2	INTERLAMINATED W/ SH
323.5	CARBONDALE		SANDSTONE	4.8	76.5	SIMILAR TO UNIT 15 BUT COARSER
318.7	CARBONDALE		SANDSTONE	3.5	81.3	INTERBEDDED W/ SH & SLTST
315.2	CARBONDALE		SILTSTONE	8.0	84.8	W/ THIN INTERLAMS. OF SS
307.2	CARBONDALE		SILTSTONE	7.0	92.8	SHALY DOWNWARDS
300.2	CARBONDALE		SILTY SHALE	20.3	99.8	W/ THIN LAMS. OF SLTST
279.9	CARBONDALE	BRIAR HILL	COAL	1.7	120.1	
278.2	CARBONDALE		SHALE	2.0	121.8	W/ ABUND. STIGMARIA; SLTST INTERLAMS.
276.2	CARBONDALE		SILTSTONE	1.8	123.8	ALMOST A SS; STIGMARIA UPPER .5'
274.5	CARBONDALE		SILTSTONE	6.2	125.5	STRIPED APPEARANCE
268.3	CARBONDALE		SILTSTONE	16.5	131.7	UNIFORM
251.8	CARBONDALE		SHALE	3.5	148.2	
248.3	CARBONDALE		BLACK SHALE	1.4	151.7	
246.9	CARBONDALE		LIMESTONE	1.0	153.1	FOSSILIFEROUS
245.9	CARBONDALE		BLACK SHALE	2.8	154.1	FOSSILS IN TOP/BOTTOM FEW INCHES
243.1	CARBONDALE		SHALE	2.4	156.9	PYRITIZED BIVALVES & GASTROPODS
240.7	CARBONDALE		SHALE	2.7	159.3	
238.0	CARBONDALE	SPRINGFIELD	COAL	4.8	162.0	
233.2	CARBONDALE		UNDERCLAY	0.5	166.8	

MAPID: 16503186000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.455659 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732684 **DATE COLLECTED:** 0 / 0 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 167.3 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	31.0	0.0	
369.0			ROCK	20.8	31.0	
348.2	CARBONDALE	HERRIN	COAL	4.8	51.8	
343.4	CARBONDALE		ROCK	64.1	56.6	
279.3	CARBONDALE	BRIAR HILL	COAL	1.7	120.7	
277.7	CARBONDALE		ROCK	40.3	122.3	
237.4	CARBONDALE	SPRINGFIELD	COAL	4.8	162.6	
232.7	CARBONDALE		ROCK	0.5	167.3	

MAPID: 16503591000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.465425 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.732005 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3329 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
107.1	CARBONDALE	HOUCHIN CREEK	COAL	1.8	272.9	
66.2	CARBONDALE	SURVANT	COAL	1.3	313.8	
-25.6	CARBONDALE	COLCHESTER	COAL	0.6	405.6	
-59.7	CARBONDALE	DEKOVEN	COAL	3.0	439.7	
-59.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	439.7	
-95.0	CARBONDALE	DAVIS	COAL	4.1	475.0	82% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503591000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.465425 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.732005 **DATE COLLECTED:** 1 / 14 / 1969

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 480.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3329 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	10.9	0.0	SURFACE LAYERS (EARTH AND CLAY)
369.1	MODESTO		SANDSTONE	9.2	10.9	
360.0	CARBONDALE	DANVILLE	COAL	1.0	20.0	
359.0	CARBONDALE		CLAY	4.0	21.0	
355.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	25.0	
348.8	CARBONDALE		GRAY SHALE	8.3	31.2	
340.5	CARBONDALE		GRAY SANDSTONE	8.5	39.5	
332.0	CARBONDALE		GRAY SHALE	17.6	48.0	
314.4	CARBONDALE	BRERETON	LIMESTONE	4.5	65.6	
309.9	CARBONDALE	ANNA	BLACK SHALE	1.2	70.1	
308.8	CARBONDALE	HERRIN	COAL	4.5	71.2	
304.4	CARBONDALE		UNDERCLAY	2.6	75.6	
301.7	CARBONDALE		GRAY SANDSTONE	31.8	78.3	
270.0	CARBONDALE		GRAY SHALE	29.5	110.0	
240.5	CARBONDALE	BRIAR HILL	COAL	1.8	139.5	
238.7	CARBONDALE		UNDERCLAY	1.5	141.3	
237.2	CARBONDALE		GRAY SANDSTONE	6.0	142.8	
231.2	CARBONDALE		GRAY SHALE	4.1	148.8	
227.1	CARBONDALE		LIMESTONE	0.8	152.9	
226.3	CARBONDALE		GRAY SHALE	21.6	153.7	
204.7	CARBONDALE		BLACK SHALE	2.2	175.3	
202.6	CARBONDALE		GRAY SHALE	11.4	177.4	
191.2	CARBONDALE	SPRINGFIELD	COAL	4.5	188.8	
186.8	CARBONDALE		UNDERCLAY	2.1	193.2	
184.7	CARBONDALE		GRAY SHALE	2.3	195.3	
182.4	CARBONDALE		LIMESTONE	2.8	197.6	
179.7	CARBONDALE		GRAY SHALE	1.6	200.3	
178.1	CARBONDALE		GRAY SANDSTONE	17.1	201.9	
161.0	CARBONDALE		GRAY SHALE	47.9	219.0	
113.1	CARBONDALE		BLACK SHALE	0.8	266.9	
112.3	CARBONDALE	HANOVER	LIMESTONE	1.6	267.7	
110.7	CARBONDALE	EXCELLO	BLACK SHALE	3.7	269.3	
107.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	273.0	
105.2	CARBONDALE		UNDERCLAY	2.4	274.8	
102.8	CARBONDALE		GRAY SANDSTONE	6.5	277.2	
96.3	CARBONDALE		GRAY SHALE	30.1	283.7	
66.2	CARBONDALE	SURVANT - UPPER	COAL	0.9	313.8	
65.3	CARBONDALE		GRAY SHALE	13.3	314.7	
52.0	CARBONDALE	SURVANT - LOWER	COAL	0.4	328.0	

51.6	CARBONDALE		GRAY SHALE	7.7	328.4	
44.0	CARBONDALE		GRAY SANDSTONE	5.0	336.0	
39.0	CARBONDALE		GRAY SHALE	9.9	341.0	
29.1	CARBONDALE		LIMESTONE	2.3	350.9	
26.9	CARBONDALE		GRAY SHALE	49.3	353.1	
-22.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.3	402.4	
-25.6	CARBONDALE	COLCHESTER	COAL	0.6	405.6	
-26.2	SPOON		GRAY SHALE	3.1	406.2	
-29.3	SPOON		GRAY SANDSTONE	30.4	409.3	
-59.7	SPOON	DEKOVEN	COAL	3.0	439.7	
-62.7	SPOON		GRAY SHALE	4.4	442.7	
-67.1	SPOON		GRAY SANDSTONE	26.7	447.1	
-93.8	SPOON		BLACK SHALE	1.3	473.8	
-95.1	SPOON	DAVIS	COAL	1.1	475.1	
-96.1	SPOON	DAVIS	ROCK	0.0	476.1	FUSION BAND
-96.1	SPOON	DAVIS	COAL	0.0	476.1	
-96.1	SPOON	DAVIS	ROCK	0.0	476.1	FUSION BAND
-96.1	SPOON	DAVIS	COAL	0.5	476.1	
-96.6	SPOON	DAVIS	ROCK	0.0	476.6	FUSION BAND
-96.7	SPOON	DAVIS	COAL	1.7	476.7	
-98.4	SPOON	DAVIS	ROCK	0.1	478.4	PYRITE BAND
-98.5	SPOON	DAVIS	COAL	0.7	478.5	
-99.2	SPOON		UNDERCLAY	0.9	479.2	

MAPID: 16503591000C **VERSION:** 3 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.465425 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732005 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3329 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.3	CARBONDALE		SANDSTONE	9.2	10.7	
360.2	CARBONDALE	ALLENBY	BONE COAL	1.0	19.8	
359.2	CARBONDALE		CLAYSTONE	4.0	20.8	
355.2	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	6.2	24.8	
349.0	CARBONDALE	LAWSON	GRAY SHALE	8.3	31.0	
340.7	CARBONDALE	LAWSON	SANDSTONE	8.5	39.3	
332.2	CARBONDALE	LAWSON	GRAY SHALE	17.6	47.8	
314.6	CARBONDALE	BRERETON	LIMESTONE	4.5	65.4	
310.1	CARBONDALE	ANNA	BLACK SHALE	1.2	69.9	
309.0	CARBONDALE	HERRIN	COAL	4.5	71.0	

MAPID: 16526244000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.447427 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738919 **DATE COLLECTED:** 3 / 4 / 1992

SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 253.3 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-5-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.4	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	BROWN SOILS & CLAY
350.4	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	18.0	BROWN
337.4	CARBONDALE		SHALE	12.0	31.0	
325.4	CARBONDALE	BRERETON	LIMESTONE	7.0	43.0	
318.4	CARBONDALE	ANNA	SHALE	1.0	50.0	DARK
317.4	CARBONDALE	HERRIN	COAL	4.5	51.0	
312.9	CARBONDALE		UNDERCLAY	2.5	55.5	
310.4	CARBONDALE		SANDSTONE	38.0	58.0	
272.4	CARBONDALE		GRAY SHALE	21.0	96.0	
251.4	CARBONDALE	BRIAR HILL	COAL	1.5	117.0	
249.9	CARBONDALE		UNDERCLAY	2.5	118.5	
247.4	CARBONDALE	DYKERSBURG	GRAY SHALE	49.0	121.0	
198.4	CARBONDALE	SPRINGFIELD	COAL	2.5	170.0	
195.9	CARBONDALE		UNDERCLAY	1.5	172.5	
194.4	CARBONDALE		SANDSTONE	15.0	174.0	
179.4	CARBONDALE		SHALE	21.0	189.0	
158.4	CARBONDALE		GRAY SHALE	26.5	210.0	STARTED CORING AT 210'
131.9	CARBONDALE		LIMESTONE	0.1	236.5	
131.8	CARBONDALE		SHALE	3.4	236.6	WITH STREAKS OF LS
128.4	CARBONDALE		SHALE	3.0	240.0	
125.4	CARBONDALE		SHALE	2.0	243.0	DARK
123.4	CARBONDALE		GRAY SHALE	2.3	245.0	
121.1	CARBONDALE	EXCELLO	BLACK SHALE	2.0	247.3	
119.1	CARBONDALE	HOUCHIN CREEK	COAL	1.7	249.3	
117.4	CARBONDALE		UNDERCLAY	2.4	251.0	

MAPID: 16526245000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456843 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738782 **DATE COLLECTED:** 4 / 6 / 1992

SURFACE ELEVATION (FT.): 369.1 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-6-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.1	PLEISTOCENE		SOIL	4.0	0.0	
365.1	PLEISTOCENE		CLAY	42.0	4.0	
323.1	CARBONDALE		SANDY SHALE	2.0	46.0	GRAY
321.1	CARBONDALE	ALLENBY	COAL	1.0	48.0	
320.1	CARBONDALE		UNDERCLAY	1.0	49.0	
319.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	50.0	TAN
313.6	CARBONDALE		GRAY SHALE	1.5	55.5	SOFT
312.1	CARBONDALE		SANDY SHALE	3.0	57.0	GRAY
309.1	CARBONDALE	ANVIL ROCK	SANDSTONE	27.0	60.0	
282.1	CARBONDALE		GRAY SHALE	4.0	87.0	
278.1	CARBONDALE		BLACK SHALE	5.0	91.0	
273.1	CARBONDALE	BRERETON	LIMESTONE	4.0	96.0	DARK
269.1	CARBONDALE	ANNA	BLACK SHALE	6.0	100.0	
263.1	CARBONDALE	HERRIN	COAL	3.0	106.0	
260.1	CARBONDALE		GRAY SHALE	2.0	109.0	
258.1	CARBONDALE		SANDY SHALE	1.0	111.0	
257.1	CARBONDALE		SANDSTONE	8.0	112.0	
249.1	CARBONDALE		SANDY SHALE	2.0	120.0	
247.1	CARBONDALE		SANDSTONE	4.5	122.0	
242.6	CARBONDALE		LIMESTONE	0.5	126.5	
242.1	CARBONDALE		LIMESTONE AND SANDSTONE	2.0	127.0	LIMESTONE AND SANDSTONE
240.1	CARBONDALE		LIMESTONE	2.0	129.0	
238.1	CARBONDALE		SANDY SHALE	3.0	131.0	
235.1	CARBONDALE		SANDSTONE	3.0	134.0	
232.1	CARBONDALE		SHALE	3.0	137.0	
229.1	CARBONDALE		SANDY SHALE	5.0	140.0	
224.1	CARBONDALE		GRAY SHALE	17.0	145.0	
207.1	CARBONDALE		SANDY SHALE	5.0	162.0	
202.1	CARBONDALE	BRIAR HILL	COAL	2.0	167.0	DARK SHALE
200.1	CARBONDALE	DYKERSBURG	SILTSTONE	2.0	169.0	GRAY
198.1	CARBONDALE	DYKERSBURG	CALCAREOUS SANDSTONE	2.0	171.0	
196.1	CARBONDALE	DYKERSBURG	SILTSTONE	8.0	173.0	GRAY
188.1	CARBONDALE	DYKERSBURG	GRAY SHALE	22.0	181.0	
166.1	CARBONDALE	DYKERSBURG	SHALE	3.0	203.0	DARK
163.1	CARBONDALE	DYKERSBURG	CALCAREOUS SHALE	1.0	206.0	
162.1	CARBONDALE	DYKERSBURG	SHALE	1.0	207.0	
161.1	CARBONDALE	DYKERSBURG	GRAY SHALE	11.2	208.0	
149.9	CARBONDALE	SPRINGFIELD	COAL	4.7	219.2	

145.2	CARBONDALE	UNDERCLAY	2.1	223.9
143.1	CARBONDALE	GRAY SHALE	1.0	226.0

MAPID: 16526246000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.448842 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738866 **DATE COLLECTED:** 4 / 7 / 1992

SURFACE ELEVATION (FT.): 369.9 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-7-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.9	PLEISTOCENE		SOIL	3.0	0.0	
366.9	PLEISTOCENE		CLAY	16.0	3.0	
350.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	19.0	
346.9	CARBONDALE		CLAYSTONE	2.0	23.0	BROWN
344.9	CARBONDALE		GRAY SHALE	1.0	25.0	SOFT
343.9	CARBONDALE		SANDSTONE	1.0	26.0	
342.9	CARBONDALE		GRAY SHALE	2.0	27.0	
340.9	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	29.0	
336.9	CARBONDALE		SHALE	1.0	33.0	DARK
335.9	CARBONDALE		SANDSTONE	1.0	34.0	
334.9	CARBONDALE		BLACK SHALE	1.0	35.0	
333.9	CARBONDALE		SANDY SHALE	12.0	36.0	DARK
321.9	CARBONDALE		BLACK SHALE	2.0	48.0	
319.9	CARBONDALE	BRERETON	LIMESTONE	0.5	50.0	RED
319.4	CARBONDALE	BRERETON	LIMESTONE	4.5	50.5	DARK
314.9	CARBONDALE	ANNA	BLACK SHALE	1.0	55.0	
313.9	CARBONDALE	HERRIN	COAL	4.0	56.0	DARK SHALE
309.9	CARBONDALE		SHALE	3.0	60.0	SOFT
306.9	CARBONDALE		SANDSTONE	2.0	63.0	GRAY
304.9	CARBONDALE		SANDY SHALE	3.0	65.0	
301.9	CARBONDALE		SANDSTONE	8.0	68.0	
293.9	CARBONDALE		LIMESTONE	1.0	76.0	
292.9	CARBONDALE		SANDSTONE	6.0	77.0	
286.9	CARBONDALE		LIMESTONE	1.0	83.0	
285.9	CARBONDALE		SANDSTONE	8.0	84.0	
277.9	CARBONDALE		SANDY SHALE	1.0	92.0	
276.9	CARBONDALE		SANDSTONE	17.0	93.0	GRAY
259.9	CARBONDALE		SILTSTONE	5.0	110.0	SHALEY
254.9	CARBONDALE		GRAY SHALE	7.0	115.0	
247.9	CARBONDALE		SHALE	2.0	122.0	DARK
245.9	CARBONDALE	BRIAR HILL	COAL	2.0	124.0	
243.9	CARBONDALE	DYKERSBURG	GRAY SHALE	2.0	126.0	DARK
241.9	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	128.0	DARK
240.9	CARBONDALE	DYKERSBURG	SANDY SHALE	5.0	129.0	
235.9	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	134.0	
230.9	CARBONDALE	DYKERSBURG	SILTSTONE	18.0	139.0	SHALEY
212.9	CARBONDALE	DYKERSBURG	SHALE	1.0	157.0	DARK
211.9	CARBONDALE	DYKERSBURG	SILTSTONE	1.0	158.0	SHALEY, GRAY
210.9	CARBONDALE	DYKERSBURG	SHALE	4.0	159.0	DARK

206.9	CARBONDALE	DYKERSBURG	GRAY SHALE	6.0	163.0	
200.9	CARBONDALE	DYKERSBURG	GRAY SHALE	2.6	169.0	DARK
198.3	CARBONDALE	SPRINGFIELD	COAL	4.2	171.6	
194.1	CARBONDALE		UNDERCLAY	2.1	175.8	
192.1	CARBONDALE		GRAY SHALE	2.0	177.8	
190.1	CARBONDALE		LIMESTONE	9.3	179.8	

MAPID: 16526247000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.447803 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738865 **DATE COLLECTED:** 4 / 7 / 1992

SURFACE ELEVATION (FT.): 370.1 **LOGGED (FT.):** 177.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-8-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.1	PLEISTOCENE		SOIL	4.0	0.0	
366.1	PLEISTOCENE		CLAY	10.0	4.0	
356.1	CARBONDALE		SANDSTONE	2.0	14.0	
354.1	CARBONDALE		SANDY CLAYSTONE	1.0	16.0	
353.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	17.0	BROWN
344.1	CARBONDALE		SHALY SANDSTONE	6.0	26.0	GRAY
338.1	CARBONDALE		SHALE	2.0	32.0	DARK
336.1	CARBONDALE		GRAY SHALE	3.0	34.0	
333.1	CARBONDALE		SANDSTONE	3.0	37.0	GRAY
330.1	CARBONDALE		GRAY SHALE	2.0	40.0	
328.1	CARBONDALE		BLACK SHALE	2.0	42.0	
326.1	CARBONDALE	BRERETON	LIMESTONE	5.0	44.0	DARK
321.1	CARBONDALE	ANNA	BLACK SHALE	1.0	49.0	
320.1	CARBONDALE	HERRIN	COAL	2.5	50.0	
317.6	CARBONDALE		SHALE	1.5	52.5	DARK
316.1	CARBONDALE		GRAY SHALE	6.0	54.0	
310.1	CARBONDALE		SANDY SHALE	3.0	60.0	
307.1	CARBONDALE		SANDSTONE	17.0	63.0	GRAY
290.1	CARBONDALE		CALCAREOUS SANDSTONE	1.0	80.0	
289.1	CARBONDALE		SANDSTONE	8.0	81.0	
281.1	CARBONDALE		LIMESTONE	0.5	89.0	
280.6	CARBONDALE		SANDSTONE	15.5	89.5	GRAY
265.1	CARBONDALE		SANDY SHALE	13.0	105.0	GRAY
252.1	CARBONDALE		SILTSTONE	4.0	118.0	GRAY
248.1	CARBONDALE		BLACK SHALE	1.0	122.0	
247.1	CARBONDALE		SANDY SHALE	4.0	123.0	GRAY
243.1	CARBONDALE		SANDSTONE	6.0	127.0	GRAY
237.1	CARBONDALE		SILTSTONE	5.0	133.0	SHALEY; GRAY
232.1	CARBONDALE		SANDSTONE	5.0	138.0	
227.1	CARBONDALE		SANDY SHALE	7.0	143.0	
220.1	CARBONDALE		SHALE	3.0	150.0	DARK
217.1	CARBONDALE		SANDY SHALE	1.0	153.0	GRAY
216.1	CARBONDALE		SHALE	1.0	154.0	DARK
215.1	CARBONDALE	ST. DAVID	LIMESTONE	2.0	155.0	DARK
213.1	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	157.0	
212.1	CARBONDALE	DYKERSBURG	GRAY SHALE	5.0	158.0	
207.1	CARBONDALE	DYKERSBURG	SHALE	1.9	163.0	
205.2	CARBONDALE	DYKERSBURG	SHALE	0.5	164.9	DARK GRAY

204.7	CARBONDALE	SPRINGFIELD	COAL	4.2	165.4	
200.5	CARBONDALE		GRAY SHALE	3.2	169.6	
197.3	CARBONDALE		LIMESTONE	4.2	172.8	

MAPID: 16526248000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456797 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.738787 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 233.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO./WILLARD G. CORP. WG-21-88 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.3	PLEISTOCENE		SOIL	3.0	0.0	SILTY CLAY
367.3	PLEISTOCENE		CLAY	43.0	3.0	
324.3	CARBONDALE	DANVILLE	COAL	0.5	46.0	TOP OF COAL ERODED
323.8	CARBONDALE		UNDERCLAY	1.5	46.5	
322.3	CARBONDALE		CLAYSTONE	53.0	48.0	
269.3	CARBONDALE		GRAY SHALE	1.0	101.0	SOFT
268.3	CARBONDALE	HERRIN	COAL	4.2	102.0	
264.1	CARBONDALE		UNDERCLAY	1.8	106.2	
262.3	CARBONDALE		SANDSTONE	58.5	108.0	WITH THIN LIMEY BEDDED SHALE
203.8	CARBONDALE	BRIAR HILL	COAL	1.5	166.5	
202.3	CARBONDALE		SANDY SHALE	32.0	168.0	
170.3	CARBONDALE		GRAY SHALE	1.9	200.0	
168.4	CARBONDALE		SHALE	1.7	201.9	DARK GRAY
166.7	CARBONDALE	ST. DAVID	LIMESTONE	1.2	203.6	GRAY
165.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	204.8	
163.0	CARBONDALE	DYKERSBURG	GRAY SHALE	11.7	207.3	
151.3	CARBONDALE	SPRINGFIELD	COAL	4.3	219.0	
147.0	CARBONDALE		UNDERCLAY	2.5	223.3	
144.5	CARBONDALE		SHALE	1.2	225.8	
143.3	CARBONDALE		LIMESTONE	1.0	227.0	
142.3	CARBONDALE		SANDY SHALE	5.0	228.0	

MAPID: 16500205000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473195 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.733414 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
336.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	25.0	36.0	
303.0	CARBONDALE	HERRIN	COAL	2.4	69.0	
298.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	45.0	74.0	
232.0	CARBONDALE	BRIAR HILL	COAL	2.5	140.0	
178.0	CARBONDALE	SPRINGFIELD	COAL	5.2	194.0	

MAPID: 16500205000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473195 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.733414 **DATE COLLECTED:** 7 / 31 / 1905

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Survey Core Study

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	36.0	0.0	
336.0			ROCK	33.0	36.0	
303.0	CARBONDALE	HERRIN	COAL	2.4	69.0	
300.6	CARBONDALE		ROCK	69.0	71.4	
231.6	CARBONDALE	BRIAR HILL	COAL	2.5	140.4	
229.1	CARBONDALE		ROCK	51.5	142.9	
177.6	CARBONDALE	SPRINGFIELD	COAL	5.2	194.4	
172.4	CARBONDALE		ROCK	0.3	199.6	

MAPID: 16500205000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473195 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.733414 **DATE COLLECTED:** 7 / 31 / 1905

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., DANFORTH #6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	36.0	0.0	
336.0	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	36.0	
322.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	50.0	
311.0	CARBONDALE	ANNA	BLACK SHALE	8.0	61.0	
303.0	CARBONDALE	HERRIN	COAL	2.5	69.0	
300.5	CARBONDALE		UNDERCLAY	3.0	71.5	
297.5	CARBONDALE		SANDSTONE	45.0	74.5	
252.5	CARBONDALE		SANDY SHALE	21.0	119.5	
231.5	CARBONDALE	BRIAR HILL	COAL	2.4	140.5	
229.1	CARBONDALE		SANDY SHALE	31.0	142.9	
198.1	CARBONDALE		BLACK SHALE	1.0	173.9	
197.1	CARBONDALE		LIMESTONE	0.5	174.9	
196.6	CARBONDALE		BLACK SHALE	4.0	175.4	
192.6	CARBONDALE		SHALE	15.0	179.4	
177.6	CARBONDALE	SPRINGFIELD	COAL	5.2	194.4	
172.4	CARBONDALE		UNDERCLAY	0.4	199.6	

MAPID: 16503592000C **VERSION:** 1 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485172 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.742435 **DATE COLLECTED:** 1 / 15 / 1969
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 126.9 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 3330 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	89.3	0.0	SURFACE LAYERS (EARTH, CLAY, & DRIFT)
275.7	CARBONDALE		GRAY SHALE	23.1	89.3	
252.6	CARBONDALE	BRERETON	LIMESTONE	6.4	112.4	
246.3	CARBONDALE	ANNA	BLACK SHALE	2.3	118.7	
244.0	CARBONDALE	HERRIN	COAL	0.6	121.0	
243.4	CARBONDALE	HERRIN	ROCK	0.0	121.6	PYRITE BAND
243.4	CARBONDALE	HERRIN	COAL	0.0	121.6	
243.3	CARBONDALE	HERRIN	ROCK	0.0	121.7	FUSION BAND
243.3	CARBONDALE	HERRIN	COAL	1.1	121.7	
242.2	CARBONDALE	HERRIN	ROCK	0.0	122.8	FUSION BAND
242.2	CARBONDALE	HERRIN	COAL	0.5	122.8	
241.7	CARBONDALE	HERRIN	ROCK	0.0	123.3	PYRITE BAND
241.7	CARBONDALE	HERRIN	COAL	0.5	123.3	
241.2	CARBONDALE	HERRIN	ROCK	0.0	123.8	PYRITE BAND
241.2	CARBONDALE	HERRIN	COAL	0.2	123.8	
241.0	CARBONDALE	HERRIN	SHALE	0.1	124.0	SHALE WITH BLUE BAND
240.9	CARBONDALE	HERRIN	COAL	0.2	124.1	
240.7	CARBONDALE	HERRIN	UNCLASSIFIED	0.1	124.3	LOG SAYS 'RASH'
240.6	CARBONDALE	HERRIN	COAL	1.2	124.4	
239.4	CARBONDALE		UNDERCLAY	1.3	125.6	

MAPID: 16503592000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485172 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.742435 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 125.6 **LOG TYPE:** Survey Core Study
SOURCE: PEABODY COAL CO. 3330 **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.7	CARBONDALE		GRAY SHALE	23.1	89.3	
252.6	CARBONDALE	BRERETON	LIMESTONE	6.4	112.4	
246.2	CARBONDALE	ANNA	BLACK SHALE	2.3	118.8	
244.0	CARBONDALE	HERRIN	COAL	4.6	121.0	

MAPID: 16524432000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:** 440' S line, 330' E line of SE NE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.467111 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.736429 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 560.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	296.0	
54.0	CARBONDALE	SURVANT	COAL	0.8	337.0	
-37.0	CARBONDALE	COLCHESTER	COAL	0.5	428.0	
-104.0	CARBONDALE	DEKOVEN	COAL	3.0	495.0	
-104.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	495.0	
-164.0	CARBONDALE	DAVIS	COAL	5.0	555.0	75% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16526066000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.48017 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.746087 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.5 **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-1-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.5	PLEISTOCENE		SOIL	10.0	0.0	SILT & CLAY
356.5	PLEISTOCENE		CLAY	62.0	10.0	
294.5	MODESTO		COAL	0.5	72.0	BK CARB. SH
294.0	MODESTO		UNDERCLAY	2.5	72.5	
291.5	MODESTO		CALCAREOUS SHALE	2.0	75.0	WITH SHALE
289.5	MODESTO		SHALE	3.0	77.0	
286.5	MODESTO		SILTY SHALE	3.0	80.0	BLACK
283.5	MODESTO		SHALE	3.0	83.0	
280.5	MODESTO		GRAY SHALE	4.0	86.0	
276.5	MODESTO		SILTY SHALE	5.0	90.0	WITH SIDERITE; DARK GRAY
271.5	CARBONDALE	DANVILLE	COAL	1.0	95.0	
270.5	CARBONDALE		SILTY SHALE	3.0	96.0	
267.5	CARBONDALE		SANDSTONE	3.0	99.0	FRIABLE; MICACEOUS
264.5	CARBONDALE		SILTY SHALE	12.0	102.0	
252.5	CARBONDALE		SANDY SHALE	4.0	114.0	WITH SANDSTONE BEDS
248.5	CARBONDALE		SANDSTONE	1.5	118.0	COARSE; FRIABLE
247.0	CARBONDALE	ALLENBY	COAL	0.5	119.5	
246.5	CARBONDALE		UNDERCLAY	2.5	120.0	
244.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	122.5	BUFF-BROWN; HARD
238.0	CARBONDALE		SHALE	1.5	128.5	GRAY GREEN
236.5	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	130.0	
227.5	CARBONDALE		SANDY SHALE	6.0	139.0	WITH SANDSTONE STREAKS, DARK GRAY
221.5	CARBONDALE		SANDY SHALE	5.1	145.0	INTERBEDDED; X-BEDS
216.4	CARBONDALE		SILTY SHALE	6.3	150.1	
210.1	CARBONDALE		CALCAREOUS BLACK SHALE	0.3	156.4	FOSSILIFEROUS
209.7	CARBONDALE	BRERETON	LIMESTONE	5.5	156.8	FOSSILIFEROUS
204.2	CARBONDALE	ANNA	BLACK SHALE & COAL	2.8	162.3	
201.4	CARBONDALE	HERRIN	COAL	4.4	165.1	
197.0	CARBONDALE		CLAYSTONE	0.8	169.5	
196.2	CARBONDALE		CALCAREOUS CLAYSTONE	1.8	170.3	SILTY
194.5	CARBONDALE		LIMESTONE	0.6	172.0	
193.9	CARBONDALE		SANDSTONE	3.2	172.6	
190.7	CARBONDALE		SANDY SHALE	3.3	175.8	WITH SANDSTONE STREAKS AND LAMINATIONS
187.5	CARBONDALE		SANDSTONE	4.0	179.0	
183.5	CARBONDALE		GRAY SHALE	12.0	183.0	
171.5	CARBONDALE		SILTY SHALE	36.0	195.0	
135.5	CARBONDALE	BRIAR HILL	COAL	1.5	231.0	

134.0	CARBONDALE	DYKERSBURG	SANDSTONE	12.5	232.5	WITH SHALE STREAKS
121.5	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	245.0	WITH SANDSTONE STREAKS
107.5	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	2.2	259.0	
105.3	CARBONDALE	DYKERSBURG	SILTY SHALE	9.6	261.2	BECOMING
95.7	CARBONDALE	DYKERSBURG	SILTY SHALE	8.0	270.8	OCC. SIDERITE NOD.
87.7	CARBONDALE	DYKERSBURG	SILTY SHALE	0.7	278.8	CARB. LAMS
87.0	CARBONDALE	SPRINGFIELD	COAL	4.4	279.5	
82.6	CARBONDALE		CLAYSTONE	3.7	283.9	
78.9	CARBONDALE		SANDY SHALE	5.4	287.6	GRAY-GREEN, SANDSTONE LAMS AND STREAKS

MAPID: 16526069000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470685 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.74616 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 329.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-4-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0	PLEISTOCENE		SILT & CLAY	10.0	0.0	
357.0	PLEISTOCENE		CLAY	27.0	10.0	
330.0	MODESTO		SILTY SHALE	21.0	37.0	
309.0	MODESTO		SHALE	4.0	58.0	DARK GRAY TO BLACK
305.0	MODESTO		COAL	1.0	62.0	
304.0	MODESTO		CLAYSTONE	4.0	63.0	
300.0	MODESTO		GRAY SHALE	4.0	67.0	
296.0	MODESTO		SANDY SHALE	14.0	71.0	
282.0	MODESTO		SILTY SHALE	17.0	85.0	
265.0	MODESTO		CALCAREOUS SHALE	2.0	102.0	WITH LIMESTONE; GREEN
263.0	MODESTO		SHALE	7.0	104.0	MEDIUM TO DARK GRAY, SLIGHTLY SANDY
256.0	MODESTO		BLACK SHALE & COAL	2.0	111.0	
254.0	MODESTO		SILTY SHALE	11.0	113.0	
243.0	CARBONDALE	DANVILLE	COAL	1.0	124.0	
242.0	CARBONDALE		SANDY SHALE	15.0	125.0	
227.0	CARBONDALE		SANDSTONE	6.0	140.0	COARSE
221.0	CARBONDALE		SHALE	2.0	146.0	WITH SANDSTONE STREAKS AND LAMS, GRAY
219.0	CARBONDALE		SHALEY CLAYSTONE	3.0	148.0	GREEN
216.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	151.0	BUFF-BROWN; HARD
210.0	CARBONDALE		SHALE	3.0	157.0	SOFT GRAY GREEN
207.0	CARBONDALE		SANDY SHALE	15.0	160.0	
192.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	175.0	SH STREAKS, X-BEDS, FRIABLE
183.0	CARBONDALE	ANVIL ROCK	CORE LOSS	1.0	184.0	
182.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	185.0	
179.0	CARBONDALE		SILTY SHALE	1.0	188.0	
178.0	CARBONDALE	BRERETON	LIMESTONE	0.5	189.0	FOSSILIFEROUS
177.5	CARBONDALE	ANNA	BLACK SHALE & COAL	8.3	189.5	
169.2	CARBONDALE	HERRIN	COAL	4.3	197.8	
165.0	CARBONDALE		CLAYSTONE	0.4	202.0	
164.6	CARBONDALE		CORE LOSS	3.0	202.4	
161.6	CARBONDALE		CLAYSTONE	0.7	205.4	SLICKENSIDES
160.9	CARBONDALE		LIMESTONE	2.6	206.1	
158.3	CARBONDALE		SANDY SHALE	4.3	208.7	WITH SANDSTONE STREAKS, LAMS, GRAY-GREEN
154.0	CARBONDALE		SANDY SHALE	23.0	213.0	WITH SANDSTONE STREAKS AND LAMS, GRAY
131.0	CARBONDALE		SANDY SHALE	23.0	236.0	WITH SANDSTONE STREAKS AND LAMS, GRAY
108.0	CARBONDALE	BRIAR HILL	COAL	1.8	259.0	
106.2	CARBONDALE		SANDY SHALE	29.2	260.8	WITH SANDSTONE STREAKS
77.0	CARBONDALE		SILTY SHALE	1.1	290.0	

75.9	CARBONDALE	ST. DAVID	LIMESTONE	1.3	291.1	FOSSILIFEROUS
74.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	292.5	FISSILE PYRITE
72.7	CARBONDALE	DYKERSBURG	SILTY SHALE	3.5	294.3	WITH CLAY PARTINGS
69.2	CARBONDALE	DYKERSBURG	SHALE	2.2	297.8	BECOMING SLIGHTLY SANDY
67.0	CARBONDALE	DYKERSBURG	SANDY SHALE	13.6	300.0	
53.4	CARBONDALE	SPRINGFIELD	COAL	4.4	313.6	PYRITE
49.0	CARBONDALE		CLAYSTONE	3.5	318.0	SLICKENSIDES
45.5	CARBONDALE		SHALE	7.5	321.5	WITH SANDSTONE STREAKS, GRAY-GREEN

MAPID: 16526071000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.48004 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.739317 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.9 **LOGGED (FT.):** 267.5 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP WG-6-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.9	PLEISTOCENE		CLAY	73.0	0.0	
295.9	CARBONDALE		SANDSTONE	19.0	73.0	
276.9	CARBONDALE	ALLENBY	COAL	0.5	92.0	
276.4	CARBONDALE		CLAYSTONE	3.5	92.5	
272.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	96.0	BUFF TO BROWN
266.9	CARBONDALE		SANDY SHALE	26.8	102.0	WITH SANDSTONE STREAKS
240.1	CARBONDALE		CALCAREOUS BLACK SHALE	1.0	128.8	FOSSILIFEROUS
239.1	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	6.7	129.8	FOSSILIFEROUS
232.5	CARBONDALE	ANNA	BLACK SHALE & COAL	2.5	136.4	
230.0	CARBONDALE	HERRIN	COAL	4.5	138.9	
225.5	CARBONDALE		CLAYSTONE	3.4	143.4	SLICKENSIDES
222.2	CARBONDALE		SHALE	18.3	146.7	WITH SANDSTONE LAMS, X-BEDS, GRAY-GREEN
203.9	CARBONDALE		SANDY SHALE	37.0	165.0	
166.9	CARBONDALE	BRIAR HILL	COAL	2.0	202.0	
164.9	CARBONDALE	DYKERSBURG	GRAY SHALE	6.0	204.0	
158.9	CARBONDALE	DYKERSBURG	SANDY SHALE	21.0	210.0	
137.9	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	4.5	231.0	
133.4	CARBONDALE	DYKERSBURG	SILTY SHALE	16.9	235.5	
116.5	CARBONDALE	SPRINGFIELD	COAL	4.1	252.4	
112.4	CARBONDALE		CLAYSTONE	2.9	256.5	ROOTED SLICKENSIDES
109.5	CARBONDALE		SANDY SHALE	4.7	259.4	
104.9	CARBONDALE		SANDSTONE	3.5	264.0	SH STREAKS, RIPPLES, X-BEDS

MAPID: 16526072000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.4661 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.739313 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-7-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	PLEISTOCENE		SILT	9.0	0.0	
360.0	PLEISTOCENE		CLAY	21.0	9.0	
339.0	MODESTO		SANDY SHALE	17.0	30.0	
322.0	CARBONDALE	DANVILLE	COAL	0.5	47.0	
321.5	CARBONDALE		SANDY SHALE	7.5	47.5	WITH SANDSTONE LAMINATIONS
314.0	CARBONDALE		SANDSTONE	6.0	55.0	
308.0	CARBONDALE		SANDY SHALE	4.0	61.0	
304.0	CARBONDALE		CLAYSTONE	2.0	65.0	
302.0	CARBONDALE		SANDSTONE	3.0	67.0	
299.0	CARBONDALE		SILTY SHALE	2.0	70.0	
297.0	CARBONDALE	ALLENBY	COAL	1.0	72.0	
296.0	CARBONDALE		CLAYSTONE	2.0	73.0	GREEN
294.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	75.0	BUFF TO BROWN
287.5	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	81.5	COARSE
274.0	CARBONDALE		SANDY SHALE	15.7	95.0	
258.3	CARBONDALE	BRERETON	LIMESTONE	0.6	110.7	FOSSILIFEROUS
257.8	CARBONDALE	ANNA	BLACK SHALE & COAL	4.7	111.2	
253.1	CARBONDALE	ANNA	CORE LOSS	1.2	115.9	
252.0	CARBONDALE	ANNA	BLACK SHALE & COAL	1.5	117.0	
250.5	CARBONDALE	HERRIN	COAL	2.8	118.5	
247.7	CARBONDALE	HERRIN	BLACK SHALE & COAL	0.1	121.3	
247.6	CARBONDALE	HERRIN	COAL	1.3	121.4	
246.3	CARBONDALE		CLAYSTONE	2.7	122.7	
243.6	CARBONDALE		SANDY SHALE	7.5	125.4	GRAY GREEN
236.2	CARBONDALE		SANDSTONE	1.2	132.8	
235.0	CARBONDALE		GRAY SHALE	6.0	134.0	
229.0	CARBONDALE		SANDY SHALE	45.0	140.0	
184.0	CARBONDALE	BRIAR HILL	COAL	1.8	185.0	
182.2	CARBONDALE		SANDY SHALE	27.2	186.8	
155.0	CARBONDALE		GRAY SHALE	3.0	214.0	
152.0	CARBONDALE		CALCAREOUS BLACK SHALE	1.6	217.0	FOSSILIFEROUS
150.4	CARBONDALE		LIMESTONE	4.2	218.6	FOSSILIFEROUS
146.2	CARBONDALE		SILTY SHALE	11.1	222.8	MEDIUM GRAY
135.1	CARBONDALE	SPRINGFIELD	COAL	4.7	233.9	
130.4	CARBONDALE		CLAYSTONE	2.4	238.6	
128.0	CARBONDALE		CORE LOSS	0.5	241.0	
127.5	CARBONDALE		CLAYSTONE	0.1	241.5	
127.4	CARBONDALE		SANDY SHALE	8.4	241.6	WITH SANDSTONE STREAKS, GRAY-GREEN

MAPID: 16526074000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470434 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.738648 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 256.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-9-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.4	PLEISTOCENE		SILT	8.0	0.0	
360.4	PLEISTOCENE		CLAY	29.0	8.0	
331.4	MODESTO		GRAY SHALE	16.0	37.0	
315.4	CARBONDALE	DANVILLE	COAL	1.0	53.0	
314.4	CARBONDALE		CLAYSTONE	4.0	54.0	
310.4	CARBONDALE		SANDY SHALE	2.0	58.0	
308.4	CARBONDALE		SANDSTONE	6.0	60.0	
302.4	CARBONDALE		CLAYSTONE	2.0	66.0	
300.4	CARBONDALE		SILTY SHALE	9.5	68.0	
290.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	77.5	BUFF TO BROWN
284.4	CARBONDALE		GREEN SHALE	3.0	84.0	
281.4	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	87.0	
268.4	CARBONDALE		SANDY SHALE	15.5	100.0	WITH SANDSTONE STREAKS, CROSS BEDS
252.9	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	6.1	115.5	FOSSILIFEROUS
246.8	CARBONDALE	ANNA	BLACK SHALE	2.6	121.6	FISSILE, PYRITE
244.2	CARBONDALE	HERRIN	COAL	3.0	124.2	
241.2	CARBONDALE	HERRIN	SILTY SHALE	0.1	127.2	TR COAL
241.1	CARBONDALE	HERRIN	COAL	1.2	127.3	
239.9	CARBONDALE		CLAYSTONE	4.2	128.5	
235.6	CARBONDALE		SANDY SHALE	1.0	132.8	
234.7	CARBONDALE		SANDSTONE	21.3	133.7	
213.4	CARBONDALE		SANDY SHALE	37.0	155.0	
176.4	CARBONDALE	BRIAR HILL	COAL	1.8	192.0	
174.6	CARBONDALE	DYKERSBURG	SILTY SHALE	29.2	193.8	
145.4	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	3.0	223.0	
142.4	CARBONDALE	DYKERSBURG	SANDY SHALE	16.3	226.0	
126.1	CARBONDALE	SPRINGFIELD	COAL	4.5	242.3	
121.6	CARBONDALE		CORE LOSS	3.0	246.8	
118.6	CARBONDALE		SANDY SHALE	6.2	249.8	

MAPID: 16526249000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 18 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.479105 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.735096 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.9 **LOGGED (FT.):** 225.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-14-18 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.9	PLEISTOCENE		SOIL	3.0	0.0	
357.9	PLEISTOCENE		CLAY	39.0	3.0	
318.9	CARBONDALE		SHALE	4.5	42.0	SOFT, BLACK
314.4	CARBONDALE	ALLENBY	SMUT	0.5	46.5	COAL, BLACK
313.9	CARBONDALE		UNDERCLAY	3.0	47.0	
310.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	50.0	GRAY
303.9	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	57.0	GRAY
291.9	CARBONDALE	ENERGY	SHALE	3.0	69.0	DARK
288.9	CARBONDALE	ENERGY	SHALY SANDSTONE	12.5	72.0	
276.4	CARBONDALE	ENERGY	SHALE	2.5	84.5	DARK
273.9	CARBONDALE	ENERGY	BLACK SHALE	3.0	87.0	SOFT
270.9	CARBONDALE	ENERGY	SHALE	1.5	90.0	DARK
269.4	CARBONDALE	HERRIN	COAL	4.0	91.5	
265.4	CARBONDALE		UNDERCLAY	3.0	95.5	
262.4	CARBONDALE		SANDSTONE	41.5	98.5	
220.9	CARBONDALE		GRAY SHALE	17.0	140.0	
203.9	CARBONDALE	BRIAR HILL	COAL	0.5	157.0	
203.4	CARBONDALE		SHALE	10.5	157.5	DARK GRAY
192.9	CARBONDALE		SANDY SHALE	17.0	168.0	GRAY
175.9	CARBONDALE		BLACK SHALE	4.0	185.0	
171.9	CARBONDALE		GRAY SHALE	2.5	189.0	
169.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	191.5	GRAY
168.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	192.5	
165.4	CARBONDALE	DYKERSBURG	GRAY SHALE	14.3	195.5	
151.1	CARBONDALE	SPRINGFIELD	COAL	4.5	209.8	
146.6	CARBONDALE		UNDERCLAY	3.3	214.3	
143.3	CARBONDALE		LIMESTONE	1.4	217.6	GRAY
141.9	CARBONDALE		SANDY SHALE	6.0	219.0	GRAY

MAPID: 16500091503M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470238 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.72748 **DATE COLLECTED:** 9 / 30 / 1977
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 61.8 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON, BIG RIDGE C C **WELL TYPE:** Strip Mine
COMMENT: NEW PIT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	15.0	0.0	
385.0	CARBONDALE		ROCK	42.4	15.0	
342.6	CARBONDALE	HERRIN	COAL	4.4	57.4	

MAPID: 16500091501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 660' S line, 1050' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481619 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.726182 **DATE COLLECTED:** 1 / 21 / 1971
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 22.4 **LOG TYPE:**
SOURCE: MINE NOTES-W. SMITH, BIG RIDGE C C **WELL TYPE:** Strip Mine
COMMENT: SAMPLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	18.5		
-	CARBONDALE	HERRIN	COAL	3.9		
-	CARBONDALE		ROCK	-		

MAPID: 16500091500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 660' S line, 1150' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481271 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.726179 **DATE COLLECTED:** 1 / 12 / 1977
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 22.4 **LOG TYPE:**
SOURCE: MINE NOTES- WM. SMITH, BIG RIDGE C C **WELL TYPE:** Strip Mine
COMMENT: SAMPLE #1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	18.5		
-	CARBONDALE	HERRIN	COAL	3.9		
-	CARBONDALE		ROCK	-		

MAPID: 16500091502M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.476863 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.725245 **DATE COLLECTED:** 5 / 30 / 1974
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 38.1 **LOG TYPE:**
SOURCE: MINE NOTES-DAMBERGER, BIG RIDGE C C **WELL TYPE:** Strip Mine
COMMENT: HIGHWALL DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	10.0	0.0	
390.0	CARBONDALE		ROCK	23.8	10.0	
366.2	CARBONDALE	HERRIN	COAL	4.3	33.8	
361.9	CARBONDALE		ROCK	-	38.1	

MAPID: 16500206000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 130' N line, 400' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.474282 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.723963 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
321.0	CARBONDALE	BRIAR HILL	COAL	2.0	55.0	
266.0	CARBONDALE	SPRINGFIELD	COAL	4.7	110.0	

MAPID: 16500206000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 130' N line, 400' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.474282 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723963 **DATE COLLECTED:** 11 / 16 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 115.7 **LOG TYPE:** Survey Core Study
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	26.0	0.0	
350.0			ROCK	29.0	26.0	
321.0			COAL	2.0	55.0	
319.0			ROCK	53.0	57.0	
266.0	CARBONDALE	SPRINGFIELD	COAL	4.7	110.0	
261.3	CARBONDALE		ROCK	1.0	114.7	

MAPID: 16500206000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 130' N line, 400' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.474282 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.723963 **DATE COLLECTED:** 11 / 16 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 115.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #19 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	26.0	0.0	
350.0	CARBONDALE		SANDSTONE	10.0	26.0	
340.0	CARBONDALE		SHALE	19.0	36.0	
321.0	CARBONDALE	BRIAR HILL	COAL	2.0	55.0	
319.0	CARBONDALE		SANDY SHALE	28.0	57.0	
291.0	CARBONDALE		SHALE	10.0	85.0	
281.0	CARBONDALE		BLACK SHALE	1.0	95.0	
280.0	CARBONDALE		BLACK SHALE	1.0	96.0	
279.0	CARBONDALE		BLACK SHALE	3.0	97.0	
276.0	CARBONDALE		SHALE	10.0	100.0	
266.0	CARBONDALE	SPRINGFIELD	COAL	2.3	110.0	
263.7	CARBONDALE	SPRINGFIELD	UNKNOWN	0.3	112.3	LOG HAS SULFUR, PROBABLY PYRITE
263.5	CARBONDALE	SPRINGFIELD	COAL	2.2	112.5	
261.3	CARBONDALE		UNDERCLAY	1.0	114.7	

MAPID: 16500207000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.482931 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.718889 **DATE COLLECTED:** 11 / 11 / 1905
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 120.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #18 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.0			UNCONSOLIDATED	65.0	0.0	
291.0			CLAY	38.0	65.0	
253.0	CARBONDALE	SPRINGFIELD	COAL	1.0	103.0	TOP OF COAL ERODED
252.0	CARBONDALE		SANDSTONE	16.0	104.0	

MAPID: 16500207000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.482931 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.718889 **DATE COLLECTED:** 11 / 11 / 1905

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 120.0 **LOG TYPE:** Survey Core Study

SOURCE: O'GARA C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.0			UNCONSOLIDATED	65.0	0.0	
291.0			ROCK	38.0	65.0	
253.0			COAL	1.0	103.0	
252.0			ROCK	16.0	104.0	

MAPID: 16503574000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.48114 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.717515 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PEABODY COAL CO. 3319 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	50.0	0.0	SURFACE CLAY (BLUE)
320.0	CARBONDALE		CLAY	60.0	50.0	BLUE CLAY AND SAND
260.0	CARBONDALE		SANDY SHALE	16.0	110.0	
244.0	CARBONDALE		GRAY SHALE	25.0	126.0	
219.0	CARBONDALE		BLACK SHALE	0.5	151.0	
218.5	CARBONDALE	HANOVER	LIMESTONE	1.5	151.5	
217.0	CARBONDALE	EXCELLO	BLACK SHALE	2.5	153.0	44% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
214.5	CARBONDALE	HOUCHIN CREEK	COAL	1.9	155.5	
212.6	CARBONDALE		UNDERCLAY	1.1	157.4	
211.5	CARBONDALE		SANDY SHALE	9.0	158.5	
202.5	CARBONDALE		GRAY SHALE	28.5	167.5	
174.0	CARBONDALE	COLCHESTER	COAL	1.0	196.0	
173.0	CARBONDALE		SANDY SHALE	29.5	197.0	
143.5	CARBONDALE		LIMESTONE	2.0	226.5	
141.5	CARBONDALE		SANDY SHALE	4.0	228.5	
137.5	CARBONDALE		GRAY SHALE	32.7	232.5	
104.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	265.2	
102.3	SPOON		UNDERCLAY	1.0	267.7	
101.3	SPOON		GRAY SANDSTONE	52.3	268.7	
49.0	SPOON		GRAY SHALE	9.0	321.0	
40.0	SPOON	DEKOVEN	COAL	3.6	330.0	
36.4	SPOON		SANDSTONE	8.9	333.6	
27.5	SPOON		SANDY SHALE	2.5	342.5	
25.0	SPOON		GRAY SHALE	5.5	345.0	
19.5	SPOON		BLACK SHALE	2.4	350.5	
17.1	SPOON		BLACK SHALE	1.1	352.9	BLACK SLATE WITH LIME FOSSILS
16.0	SPOON	DAVIS	COAL	0.5	354.0	
15.5	SPOON	DAVIS	ROCK	0.1	354.5	PYRITE BAND
15.5	SPOON	DAVIS	COAL	0.5	354.5	
15.0	SPOON	DAVIS	COAL	0.3	355.0	COAL WITH VERTICAL PYRITE
14.7	SPOON	DAVIS	COAL	0.2	355.3	
14.6	SPOON	DAVIS	ROCK	0.0	355.4	FUSION BAND
14.6	SPOON	DAVIS	COAL	0.9	355.4	
13.6	SPOON	DAVIS	ROCK	0.0	356.4	FUSION BAND
13.6	SPOON	DAVIS	COAL	0.2	356.4	COAL WITH PYRITE AND FUSIONS
13.4	SPOON	DAVIS	COAL	1.6	356.6	COAL WITH VERTICAL CALCITE
11.7	SPOON	DAVIS	COAL	0.3	358.3	COAL WITH SOME SS BANDS
11.4	SPOON		SANDSTONE	0.3	358.6	

11.1	SPOON		UNDERCLAY	2.0	358.9

MAPID: 16503574000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.48114 **GEOLOGIST:** HOKE

CONFIDENTIAL: N **LATITUDE:** 37.717515 **DATE COLLECTED:** 4 / 29 / 1968

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 360.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 3319 **WELL TYPE:** Coal Test

COMMENT: ISGS CORE# C-6874 (SE/c SE-SW-SW)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HOUCHIN CREEK	COAL	1.9	155.5	
-	CARBONDALE	SURVANT	COAL	1.0	196.0	
-	CARBONDALE	COLCHESTER	COAL	0.0	267.0	
-	CARBONDALE	DEKOVEN	COAL	3.6	330.0	
-	CARBONDALE	LOWER DEKOVEN	COAL	0.0	330.0	
-	CARBONDALE	DAVIS	COAL	4.6	354.0	

MAPID: 16503770000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1550' N line, 2200' E line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473678 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.727317 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PIAMCO INC. E530G **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
14.0	CARBONDALE	COLCHESTER	COAL	0.5	396.0	
-25.0	CARBONDALE	DEKOVEN	COAL	3.0	435.0	
-25.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	435.0	
-47.0	CARBONDALE	DAVIS	COAL	4.0	457.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503771000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1200' N line, 520' E line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.467833 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.728234 **DATE COLLECTED:** 2 / 5 / 1971

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PIAMCO INC. E558K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
152.0	CARBONDALE	HOUCHIN CREEK	COAL	0.0	272.0	
32.0	CARBONDALE	COLCHESTER	COAL	0.0	392.0	
-17.0	CARBONDALE	DEKOVEN	COAL	3.0	441.0	
-17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	441.0	
-46.9	CARBONDALE	DAVIS	COAL	3.9	470.9	74% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16526075000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466146 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.73123 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.2 **LOGGED (FT.):** 203.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-10-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.2	PLEISTOCENE		SILT	11.0	0.0	
374.2	CARBONDALE		SANDSTONE	4.0	11.0	
370.2	CARBONDALE		UNDERCLAY	3.0	15.0	
367.2	CARBONDALE	ALLENBY	COAL	1.0	18.0	
366.2	CARBONDALE		CLAYSTONE	5.0	19.0	
361.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	24.0	BROWN
355.2	CARBONDALE		SILTY SHALE	5.0	30.0	
350.2	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	35.0	
338.2	CARBONDALE		SANDY SHALE	15.2	47.0	
323.0	CARBONDALE	CONANT	LIMESTONE	1.1	62.2	FOSSILIFEROUS
321.9	CARBONDALE	JAMESTOWN	CALCAREOUS BLACK SHALE	1.0	63.3	FOSSILIFEROUS
320.9	CARBONDALE	BRERETON	LIMESTONE	4.0	64.3	FOSSILIFEROUS
316.9	CARBONDALE	ANNA	BLACK SHALE & COAL	1.9	68.3	
315.1	CARBONDALE	HERRIN	COAL	3.5	70.1	
311.6	CARBONDALE	HERRIN	COAL	0.1	73.6	
311.5	CARBONDALE	HERRIN	COAL	1.3	73.7	
310.2	CARBONDALE		UNDERCLAY	1.0	75.0	
309.2	CARBONDALE		CORE LOSS	3.0	76.0	
306.2	CARBONDALE		SANDY SHALE	3.3	79.0	
302.9	CARBONDALE		SANDSTONE	2.3	82.3	WITH SHALE STREAKS
300.7	CARBONDALE		SANDSTONE	20.5	84.5	
280.2	CARBONDALE		SANDY SHALE	33.0	105.0	WITH SANDSTONE STREAKS
247.2	CARBONDALE	BRIAR HILL	COAL	1.5	138.0	
245.7	CARBONDALE	DYKERSBURG	SANDY SHALE	10.5	139.5	
235.2	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	150.0	
229.2	CARBONDALE	DYKERSBURG	SANDY SHALE	14.0	156.0	
215.2	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	5.3	170.0	
209.9	CARBONDALE	DYKERSBURG	SILTY SHALE	11.2	175.3	
198.7	CARBONDALE	SPRINGFIELD	COAL	4.6	186.5	
194.1	CARBONDALE		CLAYSTONE	4.9	191.1	
189.2	CARBONDALE		SANDY SHALE	7.1	196.0	WITH LIMESTONE NODULES

MAPID: 16526250000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1640' N line, 2160' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.477751 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.7271 **DATE COLLECTED:** 2 / 11 / 1990
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY/TEK BAR INC. WG-GW-28 **WELL TYPE:** Water Well
COMMENT: PERMIT 226 BIG RIDGE MINE; APPROX. ELEV

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0	PLEISTOCENE		SANDY CLAY	16.0	0.0	
394.0			SILTSTONE	2.0	16.0	POOR RECOVERY; WEATHERED
392.0			CLAYSTONE	4.0	18.0	
388.0	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	22.0	WITH SLTSTN INTERBEDS; TAN TO ORANGE

MAPID: 16526251000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1500' N line, 650' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.468293 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.72741 **DATE COLLECTED:** 4 / 14 / 1988
SURFACE ELEVATION (FT.): 410.7 **LOGGED (FT.):** 38.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO./WILLARD G. CORP. WG-27MW-88 **WELL TYPE:** Water Well
COMMENT: PERMIT 226 BIG RIDGE MINE; APPROX. ELEV

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.7	PLEISTOCENE		SOIL	0.1	0.0	
410.6	PLEISTOCENE		CLAY	16.9	0.1	
393.7			SANDSTONE	4.0	17.0	
389.7			GRAY SHALE	17.0	21.0	

MAPID: 16526252000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.469327 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.73262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.5 **LOGGED (FT.):** 200.9 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO/WILLARD G. CORP. WG-12-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.5	PLEISTOCENE		SILT & CLAY	10.0	0.0	
363.5	CARBONDALE		SANDSTONE	5.0	10.0	COARSE, FE-STAIN, WEATHERED
358.5	CARBONDALE		SHALE	5.0	15.0	
353.5	CARBONDALE	ALLENBY	COAL	1.0	20.0	
352.5	CARBONDALE		CLAYSTONE	6.0	21.0	
346.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	27.0	BUFF-BROWN, WEATHERED
340.5	CARBONDALE		CLAYSTONE	4.0	33.0	
336.5	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	37.0	
332.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	41.0	
331.5	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	42.0	
327.5	CARBONDALE		SANDY SHALE	13.8	46.0	
313.7	CARBONDALE		CORE LOSS	1.5	59.8	
312.2	CARBONDALE		BLACK SHALE & COAL	1.2	61.3	
311.0	CARBONDALE	BRERETON	ARGILLACEOUS LIMESTONE	5.7	62.5	
305.4	CARBONDALE	ANNA	BLACK SHALE & COAL	0.7	68.1	
304.7	CARBONDALE	HERRIN	COAL	4.3	68.8	
300.4	CARBONDALE		CORE LOSS	2.0	73.1	
298.4	CARBONDALE		CLAYSTONE	1.4	75.1	
297.0	CARBONDALE		SANDY SHALE	2.8	76.5	WITH LIMESTONE NODULES
294.2	CARBONDALE		SANDSTONE	27.7	79.3	
266.5	CARBONDALE		SANDY SHALE	29.5	107.0	
237.0	CARBONDALE	BRIAR HILL	COAL	1.9	136.5	
235.1	CARBONDALE	DYKERSBURG	SANDY SHALE	28.6	138.4	
206.5	CARBONDALE	DYKERSBURG	BLACK SHALE & COAL	5.6	167.0	
200.9	CARBONDALE	DYKERSBURG	SILTY SHALE	14.4	172.6	
186.5	CARBONDALE	SPRINGFIELD	COAL	4.5	187.0	
182.0	CARBONDALE		CLAYSTONE	3.8	191.5	
178.3	CARBONDALE		SANDY SHALE	5.7	195.2	

MAPID: 16526253000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.47935 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.727865 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 161.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-19-88 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.6	PLEISTOCENE		CLAY	17.0	0.0	
358.6	PLEISTOCENE		SANDY CLAY	7.0	17.0	
351.6	CARBONDALE	BRERETON	LIMESTONE	4.0	24.0	
347.6	CARBONDALE	ANNA	BLACK SHALE	3.5	28.0	
344.1	CARBONDALE	HERRIN	COAL	4.2	31.5	
339.9	CARBONDALE		UNDERCLAY	2.3	35.7	
337.6	CARBONDALE		SANDY SHALE	3.0	38.0	
334.6	CARBONDALE		SANDSTONE	40.0	41.0	WITH SHALE STREAKS
294.6	CARBONDALE		SHALE	15.5	81.0	
279.1	CARBONDALE	BRIAR HILL	COAL	1.5	96.5	
277.6	CARBONDALE		SANDY SHALE	30.0	98.0	
247.6	CARBONDALE		SHALE	2.0	128.0	
245.6	CARBONDALE	ST. DAVID	LIMESTONE	1.5	130.0	
244.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	131.5	
241.6	CARBONDALE	DYKERSBURG	SANDY SHALE	12.0	134.0	
229.6	CARBONDALE	SPRINGFIELD	COAL	4.0	146.0	
225.6	CARBONDALE		UNDERCLAY	3.0	150.0	
222.6	CARBONDALE		SANDY SHALE	8.0	153.0	

MAPID: 16590885000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.469255 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.723562 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-287 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.9	PLEISTOCENE		SOIL	5.0	0.0	
372.9	PLEISTOCENE		CLAY	25.0	5.0	
347.9	CARBONDALE		GRAY SHALE	18.5	30.0	
329.4	CARBONDALE	BRIAR HILL	COAL	1.5	48.5	
327.9	CARBONDALE		UNDERCLAY	2.0	50.0	
325.9	CARBONDALE		SANDY SHALE	3.0	52.0	
322.9	CARBONDALE		SANDSTONE	8.0	55.0	
314.9	CARBONDALE		SANDY SHALE	3.0	63.0	
311.9	CARBONDALE		SANDSTONE	4.0	66.0	
307.9	CARBONDALE		GRAY SHALE	12.0	70.0	
295.9	CARBONDALE		BLACK SHALE	1.0	82.0	
294.9	CARBONDALE		CALCAREOUS SHALE	1.5	83.0	
293.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	84.5	
291.9	CARBONDALE	DYKERSBURG	SANDY SHALE	7.0	86.0	
284.9	CARBONDALE	DYKERSBURG	SANDY SHALE	3.0	93.0	WITH SIDERITE NODULES
281.9	CARBONDALE	DYKERSBURG	SANDY SHALE	0.6	96.0	
281.3	CARBONDALE		BLACK SHALE	0.1	96.6	
281.2	CARBONDALE	SPRINGFIELD	COAL	4.7	96.7	
276.5	CARBONDALE		UNDERCLAY	1.8	101.4	
274.8	CARBONDALE		CALCAREOUS SHALE	1.6	103.1	
273.2	CARBONDALE		LIMESTONE	1.1	104.7	
272.1	CARBONDALE		SANDSTONE	3.7	105.8	SHALEY
268.4	CARBONDALE		SANDSTONE	2.5	109.5	

MAPID: 16590886000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470828 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.72338 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.7 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-286 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.7	PLEISTOCENE		SOIL	4.0	0.0	
369.7	PLEISTOCENE		CLAY	11.0	4.0	
358.7	CARBONDALE		GRAY SHALE	3.0	15.0	
355.7	CARBONDALE		SANDY SHALE	28.0	18.0	
327.7	CARBONDALE	BRIAR HILL	COAL	1.5	46.0	
326.2	CARBONDALE		UNDERCLAY	1.5	47.5	
324.7	CARBONDALE		SANDY SHALE	3.0	49.0	
321.7	CARBONDALE		SANDSTONE	8.0	52.0	
313.7	CARBONDALE		SANDY SHALE	20.0	60.0	
293.7	CARBONDALE		BLACK SHALE	1.0	80.0	
292.7	CARBONDALE		CALCAREOUS SHALE	1.0	81.0	
291.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	82.0	
288.7	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	85.0	
278.7	CARBONDALE		CLAYSTONE	0.1	95.0	
278.6	CARBONDALE	SPRINGFIELD	COAL	4.8	95.1	
273.8	CARBONDALE		SANDY SHALE	2.2	99.9	
271.7	CARBONDALE		GRAY SHALE	1.1	102.0	
270.6	CARBONDALE		LIMESTONE	0.4	103.1	NODULAR
270.2	CARBONDALE		CALCAREOUS SANDSTONE	2.1	103.5	
268.1	CARBONDALE		LIMESTONE	0.1	105.6	
268.0	CARBONDALE		CALCAREOUS SHALE	2.3	105.7	
265.7	CARBONDALE		SANDSTONE	4.0	108.0	

MAPID: 16590887000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.472831 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.72331 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 115.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-285 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.9	PLEISTOCENE		SOIL	4.0	0.0	
367.9	PLEISTOCENE		CLAY	24.0	4.0	
343.9	CARBONDALE		SANDY SHALE	20.0	28.0	
323.9	CARBONDALE	BRIAR HILL	COAL	1.0	48.0	
322.9	CARBONDALE		UNDERCLAY	3.0	49.0	
319.9	CARBONDALE		GRAY SHALE	4.0	52.0	
315.9	CARBONDALE		SANDY SHALE	4.0	56.0	
311.9	CARBONDALE		SANDSTONE	16.0	60.0	
295.9	CARBONDALE		SANDY SHALE	7.0	76.0	
288.9	CARBONDALE		BLACK SHALE	1.0	83.0	
287.9	CARBONDALE		CALCAREOUS SHALE	1.0	84.0	
286.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	85.0	
283.9	CARBONDALE	DYKERSBURG	GRAY SHALE	7.0	88.0	
276.9	CARBONDALE	DYKERSBURG	SANDY SHALE	3.8	95.0	
273.1	CARBONDALE		BLACK SHALE	0.3	98.8	
272.8	CARBONDALE	SPRINGFIELD	COAL	4.5	99.1	
268.3	CARBONDALE		UNDERCLAY	1.4	103.6	
266.9	CARBONDALE		CALCAREOUS SHALE	2.0	105.0	
264.9	CARBONDALE		CALCAREOUS SANDSTONE	2.9	107.0	
262.1	CARBONDALE		CALCAREOUS SHALE	1.8	109.8	
260.3	CARBONDALE		SANDSTONE	0.2	111.6	
260.1	CARBONDALE		SANDY SHALE	0.8	111.8	
259.4	CARBONDALE		SANDSTONE	1.3	112.5	
258.1	CARBONDALE		SANDY SHALE	1.2	113.8	

MAPID: 16590888000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.474771 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.723308 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.1 **LOGGED (FT.):** 117.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-284 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.1	PLEISTOCENE		SOIL	5.0	0.0	
366.1	PLEISTOCENE		CLAY	50.0	5.0	
316.1	CARBONDALE		SANDY SHALE	2.0	55.0	
314.1	CARBONDALE		SANDSTONE	3.0	57.0	
311.1	CARBONDALE		GRAY SHALE	5.0	60.0	
306.1	CARBONDALE		SANDSTONE	11.0	65.0	
295.1	CARBONDALE		SANDY SHALE	12.0	76.0	
283.1	CARBONDALE		BLACK SHALE	1.0	88.0	
282.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	89.0	
281.1	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	90.0	
280.1	CARBONDALE	DYKERSBURG	SANDY SHALE	11.6	91.0	WITH SIDERITE
268.5	CARBONDALE		BLACK SHALE	0.2	102.6	
268.4	CARBONDALE	SPRINGFIELD	COAL	4.9	102.7	
263.5	CARBONDALE		UNDERCLAY	1.9	107.6	
261.6	CARBONDALE		CALCAREOUS SHALE	1.4	109.5	
260.2	CARBONDALE		LIMESTONE	2.2	110.9	
258.1	CARBONDALE		CALCAREOUS SANDSTONE	1.5	113.0	
256.6	CARBONDALE		CALCAREOUS SHALE	1.3	114.5	
255.3	CARBONDALE		CALCAREOUS SANDSTONE	1.2	115.8	

MAPID: 16590889000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470525 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725428 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.1 **LOGGED (FT.):** 163.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-283 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.1	PLEISTOCENE		MINE OPENING	16.0	0.0	
396.1	PLEISTOCENE		SAND	20.5	16.0	
375.6	PLEISTOCENE		CLAY	2.5	36.5	
373.1	CARBONDALE	BRERETON	LIMESTONE	4.5	39.0	
368.6	CARBONDALE	ANNA	BLACK SHALE	1.0	43.5	
367.6	CARBONDALE	HERRIN	COAL	4.0	44.5	
363.6	CARBONDALE		UNDERCLAY	3.5	48.5	
360.1	CARBONDALE		SANDY SHALE	2.0	52.0	
358.1	CARBONDALE		SANDSTONE	35.0	54.0	
323.1	CARBONDALE		SANDY SHALE	22.0	89.0	
301.1	CARBONDALE	BRIAR HILL	COAL	1.5	111.0	
299.6	CARBONDALE		SANDY SHALE	3.5	112.5	
296.1	CARBONDALE		SANDSTONE	4.0	116.0	
292.1	CARBONDALE		SANDY SHALE	23.8	120.0	
268.3	CARBONDALE		BLACK SHALE	0.7	143.8	
267.6	CARBONDALE	ST. DAVID	LIMESTONE	0.8	144.5	NODULAR
266.9	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	2.6	145.2	
264.3	CARBONDALE		CALCAREOUS SHALE	1.6	147.8	
262.7	CARBONDALE	DYKERSBURG	SANDY SHALE	8.4	149.4	
254.3	CARBONDALE		CLAYSTONE	0.6	157.8	
253.7	CARBONDALE	SPRINGFIELD	COAL	0.4	158.4	
253.3	CARBONDALE		UNDERCLAY	0.4	158.8	
252.9	CARBONDALE		SHALE	1.1	159.2	
251.8	CARBONDALE		LIMESTONE	2.7	160.3	

MAPID: 16590890000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470556 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.724675 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.8 **LOGGED (FT.):** 149.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-282 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.8	PLEISTOCENE		CLAY	3.0	0.0	
405.8	PLEISTOCENE		SAND	3.0	3.0	
402.8	PLEISTOCENE		CLAY	1.0	6.0	
401.8	PLEISTOCENE		SAND	2.0	7.0	
399.8	PLEISTOCENE		CLAY	7.0	9.0	
392.8	CARBONDALE	BRERETON	LIMESTONE	4.0	16.0	
388.8	CARBONDALE	ANNA	BLACK SHALE	1.5	20.0	
387.3	CARBONDALE	HERRIN	COAL	4.5	21.5	
382.8	CARBONDALE		UNDERCLAY	3.0	26.0	
379.8	CARBONDALE		SANDY SHALE	3.0	29.0	
376.8	CARBONDALE		SANDSTONE	9.0	32.0	
367.8	CARBONDALE		SANDY SHALE	13.0	41.0	
354.8	CARBONDALE		SANDSTONE	16.0	54.0	
338.8	CARBONDALE		SANDY SHALE	26.0	70.0	
312.8	CARBONDALE		SANDSTONE	5.0	96.0	
307.8	CARBONDALE		SANDY SHALE	20.0	101.0	
287.8	CARBONDALE		CALCAREOUS BLACK SHALE	0.6	121.0	
287.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	121.6	NODULAR
286.2	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	2.6	122.6	
283.6	CARBONDALE	DYKERSBURG	SANDY SHALE	11.3	125.2	
272.3	CARBONDALE	SPRINGFIELD	COAL	4.4	136.5	
267.9	CARBONDALE		SANDY SHALE	1.3	140.9	
266.7	CARBONDALE		CALCAREOUS SHALE	1.8	142.1	
264.9	CARBONDALE		LIMESTONE	0.9	143.9	
264.0	CARBONDALE		CALCAREOUS SANDSTONE	1.8	144.8	
262.2	CARBONDALE		SANDY SHALE	2.4	146.6	

MAPID: 16590891000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470526 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725304 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.7 **LOGGED (FT.):** 164.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-281 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.7	PLEISTOCENE		MINE OPENING	8.0	0.0	
403.7	PLEISTOCENE		CLAY	5.5	8.0	
398.2	PLEISTOCENE		SAND	17.5	13.5	
380.7	PLEISTOCENE		CLAY	4.0	31.0	
376.7	CARBONDALE	BRERETON	LIMESTONE	6.0	35.0	
370.7	CARBONDALE	ANNA	BLACK SHALE	1.0	41.0	
369.7	CARBONDALE	HERRIN	COAL	4.0	42.0	
365.7	CARBONDALE		UNDERCLAY	7.0	46.0	
358.7	CARBONDALE		SANDSTONE	7.0	53.0	
351.7	CARBONDALE		SANDY SHALE	5.0	60.0	
346.7	CARBONDALE		SANDSTONE	15.0	65.0	
331.7	CARBONDALE		SANDY SHALE	24.5	80.0	
307.2	CARBONDALE	BRIAR HILL	COAL	1.5	104.5	
305.7	CARBONDALE		SANDY SHALE	6.0	106.0	
299.7	CARBONDALE		SANDSTONE	13.0	112.0	
286.7	CARBONDALE		SANDY SHALE	11.0	125.0	
275.7	CARBONDALE		CALCAREOUS BLACK SHALE	2.1	136.0	
273.6	CARBONDALE		GRAY SHALE	1.5	138.1	
272.1	CARBONDALE	DYKERSBURG	SANDY SHALE	9.5	139.6	
262.6	CARBONDALE		PYRITE	0.0	149.1	
262.6	CARBONDALE	SPRINGFIELD	COAL	4.8	149.1	
257.8	CARBONDALE		SHALE	0.4	153.9	
257.4	CARBONDALE		SANDY SHALE	1.4	154.3	
256.0	CARBONDALE		CALCAREOUS SHALE	2.3	155.7	
253.7	CARBONDALE		LIMESTONE	0.3	158.0	
253.4	CARBONDALE		SANDSTONE	1.8	158.3	
251.7	CARBONDALE		CALCAREOUS SANDSTONE	1.0	160.0	
250.7	CARBONDALE		SANDY SHALE	2.0	161.0	
248.7	CARBONDALE		CALCAREOUS SANDSTONE	1.0	163.0	

MAPID: 16590892000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470508 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725119 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.8 **LOGGED (FT.):** 163.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-280 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.8	PLEISTOCENE		MINE OPENING	3.0	0.0	
408.8	PLEISTOCENE		CLAY	10.0	3.0	
398.8	PLEISTOCENE		SAND	11.0	13.0	
387.8	PLEISTOCENE		CLAY	1.0	24.0	
386.8	CARBONDALE	BRERETON	LIMESTONE	4.0	25.0	WEATHERED
382.8	CARBONDALE	BRERETON	LIMESTONE	0.5	29.0	
382.3	CARBONDALE	ANNA	BLACK SHALE	1.5	29.5	
380.8	CARBONDALE	HERRIN	COAL	4.0	31.0	
376.8	CARBONDALE		UNDERCLAY	2.0	35.0	
374.8	CARBONDALE		SANDY SHALE	2.0	37.0	
372.8	CARBONDALE		SANDSTONE	9.0	39.0	
363.8	CARBONDALE		SANDY SHALE	12.0	48.0	
351.8	CARBONDALE		SANDSTONE	8.0	60.0	
343.8	CARBONDALE		SANDY SHALE	4.0	68.0	
339.8	CARBONDALE		SANDSTONE	8.0	72.0	
331.8	CARBONDALE		SANDY SHALE	18.0	80.0	
313.8	CARBONDALE	BRIAR HILL	COAL	1.5	98.0	
312.3	CARBONDALE		LIMESTONE	1.5	99.5	
310.8	CARBONDALE		GRAY SHALE	2.0	101.0	
308.8	CARBONDALE		SANDSTONE	9.0	103.0	GRAY
299.8	CARBONDALE		SANDSTONE	3.0	112.0	
296.8	CARBONDALE		SANDY SHALE	3.0	115.0	
293.8	CARBONDALE		SANDSTONE	3.7	118.0	
290.1	CARBONDALE		SANDY SHALE	12.1	121.7	
278.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	133.8	NODULAR
277.2	CARBONDALE	ST. DAVID	CALCAREOUS BLACK SHALE	1.3	134.6	
275.9	CARBONDALE		PYRITE	0.1	135.9	
275.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.1	136.0	
274.7	CARBONDALE	DYKERSBURG	SANDY SHALE	10.4	137.1	
264.3	CARBONDALE	SPRINGFIELD	COAL	4.5	147.5	
259.8	CARBONDALE		UNDERCLAY	0.4	152.0	
259.4	CARBONDALE		SANDY SHALE	0.8	152.4	
258.6	CARBONDALE		SANDY SHALE	0.4	153.2	WITH LIMESTONE NODS
258.2	CARBONDALE		SANDY SHALE	0.3	153.6	
257.9	CARBONDALE		CALCAREOUS SHALE	1.9	153.9	
256.0	CARBONDALE		SANDSTONE	2.6	155.8	
253.4	CARBONDALE		SANDY SHALE	4.6	158.4	

MAPID: 16590893000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470011 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.726373 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.5 **LOGGED (FT.):** 174.2 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-278 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.5	PLEISTOCENE		SOIL	3.0	0.0	
406.5	PLEISTOCENE		CLAY	11.0	3.0	
395.5	PLEISTOCENE		SAND	16.0	14.0	
379.5	CARBONDALE		GRAY SHALE	3.0	30.0	
376.5	CARBONDALE		SANDY SHALE	6.0	33.0	
370.5	CARBONDALE	BRERETON	LIMESTONE	1.0	39.0	
369.5	CARBONDALE	BRERETON	CALCAREOUS BLACK SHALE	2.0	40.0	
367.5	CARBONDALE	BRERETON	LIMESTONE	3.5	42.0	
364.0	CARBONDALE	ANNA	BLACK SHALE	1.5	45.5	
362.5	CARBONDALE	HERRIN	COAL	4.0	47.0	
358.5	CARBONDALE		UNDERCLAY	3.0	51.0	
355.5	CARBONDALE		SANDSTONE	37.0	54.0	
318.5	CARBONDALE		SANDY SHALE	22.5	91.0	
296.0	CARBONDALE	BRIAR HILL	COAL	1.5	113.5	
294.5	CARBONDALE		SANDY SHALE	32.3	115.0	
262.2	CARBONDALE		BLACK SHALE	1.1	147.3	
261.2	CARBONDALE	ST. DAVID	LIMESTONE	1.1	148.3	NODULAR
260.1	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	2.5	149.4	
257.6	CARBONDALE	DYKERSBURG	SANDY SHALE	11.1	151.9	
246.5	CARBONDALE		BLACK SHALE	0.1	163.0	
246.5	CARBONDALE	SPRINGFIELD	COAL	4.8	163.0	
241.7	CARBONDALE		SANDY SHALE	2.5	167.8	
239.2	CARBONDALE		CALCAREOUS SHALE	0.9	170.3	
238.3	CARBONDALE		SANDSTONE	2.3	171.2	
236.0	CARBONDALE		LIMESTONE	0.7	173.5	

MAPID: 16590894000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470556 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725923 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 171.2 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-277 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0	PLEISTOCENE		MINE OPENING	13.0	0.0	
395.0	PLEISTOCENE		CLAY	3.0	13.0	
392.0	PLEISTOCENE		SAND	20.5	16.0	
371.5	PLEISTOCENE		CLAY	3.0	36.5	
368.5	CARBONDALE	BRERETON	LIMESTONE	4.5	39.5	
364.0	CARBONDALE	ANNA	BLACK SHALE	1.0	44.0	
363.0	CARBONDALE	HERRIN	COAL	4.0	45.0	
359.0	CARBONDALE		UNDERCLAY	3.0	49.0	
356.0	CARBONDALE		SANDY SHALE	3.0	52.0	
353.0	CARBONDALE		SANDSTONE	10.0	55.0	
343.0	CARBONDALE		SANDY SHALE	4.0	65.0	
339.0	CARBONDALE		SANDSTONE	7.0	69.0	
332.0	CARBONDALE		SANDY SHALE	4.0	76.0	
328.0	CARBONDALE		SANDSTONE	12.0	80.0	
316.0	CARBONDALE		SANDY SHALE	20.5	92.0	
295.5	CARBONDALE	BRIAR HILL	COAL	1.5	112.5	
294.0	CARBONDALE		UNDERCLAY	1.0	114.0	
293.0	CARBONDALE		SANDY SHALE	2.0	115.0	
291.0	CARBONDALE		SANDSTONE	11.0	117.0	
280.0	CARBONDALE		SANDY SHALE	17.5	128.0	
262.5	CARBONDALE		BLACK SHALE	1.2	145.5	
261.3	CARBONDALE	ST. DAVID	LIMESTONE	1.2	146.7	NODULAR
260.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	147.9	
257.8	CARBONDALE	DYKERSBURG	SANDY SHALE	11.8	150.2	
246.0	CARBONDALE		BLACK SHALE	0.2	162.0	
245.8	CARBONDALE	SPRINGFIELD	COAL	4.6	162.2	
241.3	CARBONDALE		SANDY SHALE	1.4	166.7	
239.9	CARBONDALE		CALCAREOUS SANDSTONE	2.3	168.1	
237.6	CARBONDALE		CALCAREOUS SHALE	0.3	170.4	
237.3	CARBONDALE		LIMESTONE	0.5	170.7	

MAPID: 16590895000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470555 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725765 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.3 **LOGGED (FT.):** 174.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-276 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.3	PLEISTOCENE		MINE OPENING	19.0	0.0	
392.3	PLEISTOCENE		SAND	21.0	19.0	
371.3	PLEISTOCENE		CLAY	1.5	40.0	
369.8	CARBONDALE	BRERETON	LIMESTONE	6.0	41.5	
363.8	CARBONDALE	ANNA	BLACK SHALE	1.0	47.5	
362.8	CARBONDALE	HERRIN	COAL	4.0	48.5	
358.8	CARBONDALE		UNDERCLAY	3.5	52.5	
355.3	CARBONDALE		SANDSTONE	10.0	56.0	
345.3	CARBONDALE		SANDY SHALE	3.0	66.0	
342.3	CARBONDALE		SANDSTONE	27.0	69.0	
315.3	CARBONDALE		SANDY SHALE	20.0	96.0	
295.3	CARBONDALE	BRIAR HILL	COAL	1.5	116.0	
293.8	CARBONDALE		UNDERCLAY	2.5	117.5	
291.3	CARBONDALE		SANDSTONE	9.0	120.0	
282.3	CARBONDALE		SANDY SHALE	19.3	129.0	
263.0	CARBONDALE		BLACK SHALE	0.9	148.3	
262.1	CARBONDALE	ST. DAVID	LIMESTONE	0.9	149.2	NODULAR
261.3	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	1.8	150.0	
259.5	CARBONDALE	TURNER MINE	LIMESTONE	0.4	151.8	
259.2	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	152.1	
258.6	CARBONDALE	DYKERSBURG	SANDY SHALE	11.1	152.7	
247.5	CARBONDALE		BLACK SHALE	0.3	163.8	
247.1	CARBONDALE	SPRINGFIELD	COAL	4.6	164.2	
242.6	CARBONDALE		SANDY SHALE	2.0	168.7	
240.6	CARBONDALE		CALCAREOUS SANDSTONE	0.7	170.7	
239.9	CARBONDALE		CALCAREOUS SHALE	0.7	171.4	
239.2	CARBONDALE		LIMESTONE	1.9	172.1	

MAPID: 16590896000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470549 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725694 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.9 **LOGGED (FT.):** 172.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-275 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.9	PLEISTOCENE		MINE OPENING	18.0	0.0	
392.9	PLEISTOCENE		SAND	19.0	18.0	
373.9	PLEISTOCENE		CLAY	1.5	37.0	
372.4	CARBONDALE	BRERETON	LIMESTONE	7.5	38.5	
364.9	CARBONDALE	ANNA	BLACK SHALE	1.0	46.0	
363.9	CARBONDALE	HERRIN	COAL	4.5	47.0	
359.4	CARBONDALE		UNDERCLAY	3.5	51.5	
355.9	CARBONDALE		SANDSTONE	7.0	55.0	
348.9	CARBONDALE		SANDY SHALE	7.0	62.0	
341.9	CARBONDALE		SANDSTONE	21.0	69.0	
320.9	CARBONDALE		SANDY SHALE	6.0	90.0	
314.9	CARBONDALE		SANDSTONE	6.0	96.0	
308.9	CARBONDALE		SANDY SHALE	12.5	102.0	
296.4	CARBONDALE	BRIAR HILL	COAL	1.5	114.5	
294.9	CARBONDALE		UNDERCLAY	3.0	116.0	
291.9	CARBONDALE		SANDSTONE	9.0	119.0	
282.9	CARBONDALE		SANDY SHALE	18.2	128.0	
264.7	CARBONDALE		BLACK SHALE	0.9	146.2	
263.8	CARBONDALE	ST. DAVID	LIMESTONE	1.1	147.1	NODULAR
262.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	148.2	
260.1	CARBONDALE	DYKERSBURG	SANDY SHALE	10.9	150.8	
249.2	CARBONDALE	SPRINGFIELD	COAL	4.6	161.7	
244.6	CARBONDALE		UNDERCLAY	1.7	166.3	
243.0	CARBONDALE		SANDY SHALE	1.3	167.9	
241.7	CARBONDALE		SANDSTONE	0.4	169.2	
241.3	CARBONDALE		CALCAREOUS SHALE	0.6	169.6	
240.7	CARBONDALE		LIMESTONE	1.8	170.2	

MAPID: 16590897000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.47055 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.72563 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.4 **LOGGED (FT.):** 172.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-274 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.4	PLEISTOCENE		MINE OPENING	18.0	0.0	
393.4	PLEISTOCENE		SAND	19.0	18.0	
374.4	PLEISTOCENE		CLAY	1.0	37.0	
373.4	PLEISTOCENE		SANDY CLAY	1.0	38.0	
372.4	CARBONDALE	BRERETON	LIMESTONE	6.0	39.0	BLACK
366.4	CARBONDALE	ANNA	BLACK SHALE	1.0	45.0	
365.4	CARBONDALE	HERRIN	COAL	4.0	46.0	
361.4	CARBONDALE		UNDERCLAY	4.0	50.0	
357.4	CARBONDALE		SANDSTONE	7.0	54.0	
350.4	CARBONDALE		SANDY SHALE	1.0	61.0	
349.4	CARBONDALE		SANDSTONE	4.0	62.0	
345.4	CARBONDALE		SANDY SHALE	1.0	66.0	
344.4	CARBONDALE		SANDSTONE	13.0	67.0	
331.4	CARBONDALE		SANDY SHALE	6.0	80.0	
325.4	CARBONDALE		SANDSTONE	6.0	86.0	
319.4	CARBONDALE		SANDY SHALE	21.5	92.0	
297.9	CARBONDALE	BRIAR HILL	COAL	1.5	113.5	
296.4	CARBONDALE		UNDERCLAY	3.0	115.0	
293.4	CARBONDALE		SANDY SHALE	4.0	118.0	
289.4	CARBONDALE		SANDSTONE	5.0	122.0	
284.4	CARBONDALE		SANDY SHALE	5.8	127.0	
278.6	CARBONDALE		CALCAREOUS SANDSTONE	0.6	132.8	
278.0	CARBONDALE		SANDSTONE	1.6	133.4	
276.4	CARBONDALE		SANDY SHALE	11.3	135.0	
265.1	CARBONDALE		DARK SHALE	1.3	146.3	
263.8	CARBONDALE	ST. DAVID	LIMESTONE	1.7	147.6	NODULAR
262.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	149.3	
259.8	CARBONDALE	DYKERSBURG	SANDY SHALE	11.1	151.6	
248.7	CARBONDALE		PYRITE	0.0	162.7	
248.7	CARBONDALE	SPRINGFIELD	COAL	4.4	162.7	
244.2	CARBONDALE		SHALE	1.5	167.2	
242.8	CARBONDALE		CALCAREOUS SANDSTONE	0.7	168.6	
242.1	CARBONDALE		CALCAREOUS SHALE	1.7	169.3	
240.4	CARBONDALE		LIMESTONE	1.0	171.0	

MAPID: 16590898000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466253 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.722273 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.5 **LOGGED (FT.):** 107.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-151 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.5	PLEISTOCENE		SOIL	2.0	0.0	
384.5	PLEISTOCENE		CLAY & GRAVEL	5.0	2.0	
379.5	PLEISTOCENE		CLAY	1.0	7.0	
378.5	PLEISTOCENE		SAND	7.0	8.0	
371.5	CARBONDALE		SANDSTONE	15.0	15.0	
356.5	CARBONDALE		SANDY SHALE	13.0	30.0	
343.5	CARBONDALE	BRIAR HILL	COAL	1.5	43.0	
342.0	CARBONDALE		SANDY SHALE	2.5	44.5	
339.5	CARBONDALE		SANDSTONE	19.0	47.0	
320.5	CARBONDALE		SANDY SHALE	2.0	66.0	
318.5	CARBONDALE		SANDSTONE	4.0	68.0	
314.5	CARBONDALE		SANDY SHALE	6.0	72.0	
308.5	CARBONDALE		BLACK SHALE	0.5	78.0	
308.0	CARBONDALE		CALCAREOUS SHALE	1.5	78.5	
306.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	80.0	
304.5	CARBONDALE	DYKERSBURG	SANDY SHALE	8.1	82.0	
296.4	CARBONDALE		BLACK SHALE	0.1	90.1	
296.3	CARBONDALE	SPRINGFIELD	COAL	4.7	90.2	
291.6	CARBONDALE		UNDERCLAY	2.6	94.9	
289.1	CARBONDALE		SANDSTONE	9.6	97.4	

MAPID: 16590899000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466548 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.724007 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.9 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-150 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.9	PLEISTOCENE		SOIL	4.0	0.0	
381.9	PLEISTOCENE		CLAY	27.0	4.0	
354.9	CARBONDALE		SANDY SHALE	1.0	31.0	
353.9	CARBONDALE		SANDSTONE	4.0	32.0	
349.9	CARBONDALE		SANDY SHALE	19.0	36.0	
330.9	CARBONDALE	BRIAR HILL	COAL	1.5	55.0	
329.4	CARBONDALE		SANDY SHALE	1.5	56.5	
327.9	CARBONDALE		SANDSTONE	24.0	58.0	
303.9	CARBONDALE		BLACK SHALE	2.0	82.0	
301.9	CARBONDALE		CALCAREOUS SHALE	1.0	84.0	
300.9	CARBONDALE		CALCAREOUS BLACK SHALE	1.0	85.0	
299.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	86.0	
298.4	CARBONDALE	DYKERSBURG	SANDY SHALE	10.3	87.5	
288.1	CARBONDALE		BLACK SHALE	0.2	97.8	
287.9	CARBONDALE	SPRINGFIELD	COAL	4.5	98.0	
283.4	CARBONDALE		UNDERCLAY	3.1	102.5	
280.3	CARBONDALE		SANDSTONE	6.4	105.6	

MAPID: 16590900000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466141 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.720618 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.7 **LOGGED (FT.):** 89.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-149 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.7	PLEISTOCENE		SOIL	2.0	0.0	
372.7	PLEISTOCENE		CLAY	15.0	2.0	
357.7	PLEISTOCENE		SAND	1.0	17.0	
356.7	PLEISTOCENE		CLAY	7.0	18.0	
349.7	CARBONDALE	BRIAR HILL	COAL	0.5	25.0	TOP MAY BE ERODED
349.2	CARBONDALE		UNDERCLAY	2.5	25.5	
346.7	CARBONDALE		SANDSTONE	2.0	28.0	GRAY
344.7	CARBONDALE		SANDY SHALE	1.0	30.0	
343.7	CARBONDALE		SANDSTONE	16.0	31.0	
327.7	CARBONDALE		SANDY SHALE	13.0	47.0	
314.7	CARBONDALE		BLACK SHALE	1.0	60.0	
313.7	CARBONDALE		CALCAREOUS SHALE	1.0	61.0	
312.7	CARBONDALE		BLACK SHALE	0.5	62.0	
312.2	CARBONDALE	ST. DAVID	LIMESTONE	1.5	62.5	BLACK
310.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	64.0	
310.2	CARBONDALE	DYKERSBURG	SANDY SHALE	9.5	64.5	
300.7	CARBONDALE		BLACK SHALE	0.1	74.0	
300.6	CARBONDALE	SPRINGFIELD	COAL	4.5	74.1	
296.1	CARBONDALE		SANDY CLAYSTONE	1.0	78.6	
295.1	CARBONDALE		SANDY SHALE	2.5	79.6	
292.6	CARBONDALE		SANDSTONE	2.1	82.1	
290.6	CARBONDALE		SANDSTONE	2.0	84.1	SHALE STREAKS
288.6	CARBONDALE		SANDY SHALE	1.4	86.1	
287.2	CARBONDALE		SANDSTONE	0.3	87.5	
287.0	CARBONDALE		SANDY SHALE	1.1	87.7	
285.9	CARBONDALE		SANDSTONE	0.2	88.8	

MAPID: 16590901000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470538 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725495 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-148 **WELL TYPE:** Coal Test

COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0	PLEISTOCENE		MINE OPENING	14.0	0.0	
398.0	PLEISTOCENE		CLAY	3.0	14.0	
395.0	PLEISTOCENE		SAND	20.0	17.0	
375.0	PLEISTOCENE		CLAY	2.0	37.0	
373.0	CARBONDALE	BRERETON	LIMESTONE	5.0	39.0	
368.0	CARBONDALE	ANNA	BLACK SHALE	1.0	44.0	
367.0	CARBONDALE	HERRIN	COAL	4.0	45.0	
363.0	CARBONDALE		UNDERCLAY	3.5	49.0	
359.5	CARBONDALE		SANDSTONE	0.5	52.5	
359.0	CARBONDALE		SANDY SHALE	2.0	53.0	
357.0	CARBONDALE		SANDSTONE	37.0	55.0	
320.0	CARBONDALE		SANDY SHALE	19.0	92.0	
301.0	CARBONDALE	BRIAR HILL	COAL	1.5	111.0	
299.5	CARBONDALE		UNDERCLAY	1.5	112.5	
298.0	CARBONDALE		SANDY SHALE	2.0	114.0	
296.0	CARBONDALE		SANDSTONE	21.0	116.0	
275.0	CARBONDALE		SANDY SHALE	9.0	137.0	
266.0	CARBONDALE		CALCAREOUS SHALE	1.0	146.0	
265.0	CARBONDALE		CALCAREOUS BLACK SHALE	1.0	147.0	
264.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	148.0	
261.5	CARBONDALE	DYKERSBURG	SANDY SHALE	10.2	150.5	
251.3	CARBONDALE		BLACK SHALE	0.3	160.7	
251.1	CARBONDALE	SPRINGFIELD	COAL	4.1	160.9	
247.0	CARBONDALE		UNDERCLAY	1.8	165.0	
245.2	CARBONDALE		SANDY SHALE	6.2	166.8	

MAPID: 16590902000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 19 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.474787 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.724332 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 129.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-140 **WELL TYPE:** Coal Test
COMMENT: PERMIT 329 BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SOIL	4.0	0.0	
371.0	PLEISTOCENE		CLAY	10.0	4.0	
361.0	PLEISTOCENE		SAND	10.0	14.0	
351.0	CARBONDALE		SANDSTONE	4.0	24.0	BROWN
347.0	CARBONDALE		SANDSTONE	3.0	28.0	GRAY
344.0	CARBONDALE		SANDY SHALE	9.0	31.0	
335.0	CARBONDALE		SANDSTONE	7.0	40.0	
328.0	CARBONDALE		SANDY SHALE	19.0	47.0	
309.0	CARBONDALE	BRIAR HILL	COAL	1.5	66.0	
307.5	CARBONDALE		SANDY SHALE	2.5	67.5	
305.0	CARBONDALE		SANDSTONE	18.0	70.0	
287.0	CARBONDALE		SANDY SHALE	11.0	88.0	
276.0	CARBONDALE		BLACK SHALE	1.0	99.0	
275.0	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.0	100.0	
274.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	101.0	
272.0	CARBONDALE	DYKERSBURG	SANDY SHALE	12.2	103.0	
259.8	CARBONDALE	SPRINGFIELD	COAL	4.7	115.2	
255.1	CARBONDALE		UNDERCLAY	2.6	119.9	
252.5	CARBONDALE		SANDY SHALE	1.5	122.5	
251.0	CARBONDALE		SANDSTONE	0.3	124.0	LS NODS
250.7	CARBONDALE		CALCAREOUS SANDSTONE	1.4	124.3	
249.3	CARBONDALE		SANDSTONE	3.3	125.7	

MAPID: 16500208000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.452783 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.723133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 89.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.0	CARBONDALE	BRIAR HILL	COAL	1.0	34.0	
293.0	CARBONDALE	SPRINGFIELD	COAL	4.8	83.0	

MAPID: 16500208000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.452783 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723133 **DATE COLLECTED:** 11 / 20 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 89.0 **LOG TYPE:** Survey Core Study
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	25.0	0.0	
351.0			ROCK	9.0	25.0	
342.0			COAL	1.0	34.0	
341.0			ROCK	48.0	35.0	
293.0	CARBONDALE	SPRINGFIELD	COAL	4.8	83.0	
288.2	CARBONDALE		ROCK	1.3	87.8	

MAPID: 16500208000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.452783 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.723133 **DATE COLLECTED:** 11 / 20 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 89.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #20 **WELL TYPE:** Coal Test
COMMENT: G. OLIVER FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	25.0	0.0	
351.0	CARBONDALE		SHALE	9.0	25.0	
342.0	CARBONDALE	BRIAR HILL	COAL	1.0	34.0	
341.0	CARBONDALE		SANDY SHALE	34.0	35.0	
307.0	CARBONDALE		BLACK SHALE	6.0	69.0	
301.0	CARBONDALE		SHALE	8.0	75.0	
293.0	CARBONDALE	SPRINGFIELD	COAL	4.8	83.0	
288.2	CARBONDALE		UNDERCLAY	1.3	87.8	

MAPID: 16500209000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463189 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.720238 **DATE COLLECTED:** 12 / 5 / 1905
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #22 **WELL TYPE:** Coal Test
COMMENT: B. WILLIAMS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	16.0	0.0	
364.0	CARBONDALE		SHALE	18.0	16.0	
346.0	CARBONDALE	BRIAR HILL	COAL	2.0	34.0	
344.0	CARBONDALE		UNDERCLAY	1.0	36.0	
343.0	CARBONDALE		SANDSTONE	17.0	37.0	
326.0	CARBONDALE		SHALE	16.0	54.0	
310.0	CARBONDALE		BLACK SHALE	6.0	70.0	
304.0	CARBONDALE		BLACK SHALE	9.0	76.0	
295.0	CARBONDALE	SPRINGFIELD	COAL	4.6	85.0	
290.4	CARBONDALE		UNDERCLAY	1.4	89.6	

MAPID: 16500209000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463189 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720238 **DATE COLLECTED:** 12 / 5 / 1905
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Survey Core Study
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	16.0	0.0	
364.0			ROCK	18.0	16.0	
346.0			COAL	2.0	34.0	
344.0			ROCK	49.0	36.0	
295.0	CARBONDALE	SPRINGFIELD	COAL	4.6	85.0	
290.4	CARBONDALE		ROCK	1.4	89.6	

MAPID: 16502992000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.453382 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.723545 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2754.0 **LOG TYPE:** Electric Log
SOURCE: KEWANEE OIL CO., ERNIE COMMUNITY **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
191.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	195.0	
141.0	CARBONDALE	SURVANT	COAL	1.5	245.0	
81.0	CARBONDALE	COLCHESTER	COAL	0.5	305.0	
15.0	CARBONDALE	DEKOVEN	COAL	3.0	371.0	
15.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	371.0	
-8.0	CARBONDALE	DAVIS	COAL	4.0	394.0	
-69.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	455.0	66% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-78.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	464.0	
-119.0	TRADEWATER	MT. RORAH	COAL	2.0	505.0	

MAPID: 16502992000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.453382 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.723545 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2286.0 **LOG TYPE:**
SOURCE: KEWANEE OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1171.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1557.0	
-1500.0			LIMESTONE	-	1886.0	
-1900.0		BASE BARLOW	LIMESTONE	-	2286.0	

MAPID: 16503020000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.464949 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2242.0 **LOG TYPE:**
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1135.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1507.0	
-1486.0			LIMESTONE	-	1858.0	
-1870.0		BASE BARLOW	LIMESTONE	-	2242.0	

MAPID: 16503020000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.464949 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:** Plugging affidavit
SOURCE: SKILES OIL CORP **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			ROCK	159.0	0.0	
213.0	CARBONDALE	SPRINGFIELD	COAL	4.0	159.0	

MAPID: 16503020000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.464949 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1354.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	284.0	
-18.0	SPOON	DAVIS	UNCLASSIFIED	-	390.0	
-982.0	BASE OF PENN.		UNCLASSIFIED	-	1354.0	

MAPID: 16503020000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.464949 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.717949 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2604.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, JOHNSON W F ETAL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	152.0	
176.0	CARBONDALE	SURVANT	COAL	0.8	196.0	
90.0	CARBONDALE	COLCHESTER	COAL	0.5	282.0	
52.0	CARBONDALE	DEKOVEN	COAL	3.0	320.0	
52.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	320.0	
32.0	CARBONDALE	DAVIS	COAL	4.0	340.0	
-33.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	405.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-40.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	412.0	
-78.0	TRADEWATER	MT. RORAH	COAL	1.2	450.0	

MAPID: 16503278000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.457979 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.721679 **DATE COLLECTED:** 3 / 14 / 1959
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 213 **WELL TYPE:** Coal Test
COMMENT: W.F. JOHNSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			CLAY	6.0	0.0	
373.0			CLAY	21.2	6.0	
351.8	CARBONDALE		SHALE	5.2	27.2	
346.7	CARBONDALE	BRIAR HILL	COAL	1.8	32.3	
344.8	CARBONDALE		UNDERCLAY	2.3	34.2	
342.5	CARBONDALE		SANDY SHALE	15.5	36.5	W/ SS BANDS
327.0	CARBONDALE		SANDY SHALE	16.1	52.0	
310.9	CARBONDALE		LIMESTONE	1.5	68.1	
309.4	CARBONDALE		BLACK SHALE	2.6	69.6	
306.8	CARBONDALE		SHALE	5.1	72.2	
301.7	CARBONDALE	SPRINGFIELD	COAL	4.6	77.3	
297.2	CARBONDALE		UNDERCLAY	1.2	81.8	

MAPID: 16503278000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.457979 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721679 **DATE COLLECTED:** 3 / 2 / 1982
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.0			ROCK	32.3	0.0	
346.7	CARBONDALE	BRIAR HILL	COAL	1.8	32.3	
344.8	CARBONDALE		ROCK	43.1	34.2	
301.8	CARBONDALE	SPRINGFIELD	COAL	4.6	77.2	
297.2	CARBONDALE		ROCK	2.0	81.8	

MAPID: 16503772000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1400' N line, 1350' E line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.452303 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.727985 **DATE COLLECTED:** 3 / 0 / 1970

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PIAMCO INC. E564N **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
142.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	238.0	
56.0	CARBONDALE	COLCHESTER	COAL	0.0	324.0	
17.5	CARBONDALE	DEKOVEN	COAL	2.5	362.5	
17.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	362.5	
-7.0	CARBONDALE	DAVIS	COAL	3.6	387.0	54% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16526073000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463871 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.720888 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 407.3 **LOGGED (FT.):** 116.6 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR CO./WILLARD G. CORP. WG-8-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.3	PLEISTOCENE		SILT & CLAY	10.0	0.0	SILT & CLAY
397.3	CARBONDALE		SANDSTONE	5.0	10.0	
392.3	CARBONDALE		SANDY SHALE	8.0	15.0	
384.3	CARBONDALE		SANDSTONE	2.0	23.0	
382.3	CARBONDALE		CLAYSTONE	3.0	25.0	
379.3	CARBONDALE		SANDY SHALE	5.0	28.0	
374.3	CARBONDALE		CLAYSTONE	2.0	33.0	
372.3	CARBONDALE		SILTY SHALE	21.5	35.0	
350.8	CARBONDALE	BRIAR HILL	COAL	2.0	56.5	
348.8	CARBONDALE		SANDY SHALE	11.5	58.5	WITH SANDSTONE STREAKS
337.3	CARBONDALE		SANDSTONE	7.0	70.0	POSSIBLE WATER BEAKING
330.3	CARBONDALE		SANDY SHALE	11.0	77.0	
319.3	CARBONDALE		BLACK SHALE & COAL	2.0	88.0	BEGAN CORING AT 90'
317.3	CARBONDALE		SILTY SHALE	2.6	90.0	DARK GRAY
314.7	CARBONDALE	ST. DAVID	ARGILLACEOUS LIMESTONE	1.0	92.6	FOSSILSFEROUS; HARD
313.7	CARBONDALE	TURNER MINE	BLACK SHALE & COAL	2.4	93.6	
311.3	CARBONDALE		CORE LOSS	0.5	96.0	CORE LOSS
310.8	CARBONDALE	DYKERSBURG	SILTY SHALE	1.5	96.5	WITH THIN CLAY PARTINGS
309.3	CARBONDALE	DYKERSBURG	SILTY SHALE	7.8	98.0	HOMOGENEOUS
301.5	CARBONDALE	DYKERSBURG	SILTY SHALE	0.2	105.8	SOFT
301.3	CARBONDALE	SPRINGFIELD	COAL	1.2	106.0	CLARAIN, CALCITE VEINS
300.1	CARBONDALE	SPRINGFIELD	PYRITE	0.2	107.2	PYRITE BAND
299.9	CARBONDALE	SPRINGFIELD	COAL	3.0	107.4	
296.9	CARBONDALE		CLAYSTONE	2.8	110.4	SLICKENSIDES; SOFT
294.1	CARBONDALE		SANDY SHALE	3.5	113.2	GRAY GREEN

MAPID: 16526254000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.453995 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.728246 **DATE COLLECTED:** 2 / 26 / 1992
SURFACE ELEVATION (FT.): 381.2 **LOGGED (FT.):** 127.5 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-1-92 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.2	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	SOILS & CLAY
361.2	CARBONDALE		SANDSTONE	14.0	20.0	
347.2	CARBONDALE		LIMESTONE	1.0	34.0	
346.2	CARBONDALE		SANDY SHALE	17.0	35.0	
329.2	CARBONDALE		GRAY SHALE	13.0	52.0	
316.2	CARBONDALE	BRIAR HILL	COAL	2.0	65.0	
314.2	CARBONDALE	DYKERSBURG	SHALE	37.5	67.0	
276.7	CARBONDALE	DYKERSBURG	GRAY SHALE	2.5	104.5	LIGHT
274.2	CARBONDALE	DYKERSBURG	GRAY SHALE	3.0	107.0	DARK
271.2	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	110.0	
269.2	CARBONDALE	DYKERSBURG	GRAY SHALE	6.5	112.0	
262.7	CARBONDALE	SPRINGFIELD	COAL	4.8	118.5	
257.9	CARBONDALE		UNDERCLAY	4.2	123.3	

MAPID: 16526255000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.45694 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.72483 **DATE COLLECTED:** 3 / 3 / 1992
SURFACE ELEVATION (FT.): 387.3 **LOGGED (FT.):** 119.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-4-92- **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.3	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	SOILS & CLAYS
374.3	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	13.0	
369.3	CARBONDALE	DYKERSBURG	GRAY SHALE	16.0	18.0	
353.3	CARBONDALE	DYKERSBURG	SHALE	36.0	34.0	
317.3	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	70.0	
315.3	CARBONDALE	DYKERSBURG	GRAY SHALE	40.0	72.0	
275.3	CARBONDALE	DYKERSBURG	SHALE	0.5	112.0	
274.8	CARBONDALE	SPRINGFIELD	COAL	4.5	112.5	
270.3	CARBONDALE		UNDERCLAY	2.0	117.0	

MAPID: 16526256000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.462571 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.728885 **DATE COLLECTED:** 4 / 3 / 1991
SURFACE ELEVATION (FT.): 412.1 **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY WG-GW-38 **WELL TYPE:** Water Well
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.1	PLEISTOCENE		CLAY	12.5	0.0	
399.6			SHALE	3.5	12.5	
396.1			SANDSTONE	0.5	16.0	
395.6			SHALE	6.0	16.5	
389.6			SANDSTONE	10.5	22.5	
379.1			SHALE	8.0	33.0	
371.1			LIMESTONE	3.0	41.0	

MAPID: 16526257000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.457971 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.728981 **DATE COLLECTED:** 4 / 3 / 1991
SURFACE ELEVATION (FT.): 388.1 **LOGGED (FT.):** 42.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY WG-GW-39 **WELL TYPE:** Water Well
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.1	PLEISTOCENE		CLAY	12.0	0.0	
376.1			SANDSTONE	23.0	12.0	
353.1			LIMESTONE	0.5	35.0	
352.6			SANDSTONE	0.5	35.5	
352.1			SHALE	6.0	36.0	

MAPID: 16526258000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 20 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.462414 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.727009 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 426.3 **LOGGED (FT.):** 180.5 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO./WILLARD G. CORP. WG-18-88 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.3	PLEISTOCENE		SOIL	4.0	0.0	SILTY CLAY
422.3	PLEISTOCENE		CLAY	24.0	4.0	
398.3	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	28.0	BROWN
386.3	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	40.0	BROWN WITH CLAY BANDS
378.3	CARBONDALE		GRAY SHALE	2.0	48.0	
376.3	CARBONDALE	BRERETON	LIMESTONE	2.0	50.0	
374.3	CARBONDALE	ANNA	BLACK SHALE	2.0	52.0	WITH LIMESTONE STREAKS
372.3	CARBONDALE	HERRIN	COAL	4.2	54.0	
368.1	CARBONDALE		SANDY SHALE	34.8	58.2	
333.3	CARBONDALE		SHALE	25.0	93.0	
308.3	CARBONDALE	BRIAR HILL	COAL	1.7	118.0	
306.6	CARBONDALE		GRAY SHALE	8.3	119.7	
298.3	CARBONDALE		SANDSTONE	10.0	128.0	
288.3	CARBONDALE		GRAY SHALE	17.0	138.0	
271.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	155.0	
270.3	CARBONDALE	TURNER MINE	BLACK SHALE	12.0	156.0	
258.3	CARBONDALE	SPRINGFIELD	COAL	4.2	168.0	
254.1	CARBONDALE		SANDY SHALE	8.3	172.2	

MAPID: 16500210000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.440659 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.730128 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.0	CARBONDALE	SPRINGFIELD	COAL	4.1	119.0	

MAPID: 16500210000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.440659 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730128 **DATE COLLECTED:** 12 / 13 / 1905
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT: REF:F274B.008

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	110.0	0.0	
260.0			ROCK	9.0	110.0	
251.0	CARBONDALE	SPRINGFIELD	COAL	4.1	119.0	
246.9			ROCK	-	123.1	

MAPID: 16500210000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.440659 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.730128 **DATE COLLECTED:** 12 / 13 / 1905
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 123.1 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #24 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	110.0	0.0	
262.0	CARBONDALE		BLACK SHALE	7.0	110.0	
255.0	CARBONDALE		SHALE	2.0	117.0	
253.0	CARBONDALE	SPRINGFIELD	COAL	4.1	119.0	
248.9	CARBONDALE		UNDERCLAY	0.0	123.1	T.D.

MAPID: 16500211000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.447567 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.720913 **DATE COLLECTED:** 12 / 8 / 1905
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 98.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., DANFORTH #23 **WELL TYPE:** Coal Test
COMMENT: W.C. CLARK FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	59.0	0.0	
317.0	CARBONDALE		SHALE	11.0	59.0	
306.0	CARBONDALE		BLACK SHALE	5.0	70.0	
301.0	CARBONDALE		MUDSTONE	15.0	75.0	LOG HAS BLUE MUD
286.0	CARBONDALE	SPRINGFIELD	COAL	8.0	90.0	LOG HAS "FLOATING COAL"

MAPID: 16502600000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.432519 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.725574 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1355.0 **LOG TYPE:** Electric Log
SOURCE: COOMBS JOHN R **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
100.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	270.0	
25.0	SPOON	DAVIS	UNCLASSIFIED	-	345.0	
-985.0	BASE OF PENN.		UNCLASSIFIED	-	1355.0	

MAPID: 16502600000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.432519 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.725574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2210.0 **LOG TYPE:**
SOURCE: COOMBS JOHN R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1130.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1500.0	
-1466.0			LIMESTONE	-	1836.0	
-1840.0		BASE BARLOW	LIMESTONE	-	2210.0	

MAPID: 16502600000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.432519 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.725574 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2703.0 **LOG TYPE:** Electric Log
SOURCE: COOMBS JOHN R, BERRY KENNETH 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
225.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	145.0	
177.0	CARBONDALE	SURVANT	COAL	1.2	193.0	
100.0	CARBONDALE	COLCHESTER	COAL	0.5	270.0	
60.0	CARBONDALE	DEKOVEN	COAL	3.0	310.0	
60.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	310.0	
26.0	CARBONDALE	DAVIS	COAL	4.0	344.0	
-30.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	400.0	65% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-45.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	415.0	
-80.0	TRADEWATER	MT. RORAH	COAL	1.2	450.0	

MAPID: 16502757000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44642 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.720013 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2240.0 **LOG TYPE:**
SOURCE: COOMBS JOHN R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1135.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1508.0	
-1483.0			LIMESTONE	-	1856.0	
-1867.0		BASE BARLOW	LIMESTONE	-	2240.0	

MAPID: 16502757000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44642 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.720013 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 190.0 **LOG TYPE:** Plugging affidavit
SOURCE: J. R. COOMBS CO **WELL TYPE:** Oil and Gas Test
COMMENT: DEPTH FROM PLUG AFFID.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			ROCK	190.0	0.0	
183.0	CARBONDALE	SPRINGFIELD	COAL	-	190.0	

MAPID: 16502757000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44642 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.720013 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log
SOURCE: COOMBS JOHN R, WINTIZER J ARTHUR 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.0	CARBONDALE	SURVANT	COAL	1.8	180.0	
108.0	CARBONDALE	COLCHESTER	COAL	0.5	265.0	
63.0	CARBONDALE	DEKOVEN	COAL	2.8	310.0	
63.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	310.0	
43.0	CARBONDALE	DAVIS	COAL	3.5	330.0	
-17.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	390.0	65% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-32.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	405.0	
-63.0	TRADEWATER	MT. RORAH	COAL	1.2	436.0	

MAPID: 16503258000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.43079 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729691 **DATE COLLECTED:** 11 / 27 / 1958
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 161 **WELL TYPE:** Coal Test
COMMENT: KENNETH BERRRY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			CLAY	8.3	0.0	
395.7	CARBONDALE		SANDSTONE	21.9	8.3	
373.7	CARBONDALE		COAL	1.9	30.3	
371.8	CARBONDALE		SHALE	5.2	32.2	
366.7	CARBONDALE		SHALY SANDSTONE	15.3	37.3	
351.4	CARBONDALE		SANDY SHALE	10.6	52.6	
340.8	CARBONDALE		BLACK SHALE	26.1	63.2	
314.7	CARBONDALE		LIMESTONE	2.1	89.3	
312.7	CARBONDALE		COAL	0.7	91.3	
312.0	CARBONDALE		SHALE	8.0	92.0	

MAPID: 16503258000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.43079 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729691 **DATE COLLECTED:** 3 / 2 / 1982
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	8.3	0.0	
395.7			ROCK	21.9	8.3	
373.8			COAL	1.9	30.2	
371.8			ROCK	59.2	32.2	
312.7			COAL	0.7	91.3	
312.0			ROCK	8.0	92.0	

MAPID: 16503259000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433685 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72831 **DATE COLLECTED:** 12 / 2 / 1958
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 162 **WELL TYPE:** Coal Test
COMMENT: KENNETH BERRY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0			SAND/CLAY	100.0	0.0	BLUE CLAY

MAPID: 16503272000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.432486 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.721924 **DATE COLLECTED:** 12 / 23 / 1958
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 101 **WELL TYPE:** Coal Test
COMMENT: BERRY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			CLAY	3.0	0.0	SOFT
359.0			SAND/CLAY	97.0	3.0	

MAPID: 16503711000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line of NE SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.431451 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.724675 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 320.5 **LOG TYPE:**
SOURCE: JOHN T. BOYD 16-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
248.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	119.0	
199.0	CARBONDALE	SURVANT	COAL	2.0	168.0	
121.0	CARBONDALE	COLCHESTER	COAL	0.0	246.0	
76.0	CARBONDALE	DEKOVEN	COAL	3.0	291.0	
76.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	291.0	
53.4	CARBONDALE	DAVIS	COAL	3.0	313.6	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503711000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line of NE SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.431451 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.724675 **DATE COLLECTED:** 11 / 16 / 1971

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 320.5 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 16-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0			CLAY	35.0	0.0	
332.0			CLAY	68.0	35.0	
264.0	CARBONDALE		DARK SHALE	16.0	103.0	
248.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	119.0	
246.5	CARBONDALE		SANDSTONE	20.5	120.5	
226.0	CARBONDALE		SHALE	27.0	141.0	
199.0	CARBONDALE	SURVANT	COAL	2.0	168.0	
197.0	CARBONDALE		SHALE	7.0	170.0	
190.0	CARBONDALE		SANDSTONE	23.0	177.0	
167.0	CARBONDALE		SHALE	40.0	200.0	
127.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.0	240.0	
121.0	SPOON		SANDSTONE	38.0	246.0	
83.0	SPOON		BLACK SHALE	7.0	284.0	
76.0	SPOON	DEKOVEN	COAL	3.0	291.0	
73.0	SPOON		UNDERCLAY	2.0	294.0	
71.0	SPOON		GRAY SHALE	0.8	296.0	
70.2	SPOON		SANDSTONE	3.0	296.8	
67.2	SPOON		GRAY SHALE	7.8	299.8	
59.4	SPOON		DARK GRAY SHALE	2.3	307.6	
57.1	SPOON		DARK GRAY SHALE	3.7	309.9	.15' ADDED TO THICKNESS TO MATCH DEPTH
53.4	SPOON	DAVIS	COAL	3.0	313.6	
50.4	SPOON		CLAYSTONE & SILTSTONE	2.2	316.6	LOG SAYS 'SEATROCK'
48.2	SPOON		GRAY SANDSTONE	1.7	318.8	

MAPID: 16503712000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1310' S line, 1350' W line of NW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438247 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.722759 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 340.5 **LOG TYPE:**

SOURCE: JOHN T. BOYD 19-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
232.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	136.0	
181.0	CARBONDALE	SURVANT	COAL	1.0	187.0	
56.0	CARBONDALE	DEKOVEN	COAL	3.0	312.0	
56.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	312.0	
36.1	CARBONDALE	DAVIS	COAL	3.5	331.9	

MAPID: 16503712000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1310' S line, 1350' W line of NW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438247 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.722759 **DATE COLLECTED:** 10 / 18 / 1971

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 340.5 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 19-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0			CLAY	35.0	0.0	
333.0			CLAY	35.0	35.0	
298.0	CARBONDALE		SANDSTONE	15.0	70.0	
283.0	CARBONDALE		SANDY SHALE	46.0	85.0	
237.0	CARBONDALE		SANDSTONE	3.0	131.0	
234.0	CARBONDALE	EXCELLO	BLACK SHALE	2.0	134.0	
232.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	136.0	
230.5	CARBONDALE		SANDSTONE	17.5	137.5	
213.0	CARBONDALE		SHALE	31.0	155.0	
182.0	CARBONDALE	SURVANT - UPPER	COAL	1.0	186.0	
181.0	CARBONDALE		SHALE	8.0	187.0	
173.0	CARBONDALE	SURVANT - LOWER	COAL	2.0	195.0	SURVANT COAL W/ SHALE
171.0	CARBONDALE		SANDSTONE	18.0	197.0	
153.0	CARBONDALE		SANDSTONE	25.0	215.0	WITH SHALE BANDS
128.0	CARBONDALE		SHALY SANDSTONE	20.0	240.0	
108.0	CARBONDALE		SANDSTONE	44.0	260.0	
64.0	CARBONDALE		DARK SHALE	8.0	304.0	
56.0	SPOON	DEKOVEN	COAL	3.0	312.0	
53.0	SPOON		UNDERCLAY	1.5	315.0	
51.5	SPOON		GRAY SHALE	4.4	316.5	
47.1	SPOON		DARK GRAY SHALE	11.0	320.9	
36.1	SPOON	DAVIS	COAL	3.6	331.9	
32.5	SPOON		CLAYSTONE & SILTSTONE	3.5	335.5	
29.0	SPOON		GRAY SHALE	1.5	339.0	

MAPID: 16503773000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 15' S line, 15' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429029 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.717425 **DATE COLLECTED:** 12 / 15 / 1970
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E425 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
216.0	CARBONDALE	SURVANT	COAL	2.0	150.0	
152.0	CARBONDALE	COLCHESTER	COAL	1.0	214.0	
93.0	CARBONDALE	DEKOVEN	COAL	3.0	273.0	
93.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	273.0	
64.5	CARBONDALE	DAVIS	COAL	3.7	301.5	47% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503774000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1320' N line, 2640' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.438436 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.728321 **DATE COLLECTED:** 1 / 25 / 1971
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E571 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
203.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	167.0	
152.0	CARBONDALE	SURVANT	COAL	1.0	218.0	
70.0	CARBONDALE	COLCHESTER	COAL	0.0	300.0	
28.5	CARBONDALE	DEKOVEN	COAL	3.0	341.5	
28.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	341.5	
6.2	CARBONDALE	DAVIS	COAL	3.8	363.8	

MAPID: 16526259000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.434862 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.730308 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.7 **LOGGED (FT.):** 111.1 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY 999QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.7	PLEISTOCENE		UNCONSOLIDATED	66.3	0.0	CLAY
301.4	PLEISTOCENE		GRAVEL	29.5	66.3	
271.9	CARBONDALE		BLACK SHALE	1.7	95.8	
270.2	CARBONDALE		CLAYSTONE	0.9	97.5	
269.3	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	98.4	
268.7	CARBONDALE	DYKERSBURG	SHALE	7.0	99.0	DARK GRAY
261.7	CARBONDALE	SPRINGFIELD	COAL	4.0	106.0	
257.7	CARBONDALE		UNDERCLAY	1.1	110.0	

MAPID: 16526260000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433446 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.731808 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 132.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY 1018QC **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.3	PLEISTOCENE		UNCONSOLIDATED	36.2	0.0	CLAY
334.1	CARBONDALE		SANDSTONE	7.3	36.2	BROWN
326.9	CARBONDALE		SANDY SHALE	37.2	43.4	GRAY
289.7	CARBONDALE	BRIAR HILL	COAL	0.9	80.6	
288.8	CARBONDALE	DYKERSBURG	SANDSTONE	1.0	81.5	
287.7	CARBONDALE	DYKERSBURG	SANDY SHALE	11.6	82.6	GRAY
276.2	CARBONDALE	DYKERSBURG	SANDSTONE	1.1	94.1	
275.1	CARBONDALE	DYKERSBURG	SANDY SHALE	19.9	95.2	GRAY
255.2	CARBONDALE	DYKERSBURG	BLACK SHALE	1.1	115.1	
254.1	CARBONDALE	DYKERSBURG	SHALE	0.5	116.2	
253.6	CARBONDALE	DYKERSBURG	BLACK SHALE	2.6	116.7	
251.0	CARBONDALE	DYKERSBURG	GRAY SHALE	7.7	119.3	
243.4	CARBONDALE	SPRINGFIELD	COAL	4.2	126.9	
239.2	CARBONDALE		UNDERCLAY	0.9	131.1	

MAPID: 16526261000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.442959 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.728296 **DATE COLLECTED:** 2 / 28 / 1992

SURFACE ELEVATION (FT.): 372.2 **LOGGED (FT.):** 109.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-2-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.2	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	SOIL & CLAY
314.2	CARBONDALE	DYKERSBURG	SHALE	12.0	58.0	
302.2	CARBONDALE	DYKERSBURG	SANDY SHALE	25.5	70.0	
276.7	CARBONDALE	SPRINGFIELD	COAL	4.0	95.5	
272.7	CARBONDALE		CLAYSTONE	9.5	99.5	

MAPID: 16526262000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:**

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.431425 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.730006 **DATE COLLECTED:** 4 / 9 / 1992

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 155.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-12-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0	PLEISTOCENE		CLAY	10.0	0.0	RED
397.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	10.0	RED
387.0	CARBONDALE		SANDY CLAYSTONE	3.0	20.0	
384.0	CARBONDALE		GRAY SHALE	5.0	23.0	
379.0	CARBONDALE	JAMESTOWN	COAL	1.0	28.0	
378.0	CARBONDALE	BRERETON	LIMESTONE	3.5	29.0	BLACK
374.5	CARBONDALE	ANNA	BLACK SHALE	1.5	32.5	
373.0	CARBONDALE	ENERGY	GRAY SHALE	2.0	34.0	
371.0	CARBONDALE	HERRIN	COAL	2.0	36.0	
369.0	CARBONDALE		GRAY SHALE	4.0	38.0	
365.0	CARBONDALE		SANDSTONE	28.0	42.0	
337.0	CARBONDALE		SILTSTONE	16.0	70.0	DARK DHALEY
321.0	CARBONDALE		SANDY SHALE	6.0	86.0	
315.0	CARBONDALE		SANDSTONE	2.0	92.0	
313.0	CARBONDALE	BRIAR HILL	COAL	3.0	94.0	
310.0	CARBONDALE	DYKERSBURG	SANDSTONE	3.0	97.0	GRAY
307.0	CARBONDALE	DYKERSBURG	SANDY SHALE	4.0	100.0	GRAY
303.0	CARBONDALE	DYKERSBURG	SANDSTONE	6.0	104.0	
297.0	CARBONDALE	DYKERSBURG	SILTSTONE	8.0	110.0	SANDSTONE
289.0	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	118.0	
281.0	CARBONDALE	DYKERSBURG	SHALE	4.0	126.0	DARK
277.0	CARBONDALE	DYKERSBURG	GRAY SHALE	1.0	130.0	
276.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	131.0	
274.0	CARBONDALE	DYKERSBURG	SANDSTONE	7.0	133.0	
267.0	CARBONDALE	DYKERSBURG	SILTSTONE	3.0	140.0	SANDY
264.0	CARBONDALE	DYKERSBURG	SHALE	1.0	143.0	DARK
263.0	CARBONDALE	DYKERSBURG	GRAY SHALE	1.5	144.0	
261.5	CARBONDALE	SPRINGFIELD	COAL	4.4	145.5	
257.1	CARBONDALE		UNDERCLAY	2.0	149.9	
255.1	CARBONDALE		GRAY SHALE	0.9	151.9	
254.2	CARBONDALE		LIMESTONE	2.2	152.8	

MAPID: 16526263000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** 200' N line, 200' E line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429753 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.73142 **DATE COLLECTED:** 4 / 13 / 1992

SURFACE ELEVATION (FT.): 374.3 **LOGGED (FT.):** 140.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-18-92 **WELL TYPE:** Coal Test

COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.3	PLEISTOCENE		SOIL	5.0	0.0	
369.3	PLEISTOCENE		CLAY	12.0	5.0	
357.3	CARBONDALE		SHALE	2.0	17.0	DARK
355.3	CARBONDALE	HERRIN	COAL	3.0	19.0	
352.3	CARBONDALE		GRAY SHALE	5.0	22.0	
347.3	CARBONDALE		SANDY SHALE	1.0	27.0	
346.3	CARBONDALE		SANDSTONE	22.0	28.0	
324.3	CARBONDALE		SANDY SHALE	10.0	50.0	
314.3	CARBONDALE		SANDSTONE	2.0	60.0	
312.3	CARBONDALE		SANDY SHALE	6.0	62.0	DARK
306.3	CARBONDALE		SILTSTONE	4.0	68.0	DARK
302.3	CARBONDALE		GRAY SHALE	2.0	72.0	
300.3	CARBONDALE		SANDSTONE	2.0	74.0	
298.3	CARBONDALE		UNKNOWN	4.0	76.0	WORDS WERE CUT OFF
294.3	CARBONDALE	BRIAR HILL	COAL	1.6	80.0	
292.7	CARBONDALE	DYKERSBURG	SANDY SHALE	10.5	81.6	DARK GRAY
282.2	CARBONDALE	DYKERSBURG	SANDSTONE	2.3	92.1	
279.9	CARBONDALE	DYKERSBURG	SANDY SHALE	11.7	94.4	
268.2	CARBONDALE	DYKERSBURG	SHALE	1.1	106.1	DARK GRAY
267.1	CARBONDALE	DYKERSBURG	BLACK SHALE	5.1	107.2	
262.0	CARBONDALE	DYKERSBURG	SANDSTONE	5.4	112.3	GRAY
256.6	CARBONDALE	DYKERSBURG	SANDY SHALE	2.3	117.7	GRAY
254.3	CARBONDALE	DYKERSBURG	SANDSTONE	4.5	120.0	
249.8	CARBONDALE	DYKERSBURG	BLACK SHALE	2.6	124.5	
247.2	CARBONDALE	DYKERSBURG	GRAY SHALE	3.3	127.1	
243.9	CARBONDALE	SPRINGFIELD	COAL	4.4	130.4	
239.5	CARBONDALE		GRAY SHALE	3.9	134.8	DARK
235.6	CARBONDALE		GRAY SHALE	1.3	138.7	LIGHT

MAPID: 165274B0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.439501 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731047 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 121.1 **LOG TYPE:** Drillers Log
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Coal Test
COMMENT: REPORTED BY HENBEST. REF. C165000210

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			ROCK	117.0	0.0	
253.0	CARBONDALE	SPRINGFIELD	COAL	4.1	117.0	

MAPID: 16500064700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE SE NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410904 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721381 **DATE COLLECTED:** 6 / 0 / 1954
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 36.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PIONEER C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	32.0	0.0	
388.0	CARBONDALE	SPRINGFIELD	COAL	4.5	32.0	

MAPID: 16500213000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.417936 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.727803 **DATE COLLECTED:** 0 / 0 / 1914
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1285.0 **LOG TYPE:** Drillers Log
SOURCE: COTTAGE OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-910.0	BASE OF PENN.		UNCLASSIFIED	-	1285.0	

MAPID: 16500213000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.417936 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727803 **DATE COLLECTED:** 0 / 0 / 1914
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3450.0 **LOG TYPE:** Drillers Log
SOURCE: COTTAGE OIL CO **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	25.0	0.0	
350.0			ROCK	35.0	25.0	
315.0	CARBONDALE	SPRINGFIELD	COAL	1.0	60.0	
314.0			ROCK	47.0	61.0	
267.0			COAL	1.0	108.0	
266.0			ROCK	3341.0	109.0	

MAPID: 16500214000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412671 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.726403 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log
SOURCE: BRIDGETT, W. M. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	CARBONDALE	BRIAR HILL	COAL	-	11.0	
318.0	CARBONDALE	SPRINGFIELD	COAL	4.1	62.0	
239.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	141.0	

MAPID: 16500214000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412671 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.726403 **DATE COLLECTED:** 7 / 5 / 1909

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Survey Core Study

SOURCE: BRIDGETT C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	25.0	0.0	
355.0			ROCK	37.5	25.0	
317.5	CARBONDALE	HERRIN	COAL	4.1	62.5	
313.4	CARBONDALE		ROCK	74.4	66.6	
239.0	CARBONDALE	BRIAR HILL	COAL	1.5	141.0	
237.5	CARBONDALE		ROCK	50.8	142.5	
186.7	CARBONDALE	SPRINGFIELD	COAL	2.5	193.3	
184.2	CARBONDALE		ROCK	4.5	195.8	

MAPID: 16500214000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.412671 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726403 **DATE COLLECTED:** 5 / 5 / 1909
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 200.3 **LOG TYPE:** Drillers Log
SOURCE: W.M. BRIDGETT, HOLE #3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	25.0	0.0	
355.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	25.0	
346.0	CARBONDALE	ANVIL ROCK	SANDSTONE	22.0	34.0	
324.0	CARBONDALE	ANNA	BLACK SHALE	2.5	56.0	
321.5	CARBONDALE	ENERGY	BLACK SHALE	4.0	58.5	
317.5	CARBONDALE	HERRIN	COAL	4.1	62.5	
313.4	CARBONDALE		UNDERCLAY	2.4	66.6	
311.0	CARBONDALE		SANDSTONE	20.0	69.0	
291.0	CARBONDALE		SANDY SHALE	11.0	89.0	
280.0	CARBONDALE		BLACK SHALE	36.0	100.0	
244.0	CARBONDALE		BLACK SHALE	1.5	136.0	
242.5	CARBONDALE		UNKNOWN	1.5	137.5	LOG HAS "SULPHUR SAND"
241.0	CARBONDALE		BLACK SHALE	2.0	139.0	
239.0	CARBONDALE	BRIAR HILL	COAL	1.5	141.0	
237.5	CARBONDALE		UNDERCLAY	0.5	142.5	
237.0	CARBONDALE		SANDSTONE	4.0	143.0	
233.0	CARBONDALE		SANDY SHALE	41.5	147.0	
191.5	CARBONDALE		BLACK SHALE	4.8	188.5	
186.7	CARBONDALE	SPRINGFIELD	COAL	2.5	193.3	
184.2	CARBONDALE	SPRINGFIELD	SANDSTONE/COAL	4.5	195.8	SS AND COAL MIXED

MAPID: 16500228601M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW NE NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41675 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723239 **DATE COLLECTED:** 0 / 0 / 1957
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 24.0 **LOG TYPE:**
SOURCE: MINE NOTES-RICHARDSON C C #2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	20.0		
-	CARBONDALE	HERRIN	COAL	4.0		

MAPID: 16501308000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 130' S line, 20' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410399 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724926 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #33 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	3.0	0.0	
401.0	CARBONDALE		SANDY SHALE	7.0	3.0	
394.0	CARBONDALE		SHALE	3.0	10.0	
391.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	13.0	
382.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	25.5	22.0	
356.5	CARBONDALE		CALCAREOUS SHALE	0.5	47.5	
356.0	CARBONDALE	ANNA	BLACK SHALE	2.8	48.0	
353.2	CARBONDALE	ENERGY	SANDY SHALE	5.3	50.8	
348.0	CARBONDALE	HERRIN	COAL	3.7	56.0	W/ RASH; TOTAL COAL 3.58'
344.3	CARBONDALE		UNDERCLAY	2.3	59.7	

MAPID: 16501308000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 130' S line, 20' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410399 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724926 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.0			UNCONSOLIDATED	3.0	0.0	
401.0			ROCK	53.0	3.0	
348.0	CARBONDALE	HERRIN	COAL	3.7	56.0	
344.3	CARBONDALE		ROCK	2.3	59.7	

MAPID: 16501309000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 70' S line, 210' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.414273 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724784 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 396.3 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #35 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.3			UNCONSOLIDATED	15.0	0.0	
381.3	CARBONDALE		SHALE	9.0	15.0	
372.3	CARBONDALE		BLACK SHALE	0.5	24.0	
371.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.5	24.5	
361.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	35.0	
358.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	38.0	
356.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	40.0	
346.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.5	50.0	
328.8	CARBONDALE	BRERETON	LIMESTONE	0.5	67.5	
328.3	CARBONDALE	ANNA	BLACK SHALE	2.7	68.0	
325.6	CARBONDALE		UNKNOWN	0.6	70.7	LOG HAS "BOULDER"; PROBABLY A CONCRETION
325.0	CARBONDALE	ENERGY	SANDY SHALE	2.9	71.3	
322.1	CARBONDALE	HERRIN	COAL	4.7	74.2	W/ SULFUR AND BAND; TOTAL COAL 4.5'
317.5	CARBONDALE		UNDERCLAY	1.2	78.8	

MAPID: 16501310000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 895' S line, 1290' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.414819 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727064 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 380.1 **LOGGED (FT.):** 87.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #34 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE; SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.1			UNCONSOLIDATED	22.0	0.0	
358.1	CARBONDALE		SHALE	24.3	22.0	
333.8	CARBONDALE	ANVIL ROCK	SANDSTONE	19.2	46.3	
314.6	CARBONDALE		SANDY SHALE	11.0	65.5	
303.6	CARBONDALE	BRERETON	LIMESTONE	1.5	76.5	
302.1	CARBONDALE	ANNA	BLACK SHALE	3.8	78.0	
298.3	CARBONDALE	HERRIN	COAL	3.9	81.8	
294.4	CARBONDALE	HERRIN	UNKNOWN	0.1	85.7	LOG HAS "BAND"
294.3	CARBONDALE	HERRIN	COAL	0.3	85.8	
294.1	CARBONDALE		UNDERCLAY	1.5	86.0	

MAPID: 16501310000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 895' S line, 1290' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.414819 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727064 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 87.6 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT: OTHER CORES AVAILABLE IN THIS AREA.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	22.0	0.0	
358.0			ROCK	59.8	22.0	
298.2	CARBONDALE	HERRIN	COAL	4.3	81.8	
294.0	CARBONDALE		ROCK	1.5	86.0	

MAPID: 16501311000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 10' N line, 200' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.411046 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.731832 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 380.4 **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #37 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.4			UNCONSOLIDATED	22.0	0.0	
358.4	CARBONDALE		SANDSTONE	7.5	22.0	
350.9	CARBONDALE		LIMESTONE	0.8	29.5	
350.1	CARBONDALE		SANDY SHALE	30.7	30.3	
319.4	CARBONDALE		CALCAREOUS SHALE	2.0	61.0	
317.4	CARBONDALE	BRIAR HILL	COAL	1.8	63.0	
315.6	CARBONDALE		UNDERCLAY	0.7	64.8	
314.9	CARBONDALE		SANDY SHALE	10.0	65.5	

MAPID: 16501311000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 10' N line, 200' E line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.411046 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731832 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 74.8 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	22.0	0.0	
358.0			ROCK	41.0	22.0	
317.0			COAL	1.8	63.0	
315.2			ROCK	10.7	64.8	

MAPID: 16501543000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 740' N line, 1270' W line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.415285 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729843 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 113.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #36 **WELL TYPE:** Coal Test
COMMENT: DIAMOND CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	22.0	0.0	
350.0	CARBONDALE		SANDY SHALE	16.5	22.0	
333.5			SANDY SHALE	14.0	38.5	
319.5	CARBONDALE	BRIAR HILL	COAL	1.8	52.5	
317.7	CARBONDALE		UNDERCLAY	1.2	54.3	
316.5	CARBONDALE		SANDY SHALE	11.0	55.5	
305.5	CARBONDALE		SANDSTONE	9.0	66.5	
296.5	CARBONDALE		SANDY SHALE	26.5	75.5	
270.0	CARBONDALE	ST. DAVID	LIMESTONE	2.0	102.0	
268.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	104.0	
264.2	CARBONDALE	SPRINGFIELD	COAL	4.3	107.8	W/ SULFUR AND BAND; TOTAL COAL 4.08'
259.9	CARBONDALE		UNDERCLAY	1.4	112.1	

MAPID: 16501543000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 740' N line, 1270' W line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.415285 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729843 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 113.5 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	22.2	0.0	
349.8			ROCK	85.9	22.2	
263.9	CARBONDALE	SPRINGFIELD	COAL	4.3	108.1	
259.7	CARBONDALE		ROCK	1.4	112.3	

MAPID: 16503713000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1330' S line, 880' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.425937 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.72104 **DATE COLLECTED:** 10 / 30 / 1971
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 5-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
171.0	CARBONDALE	SURVANT	COAL	1.5	187.0	
99.0	CARBONDALE	COLCHESTER	COAL	0.0	259.0	
55.0	CARBONDALE	DEKOVEN	COAL	3.0	303.0	
55.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	303.0	
32.9	CARBONDALE	DAVIS	COAL	2.9	325.1	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503751000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 10' S line, 2630' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.419837 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.717361 **DATE COLLECTED:** 11 / 22 / 1970
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. D405 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	105.0	
198.0	CARBONDALE	SURVANT	COAL	1.5	160.0	
118.0	CARBONDALE	COLCHESTER	COAL	0.0	240.0	
66.0	CARBONDALE	DEKOVEN	COAL	2.0	292.0	
66.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	292.0	
10.0	CARBONDALE	DAVIS	COAL	2.5	348.0	76% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503752000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2300' S line, 2500' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.420327 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.723684 **DATE COLLECTED:** 12 / 2 / 1970
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. D479I **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	135.0	
186.0	CARBONDALE	SURVANT	COAL	2.0	184.0	
54.0	CARBONDALE	DEKOVEN	COAL	3.0	316.0	
54.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	316.0	
31.5	CARBONDALE	DAVIS	COAL	4.0	338.5	

MAPID: 16526264000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424542 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.731471 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.2 **LOGGED (FT.):** 148.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY 1040QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.2	PLEISTOCENE		UNCONSOLIDATED	31.9	0.0	CL
330.3	CARBONDALE		SANDY SHALE	1.9	31.9	
328.4	CARBONDALE		SANDSTONE	37.3	33.8	
291.1	CARBONDALE		SANDY SHALE	14.8	71.1	
276.3	CARBONDALE	BRIAR HILL	COAL	1.7	85.9	
274.6	CARBONDALE	DYKERSBURG	SANDY SHALE	1.4	87.6	
273.2	CARBONDALE	DYKERSBURG	SANDSTONE	8.5	89.0	
264.7	CARBONDALE	DYKERSBURG	SANDY SHALE	16.1	97.5	
248.6	CARBONDALE	DYKERSBURG	SANDSTONE	1.2	113.6	
247.4	CARBONDALE	DYKERSBURG	SANDY SHALE	8.8	114.8	
238.6	CARBONDALE	DYKERSBURG	SANDSTONE	3.2	123.6	
235.4	CARBONDALE	DYKERSBURG	BLACK SHALE	0.5	126.8	
234.9	CARBONDALE	DYKERSBURG	SANDSTONE	7.7	127.3	
227.2	CARBONDALE	DYKERSBURG	SHALE	2.1	135.0	
225.1	CARBONDALE	DYKERSBURG	BLACK SHALE	2.8	137.1	
222.3	CARBONDALE	DYKERSBURG	SHALE	1.6	139.9	
220.7	CARBONDALE	SPRINGFIELD	COAL	4.3	141.5	
216.4	CARBONDALE		UNDERCLAY	2.2	145.8	

MAPID: 16526265000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424494 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.730429 **DATE COLLECTED:** 4 / 10 / 1992
SURFACE ELEVATION (FT.): 361.3 **LOGGED (FT.):** 132.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR COMPANY AC-15-92 **WELL TYPE:** Coal Test
COMMENT: PERMIT 226; BIG RIDGE MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.3	PLEISTOCENE		SOIL	4.0	0.0	
357.3	PLEISTOCENE		CLAY	18.0	4.0	
339.3	PLEISTOCENE		SANDY CLAY	6.0	22.0	
333.3	CARBONDALE		SANDSTONE	5.0	28.0	BROWN
328.3	CARBONDALE		SANDY SHALE	2.0	33.0	
326.3	CARBONDALE		SANDSTONE	8.0	35.0	GRAY
318.3	CARBONDALE		SANDY SHALE	9.0	43.0	GRAY
309.3	CARBONDALE		SILTSTONE	5.0	52.0	DARK, SHALEY
304.3	CARBONDALE		SHALY SANDSTONE	3.0	57.0	
301.3	CARBONDALE		SILTSTONE	8.0	60.0	DHALEY
293.3	CARBONDALE		SHALE	2.0	68.0	DARK
291.3	CARBONDALE	BRIAR HILL	COAL	1.5	70.0	
289.8	CARBONDALE	DYKERSBURG	SANDSTONE	6.5	71.5	
283.3	CARBONDALE	DYKERSBURG	SANDY SHALE	10.0	78.0	
273.3	CARBONDALE	DYKERSBURG	SANDSTONE	8.0	88.0	
265.3	CARBONDALE	DYKERSBURG	SILTSTONE	16.0	96.0	SANDY, DARK
249.3	CARBONDALE	DYKERSBURG	SANDSTONE	5.0	112.0	
244.3	CARBONDALE	DYKERSBURG	SHALE	2.0	117.0	DARK
242.3	CARBONDALE		GRAY SHALE	4.2	119.0	
238.1	CARBONDALE	SPRINGFIELD	COAL	4.6	123.2	
233.5	CARBONDALE		GRAY SHALE	2.7	127.8	
230.8	CARBONDALE		LIMESTONE	1.5	130.5	

MAPID: 16500064600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409739 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718648 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 44.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WHITE STAR C C **WELL TYPE:** Underground mine
COMMENT: SAMPLES COLLECTED LOCATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	40.0	0.0	
340.0	CARBONDALE	SPRINGFIELD	COAL	4.5	40.0	

MAPID: 16500064701M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409747 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721381 **DATE COLLECTED:** 10 / 17 / 1938
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 4.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-ROCKY BRANCH C C **WELL TYPE:** Underground mine
COMMENT: SAME AS PIONEER C C

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	0.5		
-			COAL	3.5		
-			ROCK	0.8		

MAPID: 16500330400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.406883 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721851 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MOA MAP-MILLER MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 16500330900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404592 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.723689 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-YATES C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16500330800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SE NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397144 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.721434 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 20.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SILAS MOORE C C, MINE #3 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	16.0	0.0	
384.0	CARBONDALE	SPRINGFIELD	COAL	4.5	16.0	

MAPID: 16500330700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402305 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718204 **DATE COLLECTED:** 0 / 0 / 1965
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-MARSHALL EQUIP CO, MARYANN #1 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500330600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SE SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397155 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718673 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 24.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BOND BROS C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	20.0	0.0	
400.0	CARBONDALE	SPRINGFIELD	COAL	4.5	20.0	

MAPID: 16500330500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.400015 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71821 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 54.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-REYNOLDS & EMERY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	50.0	0.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	50.0	

MAPID: 16500331000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.408596 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718651 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-JACK KELLY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500417900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409188 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727308 **DATE COLLECTED:** 0 / 0 / 1952
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-REGENHART & SOUTHERN C C **WELL TYPE:** Strip Mine
COMMENT: MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500419500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409754 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724114 **DATE COLLECTED:** 5 / 0 / 1966
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-NEW GALLATIN C C, MINE #4 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16501192000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 4040' S line, 3760' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405007 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728436 **DATE COLLECTED:** 5 / 7 / 1951
SURFACE ELEVATION (FT.): 400.6 **LOGGED (FT.):** 25.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #1 **WELL TYPE:** Coal Test
COMMENT: MUNDY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.6			CLAY	25.0	0.0	

MAPID: 16501193000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3960' S line, 3960' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405706 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728217 **DATE COLLECTED:** 5 / 7 / 1951
SURFACE ELEVATION (FT.): 411.1 **LOGGED (FT.):** 23.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #2 **WELL TYPE:** Coal Test
COMMENT: MUNDY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.1			CLAY & GRAVEL	20.5	0.0	
390.6			UNKNOWN	2.0	20.5	LOG HAS "SMUT"
388.6	CARBONDALE		UNDERCLAY	0.5	22.5	

MAPID: 16501194000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3780' S line, 3060' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402581 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727723 **DATE COLLECTED:** 5 / 8 / 1951
SURFACE ELEVATION (FT.): 413.5 **LOGGED (FT.):** 35.9 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #3 **WELL TYPE:** Coal Test
COMMENT: MUNDY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
413.5			UNCONSOLIDATED	8.0	0.0	
405.5	CARBONDALE		SANDY SHALE	14.0	8.0	
391.5	CARBONDALE		SHALE	2.6	22.0	
388.9	CARBONDALE		LIMESTONE	0.6	24.6	
388.3	CARBONDALE		BLACK SHALE	3.4	25.2	
384.9	CARBONDALE		SHALE	2.8	28.6	
382.2	CARBONDALE	SPRINGFIELD	COAL	4.1	31.3	
378.1	CARBONDALE		UNDERCLAY	0.5	35.4	

MAPID: 16501195000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3770' S line, 2760' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401539 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727696 **DATE COLLECTED:** 5 / 8 / 1951
SURFACE ELEVATION (FT.): 426.8 **LOGGED (FT.):** 36.9 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #4 **WELL TYPE:** Coal Test
COMMENT: BOND HEIRS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
426.8			CLAY	13.0	0.0	
413.8	CARBONDALE		SHALE	5.0	13.0	
408.8	CARBONDALE		SANDY SHALE	9.1	18.0	
399.7	CARBONDALE		LIMESTONE	0.8	27.1	
398.9	CARBONDALE		BLACK SHALE	3.8	27.9	
395.1	CARBONDALE	SPRINGFIELD	COAL	4.8	31.7	
390.4	CARBONDALE		UNDERCLAY	0.5	36.4	

MAPID: 16501196000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3380' S line, 3200' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403074 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726618 **DATE COLLECTED:** 5 / 9 / 1951
SURFACE ELEVATION (FT.): 417.2 **LOGGED (FT.):** 24.8 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #5 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.2			UNCONSOLIDATED	14.5	0.0	CLAY, SAND AND GRAVEL
402.7	CARBONDALE		BLACK SHALE	2.0	14.5	
400.7	CARBONDALE		SHALE	3.4	16.5	
397.3	CARBONDALE	SPRINGFIELD	COAL	4.4	19.9	
392.9	CARBONDALE		UNDERCLAY	0.5	24.3	

MAPID: 16501197000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3370' S line, 3000' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.40238 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726592 **DATE COLLECTED:** 5 / 9 / 1951
SURFACE ELEVATION (FT.): 433.3 **LOGGED (FT.):** 39.8 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO.O., #6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.3			CLAY	17.0	0.0	
416.3	CARBONDALE		SANDY SHALE	5.0	17.0	
411.3	CARBONDALE		SHALE	7.5	22.0	
403.8	CARBONDALE		LIMESTONE	0.4	29.5	
403.4	CARBONDALE		BLACK SHALE	2.6	29.9	
400.8	CARBONDALE		SHALE	4.8	32.5	
396.0	CARBONDALE	SPRINGFIELD	COAL	4.5	37.3	
391.5	CARBONDALE		UNDERCLAY	0.5	41.8	

MAPID: 16501198000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3740' S line, 3480' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404039 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72761 **DATE COLLECTED:** 5 / 12 / 1951
SURFACE ELEVATION (FT.): 405.8 **LOGGED (FT.):** 29.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #7 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.8			CLAY & GRAVEL	16.0	0.0	
389.8	CARBONDALE		SHALE	5.3	16.0	
384.5	CARBONDALE		LIMESTONE	0.4	21.3	
384.0	CARBONDALE		BLACK SHALE	3.0	21.8	
381.0	CARBONDALE	SPRINGFIELD	COAL	4.1	24.8	
377.0	CARBONDALE		UNDERCLAY	0.5	28.8	

MAPID: 16501199000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3550' S line, 3880' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405434 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727085 **DATE COLLECTED:** 5 / 12 / 1951
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 24.4 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #8 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
409.0			UNCONSOLIDATED	14.6	0.0	CLAY, GRAVEL & SAND
394.4	CARBONDALE		BLACK SHALE	2.4	14.6	
392.0	CARBONDALE		SHALE	2.7	17.0	
389.3	CARBONDALE	SPRINGFIELD	COAL	4.3	19.7	
385.1	CARBONDALE		UNDERCLAY	4.8	23.9	

MAPID: 16501200000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3830' S line, 3910' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405534 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727856 **DATE COLLECTED:** 5 / 14 / 1951
SURFACE ELEVATION (FT.): 401.8 **LOGGED (FT.):** 22.2 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #9 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.8			CLAY & GRAVEL	16.5	0.0	
385.3	CARBONDALE		BLACK SHALE	0.7	16.5	
384.6	CARBONDALE	SPRINGFIELD	COAL	4.5	17.2	
380.1	CARBONDALE		UNDERCLAY	0.5	21.7	

MAPID: 16501201000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3850' S line, 3800' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405151 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727913 **DATE COLLECTED:** 5 / 14 / 1951
SURFACE ELEVATION (FT.): 405.8 **LOGGED (FT.):** 43.4 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #10 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.8			CLAY	8.0	0.0	
397.8	CARBONDALE		SANDY CLAYSTONE	6.0	8.0	
391.8	CARBONDALE		SHALE	5.0	14.0	
386.8	CARBONDALE		SHALE	16.8	19.0	W/ SS BANDS
370.0	CARBONDALE		LIMESTONE	0.4	35.8	
369.5	CARBONDALE		BLACK SHALE	2.7	36.3	
366.9	CARBONDALE	SPRINGFIELD	COAL	4.0	38.9	
362.9	CARBONDALE		UNDERCLAY	0.5	42.9	

MAPID: 16501202000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3820' S line, 3630' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397724 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727839 **DATE COLLECTED:** 5 / 15 / 1951
SURFACE ELEVATION (FT.): 404.8 **LOGGED (FT.):** 36.6 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #11 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.8			CLAY	9.0	0.0	
395.8	CARBONDALE		SANDY SHALE	5.0	9.0	
390.8	CARBONDALE		SANDSTONE	1.5	14.0	
389.3	CARBONDALE		SANDY SHALE	13.2	15.5	
376.1	CARBONDALE		LIMESTONE	0.5	28.7	
375.6	CARBONDALE		BLACK SHALE	2.9	29.2	
372.7	CARBONDALE		COAL	4.0	32.1	
368.7	CARBONDALE		UNDERCLAY	0.5	36.1	

MAPID: 16501203000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3560' S line, 3800' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405156 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727113 **DATE COLLECTED:** 5 / 15 / 1951
SURFACE ELEVATION (FT.): 419.2 **LOGGED (FT.):** 43.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #12 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.2			UNCONSOLIDATED	11.0	0.0	CLAY & HARD PAN
408.2	CARBONDALE		SANDY SHALE	19.2	11.0	W/ SS BANDS
389.0	CARBONDALE		BLACK SHALE	2.2	30.2	
386.9	CARBONDALE		SHALE	6.4	32.3	
380.4	CARBONDALE	SPRINGFIELD	COAL	4.1	38.8	
376.4	CARBONDALE		UNDERCLAY	0.5	42.8	

MAPID: 16501204000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3270' S line, 3880' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405439 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726312 **DATE COLLECTED:** 5 / 16 / 1951
SURFACE ELEVATION (FT.): 419.9 **LOGGED (FT.):** 24.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #13 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.9			CLAY & GRAVEL	17.0	0.0	
402.9	CARBONDALE		BLACK SHALE	3.0	17.0	
399.9	CARBONDALE	SPRINGFIELD	COAL	3.8	20.0	
396.1	CARBONDALE		UNDERCLAY	0.5	23.8	

MAPID: 16501205000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3260' S line, 3720' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404883 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726284 **DATE COLLECTED:** 5 / 16 / 1951
SURFACE ELEVATION (FT.): 427.5 **LOGGED (FT.):** 31.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #14 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.5			CLAY	13.7	0.0	
413.8	CARBONDALE		SANDY SHALE	5.0	13.7	
408.8	CARBONDALE		SANDY SHALE	4.8	18.7	
404.0	CARBONDALE		LIMESTONE	0.4	23.5	
403.6	CARBONDALE		BLACK SHALE	2.8	23.9	
400.7	CARBONDALE	SPRINGFIELD	COAL	4.1	26.8	
396.7	CARBONDALE		UNDERCLAY	0.5	30.8	

MAPID: 16501206000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3930' S line, 4000' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405846 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728132 **DATE COLLECTED:** 5 / 16 / 1951
SURFACE ELEVATION (FT.): 403.4 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #15 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
403.4			CLAY & GRAVEL	21.0	0.0	
382.4	CARBONDALE		SHALE	10.5	21.0	
371.9	CARBONDALE		BLACK SHALE	3.3	31.5	
368.6	CARBONDALE		SHALE	5.6	34.8	
363.0	CARBONDALE	SPRINGFIELD	COAL	4.1	40.4	
358.9	CARBONDALE		UNDERCLAY	0.5	44.5	

MAPID: 16501207000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3780' S line, 3970' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405744 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72772 **DATE COLLECTED:** 5 / 17 / 1951
SURFACE ELEVATION (FT.): 405.6 **LOGGED (FT.):** 29.7 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #16 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.6			CLAY & GRAVEL	21.0	0.0	
384.6	CARBONDALE		SHALE	1.8	21.0	
382.8	CARBONDALE		BLACK SHALE	2.3	22.8	
380.4	CARBONDALE	SPRINGFIELD	COAL	4.0	25.2	
376.4	CARBONDALE		UNDERCLAY	0.5	29.2	

MAPID: 16501208000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 4250' S line, 3870' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405388 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729017 **DATE COLLECTED:** 5 / 17 / 1951
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 40.4 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #17 **WELL TYPE:** Coal Test
COMMENT: ELEV. NOT GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY & GRAVEL	18.0	0.0	
-	CARBONDALE		SHALE	8.0	18.0	
-	CARBONDALE		SHALE	14.4	26.0	

MAPID: 16501209000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3530' S line, 3960' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405713 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72703 **DATE COLLECTED:** 5 / 21 / 1951
SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 20.7 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #18 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.0			CLAY & GRAVEL	16.3	0.0	
390.7	CARBONDALE		BLACK SHALE	0.3	16.3	LOG HAS "SOFT SMUTTY SLATE"
390.4	CARBONDALE	SPRINGFIELD	COAL	3.6	16.6	
386.8	CARBONDALE		UNDERCLAY	0.5	20.2	

MAPID: 16501210000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3250' S line, 3930' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405614 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726256 **DATE COLLECTED:** 5 / 21 / 1951
SURFACE ELEVATION (FT.): 419.3 **LOGGED (FT.):** 37.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #19 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.3			CLAY	14.5	0.0	
404.8	CARBONDALE		SHALE	10.0	14.5	
394.8	CARBONDALE		SHALE	2.9	24.5	
391.9	CARBONDALE		LIMESTONE	0.9	27.4	
391.0	CARBONDALE		BLACK SHALE	2.8	28.3	
388.1	CARBONDALE		SHALE	1.0	31.2	
387.1	CARBONDALE	SPRINGFIELD	COAL	4.3	32.2	
382.8	CARBONDALE		UNDERCLAY	0.5	36.5	

MAPID: 16501211000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2950' S line, 3920' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405584 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725427 **DATE COLLECTED:** 5 / 21 / 1951
SURFACE ELEVATION (FT.): 437.4 **LOGGED (FT.):** 48.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #20 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.4			SANDY CLAY	10.7	0.0	
426.7	CARBONDALE		SANDY SHALE	6.3	10.7	
420.4	CARBONDALE		SANDSTONE	4.0	17.0	
416.4	CARBONDALE		SANDY SHALE	16.4	21.0	
400.0	CARBONDALE		LIMESTONE	0.3	37.4	
399.6	CARBONDALE		BLACK SHALE	2.8	37.8	
396.8	CARBONDALE		SHALE	2.7	40.6	
394.1	CARBONDALE	SPRINGFIELD	COAL	4.3	43.3	
389.9	CARBONDALE		UNDERCLAY	0.5	47.5	

MAPID: 16501212000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2190' S line, 3680' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404765 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.723332 **DATE COLLECTED:** 5 / 22 / 1951
SURFACE ELEVATION (FT.): 416.8 **LOGGED (FT.):** 17.9 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #21 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.8			CLAY	6.0	0.0	
410.8	CARBONDALE		SANDY SHALE	4.2	6.0	
406.6	CARBONDALE		BLACK SHALE	2.8	10.2	
403.8	CARBONDALE	SPRINGFIELD	COAL	4.4	13.0	
399.4	CARBONDALE		UNDERCLAY	0.5	17.4	

MAPID: 16501213000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2900' S line, 3410' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403814 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725291 **DATE COLLECTED:** 5 / 24 / 1951
SURFACE ELEVATION (FT.): 459.0 **LOGGED (FT.):** 50.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #22 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.0			CLAY	12.5	0.0	
446.5	CARBONDALE		SANDSTONE	8.7	12.5	
437.8	CARBONDALE		SANDY SHALE	28.8	21.2	

MAPID: 16501214000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2700' S line, 3350' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403607 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72474 **DATE COLLECTED:** 5 / 25 / 1951
SURFACE ELEVATION (FT.): 459.5 **LOGGED (FT.):** 55.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #23 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
459.5			CLAY	10.7	0.0	
448.8	CARBONDALE		SANDY SHALE	2.3	10.7	
446.5	CARBONDALE		SANDSTONE	12.0	13.0	W/ THIN SH. STREAKS
434.5	CARBONDALE		SANDY SHALE	21.7	25.0	
412.8	CARBONDALE		LIMESTONE	0.7	46.7	
412.2	CARBONDALE		BLACK SHALE	2.9	47.3	
409.2	CARBONDALE	SPRINGFIELD	COAL	4.5	50.3	
404.7	CARBONDALE		UNDERCLAY	0.5	54.8	

MAPID: 16501215000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2720' S line, 3190' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403053 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724795 **DATE COLLECTED:** 5 / 25 / 1951
SURFACE ELEVATION (FT.): 432.0 **LOGGED (FT.):** 27.2 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #24 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.0			CLAY	8.5	0.0	
423.5	CARBONDALE		SANDSTONE	8.0	8.5	W/ SH BANDS
415.5	CARBONDALE		SANDY SHALE	1.3	16.5	
414.2	CARBONDALE		BLACK SHALE	2.7	17.8	
411.5	CARBONDALE		BLACK SHALE	2.0	20.5	
409.5	CARBONDALE	SPRINGFIELD	COAL	4.2	22.5	
405.3	CARBONDALE		UNDERCLAY	0.5	26.7	

MAPID: 16501216000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2720' S line, 2970' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402289 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724796 **DATE COLLECTED:** 5 / 28 / 1951
SURFACE ELEVATION (FT.): 433.4 **LOGGED (FT.):** 26.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #25 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.4			CLAY & GRAVEL	10.0	0.0	
423.4	CARBONDALE		SANDY SHALE	8.6	10.0	
414.8	CARBONDALE		LIMESTONE	0.6	18.6	
414.2	CARBONDALE		BLACK SHALE	2.8	19.2	
411.4	CARBONDALE	SPRINGFIELD	COAL	3.8	22.0	
407.6	CARBONDALE		UNDERCLAY	0.5	25.8	

MAPID: 16501217000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 310' S line, 90' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401458 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725479 **DATE COLLECTED:** 5 / 28 / 1951
SURFACE ELEVATION (FT.): 439.7 **LOGGED (FT.):** 27.1 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #26 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
439.7			CLAY & GRAVEL	6.0	0.0	
433.7	CARBONDALE		SANDY SHALE	10.8	6.0	
422.9	CARBONDALE		BLACK SHALE	2.7	16.8	
420.2	CARBONDALE		SHALE	2.8	19.5	
417.4	CARBONDALE	SPRINGFIELD	COAL	4.3	22.3	
413.1	CARBONDALE		UNDERCLAY	0.5	26.6	

MAPID: 16501217000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 310' S line, 90' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401458 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.725479 **DATE COLLECTED:** 5 / 29 / 1951
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 27.1 **LOG TYPE:** Survey Core Study
SOURCE: REGENHARDT & SOUTHERN COAL CO. **WELL TYPE:** Coal Test
COMMENT: THIS COMPANY HAS 28 HOLES IN THIS AREA.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	6.0	0.0	
434.0			ROCK	16.3	6.0	
417.7			COAL	4.3	22.3	
413.4			ROCK	0.5	26.6	

MAPID: 16501218000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2950' S line, 2730' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401448 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725432 **DATE COLLECTED:** 5 / 29 / 1951
SURFACE ELEVATION (FT.): 441.3 **LOGGED (FT.):** 37.8 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #27 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.3			UNCONSOLIDATED	6.0	0.0	
435.3	CARBONDALE		SANDY SHALE	11.0	6.0	W/ "ROCK BANDS"
424.3	CARBONDALE		SANDY SHALE	11.4	17.0	W/ SS BANDS
412.9	CARBONDALE		LIMESTONE	1.7	28.4	
411.2	CARBONDALE		BLACK SHALE	3.0	30.1	
408.2	CARBONDALE	SPRINGFIELD	COAL	4.2	33.1	
404.0	CARBONDALE		UNDERCLAY	0.5	37.3	

MAPID: 16501219000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 3020' S line, 2980' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402318 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725625 **DATE COLLECTED:** 5 / 29 / 1951
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 36.3 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #28 **WELL TYPE:** Coal Test
COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY & GRAVEL	23.5	0.0	
-	CARBONDALE		SHALE	2.6	23.5	
-	CARBONDALE		LIMESTONE	0.4	26.1	
-	CARBONDALE		BLACK SHALE	2.7	26.5	
-	CARBONDALE		SHALE	2.3	29.2	
-	CARBONDALE	SPRINGFIELD	COAL	4.3	31.5	
-	CARBONDALE		UNDERCLAY	0.5	35.8	

MAPID: 16501220000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1900' S line, 1210' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405357 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.722529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 451.9 **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., #S-1 **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN, SMITH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
451.9			CLAY	3.0	0.0	
448.9	CARBONDALE		SHALE	14.0	3.0	
434.9	CARBONDALE		SANDSTONE	3.0	17.0	
431.9	CARBONDALE		SHALE	15.7	20.0	
416.2	CARBONDALE		BLACK SHALE	3.8	35.7	
412.4	CARBONDALE	SPRINGFIELD	COAL	4.0	39.5	
408.4	CARBONDALE		UNDERCLAY	0.5	43.5	

MAPID: 16501220000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1900' S line, 1210' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405357 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.722529 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 44.0 **LOG TYPE:** Survey Core Study
SOURCE: REGENHARDT & SOUTHERN COAL CO. **WELL TYPE:** Coal Test
COMMENT: THIS COMPANY HAS 6 HOLES IN THIS AREA.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	3.0	0.0	
449.0			ROCK	32.7	3.0	
416.3	CARBONDALE	SPRINGFIELD	COAL	4.0	35.7	
412.3	CARBONDALE		ROCK	0.5	39.7	

MAPID: 16501221000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1820' S line, 3350' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403623 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.722311 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 469.6 **LOGGED (FT.):** 40.5 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., S-2 **WELL TYPE:** Coal Test
COMMENT: NO DATE GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
469.6			CLAY	3.0	0.0	
466.6	CARBONDALE		SHALE	7.0	3.0	
459.6	CARBONDALE		SANDSTONE	3.0	10.0	
456.6	CARBONDALE		LIMESTONE	1.5	13.0	
455.1	CARBONDALE		SANDY SHALE	10.0	14.5	
445.1	CARBONDALE		SHALE	16.0	24.5	

MAPID: 16501222000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1720' S line, 3150' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402932 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.722036 **DATE COLLECTED:** 5 / 7 / 1952
SURFACE ELEVATION (FT.): 474.7 **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log
SOURCE: REGENHARDT & SOUTHERN COAL CO., S-3 **WELL TYPE:** Coal Test
COMMENT: 3 MORE SIMILAR HOLES BUT NO LOC/ELEV

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
474.7			CLAY	2.5	0.0	
472.2	CARBONDALE		SANDY SHALE	19.0	2.5	W/ "ROCK BAND"
453.2	CARBONDALE		SHALE	17.2	21.5	
436.0	CARBONDALE		BLACK SHALE	2.3	38.7	

MAPID: 16501312000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 885' N line, 65' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410119 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729415 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 410.1 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #30 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.1			UNCONSOLIDATED	2.0	0.0	
408.1	CARBONDALE		SANDSTONE	39.0	2.0	
369.1	CARBONDALE		LIMESTONE	1.5	41.0	
367.6	CARBONDALE		SANDY SHALE	10.5	42.5	
357.1	CARBONDALE		BLACK SHALE	0.3	53.0	
356.8	CARBONDALE		BONE COAL	0.2	53.3	
356.6	CARBONDALE		COAL	0.3	53.5	
356.3	CARBONDALE		UNKNOWN	0.3	53.8	LOG HAS BAND
356.0	CARBONDALE		COAL	0.3	54.1	
355.7	CARBONDALE		SANDY SHALE	1.3	54.4	
354.4	CARBONDALE		COAL	0.8	55.7	
353.7	CARBONDALE		SANDY SHALE	12.6	56.4	

MAPID: 16501312000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 885' N line, 65' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410119 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729415 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 69.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	2.0	0.0	
408.0			ROCK	51.3	2.0	
356.7	CARBONDALE	HERRIN	COAL	3.1	53.3	
353.6	CARBONDALE		ROCK	12.6	56.4	

MAPID: 16501313000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 25' S line, 45' E line of NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405899 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728321 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 400.1 **LOGGED (FT.):** 27.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #31 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.1			UNCONSOLIDATED	5.0	0.0	
395.1	CARBONDALE		SHALE	11.5	5.0	
383.6	CARBONDALE		BLACK SHALE	1.0	16.5	
382.6	CARBONDALE		BLACK SHALE	3.0	17.5	
379.6	CARBONDALE	SPRINGFIELD	COAL	4.4	20.5	SOFT UPPER 1.17'
375.2	CARBONDALE		UNDERCLAY	2.1	24.9	

MAPID: 16501314000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1260' N line, 660' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.408049 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728405 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 436.6 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #32 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.6			UNCONSOLIDATED	4.0	0.0	
432.6	CARBONDALE		SANDSTONE	18.0	4.0	
414.6	CARBONDALE		SHALE	4.0	22.0	
410.6	CARBONDALE		SANDY SHALE	20.8	26.0	
389.8	CARBONDALE	BRIAR HILL	COAL	1.8	46.8	
388.1	CARBONDALE		SANDY SHALE	12.5	48.5	
375.6	CARBONDALE		SANDSTONE	5.0	61.0	
370.6	CARBONDALE		SANDY SHALE	2.0	66.0	
368.6	CARBONDALE		SANDSTONE	4.0	68.0	
364.6	CARBONDALE		SANDY SHALE	19.0	72.0	

MAPID: 16501314000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1260' N line, 660' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.408049 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728405 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
436.0			UNCONSOLIDATED	4.0	0.0	
432.0			ROCK	42.0	4.0	
390.0			COAL	1.8	46.0	
388.2			ROCK	42.5	47.8	

MAPID: 16501315000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 15' N line, 325' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.404614 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.731881 **DATE COLLECTED:** 2 / 0 / 1950
SURFACE ELEVATION (FT.): 442.4 **LOGGED (FT.):** 78.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #41 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, SILAS MOORE FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.4			UNCONSOLIDATED	7.0	0.0	
435.4	CARBONDALE		SANDY SHALE	6.0	7.0	
429.4	CARBONDALE		SANDSTONE	5.5	13.0	
423.9	CARBONDALE		COAL	2.3	18.5	SOFT
421.6	CARBONDALE		UNDERCLAY	6.3	20.8	
415.4	CARBONDALE		LIMESTONE	2.0	27.0	
413.4	CARBONDALE		CALCAREOUS SHALE	1.0	29.0	
412.4	CARBONDALE		LIMESTONE	6.0	30.0	
406.4	CARBONDALE		SANDY SHALE	7.0	36.0	
399.4	CARBONDALE		SANDSTONE	13.0	43.0	
386.4	CARBONDALE		SANDY SHALE	16.0	56.0	
370.4	CARBONDALE		COAL	0.5	72.0	
369.9	CARBONDALE		SANDY SHALE	1.0	72.5	
368.9	CARBONDALE		LIMESTONE	1.5	73.5	
367.4	CARBONDALE		COAL	1.8	75.0	
365.6	CARBONDALE		UNDERCLAY	0.5	76.8	
365.1	CARBONDALE		SANDSTONE	1.3	77.3	

MAPID: 16501316000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 10' N line, 1340' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.396622 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.724626 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #^8 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, NETTIE SMITH FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	2.0	0.0	
450.0	CARBONDALE		SANDSTONE	5.0	2.0	
445.0	CARBONDALE		SANDY SHALE	8.0	7.0	
437.0	CARBONDALE		SHALE	7.0	15.0	
430.0	CARBONDALE		SANDY SHALE	11.5	22.0	
418.5	CARBONDALE		LIMESTONE	1.0	33.5	
417.5	CARBONDALE		BLACK SHALE	3.3	34.5	
414.2	CARBONDALE	HERRIN	BONE COAL	0.1	37.8	
414.2	CARBONDALE	HERRIN	COAL	4.2	37.8	
410.0	CARBONDALE		UNDERCLAY	1.0	42.0	

MAPID: 16501316000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 10' N line, 1340' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.396622 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.724626 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 452.0 **LOGGED (FT.):** 42.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
452.0			UNCONSOLIDATED	2.0	0.0	
450.0			ROCK	35.8	2.0	
414.2	CARBONDALE	HERRIN	COAL	4.3	37.8	
410.0	CARBONDALE		ROCK	1.0	42.0	

MAPID: 16501317000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1296' N line, 45' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401296 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728384 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 428.2 **LOGGED (FT.):** 54.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #38 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BOND FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.2			UNCONSOLIDATED	7.0	0.0	
421.2	CARBONDALE		SANDY SHALE	16.0	7.0	
405.2	CARBONDALE		SANDY SHALE	12.0	23.0	
393.2	CARBONDALE		LIMESTONE	1.0	35.0	
392.2	CARBONDALE		BLACK SHALE	1.5	36.0	
390.7	CARBONDALE		UNKNOWN	1.0	37.5	LOG HAS BOULDER, POSSIBLY A CONCRETION
389.7	CARBONDALE		BLACK SHALE	0.5	38.5	
389.2	CARBONDALE	HERRIN	COAL	4.1	39.0	
385.1	CARBONDALE	HERRIN	UNKNOWN	0.1	43.1	LOG HAS RASH
385.0	CARBONDALE	HERRIN	COAL	0.8	43.2	
384.2	CARBONDALE		UNDERCLAY	1.0	44.0	

MAPID: 16501317000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1296' N line, 45' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401296 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728384 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 428.0 **LOGGED (FT.):** 44.0 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
428.0			UNCONSOLIDATED	7.0	0.0	
421.0			ROCK	32.0	7.0	
389.0	CARBONDALE	HERRIN	COAL	5.0	39.0	
384.0	CARBONDALE		ROCK	1.0	44.0	

MAPID: 16501318000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1360' N line, 1100' W line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397318 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.728252 **DATE COLLECTED:** 1 / 0 / 1950
SURFACE ELEVATION (FT.): 492.3 **LOGGED (FT.):** 77.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #39 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BOND FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
492.3			UNCONSOLIDATED	1.5	0.0	
490.8	CARBONDALE		SANDSTONE	23.0	1.5	
467.8	CARBONDALE		COAL	0.5	24.5	
467.3	CARBONDALE		SANDSTONE	15.5	25.0	
451.8	CARBONDALE		SHALE	5.0	40.5	
446.8	CARBONDALE		SANDY SHALE	13.5	45.5	
433.3	CARBONDALE	BRIAR HILL	COAL	1.5	59.0	
431.8	CARBONDALE		UNDERCLAY	0.5	60.5	
431.3	CARBONDALE		SANDSTONE	4.5	61.0	
426.8	CARBONDALE		SANDY SHALE	18.5	65.5	

MAPID: 16501318000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1360' N line, 1100' W line of NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.397318 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728252 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 492.0 **LOGGED (FT.):** 60.5 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
492.0			UNCONSOLIDATED	1.5	0.0	
490.5			ROCK	23.0	1.5	
467.5			COAL	0.5	24.5	
467.0			ROCK	20.5	25.0	
446.5			COAL	1.5	45.5	
445.0			ROCK	23.5	47.0	

MAPID: 16501320000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 250' S line, 1355' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405621 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.725287 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 443.4 **LOGGED (FT.):** 51.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #69 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BOND FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.4			UNCONSOLIDATED	2.0	0.0	
441.4	CARBONDALE		SANDY SHALE	13.0	2.0	
428.4	CARBONDALE		SANDY SHALE	25.5	15.0	
402.9	CARBONDALE		BLACK SHALE	3.5	40.5	
399.4	CARBONDALE		SHALE	2.2	44.0	
397.2	CARBONDALE	HERRIN	COAL	3.9	46.2	
393.3	CARBONDALE	HERRIN	UNKNOWN	0.3	50.1	LOG HAS "BAND"
393.1	CARBONDALE	HERRIN	COAL	0.5	50.3	
392.6	CARBONDALE		UNDERCLAY	1.2	50.8	

MAPID: 16501320000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 250' S line, 1355' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405621 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.725287 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 50.8 **LOG TYPE:** Survey Core Study
SOURCE: PYRAMID C C **WELL TYPE:** Coal Test
COMMENT: OTHER LOGS ARE AVAILABLE IN THIS AREA.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
443.0			UNCONSOLIDATED	2.0	0.0	
441.0			ROCK	44.2	2.0	
396.8	CARBONDALE	HERRIN	COAL	4.7	46.2	
392.2	CARBONDALE		ROCK	1.2	50.8	

MAPID: 16501321000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403445 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.72645 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 415.6 **LOGGED (FT.):** 25.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #71 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BOND FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.6			UNCONSOLIDATED	3.0	0.0	
412.6	CARBONDALE		SANDY SHALE	10.0	3.0	
402.6	CARBONDALE		SANDY SHALE	2.8	13.0	
399.8	CARBONDALE		LIMESTONE	0.5	15.8	
399.3	CARBONDALE		BLACK SHALE	2.7	16.3	
396.7	CARBONDALE		UNKNOWN	0.4	18.9	LOG HAS "BOULDER"
396.3	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	19.3	
396.0	CARBONDALE	SPRINGFIELD	COAL	4.1	19.6	
391.9	CARBONDALE		UNDERCLAY	1.3	23.7	

MAPID: 16501322000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 575' N line, 25' W line of SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405653 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.726667 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 411.2 **LOGGED (FT.):** 22.5 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #72 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BOND FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.2			UNCONSOLIDATED	3.0	0.0	
408.2	CARBONDALE		SHALE	4.0	3.0	
404.2	CARBONDALE		SHALE	8.0	7.0	
396.2	CARBONDALE		SHALE	2.3	15.0	
393.9	CARBONDALE	SPRINGFIELD	SHALY COAL	0.5	17.3	
393.4	CARBONDALE	SPRINGFIELD	COAL	3.5	17.8	
389.9	CARBONDALE		UNDERCLAY	1.3	21.3	

MAPID: 16501323000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 410' N line, 1' E line of SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401147 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.727162 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 420.3 **LOGGED (FT.):** 33.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO., #80 **WELL TYPE:** Coal Test
COMMENT: CHURN DRILL, HIRAM BONDS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.3			UNCONSOLIDATED	2.0	0.0	
418.3	CARBONDALE		SANDSTONE	2.0	2.0	
416.3	CARBONDALE		SANDY SHALE	4.0	4.0	
412.3	CARBONDALE		SANDY SHALE	10.0	8.0	
402.3	CARBONDALE		SANDY SHALE	5.0	18.0	
397.3	CARBONDALE		LIMESTONE	1.3	23.0	
396.0	CARBONDALE		BLACK SHALE	3.3	24.3	
392.8	CARBONDALE	SPRINGFIELD	BONE COAL	0.3	27.5	
392.5	CARBONDALE	SPRINGFIELD	COAL	4.0	27.8	
388.5	CARBONDALE		UNDERCLAY	1.3	31.8	

MAPID: 16503060000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.400011 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.720051 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 555.0 **LOGGED (FT.):** 1390.0 **LOG TYPE:** Electric Log
SOURCE: HARPER, R. & MCCONNELL,M **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
225.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	330.0	
150.0	SPOON	DAVIS	UNCLASSIFIED	-	405.0	
-835.0	BASE OF PENN.		UNCLASSIFIED	-	1390.0	

MAPID: 16503060000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.400011 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.720051 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 555.0 **LOGGED (FT.):** 1534.0 **LOG TYPE:**
SOURCE: HARPER, R. & MCCONNELL,M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-979.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1534.0	

MAPID: 16503060000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.400011 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.720051 **DATE COLLECTED:** 10 / 0 / 1956

SURFACE ELEVATION (FT.): 555.0 **LOGGED (FT.):** 2836.0 **LOG TYPE:** Electric Log

SOURCE: HARPER, R. & MCCONNELL,M, MARTIN E ETAL **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	213.0	
295.0	CARBONDALE	SURVANT	COAL	0.8	260.0	
227.0	CARBONDALE	COLCHESTER	COAL	0.5	328.0	
172.0	CARBONDALE	DEKOVEN	COAL	3.0	383.0	
172.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	383.0	
151.0	CARBONDALE	DAVIS	COAL	4.0	404.0	
95.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	460.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
80.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	475.0	
40.0	TRADEWATER	MT. RORAH	COAL	2.0	515.0	

MAPID: 16503338000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409192 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.729133 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 126.5 **LOG TYPE:** Drillers Log
SOURCE: SILAS MOORE FARM DRILL HOLE #2 **WELL TYPE:** Coal Test
COMMENT: NO COMPANY GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			CLAY	20.0	0.0	
420.0	CARBONDALE		SANDSTONE	4.5	20.0	
415.5	CARBONDALE		CALCAREOUS SHALE	0.5	24.5	
415.0	CARBONDALE		SANDSTONE	16.0	25.0	
399.0	CARBONDALE		SANDY SHALE	6.0	41.0	
393.0	CARBONDALE		SANDY SHALE	14.7	47.0	
378.3	CARBONDALE	BRIAR HILL	COAL	0.1	61.7	
378.2	CARBONDALE	BRIAR HILL	SANDY SHALE	0.6	61.8	
377.7	CARBONDALE	BRIAR HILL	COAL	0.3	62.3	W/ DRK GRAY SANDY SH INTRUSIONS
377.4	CARBONDALE		SANDY SHALE	17.6	62.6	
359.8	CARBONDALE		CALCAREOUS SHALE	1.0	80.2	
358.8	CARBONDALE		SANDY SHALE	14.8	81.2	
344.0	CARBONDALE		SANDY SHALE	20.0	96.0	
324.0	CARBONDALE		LIMESTONE	0.5	116.0	
323.5	CARBONDALE		BLACK SHALE	2.9	116.5	
320.6	CARBONDALE		SHALE	1.2	119.4	
319.4	CARBONDALE	SPRINGFIELD	COAL	4.0	120.6	
315.4	CARBONDALE		UNDERCLAY	1.9	124.6	

MAPID: 16503338000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409192 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.729133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log
SOURCE: NO COMPANY **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	BRIAR HILL	COAL	0.5	62.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	121.0	

MAPID: 16503339000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401148 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.722789 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 535.0 **LOGGED (FT.):** 121.5 **LOG TYPE:** Drillers Log
SOURCE: W.SMITH FARM DRILL HOLE #3 **WELL TYPE:** Coal Test
COMMENT: NO COMPANY GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
535.0			CLAY	9.0	0.0	
526.0			SANDY CLAY	9.5	9.0	
516.5	CARBONDALE		SANDSTONE	13.5	18.5	
503.0	CARBONDALE		SANDSTONE	3.0	32.0	W/ THIN COAL INTRUSIONS
500.0	CARBONDALE		SANDY SHALE	18.0	35.0	
482.0	CARBONDALE		SANDY SHALE	15.8	53.0	
466.2	CARBONDALE	BRIAR HILL	COAL	1.8	68.8	
464.5	CARBONDALE		SANDY SHALE	42.0	70.5	
422.5	CARBONDALE		LIMESTONE	0.8	112.5	
421.7	CARBONDALE		BLACK SHALE	2.9	113.3	
418.7	CARBONDALE	SPRINGFIELD	COAL	4.1	116.3	
414.7	CARBONDALE		UNDERCLAY	1.2	120.3	

MAPID: 165274B0009F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SE SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.402875 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.718662 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 7.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, ABD DRIFT MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	4.0		
-	CARBONDALE	SPRINGFIELD	COAL	3.5		

MAPID: 16500228602M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.37522 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729906 **DATE COLLECTED:** 0 / 0 / 1957
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-RICHARDSON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 16500331200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.38616 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731197 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-RAGSDALE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500331300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.391343 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731612 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 81.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BUCKEYE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
520.0			ROCK	4.0	0.0	
516.0	CARBONDALE	SPRINGFIELD	COAL	4.0	4.0	

MAPID: 16500573000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** E2 NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374643 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.730375 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 151.7 **LOG TYPE:**
SOURCE: TEMPLE & CASTLES' COAL CO. **WELL TYPE:** Outcrop
COMMENT: MAYBE SEC 25;AT 151.67 HI WATER OF RIVER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNKNOWN	60.0	0.0	LOG HAS "SLOPE COVERED W/ DRIFT"
310.0	CARBONDALE		SANDSTONE	30.0	60.0	MICAEOUS
280.0	CARBONDALE	DYKERSBURG	SHALE	35.0	90.0	SILICEOUS
245.0	CARBONDALE	DYKERSBURG	BLACK SHALE	2.0	125.0	
243.0	CARBONDALE	SPRINGFIELD	COAL	4.7	127.0	
238.3	CARBONDALE		UNDERCLAY	2.0	131.7	
236.3	CARBONDALE		UNKNOWN	18.0	133.7	COVERED SLOPE;WATER OF SALINE R.-151.67'

MAPID: 16500573000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** E2 NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374643 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.730375 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 152.0 **LOG TYPE:** Drillers Log

SOURCE: TEMPLE & CASTLES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.0	CARBONDALE	SPRINGFIELD	COAL	4.7	127.0	

MAPID: 16524364000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.383896 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.725678 **DATE COLLECTED:** 12 / 19 / 1980

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log

SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	4.0	0.0	
356.0			ROCK	113.0	4.0	
243.0			COAL	1.0	117.0	
242.0			ROCK	47.0	118.0	
195.0			COAL	3.5	165.0	
191.5			ROCK	133.5	168.5	

MAPID: 165274B0010F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW NE SW NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.379852 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.727097 **DATE COLLECTED:** 8 / 0 / 1932

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 15.8 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-WANLESS, ABD DRIFT MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	2.0	0.0	
398.0			ROCK	10.7	2.0	
387.4	CARBONDALE	SPRINGFIELD	COAL	3.2	12.6	

MAPID: 16500848000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** 150' N line, 150' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.3915 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.716891 **DATE COLLECTED:** 5 / 0 / 1939
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1205.0 **LOG TYPE:** Drillers Log
SOURCE: KINGWOOD OIL CO **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-845.0	BASE OF PENN.		UNCLASSIFIED	-	1205.0	

MAPID: 16503335000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392592 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.71684 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 45.5 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR FARM DRILL HOLE #4 **WELL TYPE:** Coal Test
COMMENT: NO ELEV. OR COMPANY GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	16.0	0.0	
-			CLAY	11.5	16.0	
-			SHALE	12.5	27.5	
-			COAL	2.0	40.0	
-			SANDY SHALE	3.5	42.0	
-			SANDSTONE	0.0	45.5	T.D.

MAPID: 16503335000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392592 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.71684 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 45.5 **LOG TYPE:** Survey Core Study
SOURCE: TAYLOR **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	16.0	0.0	
344.0			ROCK	24.0	16.0	
320.0			COAL	2.0	40.0	
318.0			ROCK	3.5	42.0	

MAPID: 16503336000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403477 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.713613 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR FARM DRILL HOLE #5 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	32.0	0.0	
-			UNCONSOLIDATED	7.0	32.0	
-			SANDY CLAY	26.0	39.0	

MAPID: 16503337000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW NW SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405239 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.704892 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR FARM DRILL HOLE #6 **WELL TYPE:** Coal Test
COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			CLAY	24.0	0.0	
-			UNCONSOLIDATED	3.0	24.0	
-			SANDY CLAY	38.0	27.0	

MAPID: 16500215000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.428393 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.716922 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 159.7 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. **WELL TYPE:** Coal Test
COMMENT: BERRY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNKNOWN	112.0	0.0	LOG HAS CASING
253.0			COAL	0.3	112.0	
252.7			SANDSTONE	35.0	112.3	
217.7			SHALE	5.0	147.3	
212.7			COAL	0.4	152.3	
212.3			SANDSTONE	7.0	152.7	

MAPID: 16500215000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.428393 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.716922 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 207.7 **LOG TYPE:** Survey Core Study
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			ROCK	112.0	0.0	
253.0			COAL	0.3	112.0	
252.7			ROCK	88.0	112.3	
164.7			COAL	0.4	200.3	
164.3			ROCK	7.0	200.7	

MAPID: 16502559000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.416184 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.703523 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 1210.0 **LOG TYPE:** Electric Log
SOURCE: GRADY DONALD S **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
210.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	145.0	
143.0	SPOON	DAVIS	UNCLASSIFIED	-	212.0	
-855.0	BASE OF PENN.		UNCLASSIFIED	-	1210.0	

MAPID: 16502559000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.416184 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.703523 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2105.0 **LOG TYPE:**
SOURCE: GRADY DONALD S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1032.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1387.0	
-1358.0			LIMESTONE	-	1713.0	
-1750.0		BASE BARLOW	LIMESTONE	-	2105.0	

MAPID: 16502559000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.416184 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.703523 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2554.0 **LOG TYPE:** Electric Log
SOURCE: GRADY DONALD S, BERKEL A 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
214.0	CARBONDALE	COLCHESTER	COAL	0.5	141.0	
167.0	CARBONDALE	DEKOVEN	COAL	2.5	188.0	
167.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	188.0	
143.0	CARBONDALE	DAVIS	COAL	4.0	212.0	
85.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	270.0	51% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
60.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	295.0	

MAPID: 16503714000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1295' N line, 1305' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.42445 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.713785 **DATE COLLECTED:** 10 / 27 / 1971
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 4-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
229.0	CARBONDALE	SURVANT	COAL	1.0	134.0	
105.0	CARBONDALE	DEKOVEN	COAL	3.0	258.0	
105.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	258.0	
84.9	CARBONDALE	DAVIS	COAL	3.2	278.1	5% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503753000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2640' N line, 2620' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41945 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.710044 **DATE COLLECTED:** 11 / 16 / 1970
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. D305 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	SURVANT	COAL	1.0	118.0	
176.0	CARBONDALE	COLCHESTER	COAL	0.0	183.0	
114.0	CARBONDALE	DEKOVEN	COAL	3.0	245.0	
114.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	245.0	
90.5	CARBONDALE	DAVIS	COAL	3.8	268.5	54% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503754000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2640' N line, 0' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410346 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709993 **DATE COLLECTED:** 11 / 23 / 1970
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO D309 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
182.0	CARBONDALE	COLCHESTER	COAL	0.0	173.0	
130.0	CARBONDALE	DEKOVEN	COAL	3.0	225.0	
130.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	225.0	
108.8	CARBONDALE	DAVIS	COAL	3.1	246.2	71% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503785000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2400' S line, 700' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.426564 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709274 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. P10 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
192.5	CARBONDALE	COLCHESTER	COAL	1.0	162.5	
140.3	CARBONDALE	DEKOVEN	COAL	3.0	214.7	
140.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	214.7	
106.5	CARBONDALE	DAVIS	COAL	4.0	248.5	

MAPID: 16503755000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44757 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.713594 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. D2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
251.0	CARBONDALE	SURVANT	COAL	1.0	104.0	
184.5	CARBONDALE	COLCHESTER	COAL	1.0	170.5	
132.9	CARBONDALE	DEKOVEN	COAL	3.3	222.1	
132.9	CARBONDALE	LOWER DEKOVEN	COAL	0.0	222.1	
109.0	CARBONDALE	DAVIS	COAL	4.3	246.0	19% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503775000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2500' S line, 2400' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.437336 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709499 **DATE COLLECTED:** 10 / 26 / 1970
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO E296FB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
251.0	CARBONDALE	SURVANT	COAL	1.0	104.0	
198.0	CARBONDALE	COLCHESTER	COAL	1.0	157.0	
139.0	CARBONDALE	DEKOVEN	COAL	3.0	216.0	
139.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	216.0	
116.5	CARBONDALE	DAVIS	COAL	3.5	238.5	51% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503776000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2640' N line, 660' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.445291 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709968 **DATE COLLECTED:** 12 / 8 / 1970
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E318 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
252.0	CARBONDALE	SURVANT	COAL	1.0	110.0	
171.0	CARBONDALE	COLCHESTER	COAL	1.0	191.0	
116.0	CARBONDALE	DEKOVEN	COAL	2.0	246.0	
116.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	246.0	
92.0	CARBONDALE	DAVIS	COAL	4.0	270.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503786000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 200' S line, 1500' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.434226 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.703173 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 217.3 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. P2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCLASSIFIED	213.0	0.0	
142.0			COAL	4.3	213.0	

MAPID: 16503787000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 900' N line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.43357 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.714864 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. P3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
204.0	CARBONDALE	COLCHESTER	COAL	1.0	141.0	
150.5	CARBONDALE	DEKOVEN	COAL	3.3	194.5	
150.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	194.5	
125.5	CARBONDALE	DAVIS	COAL	4.3	219.5	58% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503788000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2540' S line, 1980' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.435875 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709618 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. P4 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
193.5	CARBONDALE	COLCHESTER	COAL	1.0	161.5	
135.7	CARBONDALE	DEKOVEN	COAL	3.3	219.3	
135.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	219.3	
111.3	CARBONDALE	DAVIS	COAL	4.0	243.7	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16500217000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 150' S line, 1260' E line of SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46126 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.702795 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 260.7 **LOG TYPE:** Drillers Log

SOURCE: SALINE COUNTY COAL CO., HOLE #168 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0			SOIL	80.0	0.0	
277.0			CLAYSTONE & SHALE	17.5	80.0	W/ QUICK SAND
259.5			CLAYSTONE & SHALE	10.5	97.5	
249.0			COAL	0.5	108.0	
248.5			CLAYSTONE & SHALE	4.5	108.5	
244.0			SANDY SHALE	5.0	113.0	
239.0	CARBONDALE	SURVANT	COAL	0.8	118.0	
238.2			SANDSTONE	4.2	118.8	
234.0			SANDSTONE	10.0	123.0	"STREAKED"
224.0			SANDY SHALE	10.0	133.0	
214.0			LIMESTONE	1.5	143.0	
212.5	CARBONDALE		SANDSTONE	7.5	144.5	
205.0	CARBONDALE		SANDY SHALE	51.0	152.0	
154.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	203.0	
151.0	SPOON		SANDSTONE	41.5	206.0	
109.5	SPOON		SANDY SHALE	9.0	247.5	
100.5	SPOON	DEKOVEN	COAL	4.2	256.5	

MAPID: 16500217000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 150' S line, 1260' E line of SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46126 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.702795 **DATE COLLECTED:** 10 / 11 / 1906

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 260.6 **LOG TYPE:** Survey Core Study

SOURCE: SALINE COUNTY COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0			UNCONSOLIDATED	80.0	0.0	
277.0			ROCK	28.0	80.0	
249.0			COAL	0.5	108.0	
248.5			ROCK	9.5	108.5	
239.0			COAL	0.8	118.0	
238.2			ROCK	137.8	118.8	
100.4			COAL	4.2	256.6	

MAPID: 16502983000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46263 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.712478 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2222.0 **LOG TYPE:**
SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1120.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1493.0	
-1468.0			LIMESTONE	-	1841.0	
-1849.0		BASE BARLOW	LIMESTONE	-	2222.0	

MAPID: 16502983000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46263 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.712478 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2627.0 **LOG TYPE:** Plugging affidavit
SOURCE: MCKELVEY & SIPOHA **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			ROCK	120.0	0.0	
253.0	CARBONDALE	SPRINGFIELD	COAL	4.0	120.0	
249.0			ROCK	2503.0	124.0	

MAPID: 16502983000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46263 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.712478 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1340.0 **LOG TYPE:** Electric Log
SOURCE: MCKELVY & SIPOHA DRLG. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
113.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	260.0	
51.0	SPOON	DAVIS	UNCLASSIFIED	-	322.0	
-967.0	BASE OF PENN.		UNCLASSIFIED	-	1340.0	

MAPID: 16502983000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46263 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.712478 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2627.0 **LOG TYPE:** Electric Log

SOURCE: MCKELVY & SIPOHA DRLG., WINTIZER **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
248.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	125.0	
203.0	CARBONDALE	SURVANT	COAL	0.8	170.0	
112.0	CARBONDALE	COLCHESTER	COAL	0.5	261.0	
71.0	CARBONDALE	DEKOVEN	COAL	2.5	302.0	
71.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	302.0	
50.0	CARBONDALE	DAVIS	COAL	3.5	323.0	
-16.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	389.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-22.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	395.0	
-57.0	TRADEWATER	MT. RORAH	COAL	1.4	430.0	

MAPID: 16503575000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456251 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.716677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PEABODY COAL CO. 3321 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			UNCONSOLIDATED	78.6	0.0	SURFACE LAYERS (EARTH, CLAY, & DRIFT)
292.4	CARBONDALE		GRAY SHALE	38.6	78.6	
253.8	CARBONDALE	EXCELLO	BLACK SHALE	0.9	117.2	
252.9	CARBONDALE	EXCELLO	BLACK SHALE	1.9	118.1	
251.0	CARBONDALE	EXCELLO	BLACK SHALE	2.5	120.0	
248.5	CARBONDALE	HOUCHIN CREEK	COAL	1.7	122.5	
246.8	CARBONDALE		UNDERCLAY	1.8	124.2	32% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
245.0	CARBONDALE		LIMESTONE	5.8	126.0	
239.2	CARBONDALE		GRAY SHALE	2.6	131.8	
236.6	CARBONDALE		GRAY SANDSTONE	16.6	134.4	
220.0	CARBONDALE		GRAY SHALE	20.6	151.0	
199.4	CARBONDALE	SURVANT	COAL	1.3	171.6	
198.1	CARBONDALE		GRAY SHALE	7.3	172.9	
190.8	CARBONDALE		LIMESTONE	1.0	180.2	
189.8	CARBONDALE		GRAY SHALE	10.3	181.2	
179.5	CARBONDALE		LIMESTONE	4.2	191.5	
175.4	CARBONDALE		GRAY SHALE	10.1	195.6	
165.3	CARBONDALE		LIMESTONE	2.4	205.7	
163.0	CARBONDALE		GRAY SHALE	6.5	208.0	
156.5	CARBONDALE		GRAY SANDSTONE	9.1	214.5	
147.4	CARBONDALE		GRAY SHALE	9.1	223.6	
138.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.3	232.7	
136.0	CARBONDALE	COLCHESTER	COAL	0.4	235.0	
135.6	SPOON		UNDERCLAY	5.3	235.4	
130.3	SPOON		LIMESTONE	11.6	240.7	
118.7	SPOON		GRAY SHALE	3.5	252.3	
115.2	SPOON		GRAY SANDSTONE	35.8	255.8	
79.5	SPOON		GRAY SHALE	5.2	291.5	
74.3	SPOON	DEKOVEN	COAL	2.2	296.7	
72.2	SPOON	DEKOVEN	ROCK	0.1	298.8	PYRITE BAND
72.1	SPOON	DEKOVEN	COAL	1.3	298.9	
70.9	SPOON		GRAY SANDSTONE	6.6	300.1	
64.3	SPOON		GRAY SHALE	14.4	306.7	
50.0	SPOON		UNCLASSIFIED	0.1	321.0	PYRITE BAND
49.9	SPOON	DAVIS	COAL	3.2	321.1	
46.7	SPOON	DAVIS	ROCK	0.1	324.3	PYRITE BAND
46.7	SPOON	DAVIS	COAL	0.9	324.3	
45.8	SPOON		UNDERCLAY	1.5	325.2	

MAPID: 16503575000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456251 **GEOLOGIST:** HOKE
CONFIDENTIAL: N **LATITUDE:** 37.716677 **DATE COLLECTED:** 5 / 8 / 1968
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 326.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 3321 **WELL TYPE:** Coal Test
COMMENT: ISGS CORE# C-6875 (cen.W.line NW-NW-NE)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HOUCHIN CREEK	COAL	1.7	122.5	
-	CARBONDALE	SURVANT	COAL	1.3	171.6	
-	CARBONDALE	COLCHESTER	COAL	0.4	235.0	
-	CARBONDALE	DEKOVEN	COAL	3.5	296.7	
-	CARBONDALE	LOWER DEKOVEN	COAL	0.0	296.7	
-	CARBONDALE	DAVIS	COAL	4.1	321.1	

MAPID: 16503701000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' S line, 1220' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.451838 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.706124 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 280.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 34-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	99.0	0.0	
261.0	CARBONDALE		ROCK	99.5	99.0	
161.5	CARBONDALE	COLCHESTER	COAL	1.5	198.5	UNCERTAIN CORRELATION
160.0	CARBONDALE		ROCK	54.0	200.0	
106.0	CARBONDALE	DEKOVEN	COAL	3.0	254.0	
103.0	CARBONDALE		ROCK	19.5	257.0	
83.5	CARBONDALE	DAVIS	COAL	4.0	276.5	

MAPID: 16503702000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1370' N line, 2630' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456709 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.713352 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 313.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 36-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0			UNCONSOLIDATED	106.0	0.0	
261.0	CARBONDALE		ROCK	69.0	106.0	
192.0	CARBONDALE		COAL	1.0	175.0	
191.0	CARBONDALE		ROCK	111.5	176.0	
79.5	CARBONDALE	DEKOVEN	COAL	3.0	287.5	
76.5	CARBONDALE		ROCK	18.5	290.5	
58.0	CARBONDALE	DAVIS	COAL	4.0	309.0	

MAPID: 16503715000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 10' N line, 10' W line of NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466068 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.716998 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 346.5 **LOG TYPE:**
SOURCE: JOHN T. BOYD 17-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
56.5	CARBONDALE	DEKOVEN	COAL	3.0	314.5	
56.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	314.5	
35.1	CARBONDALE	DAVIS	COAL	4.0	335.9	23% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503715000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 10' N line, 10' W line of NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466068 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 37.716998 **DATE COLLECTED:** 11 / 5 / 1971
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 346.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 17-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
371.0			CLAY	10.0	0.0	
361.0			CLAY	60.0	10.0	
301.0	CARBONDALE		SANDSTONE	15.0	70.0	
286.0	CARBONDALE		SHALE	60.0	85.0	
226.0	CARBONDALE	SURVANT	COAL	1.0	145.0	
225.0	CARBONDALE		SANDSTONE	21.0	146.0	
204.0	CARBONDALE		SANDY SHALE	31.4	167.0	
172.6	CARBONDALE		SANDY SHALE	61.6	198.4	WITH SS BANDS
111.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	28.0	260.0	
83.0	SPOON		GRAY SANDSTONE	20.0	288.0	
63.0	SPOON		DARK SHALE	6.4	308.0	
56.6	SPOON	DEKOVEN	COAL	3.0	314.4	
53.6	SPOON		UNDERCLAY	2.0	317.4	
51.5	SPOON		GRAY SANDSTONE	3.6	319.5	
47.9	SPOON		GRAY SHALE	1.2	323.1	
46.7	SPOON		GRAY SANDSTONE	0.7	324.3	
46.0	SPOON		DARK GRAY SHALE	11.0	325.0	.05' ADDED TO THICKNESS TO MATCH DEPTH
35.1	SPOON	DAVIS	COAL	4.0	335.9	
31.1	SPOON		GRAY SANDSTONE	1.1	339.9	
30.0	SPOON		GRAY SANDSTONE	5.5	341.0	

MAPID: 16503725000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2300' N line, 2590' W line of SE SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.450195 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.705344 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 319.1 **LOG TYPE:**
SOURCE: JOHN T. BOYD 10-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	111.0	
194.0	CARBONDALE	SURVANT	COAL	1.5	169.0	
116.0	CARBONDALE	COLCHESTER	COAL	0.0	247.0	
76.0	CARBONDALE	DEKOVEN	COAL	3.0	287.0	
76.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	287.0	
52.0	CARBONDALE	DAVIS	COAL	3.7	311.0	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503725000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2300' N line, 2590' W line of SE SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.450195 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.705344 **DATE COLLECTED:** 11 / 10 / 1971

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 319.1 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 10-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0			CLAY	17.0	0.0	
346.0			CLAY	83.0	17.0	
263.0			CLAY	5.0	100.0	
258.0	CARBONDALE	EXCELLO	BLACK SHALE	6.0	105.0	
252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	111.0	
250.0	CARBONDALE		SANDSTONE	27.0	113.0	
223.0	CARBONDALE		SHALE	29.0	140.0	
194.0	CARBONDALE	SURVANT	COAL	1.5	169.0	
192.5	CARBONDALE		SANDSTONE	10.5	170.5	
182.0	CARBONDALE		DARK SHALE	7.0	181.0	
175.0	CARBONDALE		SANDSTONE	8.0	188.0	
167.0	CARBONDALE		SANDY SHALE	45.0	196.0	
122.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.0	241.0	
116.0	SPOON		SANDSTONE	14.0	247.0	
102.0	SPOON		SANDY SHALE	13.0	261.0	
89.0	SPOON		GRAY SANDSTONE	7.5	274.0	
81.5	SPOON		DARK SHALE	5.5	281.5	
76.0	SPOON	DEKOVEN	COAL	3.0	287.0	
73.0	SPOON		GRAY SANDSTONE	2.9	290.0	
70.1	SPOON		GRAY SANDSTONE	1.8	292.9	
68.3	SPOON		GRAY SANDSTONE	1.2	294.7	
67.1	SPOON		GRAY SANDSTONE	2.1	295.9	
65.0	SPOON		DARK GRAY SHALE	6.8	298.0	
58.2	SPOON		DARK GRAY SHALE	3.9	304.8	WITH BROWNISH GRAY SIDERITIC BANDS
54.3	SPOON		BLACK SHALE	2.4	308.7	
51.9	SPOON	DAVIS	COAL	3.7	311.1	
48.2	SPOON		GRAY SANDSTONE	1.5	314.8	LOG SAYS 'SEATROCK'
46.7	SPOON		GRAY SANDSTONE	2.8	316.3	CONTAINS ABUNDANT CLAYSTONE MIXED IN

MAPID: 16503777000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 29 **QUARTERS/FOOTAGES:** 490' N line, 2510' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.457387 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.715771 **DATE COLLECTED:** 12 / 9 / 1970
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E387M **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	122.0	
135.0	CARBONDALE	COLCHESTER	COAL	1.0	237.0	
76.0	CARBONDALE	DEKOVEN	COAL	2.0	296.0	
76.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	296.0	
52.5	CARBONDALE	DAVIS	COAL	3.7	319.5	51% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503091000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481739 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.708741 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1386.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
140.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	228.0	
53.0	SPOON	DAVIS	UNCLASSIFIED	-	315.0	
-1018.0	BASE OF PENN.		UNCLASSIFIED	-	1386.0	

MAPID: 16503091000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481739 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.708741 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2233.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1136.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1504.0	
-1501.0			LIMESTONE	-	1869.0	
-1865.0		BASE BARLOW	LIMESTONE	-	2233.0	

MAPID: 16503091000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481739 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.708741 **DATE COLLECTED:** 2 / 0 / 1957
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2695.0 **LOG TYPE:** Electric Log
SOURCE: SHARP OLEN D, LEACH W A 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
236.0	CARBONDALE	SURVANT	COAL	0.0	132.0	
138.0	CARBONDALE	COLCHESTER	COAL	0.5	230.0	
73.0	CARBONDALE	DEKOVEN	COAL	3.0	295.0	
73.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	295.0	
52.0	CARBONDALE	DAVIS	COAL	3.7	316.0	
-12.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	380.0	27% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-22.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	390.0	

MAPID: 16503703000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1120' S line, 2620' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.475251 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.70537 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 290.2 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 30-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	99.0	0.0	
266.0	CARBONDALE		ROCK	44.0	99.0	
222.0	CARBONDALE	SURVANT	COAL	1.0	143.0	UNCERTAIN CORRELATION
221.0	CARBONDALE		ROCK	59.0	144.0	
162.0	CARBONDALE	COLCHESTER	COAL	2.0	203.0	UNCERTAIN CORRELATION
160.0	CARBONDALE		ROCK	62.0	205.0	
98.0	CARBONDALE	DEKOVEN	COAL	3.0	267.0	
95.0	CARBONDALE		ROCK	16.5	270.0	
78.5	CARBONDALE	DAVIS	COAL	3.7	286.5	

MAPID: 16503704000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 10' S line, 2620' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.47526 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.702306 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 267.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 32-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			UNCONSOLIDATED	100.0	0.0	
261.0	CARBONDALE		ROCK	23.0	100.0	
238.0	CARBONDALE	SURVANT	COAL	1.5	123.0	UNCERTAIN CORRELATION
236.5	CARBONDALE		ROCK	65.5	124.5	
171.0	CARBONDALE	COLCHESTER	COAL	2.0	190.0	UNCERTAIN CORRELATION
169.0	CARBONDALE		ROCK	43.0	192.0	
126.0	CARBONDALE	DEKOVEN	COAL	3.0	235.0	
123.0	CARBONDALE		ROCK	25.5	238.0	
97.5	CARBONDALE	DAVIS	COAL	4.0	263.5	

MAPID: 16503716000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1040' S line, 1320' E line of NW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473136 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.707005 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 296.2 **LOG TYPE:**
SOURCE: JOHN T. BOYD 11-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
223.5	CARBONDALE	SURVANT	COAL	2.5	141.5	
139.0	CARBONDALE	COLCHESTER	COAL	0.0	226.0	
96.2	CARBONDALE	DEKOVEN	COAL	3.2	268.8	
96.2	CARBONDALE	LOWER DEKOVEN	COAL	0.0	268.8	
76.1	CARBONDALE	DAVIS	COAL	3.9	288.9	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503716000C **VERSION:** 2 **PROJECT:** NCRDS92

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1040' S line, 1320' E line of NW SE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.473136 **GEOLOGIST:** C TREWORGY

CONFIDENTIAL: N **LATITUDE:** 37.707005 **DATE COLLECTED:** 11 / 3 / 1971

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 296.2 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 11-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			CLAY	17.0	0.0	
348.0			CLAY	23.0	17.0	
325.0			CLAY	58.0	40.0	STONEY
267.0			SAND	4.0	98.0	
263.0	CARBONDALE		SANDSTONE	5.0	102.0	
258.0	CARBONDALE		SHALE	33.5	107.0	
224.5	CARBONDALE	SURVANT - UPPER	COAL	1.0	140.5	
223.5	CARBONDALE		SHALE	8.5	141.5	
215.0	CARBONDALE	SURVANT - LOWER	COAL	1.5	150.0	
213.5	CARBONDALE		SHALE	12.5	151.5	
201.0	CARBONDALE		SANDSTONE	7.0	164.0	
194.0	CARBONDALE		SANDY SHALE	49.0	171.0	
145.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.0	220.0	
139.0	SPOON		SANDSTONE	34.5	226.0	WITH SDY SH BANDS
104.5	SPOON		DARK SHALE	8.3	260.5	
96.2	SPOON	DEKOVEN	COAL	3.2	268.8	
93.0	SPOON		UNDERCLAY	1.5	272.0	
91.5	SPOON		GRAY SANDSTONE	1.8	273.5	
89.7	SPOON		GRAY SILTSTONE	1.6	275.3	
88.1	SPOON		GRAY SANDSTONE	3.8	276.9	
84.4	SPOON		GRAY SHALE	4.9	280.6	
79.5	SPOON		DARK GRAY SHALE	0.5	285.5	
79.0	SPOON		BLACK SHALE	2.9	286.0	
76.1	SPOON	DAVIS	COAL	3.9	288.9	
72.2	SPOON		GRAY SILTSTONE	1.8	292.8	LOG SAYS 'SEATROCK'
70.4	SPOON		GRAY SILTSTONE	1.6	294.6	

MAPID: 16503778000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2630' N line, 10' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466164 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.709766 **DATE COLLECTED:** 3 / 23 / 1971
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E309 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
249.5	CARBONDALE	HOUCHIN CREEK	COAL	2.0	118.5	
193.0	CARBONDALE	SURVANT	COAL	2.0	175.0	
119.0	CARBONDALE	COLCHESTER	COAL	0.0	249.0	
67.5	CARBONDALE	DEKOVEN	COAL	3.0	300.5	
67.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	300.5	
45.5	CARBONDALE	DAVIS	COAL	4.0	322.5	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503705000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 10' S line, 1320' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481027 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687552 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 363.5 **LOGGED (FT.):** 204.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 40-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.5			UNCONSOLIDATED	25.0	0.0	
338.5	CARBONDALE		ROCK	24.0	25.0	
314.5	CARBONDALE	SURVANT	COAL	4.0	49.0	UNCERTAIN CORRELATION
310.5	CARBONDALE		ROCK	73.0	53.0	
237.5	CARBONDALE	COLCHESTER	COAL	1.0	126.0	UNCERTAIN CORRELATION
236.5	CARBONDALE		ROCK	49.5	127.0	
187.0	CARBONDALE	DEKOVEN	COAL	3.0	176.5	
184.0	CARBONDALE		ROCK	21.0	179.5	
163.0	CARBONDALE	DAVIS	COAL	4.0	200.5	

MAPID: 16503779000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.485572 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691148 **DATE COLLECTED:** 8 / 28 / 1970
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. F50 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.5	CARBONDALE	SURVANT	COAL	2.5	75.5	
210.0	CARBONDALE	COLCHESTER	COAL	0.5	152.0	
156.0	CARBONDALE	DEKOVEN	COAL	3.6	206.0	
156.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	206.0	
129.9	CARBONDALE	DAVIS	COAL	4.3	232.1	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503789000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.471015 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691206 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. T **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.0	CARBONDALE	SURVANT	COAL	2.5	71.0	
200.7	CARBONDALE	COLCHESTER	COAL	1.0	154.3	
153.0	CARBONDALE	DEKOVEN	COAL	3.3	202.0	
153.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	202.0	
131.6	CARBONDALE	DAVIS	COAL	4.3	223.4	12% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503756000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 150' N line, 2625' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456737 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.702014 **DATE COLLECTED:** 1 / 29 / 1971
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E192D **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
230.0	CARBONDALE	SURVANT	COAL	2.0	123.0	
130.0	CARBONDALE	DEKOVEN	COAL	2.5	223.0	
130.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	223.0	
100.0	CARBONDALE	DAVIS	COAL	4.0	253.0	74% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503790000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 2040' N line, 1790' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.460076 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.696764 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. P6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
270.4	CARBONDALE	COLCHESTER	COAL	1.2	84.6	
217.3	CARBONDALE	DEKOVEN	COAL	3.3	137.7	
217.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	137.7	
190.0	CARBONDALE	DAVIS	COAL	4.7	165.0	

MAPID: 16500418000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.443035 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691497 **DATE COLLECTED:** 0 / 0 / 1964
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SHAWNEETOWN C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNKNOWN	0.0	0.0	

MAPID: 16503757000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' N line, 2000' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.436011 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.698963 **DATE COLLECTED:** 10 / 28 / 1970
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E172 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
245.0	CARBONDALE	COLCHESTER	COAL	0.0	110.0	
188.0	CARBONDALE	DEKOVEN	COAL	3.0	167.0	
188.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	167.0	
160.6	CARBONDALE	DAVIS	COAL	4.3	194.4	61% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503758000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1300' N line, 0' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429061 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.699069 **DATE COLLECTED:** 11 / 6 / 1970
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. E175 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
263.0	CARBONDALE	COLCHESTER	COAL	1.0	92.0	
211.0	CARBONDALE	DEKOVEN	COAL	3.0	144.0	
211.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	144.0	
182.5	CARBONDALE	DAVIS	COAL	4.0	172.5	41% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503784000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 20' S line, 2640' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.554756 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687308 **DATE COLLECTED:** 2 / 20 / 1971
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 241.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			CLAY	15.0	0.0	
405.0			SANDSTONE	10.0	15.0	
395.0			SHALE	15.0	25.0	
380.0			LIMESTONE	88.0	40.0	
292.0			SHALE	40.0	128.0	
252.0			SHALE	2.0	168.0	BLACK
250.0			LIMESTONE	35.0	170.0	
215.0			SHALE	12.0	205.0	
203.0			COAL	2.5	217.0	
200.5			SANDSTONE	5.5	219.5	
195.0			SHALE	11.5	225.0	DARK
183.5			COAL	3.8	236.5	
179.8			SHALE	0.8	240.2	

MAPID: 16503792000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 0' S line, 790' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.431939 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687938 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. G35 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
331.8	CARBONDALE	DEKOVEN	COAL	3.7	42.2	
331.8	CARBONDALE	LOWER DEKOVEN	COAL	0.0	42.2	
304.9	CARBONDALE	DAVIS	COAL	4.6	69.1	18% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503793000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' S line, 2640' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.43849 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691505 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. I **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.0	CARBONDALE	COLCHESTER	COAL	1.3	33.0	
260.8	CARBONDALE	DEKOVEN	COAL	2.7	97.2	
260.8	CARBONDALE	LOWER DEKOVEN	COAL	0.0	97.2	
236.0	CARBONDALE	DAVIS	COAL	4.0	122.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503794000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1510' S line, 0' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429146 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.692135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. J **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
337.5	CARBONDALE	COLCHESTER	COAL	0.5	32.5	
279.1	CARBONDALE	DEKOVEN	COAL	3.0	90.9	
279.1	CARBONDALE	LOWER DEKOVEN	COAL	0.0	90.9	
256.2	CARBONDALE	DAVIS	COAL	4.3	113.8	34% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503795000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433737 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.69156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. L **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.4	CARBONDALE	DEKOVEN	COAL	3.0	92.6	
275.4	CARBONDALE	LOWER DEKOVEN	COAL	0.0	92.6	
253.3	CARBONDALE	DAVIS	COAL	4.3	114.7	18% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503796000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44766 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691399 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. M **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
284.1	CARBONDALE	COLCHESTER	COAL	0.4	72.9	
232.0	CARBONDALE	DEKOVEN	COAL	3.5	125.0	
232.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	125.0	
201.4	CARBONDALE	DAVIS	COAL	4.3	155.6	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503797000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433737 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.69156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. N **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.5	CARBONDALE	COLCHESTER	COAL	0.7	57.5	
247.2	CARBONDALE	DEKOVEN	COAL	3.0	113.8	
247.2	CARBONDALE	LOWER DEKOVEN	COAL	0.0	113.8	
216.3	CARBONDALE	DAVIS	COAL	4.0	144.7	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503798000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.433692 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.695336 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. O **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.0	CARBONDALE	COLCHESTER	COAL	1.3	65.0	
237.7	CARBONDALE	DEKOVEN	COAL	2.9	120.3	
237.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	120.3	
210.7	CARBONDALE	DAVIS	COAL	4.3	147.3	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503799000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2640' N line, 0' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.429105 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.695371 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. P **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.0	CARBONDALE	DEKOVEN	COAL	3.0	110.0	
250.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	110.0	
224.0	CARBONDALE	DAVIS	COAL	4.3	136.0	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503800000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.443044 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.698915 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. P5 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
207.0	CARBONDALE	DEKOVEN	COAL	3.1	148.0	
207.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	148.0	
174.3	CARBONDALE	DAVIS	COAL	4.4	180.7	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502572000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41627 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.698032 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 420.0 **LOG TYPE:** Electric Log
SOURCE: GRANT N L **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
1.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	360.0	
-59.0	SPOON	DAVIS	UNCLASSIFIED	-	420.0	

MAPID: 16502572000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41627 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.698032 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:**
SOURCE: GRANT N L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1017.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1378.0	
-1349.0			LIMESTONE	-	1710.0	

MAPID: 16502572000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41627 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.698032 **DATE COLLECTED:** 7 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1786.0 **LOG TYPE:** Electric Log
SOURCE: GRANT N L, CHURCH NEWT 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
148.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	213.0	
68.0	CARBONDALE	SURVANT	COAL	0.8	293.0	
2.0	CARBONDALE	COLCHESTER	COAL	0.5	359.0	
-44.0	CARBONDALE	DEKOVEN	COAL	3.0	405.0	
-44.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	405.0	
-59.0	CARBONDALE	DAVIS	COAL	2.5	420.0	
-89.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	450.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-99.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	460.0	
-138.0	TRADEWATER	MT. RORAH	COAL	1.2	499.0	

MAPID: 16503759000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 150' N line, 2500' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.420335 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.702212 **DATE COLLECTED:** 10 / 23 / 1970
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. D179G **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.5	CARBONDALE	COLCHESTER	COAL	1.5	123.5	
183.5	CARBONDALE	DEKOVEN	COAL	3.0	171.5	
183.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	171.5	
158.6	CARBONDALE	DAVIS	COAL	4.0	196.4	62% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503780000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 0' S line, 800' E line of SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.42724 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.695306 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. F3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
189.0	CARBONDALE	DEKOVEN	COAL	3.3	171.0	
189.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	171.0	
168.5	CARBONDALE	DAVIS	COAL	4.3	191.5	

MAPID: 16503801000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424565 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.691601 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. K **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
295.5	CARBONDALE	DEKOVEN	COAL	3.0	79.5	
295.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	79.5	
273.3	CARBONDALE	DAVIS	COAL	4.0	101.7	16% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503802000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2640' N line, 1320' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.424519 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.695352 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. Q **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
246.1	CARBONDALE	DEKOVEN	COAL	3.1	116.9	
246.1	CARBONDALE	LOWER DEKOVEN	COAL	0.0	116.9	
222.8	CARBONDALE	DAVIS	COAL	4.3	140.2	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503803000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 34 **QUARTERS/FOOTAGES:** 30' N line, 1600' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.423457 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.702553 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 205.7 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. P1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCLASSIFIED	201.0	0.0	
159.0			COAL	4.7	201.0	

MAPID: 16503187000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 9S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.378469 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.691683 **DATE COLLECTED:** 5 / 28 / 1958
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 160.5 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. 125 **WELL TYPE:** Coal Test
COMMENT: C.BURNETT FARM;FROM DRILLERS LOG & CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0			SAND/CLAY	46.5	0.0	
317.5			SANDSTONE/SHALE	3.8	46.5	INTERLAMINATED; =BLUE SH ON DRILL LOG
313.7			SANDY SHALE	3.3	50.3	SIMILAR TO ABOVE
310.3			SANDSTONE/SHALE	9.7	53.7	SS INTBD SHY SS,STYSH;C SPARS,STS FRAGS
300.7			SANDSTONE	48.2	63.3	HARD, MED GRAINED; W/ SLST
252.5			SANDSTONE	35.5	111.5	SIMILAR TO ABOVE BUT COARSER
217.0			SANDSTONE	4.5	147.0	AS ABOVE; W/ INTRLAMS OF SH
212.5			SILTY SHALE	9.0	151.5	WELL LAMINATED

MAPID: 16500061000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE NW SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.605081 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.683384 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-BLUEBIRD C C # 1 **WELL TYPE:** Strip Mine
COMMENT: SLOPE MINE IN 1929, STRIP 1930-1935

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500331500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.607283 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687062 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CLARK C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500476000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610299 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.681068 **DATE COLLECTED:** 6 / 0 / 1906

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 304.0 **LOG TYPE:** Drillers Log

SOURCE: O'GARA COAL CO., #17 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	16.0	0.0	
371.0			SAND & GRAVEL	5.0	16.0	
366.0	CARBONDALE		SHALE	25.0	21.0	
341.0	CARBONDALE		BLACK SHALE	12.0	46.0	
329.0	CARBONDALE		BLACK SHALE	1.0	58.0	
328.0	CARBONDALE		UNKNOWN	2.4	59.0	LOG HAS ROCK
325.6	CARBONDALE		BLACK SHALE & COAL	1.6	61.4	
324.0	CARBONDALE	SPRINGFIELD	COAL	2.4	63.0	
321.6	CARBONDALE		UNDERCLAY	1.6	65.4	
320.0	CARBONDALE		SANDSTONE	30.0	67.0	
290.0	CARBONDALE		BLACK SHALE	15.0	97.0	
275.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	112.0	
273.5	CARBONDALE		UNDERCLAY	0.5	113.5	
273.0	CARBONDALE		BLACK SHALE	5.0	114.0	
268.0	CARBONDALE	SURVANT	COAL	1.0	119.0	
267.0	CARBONDALE		SANDSTONE	8.0	120.0	
259.0	CARBONDALE		SANDY SHALE	12.0	128.0	
247.0	CARBONDALE		SANDSTONE	49.0	140.0	
198.0	CARBONDALE		BLACK SHALE	14.0	189.0	
184.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.8	203.0	
179.2	CARBONDALE	COLCHESTER	COAL	1.4	207.8	
177.8	SPOON		UNDERCLAY	2.8	209.2	
175.0	SPOON		SANDSTONE	29.6	212.0	
145.4	SPOON	DEKOVEN	COAL	3.4	241.6	
142.0	SPOON		UNDERCLAY	1.0	245.0	
141.0	SPOON		SANDSTONE	10.0	246.0	
131.0	SPOON		BLACK SHALE	8.0	256.0	
123.0	SPOON		BLACK SHALE	2.2	264.0	
120.8	SPOON	DAVIS	COAL	4.8	266.2	
116.0	SPOON		UNDERCLAY	15.0	271.0	
101.0	SPOON		SANDSTONE	18.0	286.0	

MAPID: 16500476000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.610299 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.681068 **DATE COLLECTED:** 6 / 0 / 1906
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 304.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
387.0			UNCONSOLIDATED	16.0	0.0	
371.0			ROCK	47.0	16.0	
324.0			COAL	2.2	63.0	
321.8			ROCK	46.8	65.2	
275.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	112.0	
273.5			ROCK	5.5	113.5	
268.0			COAL	1.0	119.0	
267.0			ROCK	31.7	120.0	
235.3			COAL	3.5	151.7	
231.8			ROCK	21.2	155.2	
210.7			COAL	4.2	176.3	
206.5			ROCK	33.0	180.5	

MAPID: 16500477000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.609695 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.682452 **DATE COLLECTED:** 5 / 28 / 1906
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., WHOOLERY #6 **WELL TYPE:** Coal Test
COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	19.0	0.0	
-			SHALE	5.0	19.0	
-			SHALE	16.0	24.0	
-			BLACK SHALE	8.0	40.0	
-			UNKNOWN	1.7	48.0	LOG HAS BROWN BOULDER
-			BLACK SHALE	0.3	49.7	
-	CARBONDALE	ST. DAVID	LIMESTONE	2.0	50.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	52.0	
-	CARBONDALE	SPRINGFIELD	COAL	1.8	54.2	
-			UNDERCLAY	1.0	56.0	

MAPID: 16500477000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.609695 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.682452 **DATE COLLECTED:** 6 / 28 / 1906
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	19.0	0.0	
361.0			ROCK	35.2	19.0	
325.8			COAL	1.8	54.2	
324.0			ROCK	1.0	56.0	

MAPID: 16500477000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.609695 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.682452 **DATE COLLECTED:** 5 / 0 / 1906
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO. WHO6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
324.0	CARBONDALE	HOUCHIN CREEK	COAL	2.2	63.0	
268.0	CARBONDALE	SURVANT	COAL	1.0	119.0	
179.1	CARBONDALE	COLCHESTER	COAL	1.5	207.9	
145.3	CARBONDALE	DEKOVEN	COAL	3.5	241.7	
145.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	241.7	
120.8	CARBONDALE	DAVIS	COAL	4.2	266.2	46% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503557000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.606133 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3127C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HOUCHIN CREEK	COAL	1.9	93.0	
-	CARBONDALE	SURVANT	COAL	1.8	140.0	
-	CARBONDALE	COLCHESTER	COAL	1.5	236.5	
-	CARBONDALE	DEKOVEN	COAL	3.4	275.5	
-	CARBONDALE	LOWER DEKOVEN	COAL	0.0	275.0	
-	CARBONDALE	DAVIS	COAL	4.2	297.1	54% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 165273A0011F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE NE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.611904 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.686129 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 36.0 **LOG TYPE:**
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	14.0	0.0	
376.0			ROCK	16.0	14.0	
360.0	CARBONDALE	SPRINGFIELD	COAL	4.0	30.0	
356.0			ROCK	2.0	34.0	

MAPID: 16503823000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616631 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.679667 **DATE COLLECTED:** 12 / 4 / 1972
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	14.0	0.0	
366.0			ROCK	59.0	14.0	
307.0			COAL	1.0	73.0	
306.0			ROCK	6.0	74.0	

MAPID: 16524052000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.626377 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.679174 **DATE COLLECTED:** 7 / 12 / 1976
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	22.0	0.0	
353.0			SHALE	14.0	22.0	
339.0			COAL	2.0	36.0	
337.0			ROCK	0.0	38.0	

MAPID: 16503558000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.635004 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673169 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Other Core Study
SOURCE: PEABODY COAL CO. 3129C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
341.0	CARBONDALE	SURVANT	COAL	1.8	36.0	
245.0	CARBONDALE	COLCHESTER	COAL	0.5	132.0	
213.0	CARBONDALE	DEKOVEN	COAL	3.3	164.0	
213.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	164.0	
193.0	CARBONDALE	DAVIS	COAL	3.9	184.0	

MAPID: 16523927000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64005 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.682819 **DATE COLLECTED:** 11 / 25 / 1975
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	20.0	0.0	
360.0			ROCK	52.0	20.0	
308.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	72.0	
306.0	CARBONDALE		ROCK	0.0	74.0	

MAPID: 16500478000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.668115 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.677862 **DATE COLLECTED:** 7 / 17 / 1905
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 68.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., HOLE #5 **WELL TYPE:** Coal Test
COMMENT: JAS. PANKEY FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	15.0	0.0	
402.0	CARBONDALE		SANDSTONE	6.0	15.0	
396.0	CARBONDALE		UNDERCLAY	9.0	21.0	
387.0	CARBONDALE		SHALE	27.0	30.0	
360.0	CARBONDALE	EXCELLO	BLACK SHALE	7.8	57.0	
352.2	CARBONDALE	HOUCHIN CREEK	COAL	2.4	64.8	
349.9	CARBONDALE		UNDERCLAY	1.0	67.1	

MAPID: 16500478000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SE NW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.668115 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.677862 **DATE COLLECTED:** 7 / 17 / 1905
SURFACE ELEVATION (FT.): 417.0 **LOGGED (FT.):** 68.2 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
417.0			UNCONSOLIDATED	15.0	0.0	
402.0			ROCK	49.8	15.0	
352.2	CARBONDALE	HOUCHIN CREEK	COAL	2.4	64.8	
349.8	CARBONDALE		ROCK	0.0	67.2	

MAPID: 16503568000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.656578 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673278 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Other Core Study
SOURCE: PEABODY COAL CO. 3312C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
299.0	CARBONDALE	SURVANT	COAL	3.3	76.0	
212.5	CARBONDALE	COLCHESTER	COAL	0.8	162.5	
187.2	CARBONDALE	DEKOVEN	COAL	3.3	187.8	
187.2	CARBONDALE	LOWER DEKOVEN	COAL	0.0	187.8	
172.6	CARBONDALE	DAVIS	COAL	3.5	202.4	

MAPID: 16500420601M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1320' N line, 660' W line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.687102 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.683526 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 4.8 **LOG TYPE:**
SOURCE: MINE NOTES-BLUEBIRD C C **WELL TYPE:** Strip Mine
COMMENT: SAMPLED BY CADY.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		SHALE	-		
-	CARBONDALE	SPRINGFIELD	COAL	4.8		
-	CARBONDALE		UNDERCLAY	-		

MAPID: 16503554000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672707 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.679635 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Other Core Study
SOURCE: PEABODY COAL CO. A-539C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	51.0	
316.0	CARBONDALE	SURVANT	COAL	2.5	99.0	
235.5	CARBONDALE	COLCHESTER	COAL	0.5	179.5	
185.0	CARBONDALE	DEKOVEN	COAL	3.0	230.0	
185.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	230.0	
173.4	CARBONDALE	DAVIS	COAL	3.4	241.6	

MAPID: 16500331400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.692239 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.685765 **DATE COLLECTED:** 6 / 0 / 1964
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 49.7 **LOG TYPE:**
SOURCE: MINE NOTES-NEW OAK HILL C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	45.0	0.0	
375.0	CARBONDALE	SPRINGFIELD	COAL	4.7	45.0	

MAPID: 16502400000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 504' N line, 250' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679581 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.660321 **DATE COLLECTED:** 10 / 0 / 1940
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 1190.0 **LOG TYPE:** Electric Log
SOURCE: PARKER CHAS & FRANK **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
198.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	222.0	
150.0	SPOON	DAVIS	UNCLASSIFIED	-	270.0	
-770.0	BASE OF PENN.		UNCLASSIFIED	-	1190.0	

MAPID: 16502400000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 504' N line, 250' W line of SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.679581 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.660321 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 2162.0 **LOG TYPE:**
SOURCE: PARKER CHAS & FRANK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-926.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1346.0	
-1342.0			LIMESTONE	-	1762.0	
-1742.0		BASE BARLOW	LIMESTONE	-	2162.0	

MAPID: 16503566000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.672965 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.661364 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Other Core Study
SOURCE: PEABODY COAL CO. 3309 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0	CARBONDALE	SURVANT	COAL	2.4	54.0	
294.5	CARBONDALE	COLCHESTER	COAL	0.5	135.5	
248.0	CARBONDALE	DEKOVEN	COAL	3.2	182.0	
248.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	182.0	
231.9	CARBONDALE	DAVIS	COAL	3.6	198.1	

MAPID: 16503567000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.682023 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.668552 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3310 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	CARBONDALE	HOUCHIN CREEK	COAL	1.9	18.0	
343.2	CARBONDALE	SURVANT	COAL	2.4	66.8	
262.2	CARBONDALE	COLCHESTER	COAL	0.4	147.8	
216.4	CARBONDALE	DEKOVEN	COAL	3.7	193.6	
216.4	CARBONDALE	LOWER DEKOVEN	COAL	0.0	193.6	
203.0	CARBONDALE	DAVIS	COAL	3.5	207.0	

MAPID: 16524365000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** 400' S line, 130' E line of NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.680793 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.66647 **DATE COLLECTED:** 7 / 24 / 1980
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	10.0	0.0	
410.0			ROCK	42.0	10.0	
368.0			COAL	1.5	52.0	
366.5			ROCK	0.0	53.5	

MAPID: 165273B0041F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.683755 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.668056 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 16.0 **LOG TYPE:**
SOURCE: MINE NOTES-GLUSKOTER STONEFORT C C TEST **WELL TYPE:** Strip Mine
COMMENT: OTHER SAMPLES AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	10.0	0.0	
400.0			ROCK	0.0	10.0	
400.0	CARBONDALE		SHALE	4.0	10.0	
396.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	14.0	
394.1	CARBONDALE		UNDERCLAY	0.0	15.9	

MAPID: 16500331700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.663127 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.664622 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 104.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DAVENPORT C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	100.0	0.0	
285.0	SPOON	DEKOVEN	COAL	4.5	100.0	
280.5	SPOON		ROCK	-	104.5	
-	SPOON	DAVIS	COAL	-		

MAPID: 16503569000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE SE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657888 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.666899 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3314C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
273.5	CARBONDALE	COLCHESTER	COAL	0.5	101.5	
222.0	CARBONDALE	DEKOVEN	COAL	3.3	153.0	
222.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	153.0	
208.0	CARBONDALE	DAVIS	COAL	3.5	167.0	29% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502453000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64367 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.665452 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 50.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA COAL CO., MINE # 15,HOLE #22 **WELL TYPE:** Coal Test
COMMENT: NO ELEV. GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	14.0	0.0	
-			COAL	3.0	14.0	
-			SHALE	24.5	17.0	
-			COAL	4.0	41.5	STREAKED W/ BKSH
-			UNDERCLAY	5.0	45.5	
-			COAL	0.0	50.5	

MAPID: 16502453000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 10 **QUARTERS/FOOTAGES:**
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.64367 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.665452 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 50.5 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	14.0	0.0	
-			COAL	3.0	14.0	
-			SHALE	24.5	17.0	
-			COAL	4.0	41.5	
-			UNDERCLAY	0.0	45.5	

MAPID: 16501422000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.617525 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.658851 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.9	CARBONDALE	DEKOVEN	COAL	3.2	36.1	
351.9	CARBONDALE	LOWER DEKOVEN	COAL	0.0	36.1	
330.0	CARBONDALE	DAVIS	COAL	4.2	58.0	

MAPID: 16501426000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NE SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.626079 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.662139 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 5 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
343.8	CARBONDALE	COLCHESTER	COAL	1.3	48.2	
314.0	CARBONDALE	DEKOVEN	COAL	3.2	78.0	
314.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	78.0	
291.0	CARBONDALE	DAVIS	COAL	4.5	101.0	

MAPID: 16503556000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.598525 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.672359 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3099 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
327.0	CARBONDALE	COLCHESTER	COAL	0.0	78.0	
271.5	CARBONDALE	DEKOVEN	COAL	3.2	133.5	
269.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	135.5	
247.7	CARBONDALE	DAVIS	COAL	4.6	157.3	53% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502399000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 13 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.600375 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.645116 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2014.0 **LOG TYPE:**
SOURCE: SMOKEY OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-819.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1211.0	
-1202.0			LIMESTONE	-	1594.0	
-1622.0		BASE BARLOW	LIMESTONE	-	2014.0	

MAPID: 165273A0012F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.620435 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.65656 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 5.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	2.0		
-			COAL	3.3		
-			ROCK	-		

MAPID: 16500069804M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.661698 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.643863 **DATE COLLECTED:** 8 / 9 / 1954
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 38.5 **LOG TYPE:**
SOURCE: MINE NOTES-SAXTON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0			UNCONSOLIDATED	20.0	0.0	
460.0			SANDSTONE	10.0	20.0	
450.0			SHALE	4.9	30.0	
445.1	SPOON	DEKOVEN	COAL	3.2	34.9	
442.0	SPOON		UNDERCLAY	0.5	38.0	

MAPID: 16500069802M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW SE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.655948 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.644814 **DATE COLLECTED:** 6 / 10 / 1954
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 16.3 **LOG TYPE:**
SOURCE: MINE NOTES-SAXTON C C **WELL TYPE:** Strip Mine
COMMENT: 100' FROM E. END OF E. PIT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		SHALE	12.3		
-	SPOON	DAVIS	COAL	3.4		
-	SPOON		UNDERCLAY	0.5		

MAPID: 16501427000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.654177 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.649914 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
311.5	CARBONDALE	DEKOVEN	COAL	3.1	61.5	
311.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	61.5	
289.9	CARBONDALE	DAVIS	COAL	3.6	83.1	14% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16501428000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.665631 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.651709 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 7 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.8	CARBONDALE	COLCHESTER	COAL	1.0	45.2	
332.9	CARBONDALE	DEKOVEN	COAL	2.4	88.1	
332.9	CARBONDALE	LOWER DEKOVEN	COAL	0.0	88.1	
314.7	CARBONDALE	DAVIS	COAL	3.2	106.3	

MAPID: 16503570000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW SW SW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.70761 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.646131 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3315C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.5	CARBONDALE	COLCHESTER	COAL	0.5	64.5	
280.0	CARBONDALE	DEKOVEN	COAL	3.3	110.0	
280.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	110.0	
263.2	CARBONDALE	DAVIS	COAL	3.9	126.8	

MAPID: 16500042700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.677293 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.638626 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 24.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-ROSS MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	-		
-	SPOON	DEKOVEN	COAL	3.0		
-	SPOON		SANDSTONE	10.0		
-	SPOON		SHALE	4.5		
-	SPOON	DAVIS	COAL	3.2		
-	SPOON		UNDERCLAY	4.0		

MAPID: 16500069803M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE SE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.653766 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639269 **DATE COLLECTED:** 8 / 7 / 1954
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 33.9 **LOG TYPE:**
SOURCE: MINE NOTES-SAXTON C C **WELL TYPE:** Strip Mine
COMMENT: S. END OF E. PIT OTHER SAMPLES AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	15.0	0.0	
395.0				15.0	15.0	
380.0			SHALE	0.3	30.0	
379.7			CLAYSTONE	0.3	30.3	
379.4	SPOON	DEKOVEN	COAL	3.3	30.6	

MAPID: 16500069801M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NE NE
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.657189 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.64018 **DATE COLLECTED:** 6 / 9 / 1954
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 8.8 **LOG TYPE:**
SOURCE: MINE NOTES-SAXTON C C **WELL TYPE:** Strip Mine
COMMENT: 100'N OF S END OF E. PIT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	5.3		
-	SPOON	DAVIS	COAL	3.3		
-	SPOON		UNDERCLAY	0.3		

MAPID: 16500331800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE SW NW NW
QUADRANGLE: CARRIER MILLS **LONGITUDE:** -88.669823 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640132 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 43.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-MCNEW C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCONSOLIDATED	40.0	0.0	
390.0	SPOON	DAVIS	COAL	3.5	40.0	

MAPID: 16502601000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.622584 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.631389 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 1812.0 **LOG TYPE:**
SOURCE: HELGEN VIRGIL I **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-588.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	976.0	
-986.0			LIMESTONE	-	1374.0	
-1424.0		BASE BARLOW	LIMESTONE	-	1812.0	

MAPID: 16503075000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624787 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.638625 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 915.0 **LOG TYPE:** Electric Log
SOURCE: MARTIN, PAUL H. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-537.0	BASE OF PENN.		UNCLASSIFIED	-	915.0	

MAPID: 16503075000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.624787 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.638625 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1900.0 **LOG TYPE:**
SOURCE: MARTIN, PAUL H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-692.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1073.0	
-1102.0			LIMESTONE	-	1483.0	
-1519.0		BASE BARLOW	LIMESTONE	-	1900.0	

MAPID: 165273A0013F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616126 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640896 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 15.7 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	-	0.0	
-	SPOON		ROCK	15.0		
-	SPOON		COAL	0.7		
-			ROCK	-		

MAPID: 165273A0014F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.615551 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640448 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 44.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	27.0	0.0	
353.0	SPOON		COAL	1.0	27.0	
352.0			ROCK	16.0	28.0	

MAPID: 165273A0015F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.616151 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639091 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 50.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT: SECTION ALSO MEASURED BY PAYNE IN 1939

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0	SPOON		ROCK	26.7	0.0	
383.3			COAL	1.0	26.7	
382.3			ROCK	17.8	27.7	
364.5			COAL	1.5	45.5	
363.0			ROCK	3.0	47.0	

MAPID: 16500480000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.618384 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.615127 **DATE COLLECTED:** 7 / 6 / 1906
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 136.0 **LOG TYPE:** Drillers Log
SOURCE: O'GARA C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
580.0			UNCONSOLIDATED	13.0	0.0	
567.0			ROCK	40.0	13.0	
527.0			COAL	1.0	53.0	
526.0			ROCK	51.0	54.0	
475.0			SHALE	25.0	105.0	
450.0			COAL	4.8	130.0	
445.2			UNDERCLAY	1.2	134.8	

MAPID: 16525821000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1400' S line, 1200' E line
QUADRANGLE: STONEFORT **LONGITUDE:** -88.67635 **GEOLOGIST:** C KOROE
CONFIDENTIAL: N **LATITUDE:** 37.617816 **DATE COLLECTED:** 7 / 31 / 1986
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Survey Core Study
SOURCE: COGEOMAP S-2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0	PLEISTOCENE		UNCONSOLIDATED	12.5	0.0	
412.5	SPOON		SHALE	7.5	12.5	GRAY
405.0	SPOON		SHALE	3.9	20.0	BLACK
401.1	SPOON	DELWOOD	COAL	3.5	23.9	BRIGHT-BANDED
397.6	SPOON		CLAYSTONE & SILTSTONE	22.3	27.4	SILTY
375.3	SPOON		SHALE	6.1	49.7	DARK
369.2	SPOON		COAL	0.5	55.8	POSSIBLE CORE LOSS
368.7	SPOON		CLAYSTONE & SILTSTONE	10.7	56.3	
358.0	SPOON		SANDSTONE/SHALE	5.7	67.0	FOSSILIFEROUS AT BASE
352.3	SPOON		LIMESTONE	0.6	72.7	
351.7	SPOON		SHALE & SILTSTONE	22.7	73.3	
329.0	SPOON		SHALE	0.6	96.0	BLACK
328.4	SPOON		COAL	0.7	96.6	CLAYEY, POOR; OLD TOWN MEMBER
327.7	SPOON		UNDERCLAY	1.2	97.3	
326.5	SPOON		SILTSTONE	57.5	98.5	SHALEY; LIGHT
269.0	ABBOTT	MURRAY BLUFF	SANDSTONE	20.0	156.0	CLEAN, WITH COAL LAMINATIONS; LIGHT
249.0	ABBOTT	MURRAY BLUFF	SANDSTONE	15.8	176.0	BROWN
233.2	ABBOTT	MURRAY BLUFF	SANDSTONE	73.2	191.8	LIGHT, SHALEY, NODULES AT BASE

MAPID: 165273C0071F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.693755 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.60003 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	-		
-			COAL	-		

MAPID: 16501462000C **VERSION:** 1 **PROJECT:** COGEOMAP

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 200' S line, 200' E line of NW SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.677411 **GEOLOGIST:** BARGH
CONFIDENTIAL: N **LATITUDE:** 37.603491 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 74.5 **LOG TYPE:**
SOURCE: STONEFORT COAL CO. **WELL TYPE:** Coal Test
COMMENT: DRILL HOLE #5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	10.0	0.0	
430.0			SANDSTONE	5.0	10.0	
425.0			SANDSTONE	53.0	15.0	
372.0			SHALE	6.5	68.0	

MAPID: 16503593000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.677845 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.602014 **DATE COLLECTED:** 5 / 0 / 1968
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 50.0 **LOG TYPE:** Drillers Log
SOURCE: RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			CLAYSTONE	4.0	0.0	
456.0			SANDSTONE	36.0	4.0	
420.0			SHALE	2.0	40.0	
418.0			SANDSTONE	8.0	42.0	

MAPID: 16524368000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** 1090' S line, 2056' E line
QUADRANGLE: STONEFORT **LONGITUDE:** -88.67932 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.602257 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 123.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			CLAYSTONE	10.0	0.0	
410.0			SANDSTONE	29.5	10.0	
380.5			COAL	2.0	39.5	
378.5			UNDERCLAY	5.5	41.5	
373.0			SHALE & SANDSTONE	71.0	47.0	
302.0			SANDSTONE	5.0	118.0	

MAPID: 165273C0072F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SE SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.673316 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.602084 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 20.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	20.0		

MAPID: 165273C0032F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.677845 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.602014 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 3.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	-		
-			COAL	3.0		

MAPID: 16502452000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 150' S line, 650' W line of NW SE

QUADRANGLE: STONEFORT **LONGITUDE:** -88.660937 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.603459 **DATE COLLECTED:** 0 / 0 / 1917

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 2685.0 **LOG TYPE:** Drillers Log

SOURCE: OHIO OIL CO. **WELL TYPE:** Oil and Gas Test

COMMENT: STUDIES AVAIL DUBOIS,BLAIR,WORKMAN SS#25

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNKNOWN	400.0	0.0	
40.0			SANDSTONE/SHALE	190.0	400.0	
-150.0			UNKNOWN	185.0	590.0	
-335.0			UNKNOWN	110.0	775.0	
-445.0			UNKNOWN	140.0	885.0	
-585.0			UNKNOWN	105.0	1025.0	
-690.0			UNKNOWN	75.0	1130.0	
-765.0			UNKNOWN	75.0	1205.0	
-840.0			UNKNOWN	85.0	1280.0	
-925.0			UNKNOWN	170.0	1365.0	
-1095.0			UNKNOWN	180.0	1535.0	
-1275.0			UNKNOWN	40.0	1715.0	
-1315.0			UNKNOWN	20.0	1755.0	
-1335.0			UNKNOWN	85.0	1775.0	
-1420.0			LIMESTONE	155.0	1860.0	
-1575.0			LIMESTONE AND SANDSTONE	185.0	2015.0	
-1760.0			LIMESTONE	35.0	2200.0	
-1795.0			LIMESTONE	405.0	2235.0	
-2200.0			LIMESTONE	-	2640.0	

MAPID: 16503548000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE NE NW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.663767 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.610837 **DATE COLLECTED:** 10 / 0 / 1967
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 110.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			CLAYSTONE	18.0	0.0	
402.0			SHALE	6.0	18.0	
396.0			SHALE	22.0	24.0	
374.0			COAL	0.5	46.0	
373.5			SANDSTONE	16.5	46.5	
357.0			SHALE	36.0	63.0	
321.0			SANDSTONE	11.0	99.0	

MAPID: 16525820000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2300' N line, 500' E line
QUADRANGLE: STONEFORT **LONGITUDE:** -88.655884 **GEOLOGIST:** C KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.607703 **DATE COLLECTED:** 8 / 5 / 1986
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 140.5 **LOG TYPE:** Survey Core Study
SOURCE: COGEOMAP S-3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
416.0	SPOON		SANDSTONE	21.4	9.0	ORANGE
394.6	SPOON		SANDSTONE	2.2	30.4	SHALEY; GRAY
392.4	SPOON		SILTSTONE	17.8	32.6	SHALEY; GRAY
374.6	SPOON		SHALE	25.8	50.4	
348.8	SPOON		SHALE	2.1	76.2	DARK
346.7	SPOON		COAL	0.4	78.3	OLD TOWN MEMBER; SHALEY
346.3	SPOON		UNDERCLAY	3.7	78.7	SHALEY
342.6	SPOON		SILTSTONE	2.7	82.4	SHALEY
339.9	ABBOTT	MURRAY BLUFF	SANDSTONE	55.4	85.1	SHALEY; LIGHT

MAPID: 165273C0084F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.671043 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.600267 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: SEVERAL NOTES FROM THIS RAVINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE	-		

MAPID: 165273C0076F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.657581 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.600304 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: SEVERAL RAVAINES WITH SS/SD OUTCROPS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
620.0	CASEYVILLE		SANDSTONE/SHALE	50.0	0.0	
-	CASEYVILLE		SHALE	-		

MAPID: 165273C0077F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.657551 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.605803 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 5.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE	5.0		
-			COAL	0.5		
-			UNDERCLAY	-		
-			SANDSTONE	-		

MAPID: 165273C0075F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.668812 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.602112 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: SEVERAL SS OUTCROPS ALONG RAVINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE	-		
-			SHALE	20.0		

MAPID: 165273C0074F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.664315 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.60212 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE/SHALE	-		

MAPID: 165273C0073F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.659818 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.602131 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE	-		

MAPID: 16524054000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW NE NE
QUADRANGLE: STONEFORT **LONGITUDE:** -88.63994 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.613522 **DATE COLLECTED:** 12 / 2 / 1978
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 150.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			CLAYSTONE	14.0	0.0	
386.0			SANDSTONE	11.0	14.0	
375.0			COAL	2.0	25.0	
373.0			SHALE	4.0	27.0	
369.0			SANDSTONE	4.0	31.0	
365.0			SHALE	47.0	35.0	
318.0			SANDSTONE	0.0	82.0	
318.0			SHALE	2.0	82.0	

MAPID: 165273C0086F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.653081 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.600298 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: DIP SW. LOC POSSIBLY SESWSW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SHALE	-		

MAPID: 165273C0085F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.649652 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.603014 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: DIP N W. SEE F273086

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CASEYVILLE		SANDSTONE	-		

MAPID: 165273C0078F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.653619 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.603513 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: SEVERAL NOTES ON STRUCTURE IN THIS SEC.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	20.0		
-			SANDSTONE	10.0		
-			SANDSTONE	30.0		
-			SHALE	-		

MAPID: 165273C0079F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.646241 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.603897 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 110.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT: STONEFORT BLUFF ANTICLINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0	CASEYVILLE		SANDSTONE	60.0	0.0	
-			SANDSTONE	50.0		

MAPID: 16500481000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW NW NE

QUADRANGLE: STONEFORT **LONGITUDE:** -88.625445 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.613186 **DATE COLLECTED:** 0 / 0 / 1916

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1281.0 **LOG TYPE:** Drillers Log

SOURCE: OHIO OIL CO. **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	7.0	0.0	
393.0			SILTSTONE	18.0	7.0	
375.0			SHALE	70.0	25.0	
305.0			LIMESTONE/SILTSTONE	25.0	95.0	
280.0			SANDSTONE	115.0	120.0	
165.0			SILTSTONE	25.0	235.0	
140.0			COAL	1.0	260.0	
139.0			SILTSTONE/SANDSTONE	69.0	261.0	
70.0			LIMESTONE	10.0	330.0	
60.0			SILTSTONE/SANDSTONE	250.0	340.0	
-190.0			LIMESTONE	52.0	590.0	
-242.0			SILTSTONE	68.0	642.0	
-310.0			LIMESTONE	90.0	710.0	
-400.0			SILTSTONE	5.0	800.0	
-405.0			ROCK	20.0	805.0	
-425.0			LIMESTONE	45.0	825.0	
-470.0			SILTSTONE/SANDSTONE	20.0	870.0	
-490.0			SANDSTONE/LIMESTONE	5.0	890.0	
-495.0			SILTSTONE/LIMESTONE	10.0	895.0	
-505.0			SILTSTONE	65.0	905.0	
-570.0			SANDSTONE	4.0	970.0	
-574.0			LIMESTONE	6.0	974.0	
-580.0			SILTSTONE/SANDSTONE	57.0	980.0	
-637.0			LIMESTONE	11.0	1037.0	
-648.0			SILTSTONE	32.0	1048.0	
-680.0			SANDSTONE	10.0	1080.0	
-690.0			SILTSTONE	17.0	1090.0	
-707.0			SANDSTONE	144.0	1107.0	

MAPID: 165273C0087F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.627835 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.607564 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: ALONG AXIS OF STRUCTURE. STRIKE W

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
540.0	CASEYVILLE		SANDSTONE	-	0.0	

MAPID: 165273C0081F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.630201 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.603825 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: LOCAL FAULTING PARALLEL TO ANTICLINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
520.0	CASEYVILLE		SANDSTONE	5.0	0.0	
-	CASEYVILLE		SHALE	40.0		
-	CASEYVILLE		SANDSTONE	20.0		

MAPID: 165273C0080F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 5E **SECTION:** 35 **QUARTERS/FOOTAGES:** SE SE SE NW
QUADRANGLE: STONEFORT **LONGITUDE:** -88.627254 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.607102 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 199.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT: GENERALIZED SECTION. THICKNESS ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
520.0	CASEYVILLE		SANDSTONE	50.0	0.0	
-	CASEYVILLE		SHALE	6.0		
-	CASEYVILLE		CONGLOMERATE	3.0		
-	CASEYVILLE		SHALE	60.0		
-	CASEYVILLE		SANDSTONE	50.0		
-	CASEYVILLE		SHALE	30.0		

MAPID: 16500482000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498828 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.680739 **DATE COLLECTED:** 3 / 0 / 1929
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Drillers Log
SOURCE: ELLIS & YOUNG, MICK HEIRS ETAL 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
260.0	CARBONDALE	DEKOVEN	COAL	2.0	105.0	
260.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	105.0	
237.0	CARBONDALE	DAVIS	COAL	4.0	128.0	

MAPID: 16500482000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498828 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.680739 **DATE COLLECTED:** 4 / 0 / 1929
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Drillers Log
SOURCE: ELLIS & YOUNG **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	10.0	0.0	
355.0			ROCK	97.0	10.0	
258.0			COAL	2.0	107.0	
256.0			ROCK	21.0	109.0	
235.0	SPOON	DAVIS	COAL	4.0	130.0	
231.0			ROCK	271.0	134.0	
-40.0			ROCK	3.0	405.0	
-43.0			ROCK	1194.0	408.0	

MAPID: 16503564000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498845 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.677189 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3307 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
253.2	CARBONDALE	DEKOVEN	COAL	3.3	106.8	
253.2	CARBONDALE	LOWER DEKOVEN	COAL	0.0	106.8	
227.0	CARBONDALE	DAVIS	COAL	4.1	133.0	39% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503685000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1660' S line, 1250' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498872 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.677777 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 147.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 37-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			UNCONSOLIDATED	92.0	0.0	
269.0	CARBONDALE		ROCK	25.5	92.0	
243.5	CARBONDALE	DEKOVEN	COAL	3.0	117.5	
240.5	CARBONDALE		ROCK	22.7	120.5	
217.8	CARBONDALE	DAVIS	COAL	4.3	143.2	

MAPID: 16503686000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2770' S line, 1260' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498805 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.680841 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 160.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 39-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			UNCONSOLIDATED	94.0	0.0	
267.0	CARBONDALE		ROCK	40.5	94.0	
226.5	CARBONDALE	DEKOVEN	COAL	3.0	134.5	
223.5	CARBONDALE		ROCK	18.9	137.5	
204.6	CARBONDALE	DAVIS	COAL	4.1	156.4	

MAPID: 16503687000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 10' S line, 660' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50097 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.673257 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 141.3 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 41-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			UNCLASSIFIED	113.5	0.0	
247.5	CARBONDALE	DEKOVEN	COAL	3.2	113.5	
244.3	CARBONDALE		UNCLASSIFIED	20.5	116.7	
223.8	CARBONDALE	DAVIS	COAL	4.1	137.2	

MAPID: 16503717000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2620' N line, 660' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.487941 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.680256 **DATE COLLECTED:** 11 / 16 / 1971
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 1-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
243.7	CARBONDALE	DEKOVEN	COAL	3.2	118.3	
243.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	118.3	
220.2	CARBONDALE	DAVIS	COAL	4.2	141.8	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503718000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1250' S line, 1850' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.492092 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.676533 **DATE COLLECTED:** 11 / 10 / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 2-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
258.0	CARBONDALE	DEKOVEN	COAL	3.0	103.0	
258.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	103.0	
233.0	CARBONDALE	DAVIS	COAL	0.0	128.0	9% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503728000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 10' S line, 1340' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498605 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673217 **DATE COLLECTED:** 12 / 15 / 1971
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 21-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
239.0	CARBONDALE	DAVIS	COAL	4.0	121.0	32% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503729000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1950' S line, 1300' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498687 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.678576 **DATE COLLECTED:** 12 / 16 / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 24-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
233.0	CARBONDALE	DEKOVEN	COAL	3.0	128.0	
233.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	128.0	
208.0	CARBONDALE	DAVIS	COAL	3.8	153.0	

MAPID: 16503730000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' N line, 1100' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.499328 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.683747 **DATE COLLECTED:** 12 / 17 / 1971
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 25-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
275.5	CARBONDALE	COLCHESTER	COAL	0.2	88.5	
237.7	CARBONDALE	DEKOVEN	COAL	3.2	126.3	
237.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	126.3	
214.7	CARBONDALE	DAVIS	COAL	4.2	149.3	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503738000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 990' S line, 1340' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.498578 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.675922 **DATE COLLECTED:** 12 / 5 / 1970
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A444C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
256.5	CARBONDALE	DEKOVEN	COAL	3.5	105.5	
256.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	105.5	
230.5	CARBONDALE	DAVIS	COAL	4.0	131.5	66% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503739000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1300' S line, 660' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.487961 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.676601 **DATE COLLECTED:** 1 / 6 / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. A474 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0	PLEISTOCENE		CLAY	41.0	0.0	TAN
320.0	PLEISTOCENE		SAND	17.0	41.0	
303.0			CLAY	36.0	58.0	
267.0			BLACK SHALE	4.0	94.0	
263.0			COAL	3.0	98.0	
260.0			SHALE	7.0	101.0	
253.0			SANDSTONE	10.0	108.0	
243.0			BLACK SHALE	3.0	118.0	
240.0			SANDY DARK SHALE	5.0	121.0	
235.0			SANDSTONE/SHALE	34.0	126.0	

MAPID: 16500483000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521122 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673749 **DATE COLLECTED:** 11 / 0 / 1928
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1415.0 **LOG TYPE:** Drillers Log
SOURCE: RODGER, RUMSEY & BARNES, SMITH **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
304.0	CARBONDALE	COLCHESTER	COAL	2.0	74.0	
263.0	CARBONDALE	DEKOVEN	COAL	5.0	115.0	
263.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	115.0	
245.0	CARBONDALE	DAVIS	COAL	4.0	133.0	
188.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	190.0	
168.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	210.0	

MAPID: 16500483000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521122 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673749 **DATE COLLECTED:** 8 / 25 / 1928
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1415.0 **LOG TYPE:** Drillers Log
SOURCE: SMITH, DRILLER **WELL TYPE:** Oil and Gas Test
COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	20.0	0.0	
358.0			ROCK	54.0	20.0	
304.0			COAL	2.0	74.0	
302.0			ROCK	39.0	76.0	
263.0	CARBONDALE		COAL	5.0	115.0	
258.0	CARBONDALE		SHALE	8.0	120.0	
250.0	CARBONDALE		COAL	4.0	128.0	
246.0			ROCK	1278.0	132.0	

MAPID: 16500760000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.520976 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.680116 **DATE COLLECTED:** 6 / 0 / 1929
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1765.0 **LOG TYPE:** Drillers Log
SOURCE: ELLIS ETAL, GERSBACHER 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.0	CARBONDALE	COLCHESTER	COAL	2.0	74.0	
247.0	CARBONDALE	DEKOVEN	COAL	5.0	130.0	
247.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	130.0	
232.0	CARBONDALE	DAVIS	COAL	4.0	145.0	

MAPID: 16500760000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NW NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.520976 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.680116 **DATE COLLECTED:** 6 / 0 / 1929
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1765.0 **LOG TYPE:** Drillers Log
SOURCE: ELLIS CO **WELL TYPE:** Oil and Gas Test
COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.0			UNCONSOLIDATED	30.0	0.0	
347.0			ROCK	44.0	30.0	
303.0			COAL	2.0	74.0	
301.0			ROCK	54.0	76.0	
247.0	SPOON	DAVIS	COAL	5.0	130.0	
242.0	SPOON		SHALE	10.0	135.0	
232.0	SPOON	DAVIS	COAL	4.0	145.0	
228.0			ROCK	1616.0	149.0	

MAPID: 16502396000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 355' S line, 355' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.520455 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.674273 **DATE COLLECTED:** 8 / 0 / 1954
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1525.0 **LOG TYPE:** Electric Log
SOURCE: ASHOFF, J. F., JR., SMITH A L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
248.0	CARBONDALE	DEKOVEN	COAL	3.0	120.0	
248.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	120.0	
223.0	CARBONDALE	DAVIS	COAL	4.0	145.0	
158.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	210.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
146.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	222.0	
113.0	TRADEWATER	MT. RORAH	COAL	2.0	255.0	

MAPID: 16502551000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 500' N line, 500' W line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.51065 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.679042 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1190.0 **LOG TYPE:** Electric Log
SOURCE: BAUER, JOSEPH E. **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
177.0	SPOON	DAVIS	UNCLASSIFIED	-	190.0	
-823.0	BASE OF PENN.		UNCLASSIFIED	-	1190.0	

MAPID: 16502551000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 500' N line, 500' W line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.51065 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.679042 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2040.0 **LOG TYPE:**
SOURCE: BAUER, JOSEPH E. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-960.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1327.0	
-1315.0			LIMESTONE	-	1682.0	
-1673.0		BASE BARLOW	LIMESTONE	-	2040.0	

MAPID: 16502551000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 500' N line, 500' W line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.51065 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.679042 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2566.0 **LOG TYPE:** Electric Log
SOURCE: BAUER, JOSEPH E., GERSBACHER W M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
223.0	CARBONDALE	DEKOVEN	COAL	2.5	144.0	
223.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	144.0	
197.0	CARBONDALE	DAVIS	COAL	3.5	170.0	
142.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	225.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
130.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	237.0	

MAPID: 16503706000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.504268 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.686443 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2077.0 **LOG TYPE:**

SOURCE: SHAWNEE PETRO. ASSOC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-973.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1342.0	
-1345.0			LIMESTONE	-	1714.0	
-1708.0		BASE BARLOW	LIMESTONE	-	2077.0	

MAPID: 16503719000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2640' N line, 2600' E line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512221 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.680033 **DATE COLLECTED:** 11 / 4 / 1971

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: JOHN T. BOYD 9-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
213.7	CARBONDALE	DEKOVEN	COAL	1.5	155.3	
213.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	155.3	
208.8	CARBONDALE	DAVIS	COAL	4.2	160.2	

MAPID: 16503731000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2630' N line, 1340' E line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512488 **GEOLOGIST:** HOURLY

CONFIDENTIAL: N **LATITUDE:** 37.676772 **DATE COLLECTED:** 12 / 15 / 1971

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 166.8 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD 20-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			CLAY	40.0	0.0	AND TAN CLAY, SANDY
325.0			CLAY	48.0	40.0	
277.0			CLAY	4.0	88.0	SANDY
273.0			DARK SHALE	5.5	92.0	
267.5			GRAY SANDSTONE	42.7	97.5	HARD
224.8			GRAY SHALE	3.0	140.2	
221.8			COAL	3.1	143.2	
218.7			CLAYSTONE	2.0	146.3	
216.7			SANDSTONE	2.0	148.3	
214.7			GRAY SANDSTONE	3.0	150.3	
211.7			GRAY SHALE	1.2	153.3	
210.5			GRAY SANDSTONE	4.8	154.5	
205.7			SHALY SANDSTONE	1.5	159.3	
204.2			SILTSTONE	4.0	160.8	MED GRAY
200.2			DARK SHALE	2.0	164.8	

MAPID: 16503732000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512366 **GEOLOGIST:** HOURLY
CONFIDENTIAL: N **LATITUDE:** 37.680302 **DATE COLLECTED:** 12 / 16 / 1971
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 134.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 22-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0			CLAY	25.0	0.0	
338.0			CLAY	33.0	25.0	AND TAN CLAY
305.0			BLACK SHALE	1.0	58.0	
304.0			COAL	0.2	59.0	
303.8			GRAY SANDSTONE	24.8	59.2	
279.0			SANDY SHALE	22.5	84.0	
256.5			COAL	3.3	106.5	
253.2			CLAYSTONE	0.2	109.8	
253.0			GRAY SANDSTONE	6.5	110.0	
246.5			SANDY SHALE	11.5	116.5	
235.0			BLACK SHALE	1.8	128.0	
233.2			COAL	4.0	129.8	
229.2			CLAYSTONE	0.2	133.8	

MAPID: 16503733000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 8' S line, 2640' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512427 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673304 **DATE COLLECTED:** 12 / 15 / 1971
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 23-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.5	CARBONDALE	DEKOVEN	COAL	3.1	95.5	
268.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	95.5	
244.0	CARBONDALE	DAVIS	COAL	4.2	120.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503734000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** 50' N line, 2630' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512252 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687183 **DATE COLLECTED:** 12 / 21 / 1971
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 27-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
187.0	CARBONDALE	DEKOVEN	COAL	2.8	176.0	
187.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	176.0	
168.4	CARBONDALE	DAVIS	COAL	4.1	194.6	41% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16599901009C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521041 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.677387 **DATE COLLECTED:** 0 / 0 / 1966
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 76.5 **LOG TYPE:** Drillers Log
SOURCE: J. RIDER, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	18.0	0.0	
362.0			ROCK	56.0	18.0	
306.0			COAL	2.5	74.0	

MAPID: 16500484000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526943 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673738 **DATE COLLECTED:** 0 / 0 / 1908
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1716.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY OIL, WARREN W O **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
305.0	CARBONDALE	DEKOVEN	COAL	1.0	80.0	
305.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	80.0	
260.0	CARBONDALE	DAVIS	COAL	3.6	125.0	

MAPID: 16500484000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526943 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673738 **DATE COLLECTED:** 0 / 0 / 1908
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1716.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE COUNTY OIL C **WELL TYPE:** Oil and Gas Test
COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	30.0	0.0	
355.0			ROCK	50.0	30.0	
305.0			COAL	1.0	80.0	
304.0			ROCK	44.0	81.0	
260.0			COAL	3.5	125.0	
256.5			ROCK	1587.5	128.5	

MAPID: 16501881000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.522852 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.674203 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 1502.0 **LOG TYPE:** Drillers Log
SOURCE: ROGERS ETAL, SAYLOR M 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
329.0	CARBONDALE	DEKOVEN	COAL	2.0	60.0	
329.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	60.0	
259.0	CARBONDALE	DAVIS	COAL	5.0	130.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502631000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.525203 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.674198 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 1293.0 **LOG TYPE:**
SOURCE: MISENER WAYNE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-904.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1293.0	

MAPID: 16502650000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534488 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.675999 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 1570.0 **LOG TYPE:** Electric Log
SOURCE: RUNYON FLOYD L **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	SPOON	DAVIS	UNCLASSIFIED	-	142.0	
-1171.0	BASE OF PENN.		UNCLASSIFIED	-	1570.0	

MAPID: 16502650000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534488 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.675999 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 1296.0 **LOG TYPE:**
SOURCE: RUNYON FLOYD L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-897.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1296.0	

MAPID: 16502697000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.527496 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.674192 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2008.0 **LOG TYPE:**
SOURCE: MISENER, WAYNE DRLG. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-881.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1257.0	
-1267.0			LIMESTONE	-	1643.0	
-1632.0		BASE BARLOW	LIMESTONE	-	2008.0	

MAPID: 16503560000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 165' N line, 165' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53952 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.686764 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3303 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
296.7	CARBONDALE	COLCHESTER	COAL	0.2	78.3	
236.0	CARBONDALE	DEKOVEN	COAL	3.1	139.0	
236.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	139.0	
213.7	CARBONDALE	DAVIS	COAL	3.6	161.3	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503571000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 165' N line, 495' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.523116 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.686821 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3316 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
259.0	CARBONDALE	COLCHESTER	COAL	0.5	106.0	
207.0	CARBONDALE	DEKOVEN	COAL	3.4	158.0	
207.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	158.0	
183.5	CARBONDALE	DAVIS	COAL	3.8	181.5	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503688000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 20' N line, 10' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521422 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.687226 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 186.9 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 29-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0			UNCLASSIFIED	107.5	0.0	
253.5	CARBONDALE	COLCHESTER	COAL	0.5	107.5	UNCERTAIN CORRELATION
253.0	CARBONDALE		UNCLASSIFIED	50.5	108.0	
202.5	CARBONDALE	DEKOVEN	COAL	3.3	158.5	
199.2	CARBONDALE		UNCLASSIFIED	20.7	161.8	
178.5	CARBONDALE	DAVIS	COAL	4.4	182.5	

MAPID: 16503689000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 10' S line, 2440' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530186 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.673304 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 173.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 31-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.0			UNCLASSIFIED	87.0	0.0	
279.0	CARBONDALE	COLCHESTER	COAL	0.5	87.0	UNCERTAIN CORRELATION
278.5	CARBONDALE		UNCLASSIFIED	56.0	87.5	
222.5	CARBONDALE	DEKOVEN	COAL	3.3	143.5	
219.2	CARBONDALE		UNCLASSIFIED	22.7	146.8	
196.5	CARBONDALE	DAVIS	COAL	4.0	169.5	

MAPID: 16503690000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1590' S line, 1' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521607 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.677684 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 138.1 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 33-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCLASSIFIED	113.5	0.0	
261.5	CARBONDALE	DEKOVEN	COAL	3.2	113.5	
258.3	CARBONDALE		UNCLASSIFIED	17.1	116.7	
241.2	CARBONDALE	DAVIS	COAL	4.3	133.8	

MAPID: 16503720000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2620' N line, 2600' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530585 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.680019 **DATE COLLECTED:** 11 / 5 / 1971
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 13-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.5	CARBONDALE	COLCHESTER	COAL	0.2	73.5	
241.0	CARBONDALE	DEKOVEN	COAL	3.9	124.0	
241.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	124.0	
216.0	CARBONDALE	DAVIS	COAL	3.7	149.0	

MAPID: 16503740000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 250' N line, 250' W line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.534759 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.67622 **DATE COLLECTED:** 8 / 30 / 1970
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A403M **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.7	CARBONDALE	COLCHESTER	COAL	0.2	60.3	
296.5	CARBONDALE	DEKOVEN	COAL	3.2	118.5	
296.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	118.5	
276.4	CARBONDALE	DAVIS	COAL	3.5	138.6	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503741000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 150' S line, 2540' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530524 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673688 **DATE COLLECTED:** 1 / 11 / 1971
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A405 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	DEKOVEN	COAL	3.0	82.0	
298.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	82.0	
278.0	CARBONDALE	DAVIS	COAL	3.8	102.0	

MAPID: 16503742000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1370' S line, 1200' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.536106 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.677045 **DATE COLLECTED:** 1 / 19 / 1971
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A452P **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.5	CARBONDALE	DEKOVEN	COAL	3.0	121.5	
268.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	121.5	
248.0	CARBONDALE	DAVIS	COAL	3.8	142.0	

MAPID: 16503743000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2630' N line, 10' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521589 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.680022 **DATE COLLECTED:** 3 / 22 / 1971
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A509 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
249.5	CARBONDALE	DEKOVEN	COAL	3.0	118.5	
249.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	118.5	
227.3	CARBONDALE	DAVIS	COAL	4.0	140.7	

MAPID: 16500485000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.554594 **GEOLOGIST:** WEIBEL
CONFIDENTIAL: N **LATITUDE:** 37.684278 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 246.1 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.0			UNCONSOLIDATED	4.0	0.0	
454.0	SPOON		SANDSTONE	150.0	4.0	
304.0	SPOON		SHALE	9.0	154.0	
295.0	SPOON		BLACK SHALE	7.9	163.0	
287.1	SPOON	DEKOVEN	COAL	0.1	170.9	
287.0	SPOON		LIMESTONE	11.0	171.0	
276.0	SPOON		SHALE	2.0	182.0	
274.0	SPOON		SANDSTONE	22.0	184.0	
252.0	SPOON		SHALE	8.0	206.0	
244.0	SPOON		BLACK SHALE	5.7	214.0	
238.3	SPOON	DAVIS	COAL	3.3	219.7	
235.1	SPOON		SANDSTONE	10.1	222.9	
225.0	SPOON		BLACK SHALE	8.3	233.0	
216.7	SPOON		COAL	3.6	241.3	
213.2	SPOON		SANDSTONE	1.3	244.8	

MAPID: 16500485000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.554594 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.684278 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 246.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
458.0			UNCONSOLIDATED	4.0	0.0	
454.0			ROCK	166.9	4.0	
287.1			COAL	0.1	170.9	
287.0			ROCK	48.7	171.0	
238.3			COAL	3.3	219.7	
235.1			ROCK	18.3	222.9	
216.8			COAL	3.6	241.2	
213.2			ROCK	1.3	244.8	

MAPID: 16500485000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.554594 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.684278 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 458.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS COAL, 2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.0	CARBONDALE	COLCHESTER	COAL	1.0	171.0	
238.3	CARBONDALE	DEKOVEN	COAL	3.2	219.7	
238.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	219.7	
217.0	CARBONDALE	DAVIS	COAL	3.5	241.0	56% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502624000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550661 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.67587 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 435.0 **LOGGED (FT.):** 1736.0 **LOG TYPE:**
SOURCE: PEP DRILLING COMPANY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-911.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1346.0	
-1301.0			LIMESTONE	-	1736.0	

MAPID: 16503559000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.541483 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.674156 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3302 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.2	CARBONDALE	COLCHESTER	COAL	0.5	86.8	
310.0	CARBONDALE	DEKOVEN	COAL	3.1	150.0	
310.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	150.0	
291.0	CARBONDALE	DAVIS	COAL	3.7	169.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16500331900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577868 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.686994 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-HARRISBURG COAL & MNG CO **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	20.0	0.0	
350.0			ROCK	40.0	20.0	
310.0	CARBONDALE	SPRINGFIELD	COAL	7.0	60.0	
303.0	CARBONDALE		ROCK	-	67.0	

MAPID: 16500332001M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579158 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.686102 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-HARRISBURG COAL & MNG CO, # 2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16500332000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.596872 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687085 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 6.6 **LOG TYPE:**
SOURCE: MINE NOTES-HARRISBURG COAL & MNG C, # 2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	6.6		

MAPID: 16500420300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582936 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687019 **DATE COLLECTED:** 0 / 0 / 1971
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-BROWN BROS EXCAVATING, # 1 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	-		

MAPID: 16500492000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577966 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.683406 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: SALINE GAS C C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	14.0	0.0	
364.0			ROCK	32.5	14.0	
331.5	CARBONDALE	HOUCHIN CREEK	COAL	4.5	46.5	

MAPID: 16503576000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579531 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.672614 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3098 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	CARBONDALE	SURVANT	COAL	2.2	16.0	
294.0	CARBONDALE	COLCHESTER	COAL	0.0	91.0	
224.5	CARBONDALE	DEKOVEN	COAL	3.1	160.5	
224.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	160.5	
201.5	CARBONDALE	DAVIS	COAL	4.0	183.5	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503577000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560542 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.672697 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3097 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
335.0	CARBONDALE	SURVANT	COAL	3.1	45.0	
265.0	CARBONDALE	COLCHESTER	COAL	0.5	115.0	
212.0	CARBONDALE	DEKOVEN	COAL	2.9	168.0	
212.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	168.0	
190.5	CARBONDALE	DAVIS	COAL	3.3	189.5	32% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16500332100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.558198 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.672705 **DATE COLLECTED:** 0 / 0 / 1963
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-WALSE C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		

MAPID: 16500332200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.553327 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.659267 **DATE COLLECTED:** 0 / 0 / 1959
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-SAXTON C C, WALNUT GROVE # 1 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	-		

MAPID: 16500419300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5502 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669947 **DATE COLLECTED:** 0 / 0 / 1964
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 16.7 **LOG TYPE:**
SOURCE: MINE NOTES-JEWEL SISK C C **WELL TYPE:** Strip Mine
COMMENT: SEE FLD NOTES-SMITH & HOPKINS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	-	0.0	
-			ROCK	14.0		
-	CARBONDALE		COAL	2.7		

MAPID: 16500496000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.541758 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.659138 **DATE COLLECTED:** 2 / 0 / 1917
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1020.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-660.0	BASE OF PENN.		UNCLASSIFIED	-	1020.0	

MAPID: 165273A0016F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.556777 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.660229 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 8.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			ROCK	80.0	0.0	
-	CARBONDALE	COLCHESTER	COAL	-		
-	CARBONDALE		COAL	-		
-	CARBONDALE	COLCHESTER	COAL	-		

MAPID: 165273A0017F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.550767 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.67041 **DATE COLLECTED:** 0 / 0 / 1964
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 16.7 **LOG TYPE:**
SOURCE: FLD NOTES-SMITH, SISK MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0			UNCONSOLIDATED	-	0.0	
-			ROCK	14.0		
-			COAL	2.7		

MAPID: 16500093100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526917 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.662262 **DATE COLLECTED:** 0 / 0 / 1971
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE INDEX-JADER FUEL C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	-		

MAPID: 16500420100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.528096 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.661314 **DATE COLLECTED:** 0 / 0 / 1966
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE INDEX-R & F C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16502428000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53942 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.661064 **DATE COLLECTED:** 1 / 0 / 1944
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1040.0 **LOG TYPE:** Electric Log
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-678.0	BASE OF PENN.		UNCLASSIFIED	-	1040.0	

MAPID: 16502428000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53942 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.661064 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1940.0 **LOG TYPE:**
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-811.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1173.0	
-1210.0			LIMESTONE	-	1572.0	
-1578.0		BASE BARLOW	LIMESTONE	-	1940.0	

MAPID: 16502619000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532356 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.668646 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1612.0 **LOG TYPE:**
SOURCE: MISENER WAYNE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-904.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1275.0	
-1241.0			LIMESTONE	-	1612.0	

MAPID: 16503721000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2610' N line, 2604' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.531196 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.666069 **DATE COLLECTED:** 11 / 1 / 1971
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 8-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
309.5	CARBONDALE	DEKOVEN	COAL	3.0	60.5	
309.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	60.5	
289.0	CARBONDALE	DAVIS	COAL	3.5	81.0	

MAPID: 16525522000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1400' S line, 2300' E line

QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530364 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.662352 **DATE COLLECTED:** 11 / 0 / 1985

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Survey Core Study

SOURCE: COGEOMAP H-1 **WELL TYPE:** Stratigraphic Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
465.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
455.0	SPOON		SANDSTONE	29.0	10.0	SUB-DAVIS; SILTY; LIGHT
426.0	SPOON		SANDSTONE	2.1	39.0	SILTY, LIGHT, COAL; SUB-DAVIS
423.9	SPOON	CARRIER MILLS	SHALE	6.9	41.1	DARK
417.0	SPOON	CARRIER MILLS	SHALE	3.3	48.0	HARD; BLACK
413.7	SPOON		CLAYSTONE & SILTSTONE	4.0	51.3	GRAY
409.7	SPOON		SHALE	5.4	55.3	
404.3	SPOON	STONEFORT	LIMESTONE	1.5	60.7	BROWN
402.8	SPOON		SHALE	1.9	62.2	BLACK
400.9	SPOON		SHALE	4.0	64.1	PYRITE BANDS AT BASE; DARK
396.9	SPOON	WISE RIDGE	COAL	0.8	68.1	CLEAN, BANDED
396.1	SPOON		UNDERCLAY	8.9	68.9	OLIVE
387.2	SPOON		SANDSTONE	8.9	77.8	SILTY; GRAY
378.3	SPOON		SHALE	5.8	86.7	DARK
372.5	SPOON	MT. RORAH	COAL	0.7	92.5	WITH 50% SANDY MUDSTONE NODULES
371.8	SPOON		UNDERCLAY	2.6	93.2	
369.2	SPOON		SHALE	7.1	95.8	GRAY
362.1	SPOON		SANDSTONE	10.0	102.9	SILTY
352.1	SPOON		SHALE	4.6	112.9	SILTY, COAL HORIZON AT BASE
347.5	SPOON		CLAYSTONE & SILTSTONE	3.6	117.5	GRAY
343.9	SPOON		SANDSTONE	46.7	121.1	LIGHT
297.2	SPOON		LIMESTONE	1.7	167.8	MITCHELLSVILLE MEMBER; BROWN
295.5	SPOON		CLAYSTONE & SILTSTONE	2.8	169.5	COAL TRACES
292.7	SPOON		SILTSTONE	21.5	172.3	SANDY
271.2	SPOON		SHALE	10.0	193.8	SILTY; DARK
261.2	SPOON		SHALE	0.3	203.8	BLACK
260.9	SPOON	DELWOOD	COAL	5.2	204.1	BLACK SHALE BED IN MIDDLE; BLACK
255.7	SPOON		UNDERCLAY	1.0	209.3	DARK
254.7	SPOON		MUDSTONE	5.6	210.3	DARK
249.2	SPOON		SILTSTONE	5.5	215.8	HARD; GRAY
243.7	SPOON		CLAYSTONE & SILTSTONE	0.5	221.3	WITH COAL HORIZON; BLACK
243.2	SPOON		CLAYSTONE & SILTSTONE	1.2	221.8	PLANT DEBRIS; DARK
242.0	SPOON		SILTSTONE	4.3	223.0	SHALEY; DARK
237.7	SPOON		COAL	0.2	227.3	DULL, IMPURE
237.5	SPOON		SILTSTONE	29.8	227.5	SHALEY
207.7	ABBOTT	MURRAY BLUFF	SANDSTONE	42.7	257.3	SHALEY NEAR TOP

MAPID: 165273A0020F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532013 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.662609 **DATE COLLECTED:** 0 / 0 / 1971
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 2.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BOSTICK **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNKNOWN	-	0.0	
-			COAL	2.0		

MAPID: 165273A0018F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530764 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.665408 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 6.4 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Underground mine
COMMENT: "DRIFT MINE"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	4.0		
-	CARBONDALE	COLCHESTER	COAL	2.4		

MAPID: 165273A0019F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SE NE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.522916 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.662807 **DATE COLLECTED:** 0 / 0 / 1971
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 27.5 **LOG TYPE:**
SOURCE: FLD NOTES-BOSTICK, JADER FUEL CO MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	23.0		
-	SPOON	DAVIS	COAL	4.5		

MAPID: 16500497000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.516546 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.672832 **DATE COLLECTED:** 2 / 0 / 1929
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1456.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG OIL & GAS **WELL TYPE:** Oil and Gas Test
COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	10.0	0.0	
355.0			ROCK	154.0	10.0	
201.0			COAL	5.0	164.0	
196.0			ROCK	1287.0	169.0	

MAPID: 16502578000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.514204 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.663243 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1109.0 **LOG TYPE:** Electric Log
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-747.0	BASE OF PENN.		UNCLASSIFIED	-	1109.0	

MAPID: 16502578000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.514204 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.663243 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1962.0 **LOG TYPE:**
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-883.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1245.0	
-1241.0			LIMESTONE	-	1603.0	
-1600.0		BASE BARLOW	LIMESTONE	-	1962.0	

MAPID: 16503563000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.521162 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.672838 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. 3306 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.2	CARBONDALE	COLCHESTER	COAL	0.5	63.8	
274.0	CARBONDALE	DEKOVEN	COAL	3.3	106.0	
274.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	106.0	
252.3	CARBONDALE	DAVIS	COAL	3.8	127.7	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503722000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1280' N line, 2600' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512458 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.669749 **DATE COLLECTED:** 11 / 2 / 1971
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: JOHN T. BOYD 7-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
293.6	CARBONDALE	DEKOVEN	COAL	2.9	64.4	
293.6	CARBONDALE	LOWER DEKOVEN	COAL	0.0	64.4	
271.4	CARBONDALE	DAVIS	COAL	4.1	86.6	5% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503744000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1320' N line, 1300' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.49892 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.669551 **DATE COLLECTED:** 1 / 8 / 1971
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. A369 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0	PLEISTOCENE		CLAY	20.0	0.0	TAN
341.0	PLEISTOCENE		CLAY	15.0	20.0	
326.0	PLEISTOCENE		SAND	7.0	35.0	
319.0			CLAY	53.0	42.0	
266.0			COAL	1.0	95.0	
265.0			SHALE/SANDSTONE/LIMESTONE	12.0	96.0	
253.0			SANDSTONE	8.0	108.0	

MAPID: 16503745000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 12 **QUARTERS/FOOTAGES:** 30' N line, 30' W line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.503159 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.673182 **DATE COLLECTED:** 1 / 7 / 1971
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. A417 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.5	CARBONDALE	DEKOVEN	COAL	3.0	111.5	
250.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	111.5	
226.5	CARBONDALE	DAVIS	COAL	4.3	135.5	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16501417000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.516972 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.652197 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1508.0 **LOG TYPE:**
SOURCE: VAUGHN JOHN T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-751.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1117.0	
-1142.0			LIMESTONE	-	1508.0	

MAPID: 16503035000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5122 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.655882 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1035.0 **LOG TYPE:** Electric Log
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-675.0	BASE OF PENN.		UNCLASSIFIED	-	1035.0	

MAPID: 16503035000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.5122 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.655882 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1526.0 **LOG TYPE:**
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-808.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1168.0	
-1166.0			LIMESTONE	-	1526.0	

MAPID: 16502397000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.528337 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.655811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1164.0 **LOG TYPE:**
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-799.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1164.0	

MAPID: 16502398000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.532849 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.65572 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1916.0 **LOG TYPE:**
SOURCE: GILLIAM, J. & SPILLER, H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-797.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1162.0	
-1185.0			LIMESTONE	-	1550.0	
-1551.0		BASE BARLOW	LIMESTONE	-	1916.0	

MAPID: 16502429000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.530747 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.650313 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1903.0 **LOG TYPE:**
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-750.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1131.0	
-1154.0			LIMESTONE	-	1535.0	
-1522.0		BASE BARLOW	LIMESTONE	-	1903.0	

MAPID: 16502430000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.523768 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.657774 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1936.0 **LOG TYPE:**
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-823.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1186.0	
-1202.0			LIMESTONE	-	1565.0	
-1573.0		BASE BARLOW	LIMESTONE	-	1936.0	

MAPID: 16502554000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526044 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.655858 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1920.0 **LOG TYPE:**
SOURCE: SUNRAY OIL CORP **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-808.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1170.0	
-1192.0			LIMESTONE	-	1554.0	
-1558.0		BASE BARLOW	LIMESTONE	-	1920.0	

MAPID: 16502628000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.526104 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.654034 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 1910.0 **LOG TYPE:**
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-791.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1155.0	
-1192.0			LIMESTONE	-	1556.0	
-1546.0		BASE BARLOW	LIMESTONE	-	1910.0	

MAPID: 16502646000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.523787 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.655902 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1024.0 **LOG TYPE:** Electric Log
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-659.0	BASE OF PENN.		UNCLASSIFIED	-	1024.0	

MAPID: 16502646000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.523787 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.655902 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1556.0 **LOG TYPE:**
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-808.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1173.0	
-1191.0			LIMESTONE	-	1556.0	

MAPID: 16502699000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53049 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.657574 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1926.0 **LOG TYPE:**
SOURCE: SUNRAY MID-CONT OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-809.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1169.0	
-1207.0			LIMESTONE	-	1567.0	
-1566.0		BASE BARLOW	LIMESTONE	-	1926.0	

MAPID: 165273A0021F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NE SW SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.537098 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.647145 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.4 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	-	0.0	
-			COAL	0.4		
-			ROCK	-		

MAPID: 16500332400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.55106 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.657402 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-HART, DUNCAN C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DAVIS	COAL	-		

MAPID: 16500332300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.55686 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.65653 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 21.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WARD C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	18.0	0.0	
382.0			COAL	3.3	18.0	

MAPID: 16502627000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.544257 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.653748 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1952.0 **LOG TYPE:**
SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-829.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1192.0	
-1222.0			LIMESTONE	-	1585.0	
-1589.0		BASE BARLOW	LIMESTONE	-	1952.0	

MAPID: 165273A0023F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.558636 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.654221 **DATE COLLECTED:** 7 / 0 / 1961
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 51.8 **LOG TYPE:**
SOURCE: FLD NOTES-PARHAM **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	38.3	0.0	
341.7	SPOON	DEKOVEN	COAL	3.0	38.3	
338.7	SPOON		ROCK	10.5	41.3	

MAPID: 165273A0022F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.553465 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.653761 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 13.0 **LOG TYPE:**
SOURCE: FLD NOTES-CADY, WARDS MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	-	0.0	
-			ROCK	8.0		
-			ROCK	2.0		
-	SPOON	DEKOVEN	COAL	3.0		

MAPID: 16500067200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.562725 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.653766 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 4.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-RAMSEY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DAVIS	COAL	4.0		

MAPID: 16500332500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.576705 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.655655 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 20.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-TOLBERT C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	17.0	0.0	
383.0	SPOON		COAL	3.5	17.0	

MAPID: 165273A0024F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.563249 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.657022 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 1.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	1.0		
-			COAL	0.3		
-			ROCK	-		

MAPID: 165273A0025F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560354 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.655621 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 2.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY, HESSON MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.0			ROCK	10.0	0.0	
-			COAL	2.0		
-			ROCK	-		

MAPID: 16500332600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 18 **QUARTERS/FOOTAGES:**
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.588042 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.651 **DATE COLLECTED:** 0 / 0 / 1959
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 79.0 **LOG TYPE:**
SOURCE: MINE NOTES-PADDOCK AUGER C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	75.0	0.0	
-	CARBONDALE	COLCHESTER	COAL	4.0	75.0	

MAPID: 16500420400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SE NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.57063 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.638481 **DATE COLLECTED:** 0 / 0 / 1976
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE MAP-BROWN BROS EXCAVATING C #3 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNKNOWN	0.0	0.0	

MAPID: 16525774000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.560667 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.637133 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.7 **LOGGED (FT.):** 890.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-526.3	BASE OF PENN.		UNCLASSIFIED	-	890.0	

MAPID: 165273A0026F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.566065 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.632062 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 14.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	12.0		
-			COAL	2.2		

MAPID: 16503119000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.542466 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.637456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1855.0 **LOG TYPE:**
SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-719.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1095.0	
-1111.0			LIMESTONE	-	1487.0	
-1479.0		BASE BARLOW	LIMESTONE	-	1855.0	

MAPID: 16525777000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.558376 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.637153 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 923.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-558.0	BASE OF PENN.		UNCLASSIFIED	-	923.0	

MAPID: 165273A0027F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.552814 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.630821 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 27.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	6.0	0.0	
-			COAL	1.0		
-			ROCK	20.0		

MAPID: 165273A0028F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE SW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.553934 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.631727 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 15.9 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT: OTHER NOTES AVAILABLE IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	1.0		
-			COAL	0.1		
-			ROCK	4.2		
-	SPOON		COAL	1.7		
-			ROCK	9.0		

MAPID: 165273A0029F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.53784 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.641222 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 4.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0			ROCK	4.0	0.0	
-			COAL	0.3		
-			ROCK	-		

MAPID: 165273A0032F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE SE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.504978 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639706 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 33.0 **LOG TYPE:** Drillers Log
SOURCE: FLD NOTES-CADY, FARM WELL **WELL TYPE:**
COMMENT: DESCRIBED BY CADY-NO LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	18.0	0.0	
382.0			COAL	1.0	18.0	
381.0			ROCK	9.0	19.0	
372.0	ABBOTT	WILLIS	COAL	3.0	28.0	

MAPID: 165273A0031F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.51041 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.631891 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 44.6 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	31.4	0.0	
388.6			COAL	0.7	31.4	
387.9			ROCK	0.2	32.1	
387.8	ABBOTT		COAL	12.4	32.2	

MAPID: 165273A0033F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.512743 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.631884 **DATE COLLECTED:** 0 / 0 / 1928
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 25.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			ROCK	25.0	0.0	
-			COAL	-		
-			ROCK	-		

MAPID: 165273A0030F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SE SE SE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.50638 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.629606 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 13.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			ROCK	6.0	0.0	
-			COAL	2.0		
-			ROCK	5.0		

MAPID: 16500499000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.489464 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.639123 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1095.0 **LOG TYPE:** Drillers Log
SOURCE: HARRISBURG OIL & GAS **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-720.0	BASE OF PENN.		UNCLASSIFIED	-	1095.0	

MAPID: 165273A0035F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE SE NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.532982 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.624954 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 2.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BENSON **WELL TYPE:** Underground mine
COMMENT: "COAL MINE IN CURLEW COAL"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		COAL	1.3		
-	SPOON		CLAYSTONE	0.0		
-	SPOON		COAL	1.5		
-			ROCK	-		

MAPID: 165273A0036F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.540927 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.628618 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 7.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	4.7		
-			COAL	0.1		
-			ROCK	3.0		

MAPID: 165273A0034F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NW SW NE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.531847 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.624955 **DATE COLLECTED:** 0 / 0 / 1925
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 23.1 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY, MINE **WELL TYPE:** Underground mine
COMMENT: OTHER NOTES AVAILABALE IN THIS MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	5.5		
-			COAL	1.3		
-			CLAYSTONE	0.5		
-			COAL	14.5		
-			ROCK	1.3		

MAPID: 165273D0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW NE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.53128 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.624498 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 47.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			LIMESTONE	-		
-			UNKNOWN	40.0		
-			COAL	3.3		

MAPID: 165273D0011F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SE SW SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.537593 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.614878 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 0.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			LIMESTONE	-		
-	SPOON	BIDWELL	COAL	-		
-			UNDERCLAY	0.3		

MAPID: 165273D0010F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SE SE NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.532996 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.623124 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 1.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	BIDWELL	COAL	1.3		

MAPID: 165273D0009F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1' N line, 1320' W line of SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.536954 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.621746 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 20.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-PAYNE **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	19.0		
-			COAL	1.3		
-			ROCK	-		

MAPID: 165273D0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SE NW SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.537567 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.619457 **DATE COLLECTED:** 8 / 0 / 1932
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 84.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			ROCK	50.0	0.0	
410.0			COAL	0.8	50.0	
409.1				-	50.9	
-	SPOON	MURPHYSBORO	COAL	1.0		
459.0				-	1.0	
-			ROCK	12.3		
-				20.0		

MAPID: 165273D0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NE SE NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.532982 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.624954 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 27.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Underground mine
COMMENT: OTHER NOTES ON THIS MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	22.0		
-			COAL	1.3		
-			CLAYSTONE	0.5		
-			COAL	1.3		
-			UNDERCLAY	2.0		
-			SHALE	-		

MAPID: 165273D0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.533568 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.622667 **DATE COLLECTED:** 8 / 18 / 1932
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 5.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BENSON **WELL TYPE:** Underground mine
COMMENT: "DRIFT OPENING"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	-		
-			SANDSTONE	3.0		
-			SHALE	0.0		
-	SPOON	BIDWELL	COAL	1.3		
-	SPOON		CLAYSTONE	0.0		
-	SPOON	BIDWELL	COAL	1.5		

MAPID: 165273A0038F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577925 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.626427 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 29.4 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			ROCK	28.2	0.0	
401.8			COAL	0.6	28.2	
401.3			ROCK	0.7	28.7	

MAPID: 165273A0037F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.577891 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.62826 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNKNOWN	0.0	0.0	

MAPID: 165273A0039F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.582259 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.62594 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 550.0 **LOGGED (FT.):** 3.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BROKAW, MINE **WELL TYPE:** Underground mine
COMMENT: OTHER FLD NOTES FOR MINE BY CADY,WANLESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	-		
-			COAL	3.5		

MAPID: 165273A0040F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: HARRISBURG **LONGITUDE:** -88.579733 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.627789 **DATE COLLECTED:** 0 / 0 / 1971
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 86.5 **LOG TYPE:**
SOURCE: FLD NOTES-BOSTICK, BROWN BROS MINE **WELL TYPE:** Strip Mine
COMMENT: SEVERAL NOTES FOR THIS MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	8.5	0.0	
441.5			ROCK	20.0	8.5	
421.5	SPOON	DEKOVEN	COAL	2.5	28.5	
419.0	SPOON		ROCK	29.5	31.0	
389.5	SPOON	DAVIS	COAL	3.0	60.5	
386.5	SPOON		ROCK	23.0	63.5	

MAPID: 165273D0013F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 3200' S line, 2250' E line
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.58639 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.622857 **DATE COLLECTED:** 0 / 0 / 1963
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 21.7 **LOG TYPE:**
SOURCE: FLD NOTES-SMITH **WELL TYPE:** Strip Mine
COMMENT: "TEST PIT 6' WIDE, 15' DEEP"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0			UNCONSOLIDATED	8.0	0.0	
492.0			ROCK	11.2	8.0	
480.8			COAL	2.5	19.2	

MAPID: 165273D0012F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.579775 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.620418 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SANDSTONE	-		
-			COAL	-		
-			SHALE	-		

MAPID: 165273D0014F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' N line, 100' W line
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.598203 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.611257 **DATE COLLECTED:** 0 / 0 / 1921
SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 85.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HENBEST **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	30.0		
-			COAL	0.8		
-			ROCK	54.2		

MAPID: 16525523000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1600' S line, 50' E line

QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.541967 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.603812 **DATE COLLECTED:** 11 / 26 / 1985

SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Survey Core Study

SOURCE: COGEOMAP E-1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
480.0	TRADEWATER		SANDSTONE	29.8	10.0	CLAYEY, GRAY, COAL STRINGERS AT BASE
450.2	TRADEWATER		SANDSTONE	1.2	39.8	SILTY, DARK, BURROWED
449.0	TRADEWATER		LIMESTONE	1.0	41.0	MITCHELLSVILLE MEMBER; GRAY
448.0	TRADEWATER		CLAYSTONE & SILTSTONE	4.0	42.0	COAL TRACE AT TOP; GRAY
444.0	TRADEWATER		SILTSTONE	5.0	46.0	
439.0	TRADEWATER		SHALE & SANDSTONE	14.0	51.0	
425.0	TRADEWATER		SHALE	6.0	65.0	DARK
419.0	TRADEWATER		SHALE	0.7	71.0	BLACK
418.3	TRADEWATER	DELWOOD	COAL	1.9	71.7	CLEAN, BRIGHTBANDED
416.4	TRADEWATER		LIMESTONE	2.0	73.6	WITH COAL/UNDERCLAY
414.4	TRADEWATER		UNDERCLAY	5.6	75.6	DARK
408.8	TRADEWATER		MUDSTONE	9.0	81.2	SILTY; DARK
399.8	TRADEWATER		CLAYSTONE & SILTSTONE	1.1	90.2	WITH COAL BED AT TOP; DARK
398.7	TRADEWATER		SANDSTONE	2.2	91.3	CARBONACEOUS; DARK
396.5	TRADEWATER	MURRAY BLUFF	SANDSTONE	34.6	93.5	CLAYEY; LIGHT
361.9	TRADEWATER		SHALE	12.2	128.1	GRAY
349.7	TRADEWATER		SHALE & SANDSTONE	25.4	140.3	LIGHT,THICK COAL STRINGERS AT BASE
324.3	TRADEWATER	MURRAY BLUFF	SANDSTONE	24.4	165.7	CLAYEY, LIGHT, COAL STRINGERS AT BASE
299.9	TRADEWATER		SHALE & SANDSTONE	10.9	190.1	

MAPID: 16525538000C **VERSION:** 1 **PROJECT:**

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 79' N line, 237' E line of SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 12 / 9 / 1986
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 105.0 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	14.0	0.0	
446.0			SHALE	1.8	14.0	
444.2			BLACK SHALE	0.7	15.8	SOME COAL
443.5			SHALE	12.0	16.5	
431.5			COAL	2.8	28.5	
428.8			UNDERCLAY	2.8	31.2	
392.8			SANDSTONE	36.0	67.2	
389.8			LIMESTONE	3.0	70.2	
387.8			SANDSTONE	2.0	72.2	
382.8			SANDSTONE	5.0	77.2	LIMEY
363.0			SANDSTONE	17.0	97.0	
355.0			SHALE	8.0	105.0	

MAPID: 16525540000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 450' N line, 30' E line of SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 5 / 5 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	10.0	0.0	
450.0			SHALE	12.1	10.0	SANDY
438.0			COAL	3.0	22.0	

MAPID: 16525541000C **VERSION:** 1 **PROJECT:**

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 575' N line, 135' E line of SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 5 / 5 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 21.2 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	8.0	0.0	
452.0			GRAY SHALE	11.0	8.0	
441.0			COAL	2.2	19.0	

MAPID: 16525542000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 5 / 6 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 45.8 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	16.0	0.0	
444.0			SHALE	27.8	16.0	SANDY
416.3			COAL	2.0	43.7	

MAPID: 16525543000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 379' S line, 100' E line of SW SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 5 / 6 / 1982
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
470.0	PLEISTOCENE		CLAY	11.0	0.0	
459.0			SHALE	7.0	11.0	SANDY
452.0			SANDSTONE	22.8	18.0	
429.3			COAL	3.3	40.7	.33 PTG NEAR BASE

MAPID: 16525544000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 562' N line, 230' E line of SW SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.548833 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601183 **DATE COLLECTED:** 5 / 11 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 44.8 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	15.0	0.0	
445.0			UNKNOWN	13.0	15.0	NO SAMPLES RECORDED
432.0			SANDSTONE	7.0	28.0	
425.0			SHALE	8.1	35.0	
417.0			COAL	1.8	43.0	

MAPID: 16525545000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 462' N line, 200' E line of SW SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.544173 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601243 **DATE COLLECTED:** 5 / 12 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 50.0 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC 9 **WELL TYPE:** Coal Test
COMMENT: HOLE #9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	SS AND CLAY
448.0			SANDSTONE	8.0	12.0	SOFT
440.0			SHALE	25.3	20.0	SANDY
414.8			COAL	2.0	45.2	
412.8			SHALE	0.3	47.2	PARTING
412.5			COAL	0.9	47.5	
411.6			UNDERCLAY	1.5	48.4	

MAPID: 16525546000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 275' N line, 170' E line of SW SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.544173 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601243 **DATE COLLECTED:** 5 / 13 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 57.3 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC 10 **WELL TYPE:** Coal Test
COMMENT: HOLE #10

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	SS AND CLAY
448.0			SANDSTONE	6.0	12.0	
442.0			LIMESTONE	3.0	18.0	VERY HARD
439.0			LIMESTONE	7.0	21.0	SANDY
432.0			SANDSTONE	5.0	28.0	SHALEY
427.0			SHALE	5.0	33.0	SANDY
422.0			SHALE	15.8	38.0	
406.3			COAL	3.1	53.7	W .33 SH PTG
403.2			UNDERCLAY	0.5	56.8	

MAPID: 16525548000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** 375' S line, 1200' W line of SE SE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.539564 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601296 **DATE COLLECTED:** 5 / 18 / 1982
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 62.7 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC 13 **WELL TYPE:** Coal Test
COMMENT: HOLE #13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0	PLEISTOCENE		CLAY	4.0	0.0	
496.0			SANDSTONE	11.3	4.0	
484.7			SHALE	0.3	15.3	
484.4			SANDSTONE	5.7	15.6	
478.7			COAL	0.1	21.3	
478.6			SANDSTONE	1.6	21.4	
477.1			SHALE	37.0	22.9	SANDY
440.1			COAL	2.7	59.9	WITH 4" SH PTG

MAPID: 165273D0015F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.542784 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.611584 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	ABBOTT	WILLIS	COAL	-		
-			ROCK	-		

MAPID: 16523981000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** 460' N line, 660' W line
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.539345 **GEOLOGIST:** WEIBEL
CONFIDENTIAL: N **LATITUDE:** 37.613148 **DATE COLLECTED:** 9 / 21 / 1977
SURFACE ELEVATION (FT.): 589.0 **LOGGED (FT.):** 5449.0 **LOG TYPE:** Geologic Tops
SOURCE: TEXAS PACIFIC OIL CO **WELL TYPE:** Oil and Gas Test
COMMENT: 4,5 S#61169

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-106.0	MISSISSIPPIAN	KINKAID	LIMESTONE	128.0	695.0	
-234.0	MISSISSIPPIAN	DEGONIA	SANDSTONE	21.0	823.0	
-255.0	MISSISSIPPIAN	CLORE	SHALE	109.0	844.0	
-364.0	MISSISSIPPIAN	PALESTINE	SANDSTONE	77.0	953.0	
-441.0	MISSISSIPPIAN	MENARD	LIMESTONE	96.0	1030.0	
-537.0	MISSISSIPPIAN	WALTERSBURG	SANDSTONE	33.0	1126.0	
-570.0	MISSISSIPPIAN	VIENNA	LIMESTONE	22.0	1159.0	
-592.0	MISSISSIPPIAN	TAR SPRINGS	SANDSTONE	73.0	1181.0	
-675.0			LIMESTONE	67.0	1264.0	
-742.0	MISSISSIPPIAN	HARDINSBURG	SANDSTONE	86.0	1331.0	
-828.0	MISSISSIPPIAN	HANEY	LIMESTONE	56.0	1417.0	
-884.0	MISSISSIPPIAN	FRAILEYS	SHALE	-	1473.0	
-926.0	MISSISSIPPIAN	BEECH CREEK	LIMESTONE	25.0	1515.0	
-951.0	MISSISSIPPIAN	CYPRESS	SANDSTONE	70.0	1540.0	
-1021.0	MISSISSIPPIAN		LIMESTONE	-	1610.0	QUESTIONABLE - RIDENHOWER

MAPID: 16525552000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW SW SW SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.539564 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601296 **DATE COLLECTED:** 5 / 19 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 13.0 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC 17 **WELL TYPE:** Coal Test
COMMENT: HOLE #17 IN BOTTOM OF CREEK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			SHALE	10.2	0.0	
449.9			COAL	2.8	10.1	WITH 4" SH PTG

MAPID: 16525554000C **VERSION:** 1 **PROJECT:** NCRDS17

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.539564 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.601296 **DATE COLLECTED:** 5 / 25 / 1982
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: ENERGY SUPPLY INC 19 **WELL TYPE:** Coal Test
COMMENT: HOLE #19

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	9.8	0.0	
450.2			SANDSTONE	22.7	9.8	
427.5			SHALE	1.3	32.5	
426.2			SANDSTONE	1.2	33.8	
425.0			SHALE	8.0	35.0	
417.0			SANDSTONE	17.0	43.0	

MAPID: 165273D0020F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW NW NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.541072 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.611131 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 166.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-BENSON **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	-		
-			ROCK	-		
-	SPOON	BIDWELL	COAL	0.7		
-			ROCK	-		

MAPID: 165273D0016F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.535947 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.611618 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: FLD NOTES-BROKAW **WELL TYPE:** Strip Mine
COMMENT: "COAL MINE FILLED WITH WATER"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	-		

MAPID: 165273D0017F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.539879 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.613947 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	60.0		
-			COAL	-		
-			ROCK	-		

MAPID: 165273D0018F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE SE NW NW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.537644 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.612079 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 2.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT: SEVERAL PITS IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SHALE	-		
-	ABBOTT	WILLIS	COAL	2.0		

MAPID: 165273D0019F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 6E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE NE NE SW
QUADRANGLE: EDDYVILLE **LONGITUDE:** -88.533217 **GEOLOGIST:** BARGH M.
CONFIDENTIAL: N **LATITUDE:** 37.60556 **DATE COLLECTED:** 8 / 0 / 1933
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 1.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT: IN CREEK BED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
520.0			ROCK	0.0	0.0	
-	ABBOTT	WILLIS	COAL	1.0		

MAPID: 16503176000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE SE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374594 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.681055 **DATE COLLECTED:** 5 / 24 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT: OTHER CORES IN THIS AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	12.0	0.0	
368.0			ROCK	8.0	12.0	
360.0			ROCK	54.1	20.0	
305.9			COAL	0.8	74.1	
305.2			ROCK	76.7	74.8	
228.5			COAL	3.1	151.5	
225.4			ROCK	60.8	154.6	
164.7			COAL	2.3	215.3	
162.3	CARBONDALE		ROCK	56.2	217.7	
106.2			COAL	2.0	273.8	
104.2			ROCK	4.0	275.8	

MAPID: 16503176000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE SE SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374594 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.681055 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 217.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
235.9	MODESTO	PIASA	LIMESTONE	1.4	144.1	
234.5	CARBONDALE	DANVILLE	COAL	3.1	145.5	
231.4	CARBONDALE	LAWSON	SILTSTONE	52.1	148.6	
179.3	CARBONDALE	LAWSON	SANDSTONE	14.3	200.7	
165.0	CARBONDALE	HERRIN	COAL	2.3	215.0	

MAPID: 16503176000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE SE SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374594 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.681055 **DATE COLLECTED:** 5 / 24 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. 124 **WELL TYPE:** Coal Test

COMMENT: 15' WEST ROAD, DRILL LOG AND CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			CLAY	12.7	0.0	
367.3			SHALE	7.3	12.7	SOFT
360.0			LIMESTONE	2.7	20.0	WEATHERED BROWN, BRACHS
357.3			SHALE	9.8	22.7	STRIPPED; INTERLAMINATED W/ SLTST
347.5			SHALE	0.3	32.5	FISSILE
347.2			UNDERCLAY	1.2	32.8	CALC. NODULES, SLICKENSIDED
346.0			CLAYSTONE & SILTSTONE	1.5	34.0	W/ GRANULAR SIDERITE
344.5			SILTY SHALE	2.8	35.5	W/ GRANULAR SIDERITE
341.7			CALCAREOUS SILTSTONE	3.0	38.3	INTERBDD W/ SH
338.7			SHALE	19.8	41.3	W/ SLTST INTERLAMS; FINES DOWN
318.8			SHALE	4.8	61.2	
314.0			CORE LOSS	3.5	66.0	
310.5			SHALE	2.2	69.5	AS UNIT 11
308.3			FOSSILIFEROUS SHALE	1.0	71.7	BIVALVES, FISSILE
307.3			BLACK SHALE	1.4	72.7	
305.9			COAL	0.8	74.1	
305.2			SHALE	3.8	74.8	W/ FEW PLANT FOSSILS
301.3			SHALE	0.8	78.7	W/ FEW PLANT FOSSILS
300.6			SILTSTONE	2.0	79.4	
298.6			SILTSTONE	2.5	81.4	W/ SS
296.1			SANDSTONE	6.8	83.9	
289.2			SANDSTONE	13.5	90.8	W/ SLTST INTERLAMS
275.7			SANDSTONE	34.8	104.3	MASSIVE, W/ SH PEBBLES BASAL 3'
241.0			SHALE	5.3	139.0	SLICKENED, JOINTED
235.7			CLAYSTONE & SILTSTONE	0.9	144.3	W/ LS NODS.
234.8			BLACK SHALE	2.4	145.2	W/ SID. NODS.
232.4			SHALE	2.5	147.6	FISSILE
229.9			LIMESTONE	1.4	150.1	
228.5			COAL	1.5	151.5	
227.0			SILTSTONE	4.5	153.0	
222.5			SILTSTONE	21.3	157.5	W/ LIGHT COLORED SLTST LAMS.
201.2			CORE LOSS	0.9	178.8	
200.3			SILTSTONE	25.4	179.7	W/ INTERBDD SS
174.9			SANDSTONE	10.3	205.1	
164.7			COAL	2.3	215.3	W/ .21' SH BAND
162.3			UNDERCLAY	2.0	217.7	STIGMARIAN
160.3			UNDERCLAY	1.3	219.7	W/ LS NODULES
159.0			CLAYSTONE & SILTSTONE	1.3	221.0	

157.7		SILTSTONE	5.0	222.3	
152.7		SANDSTONE	2.5	227.3	INTERBDD W/ SLTST
150.2		SILTSTONE	4.8	229.8	
145.5		SILTSTONE	14.0	234.5	DISTURBED & DISTORTION FEATURES
131.5		CARBONACEOUS SHALE	25.3	248.5	SLIGHTLY SILTY BUT FINES DOWNWARD
106.2		COAL	2.0	273.8	W/ PYRITE BAND
104.2		SILTSTONE	2.5	275.8	STIGMARIAN
101.7		SANDSTONE	1.7	278.3	W/ SH PARTINGS

MAPID: 16503177000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386686 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.681507 **DATE COLLECTED:** 5 / 13 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 235.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 121 **WELL TYPE:** Coal Test

COMMENT: IN BARN LOT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			SAND/CLAY	12.3	0.0	
387.7	CARBONDALE		SHALE	16.2	12.3	
371.5	CARBONDALE		BONE COAL	0.5	28.5	
371.0	CARBONDALE		SHALE	44.3	29.0	
326.7	CARBONDALE		COAL	1.3	73.3	
325.4	CARBONDALE		SHALE	10.5	74.6	
314.9	CARBONDALE		BLACK SHALE	19.1	85.1	
295.7	CARBONDALE		LIMESTONE	0.4	104.3	
295.3	CARBONDALE	HERRIN	COAL	2.5	104.7	
292.9	CARBONDALE		SANDY SHALE	32.2	107.1	
260.7	CARBONDALE		SANDSTONE	13.4	139.3	
247.2	CARBONDALE		SHALE	1.4	152.8	
245.8	CARBONDALE	SPRINGFIELD	COAL	3.7	154.2	
242.2	CARBONDALE		SHALE	1.9	157.8	
240.2	CARBONDALE		SHALE	16.4	159.8	
223.8	CARBONDALE		SANDSTONE	43.2	176.2	
180.7	CARBONDALE		SHALE	15.7	219.3	

MAPID: 16503177000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386686 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.681507 **DATE COLLECTED:** 6 / 13 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 235.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	12.3	0.0	
387.7			ROCK	7.7	12.3	
380.0			ROCK	53.4	20.0	
326.6			COAL	1.3	73.4	
325.3			ROCK	30.1	74.7	
295.3	CARBONDALE	HERRIN	COAL	2.5	104.7	
292.8	CARBONDALE		ROCK	47.0	107.2	
245.8	CARBONDALE	SPRINGFIELD	COAL	3.7	154.2	
242.1	CARBONDALE		ROCK	77.2	157.9	

MAPID: 16503178000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW NW SE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387231 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.682895 **DATE COLLECTED:** 1 / 30 / 1958

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 231.3 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 54 **WELL TYPE:** Coal Test

COMMENT: G. ROBERTSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			CLAY	7.2	0.0	
382.8	MODESTO		SHALE	8.8	7.2	
374.0	MODESTO		SHALE	0.7	16.0	
373.3	MODESTO		SHALE	7.3	16.7	
366.0	MODESTO		SHALE	5.1	24.0	
360.9	MODESTO		BLACK SHALE	1.1	29.1	
359.8	MODESTO		SHALE	1.0	30.2	
358.8	MODESTO		COAL	0.2	31.2	
358.7	MODESTO		SHALE	6.2	31.3	
352.5	MODESTO		SANDY SHALE	29.5	37.5	
323.0	MODESTO		SHALE	3.8	67.0	
319.2	MODESTO		COAL	0.7	70.8	
318.6	MODESTO		SHALE	2.6	71.4	
316.0	MODESTO		LIMESTONE	0.8	74.0	
315.2	MODESTO		SANDY SHALE	6.9	74.8	
308.3	MODESTO		SHALE	5.3	81.7	
303.0	MODESTO		BLACK SHALE	3.5	87.0	
299.5	MODESTO		SHALE	9.3	90.5	
290.2	CARBONDALE	DANVILLE	COAL	2.5	99.8	
287.7	CARBONDALE		SHALE	1.7	102.3	
286.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	43.0	104.0	
243.0	CARBONDALE		SANDSTONE	14.4	147.0	
228.6	CARBONDALE	HERRIN	COAL	2.2	161.4	
226.4	CARBONDALE		SHALE	1.9	163.6	
224.5	CARBONDALE		SANDSTONE	36.8	165.5	
187.7	CARBONDALE		SANDY SHALE	15.7	202.3	
172.0	CARBONDALE		SHALE	2.0	218.0	
170.0	CARBONDALE	BRIAR HILL	COAL	1.4	220.0	
168.6	CARBONDALE		SHALE	4.0	221.4	
164.6	CARBONDALE		SANDSTONE	5.9	225.4	

MAPID: 16503178000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW NW SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387231 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.682895 **DATE COLLECTED:** 1 / 30 / 1958
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 231.3 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	7.2	0.0	
382.8			ROCK	24.0	7.2	
358.8			COAL	0.2	31.2	
358.7			ROCK	39.4	31.3	
319.3			COAL	0.7	70.7	
318.6			ROCK	28.4	71.4	
290.2	CARBONDALE	DANVILLE	COAL	2.5	99.8	
287.7	CARBONDALE		ROCK	59.1	102.3	
228.6	CARBONDALE	HERRIN	COAL	2.2	161.4	
226.4	CARBONDALE		ROCK	56.4	163.6	
170.0	CARBONDALE	BRIAR HILL	COAL	1.4	220.0	
168.6	CARBONDALE		ROCK	9.9	221.4	

MAPID: 16503182000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 200' N line, 50' E line of NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374133 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.687493 **DATE COLLECTED:** 2 / 27 / 1958
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 109 **WELL TYPE:** Coal Test
COMMENT: ROBERTSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			SAND & GRAVEL	47.0	0.0	
325.0			BLACK SHALE	48.3	47.0	
276.7			COAL	0.9	95.3	
275.8			SHALE	2.1	96.2	
273.7			SANDSTONE	39.8	98.3	
233.9			COAL	0.5	138.1	
233.4			SANDSTONE	1.4	138.6	
232.0			BLACK SHALE	61.3	140.0	
170.7			COAL	0.3	201.3	
170.4			SHALE	17.7	201.6	
152.7			SANDY SHALE	7.9	219.3	
144.8			SANDSTONE	29.8	227.2	

MAPID: 16503182000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 200' N line, 50' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374133 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.687493 **DATE COLLECTED:** 2 / 27 / 1958

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	47.0	0.0	
325.0			ROCK	48.3	47.0	
276.7			COAL	0.9	95.3	
275.8			ROCK	41.9	96.2	
233.9			COAL	0.5	138.1	
233.4			ROCK	62.7	138.6	
170.7			COAL	0.3	201.3	
170.4			ROCK	55.4	201.6	

MAPID: 16503188000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1040' S line, 30' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374102 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.68346 **DATE COLLECTED:** 6 / 12 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 336.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 128 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNCLASSIFIED	21.5	0.0	
353.5			SILTSTONE	23.5	21.5	W/ SH LAMINATIONS
330.0			FOSSILIFEROUS LIMESTONE	3.3	45.0	
326.7			SILTSTONE	7.8	48.3	W/ SH LAMINATIONS
319.0			SHALE	8.3	56.0	W/ SLTST
310.7			SILTY SHALE	7.5	64.3	W/ PLANT FRAGS, BIVALVES
303.2			SILTSTONE	0.3	71.8	UC SLTST; SLICKENSIDED
302.8			SILTSTONE	1.5	72.2	STIGMARIAN
301.3			SHALE	2.2	73.7	W/ PLANT FOSSILS
299.2			SILTY SHALE	3.0	75.8	
296.2			SILTY SHALE	5.0	78.8	W/ LS NODS
291.2			SILTSTONE	1.7	83.8	
289.5			SILTY SHALE	3.8	85.5	W/ IRREGULAR LS MASSES
285.7			SHALE	2.0	89.3	
283.7			SHALE	3.0	91.3	
280.7			FOSSILIFEROUS SHALE	1.3	94.3	
279.3			BLACK SHALE	2.0	95.7	
277.3			BLACK SHALE	0.7	97.7	
276.7			COAL	0.6	98.3	W/ BONEY BANDS
276.1			SHALE	0.5	98.9	
275.6			SHALE	4.0	99.4	W/ PLANT IMPRESSIONS
271.6			SILTSTONE	8.6	103.4	W/ LEAVES IN BASE
263.0			ROCK	0.0	112.0	MARCASITE
263.0			SHALE	0.9	112.0	SLICKENSIDES
262.0			SILTY CLAYSTONE	3.3	113.0	STIGMARIAN
258.7			SILTSTONE	4.7	116.3	W/ SS INTERLAMS
254.1			SANDSTONE	9.0	120.9	CONGLOMERATIC IN PARTS
245.1			SILTSTONE	3.1	129.9	
242.0			SHALE	2.0	133.0	
240.0			SILTSTONE	2.3	135.0	
237.7			CLAYSTONE & SILTSTONE	0.4	137.3	
237.2			SHALE	4.7	137.8	W/ A FEW SID. BANDS
232.6			BLACK SHALE	2.0	142.4	
230.6			SHALE	7.8	144.4	
222.7			SHALE	4.6	152.3	W/ SID. BANDS
218.2			FOSSILIFEROUS SHALE	0.2	156.8	ALMOST A COQUINA
218.0	CARBONDALE		COAL	1.3	157.0	

216.7	CARBONDALE		SHALE	0.7	158.3	SLICKENSIDES
216.0	CARBONDALE		CLAYSTONE & SILTSTONE	1.5	159.0	W/ STIGMARIA
214.5	CARBONDALE	ANVIL ROCK	SILTSTONE	34.5	160.5	
180.0	CARBONDALE	ANVIL ROCK	SANDSTONE	23.0	195.0	
157.0	CARBONDALE	HERRIN	COAL	2.4	218.0	FRACTURED
154.6	CARBONDALE		UNDERCLAY	2.5	220.4	
152.1	CARBONDALE		UNCLASSIFIED	50.8	222.9	INTERVAL FROM 6-5A COAL AS IN 16503176
101.3	CARBONDALE	BRIAR HILL	COAL	2.0	273.7	
99.3	CARBONDALE		UNCLASSIFIED	51.8	275.7	INTERVAL FROM 5A-5 COAL AS IN HOLE 107
47.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	327.4	
45.6	CARBONDALE	SPRINGFIELD	COAL	4.4	329.4	
41.2	CARBONDALE		UNDERCLAY	2.3	333.8	STIGMARIAN

MAPID: 16503188000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1040' S line, 30' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.374102 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.68346 **DATE COLLECTED:** 6 / 10 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 337.6 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			UNKNOWN	21.5	0.0	
353.5			ROCK	76.8	21.5	
276.7			COAL	0.6	98.3	
276.1			ROCK	58.1	98.9	
218.0			COAL	1.3	157.0	
216.7			ROCK	59.7	158.3	
157.0	CARBONDALE	HERRIN	COAL	2.4	218.0	
154.6	CARBONDALE		ROCK	53.2	220.4	
101.3	CARBONDALE	BRIAR HILL	COAL	2.0	273.7	
99.3	CARBONDALE		ROCK	53.8	275.7	
45.6	CARBONDALE	SPRINGFIELD	COAL	4.4	329.4	
41.2	CARBONDALE		ROCK	2.3	333.8	

MAPID: 16503189000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 550' N line, 1800' W line of NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386067 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.686476 **DATE COLLECTED:** 6 / 13 / 1958

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 255.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. 129 **WELL TYPE:** Coal Test

COMMENT: DRILLER'S LOG & CORE DESCR.; NO ELEV.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			SAND/CLAY	12.7	0.0	
-	CARBONDALE		SANDSTONE	8.8	12.7	
-	CARBONDALE		SANDSTONE	8.5	21.5	
-	CARBONDALE		SANDSTONE	7.5	30.0	MED GRAINED;W/ CARBONDACEOUS COALY
-	CARBONDALE		CARBONACEOUS SANDSTONE	0.5	37.5	W/ COALY, SANDY SH BANDS
-	CARBONDALE		CARBONACEOUS SANDSTONE	3.7	38.1	MICAEOUS, PYRITIC
-	CARBONDALE		CARBONACEOUS SILTSTONE	10.3	41.8	FINES DOWNWARD
-	CARBONDALE		SILTY SHALE	3.3	52.0	
-	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.2	55.3	W/ LIMEY SH; CRINOIDS
-	CARBONDALE	TURNER MINE	FOSSILIFEROUS BLACK SHALE	3.8	56.5	LINGULOID FOSSILS
-	CARBONDALE	SPRINGFIELD	COAL	4.4	60.3	
-	CARBONDALE		SILTY CLAYSTONE	1.3	64.7	STIGMARIAN
-	CARBONDALE		CALCAREOUS CLAYSTONE	1.9	65.9	
-	CARBONDALE		SANDSTONE	13.2	67.8	SHALY UPPER 2'
-	CARBONDALE		SILTSTONE	2.0	81.0	
-	CARBONDALE		SILTY SHALE	12.3	83.0	CARBONACEOUS PLANT FRAGS
-	CARBONDALE		SILTY SHALE	14.5	95.3	AS ABOVE, FINES DOWNWARD
-	CARBONDALE		SHALE	4.7	109.8	
-	CARBONDALE		FOSSILIFEROUS SHALE	12.8	114.5	ABUNDANT CRINOID STEMS
-	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.5	127.3	BRACHIOPODS, CRINOIDS
-	CARBONDALE	EXCELLO	BLACK SHALE	3.9	127.8	
-	CARBONDALE	HOUCHIN CREEK	COAL	0.8	131.8	
-	CARBONDALE		SHALY SANDSTONE	1.5	132.5	STIGMARIAN
-	CARBONDALE		SANDSTONE	47.0	134.0	PYRITE FILLED FRAC, 45 DEG. TO BEDDING
-	CARBONDALE	SURVANT	COAL	0.7	181.0	
-	CARBONDALE		SILTSTONE	1.0	181.7	UC SLTST, STIGMARIAN
-	CARBONDALE		SANDSTONE	5.3	182.7	STIGMARIA
-	CARBONDALE		SILTSTONE	12.0	188.0	SLICKENSIDED
-	CARBONDALE		FOSSILIFEROUS SHALE	2.7	200.0	PYRITE TRAILS, ORBICULOIDEA, LINGULA
-	CARBONDALE		SANDSTONE	1.2	202.7	STIGMARIAN
-	CARBONDALE		SHALE	3.5	203.8	W/ SLTST INTERLAMS
-	CARBONDALE		SILTY SHALE	37.7	207.3	FINES DOWNWARD
-			FOSSILIFEROUS SHALE	3.4	245.0	BRACHIOPODS, CRINOID STEMS

-	COAL	0.1	248.4	
-	SILTSTONE	2.0	248.5	W/ NODS. AND SH INTERLAMS
-	SHALE	5.0	250.5	W/ CALC. NODS AND SLTST INTERLAMS

MAPID: 16503189000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** 550' N line, 1800' W line of NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386067 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.686476 **DATE COLLECTED:** 6 / 13 / 1958

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	12.8	0.0	
447.2			ROCK	8.7	12.8	
438.5			ROCK	39.3	21.5	
399.2			COAL	2.5	60.8	
396.7			ROCK	68.6	63.3	
328.1			COAL	0.8	131.9	
327.3			ROCK	49.0	132.7	
278.3			COAL	0.7	181.7	
277.7			ROCK	59.8	182.3	
217.9			COAL	0.1	242.1	
217.8			ROCK	12.8	242.2	

MAPID: 16503250000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387422 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.673635 **DATE COLLECTED:** 11 / 21 / 1958

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 253.4 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 159 **WELL TYPE:** Coal Test

COMMENT: CORE DESCR. BY W.H.SMITH & E.K.NORMAN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNCLASSIFIED	21.5	0.0	
393.5			SANDSTONE	4.0	21.5	
389.5			SHALE	4.0	25.5	
385.5			SHALE	5.0	29.5	WELL LAMINATED;BIVALVES IN BOTTOM 1'
380.5			COAL	1.3	34.5	
379.2			UNDERCLAY	2.0	35.8	
377.2			FOSSILIFEROUS LIMESTONE	3.7	37.8	CRINOIDS, BRACHIOPODS
373.5			SHALE	2.5	41.5	CRINOID STEMS SEGS., W/ NOD. LS
371.0			SHALE	3.0	44.0	WELL LAMINATED
368.0			FOSSILIFEROUS SHALE	1.0	47.0	GASTROPODS, CRINOID STEMS
367.0			FOSSILIFEROUS SHALE	3.0	48.0	NUM. SMALL FOSSILS, WELL LAMINATED
364.0			BLACK SHALE	2.0	51.0	
362.0			SHALE	5.2	53.0	SOME FOSSILS (PECTINOID)
356.8			SHALE	1.8	58.2	ABUNDANT BRACHIOPODS (ATHYRIS)?
355.0			SHALE	0.8	60.0	SIMILAR TO ABOVE, DARKER BOTTOM 2'
354.2			COAL	1.3	60.8	
352.8			SILTY CLAYSTONE	0.5	62.2	HARD, STIGMARIAN
352.3			SILTY SHALE	2.5	62.7	
349.8			SHALY SILTSTONE	11.5	65.2	
338.3			SILTY SHALE	41.8	76.7	SOME PLANT FOSSILS IN UPPER 5'
296.5			SILTY SHALE	3.0	118.5	W/ SLTST INTERLAMS
293.5			SANDSTONE	12.5	121.5	OCCASSIONAL BEDS OF SLTST
281.0			SANDSTONE	17.0	134.0	
264.0			SANDSTONE	8.4	151.0	SIMILAR TO ABOVE; W. COALSPARS AND BANDS
255.6			SANDSTONE & CONGLOMERATE	1.8	159.4	W/ COAL SHARDS, LS PEBBLES, SH INCL.
253.8			SANDSTONE	1.6	161.2	W/ COAL SPARS, LIKE UNIT 24
252.2			SANDSTONE & CONGLOMERATE	9.2	162.8	W/ LS MASSES, COAL SPARS
243.1			SHALE	9.5	171.9	WELL LAMINATED, SILTY AT BASE
233.6			SILTY SHALE	13.1	181.4	CARBONIZED PLANT DEBRIS AT BASE
220.5			COAL	1.8	194.5	
218.7			SILTSTONE	0.5	196.3	UC SLTST, STIGMARIAN
218.2			SHALY SILTSTONE	2.8	196.8	
215.5	CARBONDALE		SANDSTONE	33.5	199.5	W/ OCCASSIONAL SLTST LAMS.
182.0	CARBONDALE		SHALY SILTSTONE	4.5	233.0	
177.5	CARBONDALE		SILTY SHALE	2.0	237.5	WELL LAMINATED

175.5	CARBONDALE	ST. DAVID	SHALY LIMESTONE	1.6	239.5	
173.9	CARBONDALE	TURNER MINE	BLACK SHALE	6.9	241.1	
167.0	CARBONDALE	SPRINGFIELD	COAL	4.9	248.0	W/ CALCITE ON CLEATS: SHALE BANDS
162.1	CARBONDALE	SPRINGFIELD	COAL	0.1	252.9	CLAYEY
162.1	CARBONDALE		CLAYSTONE & SILTSTONE	0.4	252.9	

MAPID: 16503250000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387422 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673635 **DATE COLLECTED:** 11 / 20 / 1958
SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 248.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
415.0			UNKNOWN	21.5	0.0	
393.5			ROCK	13.0	21.5	
380.5			COAL	1.3	34.5	
379.2			ROCK	25.7	35.8	
353.4			COAL	1.3	61.6	
352.1			ROCK	132.3	62.9	
219.8	CARBONDALE	BRIAR HILL	COAL	1.8	195.2	
218.0	CARBONDALE		ROCK	51.8	197.0	
166.3	CARBONDALE	SPRINGFIELD	COAL	4.3	248.7	
161.9	CARBONDALE		ROCK	6.0	253.1	

MAPID: 165274B0012F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.383699 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.68754 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 18.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	-	0.0	
-			ROCK	12.2		
-	CARBONDALE	SPRINGFIELD	COAL	3.0		
-	CARBONDALE		ROCK	3.0		

MAPID: 165274B0011F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.381987 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.687082 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 7.7 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-PARHAM **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	5.0		
-	CARBONDALE	SPRINGFIELD	COAL	2.7		
-			ROCK	0.0		

MAPID: 16503184000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 150' S line, 600' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.394723 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.673596 **DATE COLLECTED:** 4 / 14 / 1958
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 193.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 114 **WELL TYPE:** Coal Test
COMMENT: EDITH GIBSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			SAND/CLAY	23.0	0.0	
385.0	CARBONDALE		BLACK SHALE	1.7	23.0	
383.3	CARBONDALE	ANVIL ROCK	SANDSTONE	0.9	24.7	
382.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.8	25.6	
377.7	CARBONDALE	ANVIL ROCK	SANDSTONE	34.9	30.3	
342.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.9	65.3	
331.8	CARBONDALE	BRERETON	LIMESTONE	2.2	76.2	
329.7	CARBONDALE	HERRIN	COAL	4.1	78.3	
325.6	CARBONDALE		SHALE	0.7	82.4	
324.9	CARBONDALE		SANDY SHALE	55.1	83.1	
269.8	CARBONDALE	BRIAR HILL	COAL	1.8	138.2	
268.1	CARBONDALE		SHALE	0.3	139.9	
267.8	CARBONDALE		SANDSTONE	21.5	140.2	
246.3	CARBONDALE		SANDY SHALE	16.3	161.7	
230.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	178.0	
228.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.9	179.3	
223.8	CARBONDALE	SPRINGFIELD	COAL	5.0	184.2	
218.8	CARBONDALE		SHALE	3.8	189.2	

MAPID: 16503184000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 150' S line, 600' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.394723 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673596 **DATE COLLECTED:** 4 / 14 / 1958
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 193.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
408.0			UNCONSOLIDATED	23.0	0.0	
385.0			ROCK	55.3	23.0	
329.7			COAL	4.1	78.3	
325.6			ROCK	55.7	82.4	
269.8			COAL	1.8	138.2	
268.1			ROCK	44.3	139.9	
223.8			COAL	5.0	184.2	
218.8			ROCK	3.0	189.2	

MAPID: 16503204000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1' S line, 400' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403239 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.673164 **DATE COLLECTED:** 6 / 17 / 1958
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 72.0 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. 62 **WELL TYPE:** Coal Test
COMMENT: LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			CLAY	1.0	0.0	
459.0	CARBONDALE		SANDSTONE	1.5	1.0	
457.5	CARBONDALE		SANDY SHALE	10.5	2.5	
447.0	CARBONDALE		CLAYSTONE & SILTSTONE	2.3	13.0	
444.7	CARBONDALE		SHALE	0.5	15.3	
444.2	CARBONDALE	BRIAR HILL	COAL	2.3	15.8	
441.8	CARBONDALE		SHALE	9.0	18.2	
432.8	CARBONDALE		SILTY SHALE	16.8	27.2	SLUMP STRUCTS IN SS;W/ IRREG. SS INTRBDS
416.0	CARBONDALE		SHALE	17.5	44.0	SLUMP STRUCTS IN SLST;W/ INTRLMS OF SLST
398.5	CARBONDALE	ST. DAVID	SHALY LIMESTONE	0.8	61.5	CRINOIDS STEMS, BRACHIOPODS
397.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	62.3	
393.2	CARBONDALE	SPRINGFIELD	COAL	4.6	66.8	
388.6	CARBONDALE		UNDERCLAY	0.6	71.4	

MAPID: 16503204000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1' S line, 400' E line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403239 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673164 **DATE COLLECTED:** 6 / 17 / 1958
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 72.0 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT: 4, 1, 4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			ROCK	15.8	0.0	
444.2	CARBONDALE	BRIAR HILL	COAL	2.3	15.8	
441.8	CARBONDALE		ROCK	21.8	18.2	
420.0	CARBONDALE		ROCK	12.1	40.0	
407.9	CARBONDALE		ROCK	4.7	52.1	
403.2	CARBONDALE	SPRINGFIELD	COAL	4.6	56.8	
398.6	CARBONDALE		ROCK	0.6	61.4	

MAPID: 16503209000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.39594 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.679645 **DATE COLLECTED:** 6 / 31 / 1958
SURFACE ELEVATION (FT.): 505.0 **LOGGED (FT.):** 400.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
505.0			UNCONSOLIDATED	27.0	0.0	
478.0			ROCK	12.5	27.0	
465.5			COAL	0.6	39.5	
464.9			ROCK	105.6	40.1	
359.3			COAL	0.5	145.7	
358.8			ROCK	18.4	146.2	
340.4			COAL	-	164.6	
-			ROCK	39.1		
-			COAL	0.3		
-			ROCK	50.8		
-			COAL	0.8		
-			ROCK	51.5		
-			COAL	0.1		
-			ROCK	82.6		

MAPID: 16503209000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.39594 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.679645 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 505.0 **LOGGED (FT.):** 214.7 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
338.0	MODESTO	PIASA	LIMESTONE	1.8	167.0	
336.2	MODESTO		BLACK SHALE	1.7	168.8	
334.6	CARBONDALE	DANVILLE	COAL	3.6	170.4	
331.0	CARBONDALE		SILTY SHALE	11.2	174.0	
319.8	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.4	185.2	
317.4	CARBONDALE	LAWSON	GRAY SHALE	21.2	187.6	
296.2	CARBONDALE	BRERETON	LIMESTONE	0.8	208.8	
295.4	CARBONDALE	ANNA	BLACK SHALE	2.0	209.6	
293.4	CARBONDALE	HERRIN	COAL	0.7	211.6	

MAPID: 16503209000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.39594 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.679645 **DATE COLLECTED:** 7 / 28 / 1958

SURFACE ELEVATION (FT.): 505.0 **LOGGED (FT.):** 357.7 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 134 **WELL TYPE:** Coal Test

COMMENT: CORE DESCRIP., EDITH GIBSON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
505.0			UNCLASSIFIED	27.0	0.0	
478.0			MICACEOUS SANDSTONE	12.5	27.0	SHALY ZONES IN MIDDLE
465.5			COAL	0.6	39.5	
464.9			CLAYSTONE & SILTSTONE	0.1	40.1	
464.8			SILTSTONE	0.7	40.2	STIGMARIAN
464.2			SHALY SANDSTONE	10.5	40.8	
453.7			SHALY SILTSTONE	1.6	51.3	
452.1			FOSSILIFEROUS SHALE	1.0	52.9	LINGULA-LIKE FOSSILS
451.1			CALCAREOUS SANDSTONE	0.8	53.9	HORN CORAL, BRACKS, STIGMARIA-LIKE
450.3			SANDSTONE	0.5	54.7	
449.8			SHALY SILTSTONE	2.5	55.2	
447.3			SILTY SHALE	2.0	57.7	
445.3			SILTSTONE	5.5	59.7	
439.8			SHALY SILTSTONE	2.5	65.2	
437.3			FOSSILIFEROUS SHALE	34.3	67.7	SILTY UPPER 28'; W/ POSS. BIVALVES
403.1			SHALE	0.4	101.9	
402.7			BLACK SHALE	2.2	102.3	
400.5			CARBONACEOUS SANDSTONE	0.0	104.5	.01' FUSAIN AT TOP
400.5			SHALY SANDSTONE	0.4	104.5	SOFT, UC SS
400.1			SANDSTONE	2.5	104.9	MASSIVE
397.6			CALCAREOUS SANDSTONE	6.0	107.4	HARD, ALMOST A LS
391.6			SANDSTONE	3.3	113.4	FINE GRAINED, HARD
388.2			SILTSTONE	15.5	116.8	SHALY DOWNWARD
372.7			SHALE	13.4	132.3	W/ SID. NODS, PYRITIC IN PART
359.3			CORE LOSS	6.1	145.7	"DIFFERENCES BETWEEN LOG & CORE"
353.2			COAL	0.5	151.8	
352.7			SILTY CLAYSTONE	2.6	152.3	STIGMARIAN
350.2			SHALE	2.2	154.8	
348.0			SANDSTONE	2.3	157.0	
345.7			SILTY CLAYSTONE	4.0	159.3	PLANT DEBRIS ON BDD PLANTS
341.7			SHALE	4.0	163.3	W/ SID. BANDS
337.7			LIMESTONE	1.8	167.3	BRACHS, GAST, CRINOIDS
336.0			BLACK SHALE	1.7	169.0	
334.3			CORE LOSS	4.3	170.7	COAL, UC, SOME ROOF REMOVED
330.1			SHALY SILTSTONE	7.2	174.9	
322.9			SHALE	4.0	182.1	

318.9	SHALY LIMESTONE	2.4	186.1	FOSSILIF.
316.5	SHALE	21.2	188.5	
295.3	FOSSILIFEROUS LIMESTONE	0.7	209.7	
294.7	BLACK SHALE	3.7	210.3	
291.0	COAL	0.3	214.0	
290.7	SILTY CLAYSTONE	3.0	214.3	STIGMARIAN
287.7	DOLOMITE	0.4	217.3	DENSE
287.2	SILTSTONE	13.7	217.8	STIGMARIAN, W/ SS BASAL 7.67'
273.6	SANDSTONE	8.8	231.4	
264.7	CARBONACEOUS SHALE	0.0	240.3	SLICKENSIDED
264.7	SILTY CLAYSTONE	3.0	240.3	STIGMARIA
261.7	SHALY SILTSTONE	4.4	243.3	W/ SIDERITE GRANULES
257.3	SHALE	0.3	247.7	ABUNDANT PLANTS; POSS A COAL
257.0	SILTY CLAYSTONE	1.2	248.0	UC SLTST
255.8	SILTSTONE	7.5	249.2	INTRBDD W/ SH BASAL 3'
248.3	SHALE	5.5	256.7	WELL LAMINATED
242.8	SHALE	3.0	262.2	FISSILE
239.8	COAL	0.8	265.2	
239.0	UNDERCLAY	1.0	266.0	STIGMARIAN
238.0	CLAYSTONE & SILTSTONE	1.9	267.0	W/ SID. GRANULES
236.1	SHALE	6.5	268.9	W/ SID. GRANULES
229.6	SILTSTONE	2.0	275.4	
227.6	SHALE	5.8	277.4	W/ SLTST INTERLAMS
221.7	SHALE	2.5	283.3	W/ SID. BANDS
219.2	CARBONACEOUS CLAYSTONE	0.8	285.8	W/ STIGMARIA
218.5	SILTSTONE	2.2	286.5	W/ FEW STIGMARIA
216.3	SANDSTONE	13.8	288.7	
202.5	SANDSTONE	14.0	302.5	
188.5	CONGLOMERATE	0.9	316.5	W/ CARBONACEOUS DEBRIS; SH PEBBLES
187.6	COAL	0.1	317.4	
187.5	SANDSTONE	18.1	317.5	UPPER 1.67' W/ COAL SPARS
169.4	SHALE	6.3	335.6	
163.2	CARBONACEOUS SHALE	0.3	341.8	
162.8	UNDERCLAY	4.5	342.2	
158.3	SHALE	5.0	346.7	
153.3	SHALE	6.0	351.7	W/ SLTST INTERLAMS

MAPID: 16500084004M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.43928 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.680033 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 70.2 **LOG TYPE:**
SOURCE: FLD NOTES-PARHAM, WALNUT GROVE MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	45.0		
-	SPOON	DEKOVEN	COAL	3.0		
-	SPOON		ROCK	17.3		
-	SPOON	DAVIS	COAL	4.4		
-	SPOON		ROCK	0.5		

MAPID: 16500084002M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SW NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.447456 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.677257 **DATE COLLECTED:** 6 / 9 / 1965
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 4.8 **LOG TYPE:**
SOURCE: MINE NOTES-YOUNG C C, SOMERSET MINE **WELL TYPE:** Strip Mine
COMMENT: SAMPLE #2 BY PEPPERS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DAVIS	COAL	4.8		

MAPID: 16500084003M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.444008 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.673598 **DATE COLLECTED:** 6 / 8 / 1964
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3.8 **LOG TYPE:**
SOURCE: MINE NOTES-YOUNG C C, SOMERSET MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	3.8		

MAPID: 16500084000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.443978 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.676347 **DATE COLLECTED:** 10 / 26 / 1977
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 68.5 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON, YOUNG C C **WELL TYPE:** Strip Mine
COMMENT: GENERALIZED SECTION FROM ABD PIT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	21.0		
-	SPOON		COAL	0.5		
-	SPOON		ROCK	43.0		
-	SPOON	DEKOVEN	COAL	4.0		
-	SPOON		ROCK	-		

MAPID: 16500084001M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.444581 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.674056 **DATE COLLECTED:** 6 / 8 / 1964
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3.8 **LOG TYPE:**
SOURCE: MINE NOTES-YOUNG C C, SOMERSET MINE **WELL TYPE:** Strip Mine
COMMENT: SAMPLE #1 BY PEPPERS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	3.8		

MAPID: 16503781000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' N line, 900' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.444829 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.68779 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. G **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
298.0	CARBONDALE	COLCHESTER	COAL	0.9	64.0	
263.4	CARBONDALE	DEKOVEN	COAL	1.1	98.6	
263.4	CARBONDALE	LOWER DEKOVEN	COAL	0.0	98.6	
239.2	CARBONDALE	DAVIS	COAL	4.5	122.8	24% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 165274B0013F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.432995 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.674045 **DATE COLLECTED:** 0 / 0 / 1958
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 35.8 **LOG TYPE:**
SOURCE: FLD NOTES-SIMON, ABD MINE **WELL TYPE:** Strip Mine
COMMENT: STRIP PIT HIGHWALL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	7.0		
-			COAL	0.8		
-			ROCK	27.0		
-			COAL	1.1		

MAPID: 16500084007M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW NW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466233 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.676286 **DATE COLLECTED:** 10 / 26 / 1977
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 27.8 **LOG TYPE:**
SOURCE: MINE NOTES-W. SMITH, SAXTON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	24.0		
-	SPOON	DAVIS	COAL	3.8		

MAPID: 16500084006M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE NW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.465065 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.675386 **DATE COLLECTED:** 10 / 26 / 1977
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 40.1 **LOG TYPE:**
SOURCE: MINE NOTES-W. SMITH, SAXTON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	15.0	0.0	
355.0	SPOON		ROCK	21.0	15.0	
334.0	SPOON	DAVIS	COAL	4.1	36.0	

MAPID: 16500084005M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463313 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.674034 **DATE COLLECTED:** 9 / 15 / 1959
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 25.3 **LOG TYPE:**
SOURCE: MINE NOTES-W. SMITH, SAXTON C C **WELL TYPE:** Strip Mine
COMMENT: "NEW LOCATION" TIPPLE IN SEC 9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	21.1		
-	SPOON	DAVIS	COAL	4.2		

MAPID: 16503691000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 10' N line, 1980' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.459891 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.687613 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 144.8 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 38-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.0			UNCONSOLIDATED	78.0	0.0	
281.0	CARBONDALE		ROCK	36.0	78.0	
245.0	CARBONDALE	DEKOVEN	COAL	3.0	114.0	
242.0	CARBONDALE		ROCK	23.0	117.0	
219.0	CARBONDALE	DAVIS	COAL	4.8	140.0	

MAPID: 16503692000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 600' N line, 1130' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46285 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.685959 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 135.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 42-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	17.0	0.0	
343.0	CARBONDALE		ROCK	36.0	17.0	
307.0	CARBONDALE		BLACK SHALE	4.5	53.0	RASHY
302.5	CARBONDALE		ROCK	52.0	57.5	
250.5	CARBONDALE	DEKOVEN	COAL	3.0	109.5	
247.5	CARBONDALE		ROCK	19.0	112.5	
228.5	CARBONDALE	DAVIS	COAL	4.0	131.5	

MAPID: 16503693000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1830' N line, 825' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463927 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.682553 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 108.8 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 46-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.0			UNCONSOLIDATED	32.0	0.0	
327.0	CARBONDALE		ROCK	44.4	32.0	
282.6	CARBONDALE	DEKOVEN	COAL	3.1	76.4	
279.5	CARBONDALE		ROCK	25.2	79.5	
254.3	CARBONDALE	DAVIS	COAL	4.1	104.7	

MAPID: 16503694000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1500' N line, 935' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463539 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.683466 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 111.3 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 48-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.0			UNCONSOLIDATED	24.0	0.0	
334.0	CARBONDALE		ROCK	3.5	24.0	
330.5	CARBONDALE		BLACK SHALE	2.5	27.5	RASHY
328.0	CARBONDALE		ROCK	53.5	30.0	
274.5	CARBONDALE	DEKOVEN	COAL	3.0	83.5	
271.5	CARBONDALE		ROCK	20.8	86.5	
250.7	CARBONDALE	DAVIS	COAL	4.0	107.3	

MAPID: 16503695000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1200' N line, 1035' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.46319 **GEOLOGIST:** MORGAN
CONFIDENTIAL: N **LATITUDE:** 37.6843 **DATE COLLECTED:** / / 1971
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 118.5 **LOG TYPE:** Drillers Log
SOURCE: JOHN T. BOYD 49-B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.0			UNCONSOLIDATED	17.0	0.0	
342.0	CARBONDALE		ROCK	16.5	17.0	
325.5	CARBONDALE		BLACK SHALE	3.5	33.5	RASHY
322.0	CARBONDALE		ROCK	54.8	37.0	
267.2	CARBONDALE	DEKOVEN	COAL	3.1	91.8	
264.1	CARBONDALE		ROCK	19.4	94.9	
244.7	CARBONDALE	DAVIS	COAL	4.2	114.3	

MAPID: 16503746000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 10' N line, 2640' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.457598 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687636 **DATE COLLECTED:** 11 / 2 / 1970
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. B613 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
310.0	CARBONDALE	COLCHESTER	COAL	1.0	48.0	
252.0	CARBONDALE	DEKOVEN	COAL	3.0	106.0	
252.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	106.0	
225.9	CARBONDALE	DAVIS	COAL	5.0	132.1	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503747000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 15' N line, 800' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.450736 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687687 **DATE COLLECTED:** 10 / 22 / 1970
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. B615P **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.0	CARBONDALE	COLCHESTER	COAL	0.5	52.0	
251.5	CARBONDALE	DEKOVEN	COAL	3.3	108.5	
251.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	108.5	
226.5	CARBONDALE	DAVIS	COAL	4.0	133.5	24% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503782000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' N line, 2360' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.456156 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687676 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. R **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
308.0	CARBONDALE	COLCHESTER	COAL	0.5	52.0	
256.3	CARBONDALE	DEKOVEN	COAL	3.3	103.7	
256.3	CARBONDALE	LOWER DEKOVEN	COAL	0.0	103.7	
229.0	CARBONDALE	DAVIS	COAL	4.5	131.0	17% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503783000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1' N line, 1320' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.462205 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 37.687618 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 148.3 **LOG TYPE:** Drillers Log
SOURCE: PIAMCO INC. S **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCLASSIFIED	144.0	0.0	
211.0			COAL	4.3	144.0	

MAPID: 165274B0014F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.463263 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.683086 **DATE COLLECTED:** 8 / 0 / 1933
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	0.7		
-			ROCK	0.3		

MAPID: 16502647000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.479758 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.686619 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1245.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
242.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	124.0	
176.0	SPOON	DAVIS	UNCLASSIFIED	-	190.0	
-879.0	BASE OF PENN.		UNCLASSIFIED	-	1245.0	

MAPID: 16502647000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.479758 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.686619 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2119.0 **LOG TYPE:**
SOURCE: PLEDGER ROY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1015.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1381.0	
-1358.0			LIMESTONE	-	1724.0	
-1753.0		BASE BARLOW	LIMESTONE	-	2119.0	

MAPID: 16502647000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.479758 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.686619 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2600.0 **LOG TYPE:** Electric Log
SOURCE: PLEDGER ROY, MCFARLAND J B 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
246.0	CARBONDALE	COLCHESTER	COAL	0.5	120.0	
201.0	CARBONDALE	DEKOVEN	COAL	3.0	165.0	
201.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	165.0	
176.0	CARBONDALE	DAVIS	COAL	5.0	190.0	
121.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	245.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
102.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	264.0	
66.0	TRADEWATER	MT. RORAH	COAL	1.2	300.0	

MAPID: 16503723000C **VERSION:** 1 **PROJECT:** NCRDS 2011

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1320' S line, 715' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.483183 **GEOLOGIST:** MORGAN

CONFIDENTIAL: N **LATITUDE:** 37.676979 **DATE COLLECTED:** 11 / 17 / 1971

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 119.0 **LOG TYPE:** Drillers Log

SOURCE: JOHN T. BOYD (SOMERSET) 3-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			CLAY	38.0	0.0	
322.0	CARBONDALE		SAND	22.0	38.0	
300.0	CARBONDALE		CLAY	33.0	60.0	GRAY, SANDY
267.0	CARBONDALE	DEKOVEN	COAL	1.1	93.0	
265.9			SHALE	2.7	94.1	GRAY WITH FIRECLAY BANDS
263.2			SILTSTONE	6.2	96.8	CORE BEGINS, LT GRAY, FINELY LAMD
257.0			SILTSTONE	1.3	103.0	MED LT GRAY, HARD, DENSE, SIDC, DOLC
255.7			SHALE	3.9	104.3	LAMD, SILTY, MICS, MED LT GRAY
251.8			SHALE	2.1	108.2	MED GRAY, FIS, CARB, PYRC, POSS C HORIZO
249.7			SILTSTONE	0.3	110.3	HARD, DENSE
249.5			SHALE	1.3	110.5	
248.2			UNKNOWN	0.3	111.8	
247.9			SANDSTONE	6.9	112.1	LT GRAY, MED GRAINED, MICS, CARB

MAPID: 16503724000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2600' S line, 2640' W line

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.47648 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.680428 **DATE COLLECTED:** 11 / 17 / 1971

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: JOHN T. BOYD 6-B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
252.1	CARBONDALE	DEKOVEN	COAL	3.7	107.9	
252.1	CARBONDALE	LOWER DEKOVEN	COAL	0.0	107.9	
227.7	CARBONDALE	DAVIS	COAL	0.0	132.3	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503737000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.470305 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.686664 **DATE COLLECTED:** 5 / 1 / 1972
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 145.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	101.0	0.0	
259.0			ROCK	28.0	101.0	
231.0			COAL	1.0	129.0	
230.0			ROCK	15.0	130.0	

MAPID: 16503748000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1480' N line, 900' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.469913 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.68348 **DATE COLLECTED:** 11 / 3 / 1970
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. B532F **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
237.0	CARBONDALE	DEKOVEN	COAL	3.0	123.0	
237.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	123.0	
210.7	CARBONDALE	DAVIS	COAL	4.2	149.3	

MAPID: 16503749000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 875' N line, 1150' W line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.481631 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.685106 **DATE COLLECTED:** 1 / 5 / 1971
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. B552G **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
331.0	CARBONDALE	SURVANT	COAL	1.5	34.0	
206.5	CARBONDALE	DEKOVEN	COAL	3.0	158.5	
206.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	158.5	
183.0	CARBONDALE	DAVIS	COAL	4.4	182.0	53% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503750000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 6 **QUARTERS/FOOTAGES:** 30' N line, 2500' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.475453 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.687461 **DATE COLLECTED:** 11 / 5 / 1970
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PIAMCO INC. B605NB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
241.0	CARBONDALE	COLCHESTER	COAL	1.0	120.0	
194.0	CARBONDALE	DEKOVEN	COAL	3.0	167.0	
194.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	167.0	
169.5	CARBONDALE	DAVIS	COAL	4.8	191.5	14% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503036000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.477414 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.666931 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2442.0 **LOG TYPE:** Electric Log
SOURCE: LOYD L J, HERRMAN N A ESTATE 1 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
266.0	CARBONDALE	DEKOVEN	COAL	3.0	100.0	
266.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	100.0	
238.0	CARBONDALE	DAVIS	COAL	3.0	128.0	
191.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	175.0	75% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
181.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	185.0	

MAPID: 16503036000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.477414 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.666931 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1932.0 **LOG TYPE:**
SOURCE: LOYD L J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-801.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1167.0	
-1566.0		BASE BARLOW	LIMESTONE	-	1932.0	

MAPID: 16500332700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW SW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466241 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.667214 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 34.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CONWAY MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	30.0	0.0	
370.0			COAL	4.0	30.0	

MAPID: 16500332800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.466243 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669033 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 64.0 **LOG TYPE:**
SOURCE: MINE NOTES-NELSON, BEECHER WILLIAM MINE1 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	5.0	0.0	
395.0			ROCK	25.0	5.0	
370.0	SPOON	DEKOVEN	COAL	3.0	30.0	
367.0	SPOON		ROCK	30.0	33.0	
-	SPOON	DAVIS	COAL	-		
-	SPOON		ROCK	1.0		

MAPID: 16500333001M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:**
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401955 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.665811 **DATE COLLECTED:** 11 / 18 / 1977
SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 1.8 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	BRIAR HILL	COAL	1.8		
-	CARBONDALE		ROCK	-		

MAPID: 16500333002M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.396745 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.666277 **DATE COLLECTED:** 5 / 26 / 1980
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 157.0 **LOG TYPE:**
SOURCE: GUIDE BOOK-REINERTSEN **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			ROCK	25.0	0.0	
415.0			UNKNOWN	7.5	25.0	
407.5	CARBONDALE	HERRIN	COAL	3.5	32.5	
404.0	CARBONDALE		ROCK	1.0	36.0	
403.0	CARBONDALE		UNKNOWN	20.5	37.0	
382.5	CARBONDALE		ROCK	40.0	57.5	
342.5	CARBONDALE	BRIAR HILL	COAL	2.0	97.5	
340.5	CARBONDALE		ROCK	55.0	99.5	
285.5	CARBONDALE	SPRINGFIELD	COAL	3.3	154.5	

MAPID: 16503180000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.393329 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.658917 **DATE COLLECTED:** 1 / 10 / 1958
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 104 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			SAND & GRAVEL	30.0	0.0	
352.0			BLACK SHALE	1.5	30.0	
350.5			COAL	1.5	31.5	
349.0			SHALY SANDSTONE	7.3	33.0	
341.7			BLACK SHALE	29.4	40.3	
312.3			COAL	1.7	69.7	
310.7			SHALE	56.2	71.3	
254.5			BLACK SHALE	9.8	127.5	
244.7			COAL	0.3	137.3	
244.5			SANDSTONE	1.8	137.5	
242.7			SANDY SHALE	22.8	139.3	

MAPID: 16503180000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SE SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.393329 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.658917 **DATE COLLECTED:** 1 / 10 / 1958

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 162.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0			UNCONSOLIDATED	30.0	0.0	
352.0			ROCK	1.5	30.0	
350.5			COAL	1.5	31.5	
349.0			ROCK	36.7	33.0	
312.3			COAL	1.7	69.7	
310.7			ROCK	65.9	71.3	
244.8			COAL	0.3	137.2	
244.5			ROCK	24.5	137.5	

MAPID: 16503205000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.407084 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.669938 **DATE COLLECTED:** 6 / 27 / 1958

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 133 **WELL TYPE:** Coal Test

COMMENT: L.B. LEWIS FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			CLAY	12.3	0.0	
407.7			CLAY	26.1	12.3	
381.7	CARBONDALE		SANDSTONE	41.1	38.3	
340.6	CARBONDALE		SHALY SANDSTONE	31.6	79.4	
309.0	CARBONDALE		SANDY SHALE	31.1	111.0	
277.9	CARBONDALE		SHALE	2.2	142.1	
275.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.1	144.3	
272.7	CARBONDALE	COLCHESTER	COAL	0.4	147.3	
272.2	SPOON		SHALE	1.3	147.8	
270.9	SPOON		SANDY SHALE	5.2	149.1	
265.7	SPOON		SANDY SHALE	27.8	154.3	
238.0	SPOON		SANDY SHALE	6.1	182.0	
231.9	SPOON		BLACK SHALE	2.1	188.1	
229.8	SPOON	DEKOVEN	COAL	3.3	190.2	
226.5	SPOON		SHALE	3.6	193.5	
222.9	SPOON		SANDY SHALE	2.1	197.1	
220.8	SPOON		SANDSTONE	2.9	199.2	
217.9	SPOON		SHALE	11.1	202.1	
206.8	SPOON		BLACK SHALE	4.5	213.2	
202.3	SPOON	DAVIS	COAL	3.8	217.7	
198.6	SPOON		SANDY SHALE	1.6	221.4	

MAPID: 16503205000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.407084 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669938 **DATE COLLECTED:** 6 / 27 / 1958
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	38.3	0.0	
381.7			ROCK	109.0	38.3	
272.7	CARBONDALE	COLCHESTER	COAL	0.4	147.3	
272.2			ROCK	42.4	147.8	
229.8	SPOON	DEKOVEN	COAL	3.3	190.2	
226.5	SPOON		ROCK	24.2	193.5	
202.3	SPOON	DAVIS	COAL	3.8	217.7	
198.6	SPOON		ROCK	1.6	221.4	

MAPID: 16503205000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.407084 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.669938 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING 133, LEWIS L B **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
272.8	CARBONDALE	COLCHESTER	COAL	0.4	147.2	
230.0	CARBONDALE	DEKOVEN	COAL	3.3	190.0	
230.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	190.0	
202.4	CARBONDALE	DAVIS	COAL	3.7	217.6	5% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 165274B0015F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.393283 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.66536 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 19.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	-	0.0	
-			ROCK	14.0		
-			UNKNOWN	0.7		
-			COAL	2.5		
-			ROCK	0.1		
-			COAL	0.9		
-			ROCK	1.0		

MAPID: 16500333101M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.38981 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.665357 **DATE COLLECTED:** 0 / 0 / 1954
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 14.1 **LOG TYPE:**
SOURCE: FLD NOTES-STONEHOUSE, FINK COAL CO **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	10.0		
-	CARBONDALE	HERRIN	COAL	3.6		
-	CARBONDALE		ROCK	0.5		

MAPID: 16500333100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387504 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.664432 **DATE COLLECTED:** 10 / 6 / 1981
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 25.0 **LOG TYPE:**
SOURCE: MINE NOTES-FINK C C **WELL TYPE:** Strip Mine
COMMENT: GENERALIZED SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	3.0	0.0	
457.0			ROCK	10.0	3.0	
447.0			UNKNOWN	10.0	13.0	
437.0			ROCK	2.0	23.0	
435.0	CARBONDALE	HERRIN	COAL	-	25.0	

MAPID: 16500500000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387443 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.671791 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log

SOURCE: A.R. BYRD & SONS HOLE #6 **WELL TYPE:** Coal Test

COMMENT: CENTR. OF W SIDE NE NW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			CLAY	23.0	0.0	
382.0			SANDY SHALE	14.0	23.0	
368.0			SANDSTONE	18.0	37.0	
350.0			SHALE	2.0	55.0	
348.0			SANDSTONE	14.0	57.0	
334.0			SANDY SHALE	2.0	71.0	
332.0			SANDSTONE	21.0	73.0	
311.0			SANDY SHALE	4.0	94.0	
307.0			SHALE	33.9	98.0	
273.1			SHALE	1.0	131.9	
272.1	CARBONDALE	BRIAR HILL	COAL	0.8	132.9	
271.2	CARBONDALE	BRIAR HILL	UNKNOWN	0.1	133.8	LOG HAS SULPHUR PARTINGS; POSS. PYRITE
271.2	CARBONDALE	BRIAR HILL	COAL	0.6	133.8	
270.6	CARBONDALE		SHALE	1.2	134.4	
269.4	CARBONDALE		SANDY SHALE	2.4	135.6	
267.0	CARBONDALE		SANDSTONE	12.0	138.0	
255.0	CARBONDALE		SANDY SHALE	17.0	150.0	
238.0	CARBONDALE		SHALE	8.0	167.0	
230.0	CARBONDALE		SHALE	7.0	175.0	
223.0	CARBONDALE	SPRINGFIELD	COAL	5.0	182.0	
218.0	CARBONDALE		UNKNOWN	2.0	187.0	LOG HAS "LIME SHELL" POSS LS OR LIMEY SH

MAPID: 16500500000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387443 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.671791 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 189.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SONS **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0			UNCONSOLIDATED	23.0	0.0	
382.0			ROCK	109.0	23.0	
273.0			COAL	1.5	132.0	
271.5			ROCK	47.6	133.5	
223.9			COAL	5.0	181.1	
218.9			ROCK	2.0	186.1	

MAPID: 16503142000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 150' S line, 660' W line of NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.390408 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.666233 **DATE COLLECTED:** 6 / 30 / 1957

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 156.3 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 34 **WELL TYPE:** Coal Test

COMMENT: CORE DESCRIP. BY J.SIMON & W.SMITH

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNCLASSIFIED	14.3	0.0	
415.7	CARBONDALE		SANDSTONE	5.0	14.3	W/ THIN SH PARTINGS & LAMS
410.7	CARBONDALE		SHALE	4.5	19.3	SILTY IN PART
406.2	CARBONDALE		SHALE	3.2	23.8	W/ SLTST PARTINGS & LAMS
403.0	CARBONDALE		SHALE	6.4	27.0	WELL LAMINATED
396.6	CARBONDALE		SHALY LIMESTONE	0.3	33.4	FOSSILIFEROUS
396.2	CARBONDALE		CALCAREOUS SHALE	0.1	33.8	
396.2	CARBONDALE		SHALE	1.3	33.8	PYRITIC & CALCAREOUS MASSES
394.9	CARBONDALE		BLACK SHALE	0.7	35.1	
394.2	CARBONDALE	HERRIN	COAL	3.7	35.8	W/ PYRITE & SH BANDS
390.5	CARBONDALE		UNDERCLAY	0.4	39.5	STIGMARIAN, SOFT
390.2	CARBONDALE		SILTY CLAYSTONE	2.8	39.8	W/ SMALL CALCAREOUS NODS.
387.3	CARBONDALE		SANDSTONE	15.8	42.7	W/ SH LENSES, BENCHES, LAMS
371.5	CARBONDALE		SHALE	9.0	58.5	LAMINATED, SLTST IN PART
362.5	CARBONDALE		SILTSTONE	3.0	67.5	W/ SHALY LAMINATIONS
359.5	CARBONDALE		SHALE	27.7	70.5	W/ A FEW PLANT FRAGS;SLST LENS. IN PLACE
331.8	CARBONDALE		COAL	1.8	98.2	W/ THIN PYRITE AT TOP
330.1	CARBONDALE		SILTY CLAYSTONE	0.5	99.9	STIGMARIAN
329.6	CARBONDALE		SHALE & SILTSTONE	0.3	100.4	INTERLAMINATED
329.2	CARBONDALE		SANDSTONE	3.8	100.8	CARBONACEOUS & SHALY LENSES
325.4	CARBONDALE		SHALE	4.5	104.6	W/ SLTST LAMS. & LENSES
320.9	CARBONDALE		SANDSTONE	1.9	109.1	CARBONACEOUS & SHALY LENSES
319.0	CARBONDALE		SHALE	3.6	111.0	W/ SLTST LAMS. & LENSES
315.4	CARBONDALE		SANDSTONE	0.2	114.6	CARBONACEOUS & SHALY LENSES
315.2	CARBONDALE		SHALE	0.6	114.8	COALY, W/ SLTST LENSES
314.7	CARBONDALE		SILTSTONE	7.7	115.3	
307.0	CARBONDALE		SILTY SHALE	16.3	123.0	SLTST IN PART
290.7	CARBONDALE	ST. DAVID	SHALY LIMESTONE	0.7	139.3	ALMOST BLACK
290.0	CARBONDALE		FOSSILIFEROUS SHALE	0.8	140.0	PYRITIC
289.2	CARBONDALE	TURNER MINE	BLACK SHALE	6.1	140.8	PYRITIZED BIVALVES
283.1	CARBONDALE	SPRINGFIELD	COAL	4.0	146.9	W/ SOME THIN PYRITE & SHALE BANDS
279.0	CARBONDALE		UNDERCLAY	1.9	151.0	

MAPID: 16503142000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** 150' S line, 660' W line of NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.390408 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.666233 **DATE COLLECTED:** 8 / 30 / 1957
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 156.3 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.0			UNKNOWN	14.3	0.0	
415.7			ROCK	21.4	14.3	
394.2	CARBONDALE	HERRIN	COAL	3.8	35.8	
390.4	CARBONDALE		ROCK	58.5	39.6	
331.9	CARBONDALE	BRIAR HILL	COAL	1.8	98.1	
330.1	CARBONDALE		ROCK	50.5	99.9	
279.6	CARBONDALE	SPRINGFIELD	COAL	4.5	150.4	
275.2	CARBONDALE		ROCK	1.9	154.8	

MAPID: 16503179000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374838 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.659822 **DATE COLLECTED:** 2 / 28 / 1958
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 170.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 55 **WELL TYPE:** Coal Test
COMMENT: R. ELLIOT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			CLAY	5.0	0.0	
436.0	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	5.0	
406.0	CARBONDALE	ANVIL ROCK	SANDSTONE	16.8	35.0	
389.2	CARBONDALE	HERRIN	COAL	3.0	51.8	
386.2	CARBONDALE		SHALE	2.2	54.8	
384.0	CARBONDALE		SANDY SHALE	23.5	57.0	
360.5	CARBONDALE		SANDSTONE	9.0	80.5	
351.5	CARBONDALE		SHALE	23.0	89.5	
328.5	CARBONDALE	BRIAR HILL	COAL	2.2	112.5	
326.3	CARBONDALE		SHALE	3.8	114.7	
322.5	CARBONDALE		SANDY SHALE	39.8	118.5	
282.7	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	158.3	
277.7	CARBONDALE	SPRINGFIELD	COAL	4.7	163.3	
273.0	CARBONDALE		UNDERCLAY	2.0	168.0	

MAPID: 16503179000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374838 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.659822 **DATE COLLECTED:** 2 / 26 / 1958
SURFACE ELEVATION (FT.): 441.0 **LOGGED (FT.):** 170.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
441.0			UNCONSOLIDATED	5.0	0.0	
436.0			ROCK	46.8	5.0	
389.2			COAL	3.0	51.8	
386.2			ROCK	57.7	54.8	
328.5			COAL	2.2	112.5	
326.3			ROCK	48.7	114.7	
277.7			COAL	4.7	163.3	
273.0			ROCK	2.0	168.0	

MAPID: 16503244000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.382331 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.661207 **DATE COLLECTED:** 11 / 4 / 1958
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 101.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 94 **WELL TYPE:** Coal Test
COMMENT: MELVIN BOOTEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0			CLAY	3.0	0.0	
378.0			SANDY CLAY	27.0	3.0	
351.0			SAND/CLAY	17.5	30.0	
333.5	CARBONDALE		SANDY SHALE	5.6	47.5	
327.9	CARBONDALE		SANDSTONE	4.5	53.1	
323.4	CARBONDALE		SANDY SHALE	31.7	57.6	
291.7	CARBONDALE	ST. DAVID	LIMESTONE	1.2	89.3	
290.6	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	90.4	
285.6	CARBONDALE	SPRINGFIELD	COAL	4.7	95.4	
280.9	CARBONDALE		UNDERCLAY	0.9	100.1	

MAPID: 16503244000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.382331 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.661207 **DATE COLLECTED:** 11 / 4 / 1958
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 101.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0			UNCONSOLIDATED	47.5	0.0	
333.5			ROCK	47.9	47.5	
285.6	CARBONDALE	SPRINGFIELD	COAL	4.7	95.4	
280.9	CARBONDALE		ROCK	0.9	100.1	

MAPID: 16503245000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.382861 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.666264 **DATE COLLECTED:** 11 / 10 / 1958
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 95 **WELL TYPE:** Coal Test
COMMENT: SAM BOOTEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0			CLAY	1.0	0.0	
391.0			CLAY	12.5	1.0	
378.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	43.8	13.5	
334.7	CARBONDALE		SHALE	0.6	57.3	
334.2	CARBONDALE	HERRIN	COAL	3.9	57.8	
330.2	CARBONDALE		UNDERCLAY	6.8	61.8	
323.5	CARBONDALE		SANDSTONE	20.5	68.5	W/ SH BANDS
303.0	CARBONDALE		SANDY SHALE	34.8	89.0	
268.2	CARBONDALE	BRIAR HILL	COAL	2.1	123.8	
266.1	CARBONDALE		SANDY SHALE	7.1	125.9	
259.0	CARBONDALE		SANDSTONE	3.3	133.0	
255.7	CARBONDALE		SANDY SHALE	31.3	136.3	
224.5	CARBONDALE	ST. DAVID	LIMESTONE	0.7	167.5	
223.8	CARBONDALE	TURNER MINE	BLACK SHALE	5.5	168.2	PROBABLY BKSH
218.3	CARBONDALE	SPRINGFIELD	COAL	4.7	173.7	
213.7	CARBONDALE		UNDERCLAY	1.7	178.3	

MAPID: 16503245000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.382861 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.666264 **DATE COLLECTED:** 11 / 10 / 1958
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0			UNCONSOLIDATED	13.5	0.0	
378.5			ROCK	44.3	13.5	
334.2	CARBONDALE	HERRIN	COAL	3.9	57.8	
330.3	CARBONDALE		ROCK	62.1	61.7	
268.2	CARBONDALE	BRIAR HILL	COAL	2.1	123.8	
266.1	CARBONDALE		ROCK	47.8	125.9	
218.3	CARBONDALE	SPRINGFIELD	COAL	4.7	173.7	
213.7	CARBONDALE		ROCK	1.7	178.3	

MAPID: 16503246000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.377731 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.659364 **DATE COLLECTED:** 11 / 7 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 155 **WELL TYPE:** Coal Test
COMMENT: MELVIN BARTEN FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			CLAY	25.0	0.0	
355.0	CARBONDALE		SANDSTONE	5.0	25.0	
350.0	CARBONDALE		SHALE	26.0	30.0	
324.0	CARBONDALE	BRIAR HILL	COAL	1.8	56.0	
322.2	CARBONDALE		SHALE	39.5	57.8	
282.7	CARBONDALE	ST. DAVID	LIMESTONE	0.7	97.3	
282.1	CARBONDALE	TURNER MINE	BLACK SHALE	6.5	97.9	
275.6	CARBONDALE	SPRINGFIELD	COAL	5.2	104.4	
270.4	CARBONDALE		SHALE	2.4	109.6	

MAPID: 16503246000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.377731 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.659364 **DATE COLLECTED:** 11 / 7 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 112.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	25.0	0.0	
355.0			ROCK	31.0	25.0	
324.0	CARBONDALE	BRIAR HILL	COAL	1.8	56.0	
322.2	CARBONDALE		ROCK	46.7	57.8	
275.6	CARBONDALE	SPRINGFIELD	COAL	5.2	104.4	
270.4	CARBONDALE		ROCK	2.4	109.6	

MAPID: 16503248000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.389839 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.661677 **DATE COLLECTED:** 11 / 13 / 1958
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 155.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 157 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			CLAY	10.3	0.0	
439.7	CARBONDALE		SHALE	20.9	10.3	
418.7	CARBONDALE	HERRIN	COAL	4.0	31.3	
414.7	CARBONDALE		SHALE	12.8	35.3	
401.9	CARBONDALE		SANDY SHALE	3.3	48.1	
398.7	CARBONDALE		SANDSTONE	5.1	51.3	
393.6	CARBONDALE		SANDY SHALE	7.1	56.4	
386.5	CARBONDALE		SHALE	29.2	63.5	
357.3	CARBONDALE		LIMESTONE	1.4	92.7	
355.9	CARBONDALE	BRIAR HILL	COAL	2.3	94.1	
353.6	CARBONDALE		SHALE	49.9	96.4	
303.7	CARBONDALE	ST. DAVID	LIMESTONE	0.8	146.3	
302.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	147.1	
300.9	CARBONDALE	SPRINGFIELD	COAL	5.8	149.1	
295.1	CARBONDALE		SHALE	0.6	154.9	

MAPID: 16503248000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.389839 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.661677 **DATE COLLECTED:** 11 / 13 / 1958
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 155.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	10.3	0.0	
439.7			ROCK	20.9	10.3	
418.8	CARBONDALE	HERRIN	COAL	4.0	31.2	
414.7	CARBONDALE		ROCK	58.8	35.3	
355.9	CARBONDALE	BRIAR HILL	COAL	2.3	94.1	
353.6	CARBONDALE		ROCK	52.7	96.4	
300.9	CARBONDALE	SPRINGFIELD	COAL	5.8	149.1	
295.1	CARBONDALE		ROCK	0.6	154.9	

MAPID: 16503249000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392101 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.669043 **DATE COLLECTED:** 11 / 17 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 153.5 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. 158 **WELL TYPE:** Coal Test
COMMENT: DRILLERS LOG AND CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			CLAY	7.3	0.0	
392.7	CARBONDALE		SHALE	24.2	7.3	
368.5	CARBONDALE	BRERETON	LIMESTONE	4.5	31.5	
364.0	CARBONDALE	HERRIN	COAL	3.5	36.0	
360.5	CARBONDALE		UNDERCLAY	4.1	39.5	GRAY SHALE
356.4	CARBONDALE		SILTY, SANDY SHALE	18.7	43.6	W/ SS AND SLTST IN UPPER 10+'
337.7	CARBONDALE		SHALE	33.1	62.3	
304.7	CARBONDALE	BRIAR HILL	COAL	2.0	95.3	
302.7	CARBONDALE		SANDY SHALE	44.8	97.3	UPPER 15' W/SS INTRBDS THEN SLTY-SNDY SH
257.8	CARBONDALE	TURNER MINE	BLACK SHALE	5.1	142.2	CORE DES. .67' OF LIMEY SH THEN 3' BKSH
252.7	CARBONDALE	SPRINGFIELD	COAL	4.0	147.3	
248.7	CARBONDALE		SHALE	2.3	151.3	

MAPID: 16503249000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392101 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669043 **DATE COLLECTED:** 11 / 17 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 153.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	7.3	0.0	
392.7			ROCK	28.7	7.3	
364.0	CARBONDALE	HERRIN	COAL	3.5	36.0	
360.5	CARBONDALE		ROCK	55.8	39.5	
304.7	CARBONDALE	BRIAR HILL	COAL	2.0	95.3	
302.7	CARBONDALE		ROCK	49.9	97.3	
252.7	CARBONDALE	SPRINGFIELD	COAL	4.0	147.3	
248.7	CARBONDALE		ROCK	2.3	151.3	

MAPID: 165274B0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 12 **QUARTERS/FOOTAGES:** SW NW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387504 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.664432 **DATE COLLECTED:** 6 / 23 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 14.2 **LOG TYPE:**
SOURCE: MINE NOTES-STONEHOUSE **WELL TYPE:** Strip Mine
COMMENT: PROBABLY FINK MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	10.0	0.0	
390.0	CARBONDALE	HERRIN	COAL	3.7	10.0	
386.3	CARBONDALE		ROCK	0.5	13.7	

MAPID: 16500013100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW NE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.3773 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.649725 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 4.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-OSBORN MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 16500013200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.378489 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.646965 **DATE COLLECTED:** 4 / 26 / 1980
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 54.5 **LOG TYPE:**
SOURCE: GUIDEBOOK-REINERTSEN,STOP 7 **WELL TYPE:** Strip Mine
COMMENT: GENERALIZED SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0			ROCK	7.5	0.0	
492.5	CARBONDALE	BRIAR HILL	COAL	2.0	7.5	
490.5	CARBONDALE		ROCK	38.0	9.5	
452.5	CARBONDALE	SPRINGFIELD	COAL	4.0	47.5	
448.5	CARBONDALE		ROCK	3.0	51.5	

MAPID: 16500013201M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.378489 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.646965 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 14.7 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, ABD DRIFT MINE **WELL TYPE:** Underground mine
COMMENT: TARLETON MINE.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	9.7		
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 16500333200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.384799 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.644645 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-EAGLE CREEK C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.5		

MAPID: 16500418401M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW SE SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386499 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.646017 **DATE COLLECTED:** 0 / 0 / 1972

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 50.0 **LOG TYPE:**

SOURCE: MINE NOTES-DIVERSIFIED MINERALS,INC.PIT1 **WELL TYPE:** Strip Mine

COMMENT: PIT #2 IS IN SEC 14. NO LOCATION GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			ROCK	45.0	0.0	
315.0	CARBONDALE	SPRINGFIELD	COAL	5.0	45.0	

MAPID: 16500501000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.388744 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.652463 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 393.7 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log

SOURCE: F.K. TAYLOR **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.7			UNCONSOLIDATED	14.8	0.0	
378.9	CARBONDALE		GRAY SHALE	0.0	14.8	
378.9	CARBONDALE	SPRINGFIELD	COAL	4.0	14.8	
374.9	CARBONDALE		GRAY SHALE	41.3	18.8	
333.7	CARBONDALE		DARK SHALE	9.4	60.0	
324.3	CARBONDALE		COAL	1.0	69.4	
323.3	CARBONDALE		SHALE	34.9	70.4	
288.4	CARBONDALE	HOUCHIN CREEK	COAL	2.8	105.3	
285.6	CARBONDALE		DARK SHALE	5.9	108.1	
279.7	CARBONDALE		SANDSTONE	5.0	114.0	
274.7	CARBONDALE		SHALE	29.0	119.0	
245.7	CARBONDALE		SANDSTONE	2.0	148.0	
243.7	CARBONDALE		SHALE	26.0	150.0	
217.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.0	176.0	
212.7	SPOON		SHALE	23.0	181.0	
189.7	SPOON		DARK SHALE	13.0	204.0	
176.7	SPOON	DEKOVEN	COAL	3.4	217.0	
173.3	SPOON		SHALE	20.6	220.4	
152.7	SPOON		DARK SHALE	2.9	241.0	
149.8	SPOON	DAVIS	COAL	5.1	243.9	
144.7	SPOON		SHALE	35.0	249.0	
109.7	SPOON		BLACK SHALE	2.0	284.0	
107.7	SPOON		COAL	0.5	286.0	
107.2	SPOON		SHALE	3.5	286.5	
103.7	SPOON		SANDSTONE	5.0	290.0	
98.7	SPOON		SHALE	5.0	295.0	
93.7	SPOON		DARK SHALE	12.0	300.0	
81.7	SPOON		COAL	0.9	312.0	
80.8	SPOON		UNDERCLAY	2.1	312.9	
78.7	SPOON		LIMESTONE	10.0	315.0	
68.7	SPOON		SHALE	23.0	325.0	
45.7	SPOON		SANDSTONE	52.0	348.0	
-6.3			SHALE	9.7	400.0	
-16.0			COAL	2.7	409.7	
-18.6			UNDERCLAY	3.7	412.3	
-22.3			DARK SHALE	1.3	416.0	
-23.6			COAL	0.9	417.3	
-24.5			SHALE	21.3	418.2	
-45.7			COAL	0.6	439.4	

-46.3	DARK SHALE	13.0	440.0
-59.3	COAL	0.8	453.0
-60.1	UNDERCLAY	2.2	453.8
-62.3	DARK SHALE	13.0	456.0
-75.3	COAL	1.0	469.0
-76.3	SHALE	7.0	470.0
-83.3	SANDSTONE	96.8	477.0
-180.1	COAL	0.7	573.8
-180.7	SHALE	5.6	574.4
-186.3	SANDSTONE	26.0	580.0

MAPID: 16500501000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.388744 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.652463 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 606.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.0			UNCONSOLIDATED	5.0	0.0	
389.0			ROCK	9.8	5.0	
379.2	CARBONDALE	SPRINGFIELD	COAL	4.0	14.8	
375.3			ROCK	50.7	18.7	
324.6			COAL	1.0	69.4	
323.6			ROCK	34.9	70.4	
288.7			COAL	2.8	105.3	
285.9			ROCK	108.9	108.1	
177.0	SPOON	DEKOVEN	COAL	3.4	217.0	
173.6	SPOON		ROCK	22.6	220.4	
151.0	SPOON	DAVIS	COAL	3.8	243.0	
147.2	SPOON		ROCK	39.2	246.8	
108.0	SPOON		COAL	0.5	286.0	
107.5	SPOON		ROCK	25.5	286.5	
82.0	SPOON		COAL	0.8	312.0	
81.2	SPOON		ROCK	96.8	312.8	
-15.7	SPOON		COAL	2.7	409.7	
-18.3			ROCK	5.8	412.3	
-24.1			COAL	0.9	418.1	
-25.1			ROCK	21.3	419.1	
-46.3			COAL	0.6	440.3	
-46.9			ROCK	13.0	440.9	
-59.9			COAL	0.8	453.9	
-60.7			ROCK	16.2	454.7	
-76.9			COAL	0.8	470.9	
-77.6			ROCK	96.8	471.6	
-174.4			ROCK	0.7	568.4	
-175.1			ROCK	31.6	569.1	

MAPID: 16500501000C **VERSION:** 3 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.388744 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.652463 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 393.7 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log

SOURCE: F.K. TAYLOR, HOLE #10 **WELL TYPE:** Coal Test

COMMENT: E SIDE OF SW NW, F.K. TAYLOR FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.7			SAND	5.0	0.0	
388.7			CLAY	7.5	5.0	
381.2	CARBONDALE		SHALE	2.3	12.5	
378.9	CARBONDALE	SPRINGFIELD	COAL	4.0	14.8	
374.9	CARBONDALE		SHALE	41.3	18.8	
333.7	CARBONDALE		SHALE	9.4	60.0	
324.3	CARBONDALE	HOUCHIN CREEK	COAL	1.0	69.4	
323.3	CARBONDALE		SHALE	6.6	70.4	
316.7	CARBONDALE		SHALE	22.0	77.0	
294.7	CARBONDALE		SHALE	6.3	99.0	
288.4	CARBONDALE	SURVANT	COAL	2.8	105.3	
285.6	CARBONDALE		SHALE	5.9	108.1	
279.7	CARBONDALE		SANDSTONE	5.0	114.0	
274.7	CARBONDALE		SHALE	21.0	119.0	
253.7	CARBONDALE		SANDY SHALE	8.0	140.0	
245.7	CARBONDALE		SANDSTONE	2.0	148.0	
243.7	CARBONDALE		SANDY SHALE	5.0	150.0	
238.7	CARBONDALE		SHALE	17.0	155.0	
221.7	CARBONDALE		SANDY SHALE	4.0	172.0	
217.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.0	176.0	
212.7	SPOON		SHALE	23.0	181.0	
189.7	SPOON		SHALE	13.0	204.0	
176.7	SPOON	DEKOVEN	COAL	3.4	217.0	
173.3	SPOON		SHALE	9.6	220.4	
163.7	SPOON		SANDY SHALE	11.0	230.0	
152.7	SPOON		SHALE	2.0	241.0	
150.7	SPOON	DAVIS	COAL	3.8	243.0	
146.9	SPOON		SHALE	2.2	246.8	
144.7	SPOON		SANDY SHALE	4.0	249.0	
140.7	SPOON		SHALE	8.0	253.0	
132.7	SPOON		SANDY SHALE	11.0	261.0	
121.7	SPOON		SHALE	12.0	272.0	
109.7			BLACK SHALE	2.0	284.0	
107.7			COAL	0.5	286.0	
107.2			SHALE	3.5	286.5	
103.7			SANDSTONE	5.0	290.0	
98.7			SANDY SHALE	5.0	295.0	
93.7			SHALE	12.0	300.0	
81.7			COAL	0.8	312.0	

80.9	UNDERCLAY	2.2	312.8
78.7	LIMESTONE	10.0	315.0
68.7	SHALE	7.0	325.0
61.7	SHALE	5.0	332.0
56.7	SANDY SHALE	5.0	337.0
51.7	SHALE	3.0	342.0
48.7	SHALE	2.0	345.0
46.7	SHALE	1.0	347.0
45.7	SANDSTONE	52.0	348.0
-6.3	SANDY SHALE	5.0	400.0
-11.3	SHALE	4.7	405.0
-16.0	COAL	2.7	409.7
-18.6	UNDERCLAY	3.7	412.3
-22.3	SHALE	1.3	416.0
-23.6	COAL	0.9	417.3
-24.5	SHALE	3.8	418.2
-28.3	SHALE	5.0	422.0
-33.3	SHALE	5.0	427.0
-38.3	SHALE	4.0	432.0
-42.3	SHALE	3.4	436.0
-45.7	COAL	0.6	439.4
-46.3	SHALE	13.0	440.0
-59.3	COAL	0.8	453.0
-60.1	UNDERCLAY	2.2	453.8
-62.3	SHALE	13.3	456.0
-75.6	COAL	0.8	469.3
-76.3	CALCAREOUS SHALE	7.0	470.0
-83.3	SANDSTONE/SHALE	36.0	477.0
-119.3	SANDSTONE	60.8	513.0
-180.1	COAL	0.7	573.8
-180.7	SHALE	5.6	574.4
-186.3	SANDSTONE	26.0	580.0

MAPID: 16500501000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SE SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.388744 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.652463 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 606.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR F K, 10 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
325.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	69.0	
289.0	CARBONDALE	SURVANT	COAL	2.7	105.0	
213.0	CARBONDALE	COLCHESTER	COAL	0.0	181.0	
177.0	CARBONDALE	DEKOVEN	COAL	3.4	217.0	
177.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	217.0	
151.0	CARBONDALE	DAVIS	COAL	3.8	243.0	
110.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	284.0	

MAPID: 16503183000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW NW SW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392188 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.65338 **DATE COLLECTED:** 4 / 11 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 205.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 113 **WELL TYPE:** Coal Test
COMMENT: APPROXIMATE LOC., C.S. HULL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	47.0	0.0	CLAY, SAND, AND GRAVEL
333.0	CARBONDALE		SANDY SHALE	33.2	47.0	
299.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.2	80.2	
295.7	CARBONDALE	COLCHESTER	COAL	0.2	84.3	
295.5	SPOON		SHALE	3.1	84.5	
292.4	SPOON		SHALE	44.9	87.6	
247.5	SPOON	DEKOVEN	COAL	2.1	132.5	
245.4	SPOON		SHALE	2.7	134.6	
242.7	SPOON		SANDSTONE	5.8	137.3	
236.9	SPOON		SHALE	18.4	143.1	
218.5	SPOON	DAVIS	COAL	4.3	161.5	
214.2	SPOON		SHALE	16.0	165.8	
198.2	SPOON		COAL	0.1	181.8	
198.1	SPOON		SANDSTONE	18.1	181.9	
180.0	SPOON		BLACK SHALE	1.5	200.0	
178.5	SPOON		SANDY SHALE	4.0	201.5	

MAPID: 16503183000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW NW SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392188 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.65338 **DATE COLLECTED:** 4 / 11 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 205.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	47.0	0.0	
333.0			ROCK	37.3	47.0	
295.7			COAL	0.2	84.3	
295.5			ROCK	48.0	84.5	
247.5			COAL	2.1	132.5	
245.4			ROCK	26.9	134.6	
218.5			COAL	4.3	161.5	
214.2			ROCK	16.0	165.8	
198.2			COAL	0.1	181.8	
198.1			ROCK	23.6	181.9	

MAPID: 16503195000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 400' S line, 30' W line of SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392681 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.64479 **DATE COLLECTED:** 6 / 14 / 1958

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 191.5 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. 130 **WELL TYPE:** Coal Test

COMMENT: DRILL LOG, CORE, JESS CARNETT FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			SAND/CLAY	13.7	0.0	
408.3	CARBONDALE		SHALY SANDSTONE	26.4	13.7	
381.9	CARBONDALE		SANDY SHALE	27.8	40.1	
354.2	CARBONDALE		FOSSILIFEROUS SHALE	6.0	67.8	FROM CORE; W/ COALY PART, DRK GRAY BASE
348.2	CARBONDALE	COLCHESTER	COAL	0.5	73.8	
347.7	SPOON		UNDERCLAY	4.0	74.3	CARBONACEOUS
343.7	SPOON		SANDY SHALE	21.0	78.3	
322.7	SPOON		SHALE	15.2	99.3	
307.5	SPOON	DEKOVEN	COAL	3.0	114.5	
304.5	SPOON		SANDSTONE	6.2	117.5	
298.3	SPOON		SANDY SHALE	6.3	123.7	
292.1	SPOON		SANDSTONE	2.6	129.9	
289.5	SPOON		SANDY SHALE	10.3	132.5	
279.2	SPOON		BLACK SHALE	1.8	142.8	
277.5	SPOON	DAVIS	COAL	4.0	144.5	
273.5	SPOON		SHALE	1.8	148.5	
271.7	SPOON		SANDSTONE	34.5	150.3	
237.2	SPOON		BLACK SHALE	5.3	184.8	
232.0	SPOON		COAL	0.5	190.0	
231.5	SPOON		SHALE	1.5	190.5	

MAPID: 16503195000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 400' S line, 30' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392681 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.64479 **DATE COLLECTED:** 6 / 14 / 1958
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 191.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0			UNCONSOLIDATED	13.7	0.0	
408.3			ROCK	59.7	13.7	
348.7	CARBONDALE	COLCHESTER	COAL	0.5	73.3	
348.2			ROCK	40.2	73.8	
308.0	SPOON	DEKOVEN	COAL	3.0	114.0	
305.0	SPOON		ROCK	27.0	117.0	
278.0	SPOON	DAVIS	COAL	4.0	144.0	
274.0			ROCK	41.5	148.0	
232.5			COAL	0.5	189.5	
232.0			ROCK	1.5	190.0	

MAPID: 16503195000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** 400' S line, 30' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.392681 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.64479 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 192.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING 130, CARNETT JESS **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.7	CARBONDALE	COLCHESTER	COAL	0.5	73.3	
308.0	CARBONDALE	DEKOVEN	COAL	3.0	114.0	
308.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	114.0	
278.0	CARBONDALE	DAVIS	COAL	4.0	144.0	
232.5	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	189.5	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503228000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NW NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386405 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.657992 **DATE COLLECTED:** 9 / 29 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 266.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. 148 **WELL TYPE:** Coal Test

COMMENT: DRILL LOG, CORE, BILL HORRISON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			SAND/CLAY	51.5	0.0	
328.5	CARBONDALE		SHALE	23.5	51.5	
305.0	CARBONDALE	EXCELLO	BLACK SHALE	7.2	75.0	PYRITIC, W/ FEW FOSSILS
297.8	CARBONDALE	HOUCHIN CREEK	COAL	1.2	82.2	
296.7	CARBONDALE		SILTY CLAYSTONE	1.4	83.3	STIGMARIAN
295.2	CARBONDALE		SHALY SILTSTONE	2.0	84.8	"UC SLSTS"
293.2	CARBONDALE		SHALY SILTSTONE	2.2	86.8	W/ LS NODS.
291.1	CARBONDALE		SHALY SILTSTONE	4.7	88.9	W/ DISSEM. PYRITE & SID. MASSES
286.3	CARBONDALE		SHALE	14.3	93.7	
272.0	CARBONDALE		SHALE	10.3	108.0	W/ SIDERITE BANDS
261.7	CARBONDALE	SURVANT	COAL	1.7	118.3	
260.0	CARBONDALE		SILTY CLAYSTONE	4.0	120.0	STIGMARIAN, "UC SLTST"
256.0	CARBONDALE		SILTSTONE	8.5	124.0	STRIPED, "INTERLAMINATED W/ SH"
247.5	CARBONDALE		FOSSILIFEROUS SHALE	2.0	132.5	W/ LINGULOID BRACHIOPODS
245.5	CARBONDALE		SHALE	1.0	134.5	W/ A LS BAND
244.5	CARBONDALE		SANDSTONE	32.5	135.5	W/ INTERLAMS OF SH
212.0	CARBONDALE		SHALE	10.0	168.0	
202.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.4	178.0	
195.6	CARBONDALE	COLCHESTER	COAL	0.3	184.4	
195.2	SPOON		SILTY CLAYSTONE	1.6	184.8	"UC SLTST", STIGMARIAN
193.7	SPOON		SILTSTONE	22.2	186.3	SHALY LAMINAE & BANDS IN PARTS
171.5	SPOON		SHALE	13.0	208.5	W/ SID. NODS & BANDS
158.5	SPOON		CORE LOSS	4.0	221.5	SOME COAL & SHALE AS ABOVE
154.5	SPOON	DEKOVEN	COAL	2.7	225.5	
151.8	SPOON		SHALE	1.7	228.2	
150.2	SPOON		SILTSTONE	10.2	229.8	W/ INTERLAMS OF SHALE
140.0	SPOON		SILTY SHALE	7.0	240.0	NODULAR, W/ CARBONIZED PLANT DEB.
133.0	SPOON		SHALE	8.0	247.0	FOSSILIFEROUS SID. CONCRETIONS NEAR BASE
125.0	SPOON		BLACK SHALE	5.7	255.0	FROM DRILLERS LOG
119.3	SPOON	DAVIS	COAL	4.2	260.7	FROM DRILLERS LOG
115.2	SPOON		SHALE	1.2	264.8	FROM DRILLERS LOG

MAPID: 16503228000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386405 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.657992 **DATE COLLECTED:** 9 / 29 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 266.0 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT: 1, 4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	51.5	0.0	
328.5			ROCK	30.7	51.5	
297.8	CARBONDALE	HOUCHIN CREEK	COAL	1.2	82.2	
296.7	CARBONDALE		ROCK	35.0	83.3	
261.7	CARBONDALE		COAL	1.7	118.3	
260.0	CARBONDALE		ROCK	64.4	120.0	
195.6	CARBONDALE	COLCHESTER	COAL	0.3	184.4	
195.3	SPOON		ROCK	36.8	184.7	
158.5	SPOON	DEKOVEN	COAL	2.8	221.5	
155.7	SPOON		ROCK	32.7	224.3	
123.1	SPOON	DAVIS	COAL	4.2	256.9	
118.9	SPOON		ROCK	1.2	261.1	

MAPID: 16503228000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.386405 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.657992 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 266.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING 148, HORBISON BILL **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
297.9	CARBONDALE	HOUCHIN CREEK	COAL	1.2	82.1	
261.7	CARBONDALE	SURVANT	COAL	1.6	118.3	
205.5	CARBONDALE	COLCHESTER	COAL	0.3	174.5	
154.5	CARBONDALE	DEKOVEN	COAL	2.6	225.5	
157.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	222.5	
119.4	CARBONDALE	DAVIS	COAL	4.1	260.6	

MAPID: 16503247000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.376617 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.656609 **DATE COLLECTED:** 11 / 11 / 1958
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 113.7 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 156 **WELL TYPE:** Coal Test
COMMENT: RAYMOND ELLIOT FARM; JUST S OF CTR NE NE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			CLAY	20.0	0.0	
358.0	CARBONDALE		SANDY SHALE	4.2	20.0	
353.8	CARBONDALE		SHALE	35.3	24.2	
318.6	CARBONDALE	BRIAR HILL	COAL	2.6	59.4	
316.0	CARBONDALE		SHALE	40.3	62.0	
275.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	102.3	
274.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	103.3	
271.7	CARBONDALE	SPRINGFIELD	COAL	5.2	106.3	
266.5	CARBONDALE		UNCLASSIFIED	2.7	111.5	NO RECORD

MAPID: 16503247000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.376617 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.656609 **DATE COLLECTED:** 11 / 11 / 1958
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 113.7 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	20.0	0.0	
358.0			ROCK	39.4	20.0	
318.6	CARBONDALE	BRIAR HILL	COAL	2.6	59.4	
316.0	CARBONDALE		ROCK	44.3	62.0	
271.7	CARBONDALE	SPRINGFIELD	COAL	5.2	106.3	
266.5			UNKNOWN	2.2	111.5	

MAPID: 165274B0016F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE NE SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.375058 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.646979 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 26.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT: LANE LEADING TO DRIFT MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	-		
-			ROCK	5.7		
-	CARBONDALE	HOUCHIN CREEK	COAL	0.6		
-			ROCK	2.2		
-			UNKNOWN	12.0		
-			ROCK	6.0		

MAPID: 16502726000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW SE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405594 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.646524 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 523.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: STERLING-MIDLAND COAL CO S-D-1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
475.2	CARBONDALE	COLCHESTER	COAL	0.5	47.8	
429.7	CARBONDALE	DEKOVEN	COAL	1.5	93.3	
429.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	93.3	
402.5	CARBONDALE	DAVIS	COAL	2.6	120.5	

MAPID: 16503181000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403229 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.657539 **DATE COLLECTED:** 1 / 16 / 1958

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 105 **WELL TYPE:** Coal Test

COMMENT: APPROXIMATE LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			BOULDERS & CLAY	3.0	0.0	
409.0			SHALE	55.5	3.0	
353.5			LIMESTONE	0.3	58.5	
353.2			COAL	0.3	58.8	
352.9	SPOON		UNDERCLAY	2.1	59.1	
350.8	SPOON		SHALE	43.3	61.2	
307.5	SPOON	DAVIS	COAL	4.3	104.5	
303.2	SPOON		SHALE	21.8	108.8	
281.5	SPOON		COAL	1.0	130.5	
280.5	SPOON		UNDERCLAY	1.8	131.5	
278.7	SPOON		SANDSTONE	36.9	133.3	
241.7			COAL	0.2	170.3	
241.6			BLACK SHALE	3.6	170.4	
238.0			SHALE	21.6	174.0	
216.4			SANDSTONE	2.7	195.6	
213.7			SANDY SHALE	3.9	198.3	
209.8			LIMESTONE	1.0	202.2	
208.8			BLACK SHALE	2.1	203.2	
206.7			COAL	0.1	205.3	
206.7			SANDY SHALE	1.7	205.3	

MAPID: 16503181000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403229 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.657539 **DATE COLLECTED:** 1 / 16 / 1958
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 207.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	3.0	0.0	
409.0			ROCK	55.8	3.0	
353.2			COAL	0.3	58.8	
352.9			ROCK	45.4	59.1	
307.5			COAL	2.3	104.5	
305.2			ROCK	23.8	106.8	
281.5			COAL	1.0	130.5	
280.5			ROCK	38.9	131.5	
241.6			COAL	0.2	170.4	
241.4			ROCK	34.8	170.6	
206.6			COAL	0.1	205.4	
206.5			ROCK	1.7	205.5	

MAPID: 165274B0017F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.407327 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.65066 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 11.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	-	0.0	
-			UNKNOWN	4.5		
-	SPOON	DEKOVEN	COAL	0.8		
-			ROCK	6.0		

MAPID: 16590905000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 14 **QUARTERS/FOOTAGES:** 550' S line, 300' E line of NW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.398475 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.648924 **DATE COLLECTED:** 6 / 18 / 1990
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 97.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. OB#2 **WELL TYPE:** Coal Test
COMMENT: MINE #4 PERMIT 325

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	19.0	0.0	BROWN
361.0	PLEISTOCENE		CLAY	1.0	19.0	BLUE
360.0	PLEISTOCENE		CLAY	35.0	20.0	CONTAINS COAL AND SS FRAGS
325.0	CARBONDALE		GRAY SHALE	3.0	55.0	
322.0	CARBONDALE		SANDY SHALE	2.0	58.0	
320.0	CARBONDALE	DEKOVEN	COAL	3.0	60.0	
317.0	CARBONDALE		UNDERCLAY	2.0	63.0	
315.0	CARBONDALE		SANDSTONE	5.0	65.0	
310.0	CARBONDALE		GRAY SHALE	2.0	70.0	
308.0	CARBONDALE		SILTSTONE	21.5	72.0	
286.5	CARBONDALE		BLACK SHALE	0.5	93.5	
286.0	CARBONDALE	DAVIS	COAL	3.0	94.0	

MAPID: 165274B0018F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.44724 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.644826 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 544.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT: TRAVERSE UP RAVINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			ROCK	30.0	0.0	
430.0	ABBOTT	WILLIS	COAL	2.0	30.0	
428.0			ROCK	6.3	32.0	
421.7			UNKNOWN	50.0	38.3	
371.7			ROCK	456.0	88.3	

MAPID: 16500333300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.465666 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.657665 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WARD MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 16503830000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NE NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.462889 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.65081 **DATE COLLECTED:** 5 / 10 / 1973
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	11.0	0.0	
379.0			ROCK	26.0	11.0	
353.0			COAL	2.0	37.0	
351.0			ROCK	61.0	39.0	

MAPID: 16524371000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW SW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.45702 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.654481 **DATE COLLECTED:** 6 / 19 / 1978
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 330.0 **LOG TYPE:** Drillers Log
SOURCE: RON BEANLAND, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	20.0	0.0	
420.0			ROCK	15.0	20.0	
405.0			COAL	1.0	35.0	
404.0			ROCK	294.0	36.0	

MAPID: 165274B0020F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SE NE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.448875 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.656333 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 1.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	SPOON		COAL	1.0	0.0	

MAPID: 165274B0021F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW SE SE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.459369 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.652645 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 20.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		ROCK	19.5		
-	SPOON	MURPHYSBORO	COAL	0.7		
-			ROCK	0.0		

MAPID: 165274B0019F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW SW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.415537 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.630607 **DATE COLLECTED:** 0 / 0 / 1954
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-STONEHOUSE, ABD MINES **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	-		

MAPID: 16500013300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SW SW SW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.409733 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.629688 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-COLBERT MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
560.0			UNKNOWN	0.0	0.0	

MAPID: 16500502000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.399189 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.643274 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 398.5 **LOGGED (FT.):** 353.0 **LOG TYPE:** Drillers Log

SOURCE: FRANK TAYLOR, HOLE #8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.5			CLAY	40.0	0.0	
358.5			SAND	15.0	40.0	
343.5			CLAY	19.0	55.0	
324.5	SPOON		SHALE	5.0	74.0	
319.5	SPOON	DEKOVEN	COAL	3.5	79.0	
316.0	SPOON		SHALE	15.5	82.5	
300.5	SPOON		SHALE	7.8	98.0	
292.7	SPOON	DAVIS	COAL	2.3	105.8	
290.3	SPOON		SHALE	10.7	108.2	
279.7	SPOON		SANDSTONE	30.2	118.8	
249.5	SPOON		SHALE	2.3	149.0	
247.2	SPOON		COAL	1.0	151.3	
246.2	SPOON		SHALE	2.7	152.3	
243.5	SPOON		LIMESTONE	1.0	155.0	
242.5	SPOON		CALCAREOUS SHALE	9.0	156.0	
233.5	SPOON		SHALE	13.0	165.0	
220.5	SPOON	MT. RORAH	COAL	0.5	178.0	
220.0	SPOON		SANDSTONE	14.5	178.5	
205.5	SPOON		SHALE	4.0	193.0	
201.5	SPOON		SHALE	6.0	197.0	
195.5			SHALE	10.0	203.0	
185.5	SPOON		SANDY SHALE	12.0	213.0	
173.5	SPOON	CURLEW	SANDSTONE	33.5	225.0	
140.0	SPOON		COAL	1.2	258.5	
138.8	SPOON		SHALE	2.3	259.7	
136.5	SPOON		SANDSTONE	8.5	262.0	
128.0	SPOON		SHALE	1.5	270.5	
126.5	SPOON		COAL	0.5	272.0	
126.0	SPOON		SHALE	7.5	272.5	
118.5	SPOON	CURLEW	LIMESTONE	1.0	280.0	
117.5			SHALE	2.0	281.0	
115.5			BLACK SHALE	1.0	283.0	
114.5			COAL	2.3	284.0	
112.2			SHALE	3.7	286.3	
108.5			SANDSTONE	5.0	290.0	
103.5			BLACK SHALE	4.0	295.0	
99.5			COAL	0.5	299.0	
99.0			SHALE	7.5	299.5	
91.5			BLACK SHALE	8.0	307.0	

83.5	SHALE	3.0	315.0
80.5	COAL	0.5	318.0
80.0	SHALE	9.5	318.5
70.5	SANDSTONE	12.0	328.0
58.5	SANDY SHALE	13.0	340.0

MAPID: 16500502000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.399189 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.643274 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.0			UNCONSOLIDATED	40.0	0.0	
359.0			ROCK	39.0	40.0	
320.0	CARBONDALE	HOUCHIN CREEK	COAL	3.5	79.0	
316.5			ROCK	33.8	82.5	
282.7			COAL	2.3	116.3	
280.3			ROCK	43.2	118.7	
237.2			COAL	1.0	161.8	
236.2			ROCK	25.7	162.8	
210.5			COAL	0.5	188.5	
210.0			ROCK	80.0	189.0	
130.0			COAL	1.2	269.0	
128.8			ROCK	10.8	270.2	
118.0			COAL	2.5	281.0	
115.5			ROCK	11.5	283.5	
104.0			COAL	2.3	295.0	
101.7			ROCK	12.7	297.3	
89.0			COAL	0.5	310.0	
88.5			ROCK	18.5	310.5	
70.0			COAL	0.5	329.0	
69.5			ROCK	34.5	329.5	

MAPID: 16500502000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.399189 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.643274 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 353.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR FRANK, 8 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
320.0	CARBONDALE	DEKOVEN	COAL	3.5	79.0	
320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	79.0	
293.1	CARBONDALE	DAVIS	COAL	2.3	105.9	
247.7	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	151.3	
244.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	155.0	

MAPID: 16502728000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.407937 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.641053 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 581.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: STERLING-MIDLAND COAL CO US-D-1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.0	CARBONDALE	DEKOVEN	COAL	2.8	102.0	
479.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	102.0	
448.0	CARBONDALE	DAVIS	COAL	3.3	133.0	49% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16502730000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW NW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41031 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.633788 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 555.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: STERLING-MIDLAND COAL CO M-D-2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
531.5	CARBONDALE	COLCHESTER	COAL	0.4	23.5	
498.0	CARBONDALE	DEKOVEN	COAL	2.1	57.0	
498.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	57.0	
466.5	CARBONDALE	DAVIS	COAL	3.8	88.5	51% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16503185000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1000' N line, 900' E line of SE

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395691 **GEOLOGIST:** S.SROKA

CONFIDENTIAL: N **LATITUDE:** 37.633669 **DATE COLLECTED:** 4 / 18 / 1958

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 115 **WELL TYPE:** Coal Test

COMMENT: JOHN MITCHELL FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			SAND/CLAY	20.0	0.0	
375.0	SPOON		BLACK SHALE	2.1	20.0	
372.9	SPOON	DAVIS	COAL	3.7	22.1	
369.2	SPOON		SHALE	0.6	25.8	
368.7	SPOON		SANDSTONE	45.2	26.3	
323.5	SPOON		BLACK SHALE	1.5	71.5	
322.0	SPOON		COAL	0.5	73.0	
321.5	SPOON		SHALE	18.8	73.5	
302.7	SPOON		SANDSTONE	7.6	92.3	
295.1	SPOON		SANDY SHALE	20.1	99.9	
275.0	SPOON		COAL	0.5	120.0	
274.5			LIMESTONE	2.5	120.5	
272.0			SHALE	2.2	123.0	
269.8			SANDY SHALE	4.8	125.2	
265.0			SANDSTONE	6.6	130.0	
258.4			SHALE	17.9	136.6	
240.5			LIMESTONE	2.1	154.5	
238.4			BLACK SHALE	0.6	156.6	
237.8			SANDSTONE	24.9	157.2	
212.9			SANDY SHALE	9.9	182.1	
203.0			COAL	1.2	192.0	
201.8			SHALY SANDSTONE	6.2	193.2	
195.7			COAL	0.8	199.3	
194.9			SHALE	16.4	200.1	

MAPID: 16503185000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1000' N line, 900' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395691 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.633669 **DATE COLLECTED:** 4 / 18 / 1958
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0			UNCONSOLIDATED	20.0	0.0	
375.0			ROCK	2.1	20.0	
372.9			COAL	3.7	22.1	
369.3			ROCK	47.3	25.7	
322.0			COAL	0.5	73.0	
321.5			ROCK	46.5	73.5	
275.0			COAL	0.5	120.0	
274.5			ROCK	71.5	120.5	
203.0			COAL	1.2	192.0	
201.8			ROCK	6.2	193.2	
195.6			COAL	0.8	199.4	
194.9			ROCK	16.4	200.1	

MAPID: 16503185000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1000' N line, 900' E line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395691 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.633669 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 217.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING 115, MITCHELL JOHN **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0	CARBONDALE	DAVIS	COAL	3.7	22.0	
323.5	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	71.5	
275.0	TRADEWATER	MT. RORAH	COAL	0.5	120.0	

MAPID: 165274B0022F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.403816 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.636025 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 10.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	7.0		
-	SPOON	DEKOVEN	COAL	3.3		
-	SPOON		ROCK	0.0		

MAPID: 165274B0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1' S line, 1800' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405276 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.629212 **DATE COLLECTED:** 10 / 16 / 1981
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 18.8 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON,ABD MINE **WELL TYPE:** Strip Mine
COMMENT: POSSIBLY AUGER STRIP MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		ROCK	4.0		
-	SPOON	DEKOVEN	COAL	2.8		
-	SPOON		ROCK	12.0		

MAPID: 165274B0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.410923 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.629694 **DATE COLLECTED:** 9 / 16 / 1977
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 143.6 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON, ABD STRIP MINE **WELL TYPE:** Strip Mine
COMMENT: POSSIBLY AUGERCC INDEX3332 OPERATED61-62

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	75.5		
-	CARBONDALE	COLCHESTER	COAL	0.7		
-	SPOON		ROCK	33.8		
-	SPOON	DEKOVEN	COAL	3.2		
-	SPOON		ROCK	28.9		
-	SPOON	DAVIS	COAL	1.5		

MAPID: 165274B0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1300' S line, 300' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.41046 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.632826 **DATE COLLECTED:** 10 / 6 / 1981
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 30.5 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON,ABD MINE **WELL TYPE:** Strip Mine
COMMENT: MORE DATA AVAILABLE IN MINE NOTES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	27.0		
-	CARBONDALE	COLCHESTER	COAL	0.5		
-			ROCK	3.0		

MAPID: 165274B0004F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 300' S line, 1600' W line of SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405965 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.630041 **DATE COLLECTED:** 10 / 6 / 1981
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 72.3 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON **WELL TYPE:** Strip Mine
COMMENT: COMPOSITE SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	-		
-	CARBONDALE	COLCHESTER	COAL	0.5		
-			ROCK	39.0		
-	SPOON	DEKOVEN	COAL	2.8		
-	SPOON		ROCK	30.0		
-	SPOON	DAVIS	COAL	-		

MAPID: 165274B0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1450' S line, 10' W line of SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.401991 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.633192 **DATE COLLECTED:** 10 / 6 / 1981
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 32.8 **LOG TYPE:**
SOURCE: MINE NOTES-JOHN NELSON, ABD MINE **WELL TYPE:** Strip Mine
COMMENT: POSSIBLY AUGER MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	COLCHESTER	COAL	-		
-	SPOON		ROCK	30.0		
-	SPOON	DEKOVEN	COAL	2.8		

MAPID: 165274B0023F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SW SE SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.395471 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.630517 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 25.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT: NOTE:SECT. STONEFRONT OR SEAHORNE-DELONG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0	SPOON		ROCK	11.0	0.0	
429.0			COAL	0.8	11.0	
428.2			ROCK	6.3	11.8	
421.9			COAL	0.7	18.1	
421.1			ROCK	6.7	18.9	

MAPID: 16500333500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NE SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.376329 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639631 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-HEROD C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON	DEKOVEN	COAL	-		
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	-		

MAPID: 16500333501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.375773 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639176 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 17.0 **LOG TYPE:**
SOURCE: FLD NOTES-PARHAM, HEROD MINE **WELL TYPE:** Strip Mine
COMMENT: COAL NAMED BY JOHN NELSON-1982

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	13.5		
-	SPOON	DAVIS	COAL	3.0		
-			ROCK	0.5		

MAPID: 16503194000C **VERSION:** 1 **PROJECT:** NCRDS90

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.380838 **GEOLOGIST:** S.SROKA
CONFIDENTIAL: N **LATITUDE:** 37.640537 **DATE COLLECTED:** 6 / 18 / 1958
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CO. 131 **WELL TYPE:** Coal Test
COMMENT: DRILLERS LOG, CORE, H. TARLETON FARM

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			CLAY	8.0	0.0	
362.0	SPOON	PALZO	SANDSTONE	10.3	8.0	
351.7	SPOON		CLAYSTONE & SILTSTONE	12.9	18.3	DRILLERS LOG NOTES "CLAY"
338.7	SPOON		SHALE	22.8	31.3	
315.9	SPOON		SILTY SHALE	9.9	54.1	CORED AT 61.83';W/CARBONIZED PLANT
306.0	SPOON		PYRITE	0.0	64.0	
306.0	SPOON	DEKOVEN	COAL	3.3	64.0	W/ SH & PYRITE BANDS
302.7	SPOON		SILTY CLAYSTONE	1.1	67.3	STIGMARIAN
301.7	SPOON		SHALY SANDSTONE	0.9	68.3	
300.7	SPOON		SHALE	1.1	69.3	FROM DRILLERS LOG
299.7	SPOON		SANDY SHALE	8.2	70.3	
291.5	SPOON		FOSSILIFEROUS SHALE	15.9	78.5	
275.6	SPOON	DAVIS	COAL	4.0	94.4	PYRITIC & BONEY BANDS
271.6	SPOON		SILTY CLAYSTONE	2.4	98.4	STIGMARIAN
269.2	SPOON		SHALE	1.2	100.8	

MAPID: 16503194000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.380838 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640537 **DATE COLLECTED:** 6 / 18 / 1956
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	8.0	0.0	
452.0			ROCK	56.0	8.0	
396.0	SPOON	DEKOVEN	COAL	3.3	64.0	
392.7	SPOON		ROCK	27.1	67.3	
365.6	SPOON	DAVIS	COAL	4.0	94.4	
361.6	SPOON		ROCK	3.6	98.4	

MAPID: 16503194000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.380838 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.640537 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING 131, TARELTON H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
306.0	CARBONDALE	DEKOVEN	COAL	3.3	64.0	
306.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	64.0	
275.5	CARBONDALE	DAVIS	COAL	4.0	94.5	1% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 16526266000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 1516' N line, 1662' E line
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.380405 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.639558 **DATE COLLECTED:** 4 / 22 / 1983
SURFACE ELEVATION (FT.): 430.9 **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO. BH2 **WELL TYPE:** Water Well
COMMENT: PERMIT 150; EAGLE VALLEY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.9	PLEISTOCENE		UNCONSOLIDATED	11.7	0.0	CLAY TO SILTY CLAY
419.2	CARBONDALE		BLACK SHALE	0.9	11.7	
418.3	CARBONDALE	DEKOVEN	COAL	3.4	12.6	
414.9	CARBONDALE		CLAYSTONE	4.1	16.0	
410.8	CARBONDALE		SANDSTONE	3.9	20.1	SOFT, COARSE; WATER AT 21'
406.9	CARBONDALE		SANDSTONE	4.0	24.0	FINE HARD, FE OR CLAY CEMENT
402.9	CARBONDALE		CLAYSTONE	11.0	28.0	GRAY
391.9	CARBONDALE		CLAYSTONE	2.0	39.0	BLACK; GYPSUM & PYRITE
389.9	CARBONDALE	DAVIS	COAL	3.8	41.0	WATER COMING FR. COAL OR JUST ABOVE
386.1	CARBONDALE		CLAYSTONE	10.2	44.8	

MAPID: 16526267000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE NW NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.380269 **GEOLOGIST:** J. MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.640998 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 430.4 **LOGGED (FT.):** 28.0 **LOG TYPE:** Drillers Log
SOURCE: ARCLAR CO. BH3 **WELL TYPE:** Water Well
COMMENT: PERMIT 150; EAGLE VALLEY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.4	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	SILTY CLAY TO CLAY
419.4	CARBONDALE		CLAYSTONE	3.0	11.0	BROWNISH-BLACK
416.4	CARBONDALE		CLAYSTONE	3.0	14.0	DARKER, TURNING TO SHALE
413.4	CARBONDALE	DEKOVEN	COAL	3.5	17.0	YIELDING WATER AT 19'
409.9	CARBONDALE		CLAYSTONE	1.5	20.5	
408.4	CARBONDALE		SANDSTONE	5.0	22.0	
403.4	CARBONDALE		BLACK SHALE	0.5	27.0	SOFT, PAPERY
402.9	CARBONDALE		SANDSTONE	0.5	27.5	

MAPID: 165274B0024F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.387557 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.633223 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 13.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	3.0		
-			COAL	0.2		
-			ROCK	10.3		

MAPID: 165274B0025F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SW NW

QUADRANGLE: RUDEMENT **LONGITUDE:** -88.391525 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.637323 **DATE COLLECTED:** 0 / 0 / 1933

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 114.0 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	34.0	0.0	
366.0	SPOON	DEKOVEN	COAL	2.5	34.0	
363.5	SPOON		ROCK	19.5	36.5	
344.0	SPOON	DAVIS	COAL	3.0	56.0	
341.0			ROCK	3.0	59.0	
338.0			UNKNOWN	2.0	62.0	
336.0			ROCK	20.0	64.0	
316.0			UNKNOWN	20.0	84.0	
296.0			ROCK	10.0	104.0	

MAPID: 16590903000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.382563 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.630016 **DATE COLLECTED:** 1 / 20 / 1987
SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 146.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. EV-MW-22 **WELL TYPE:** Observation Well
COMMENT: PERMIT 316 JADER NO. 4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
422.0	PLEISTOCENE		SILT	5.0	0.0	
417.0	PLEISTOCENE		SAND	5.0	5.0	
412.0	CARBONDALE		SANDSTONE	10.0	10.0	
402.0	CARBONDALE		SANDY SHALE	5.0	20.0	
397.0	CARBONDALE		SILTY SHALE	32.0	25.0	
365.0	CARBONDALE	COLCHESTER	COAL	0.8	57.0	
364.2	CARBONDALE		UNDERCLAY	2.2	57.8	
362.0	CARBONDALE		SANDY SHALE	25.0	60.0	
337.0	CARBONDALE		SANDY SHALE	10.0	85.0	
327.0	CARBONDALE		BLACK SHALE	4.5	95.0	
322.5	CARBONDALE	DEKOVEN	COAL	2.3	99.5	
320.2	CARBONDALE		UNDERCLAY	1.2	101.8	
319.0	CARBONDALE		SHALY SANDSTONE	7.0	103.0	
312.0	CARBONDALE		SANDSTONE	10.0	110.0	
302.0	CARBONDALE		SANDY SHALE	5.0	120.0	
297.0	CARBONDALE		BLACK SHALE	7.5	125.0	
289.5	CARBONDALE	DAVIS	COAL	3.8	132.5	
285.7	TRADEWATER		SHALY SANDSTONE	9.7	136.3	

MAPID: 16590904000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 24 **QUARTERS/FOOTAGES:** 400' N line, 10' W line of SE NE
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.379123 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.63898 **DATE COLLECTED:** 7 / 1 / 1986
SURFACE ELEVATION (FT.): 449.9 **LOGGED (FT.):** 80.0 **LOG TYPE:**
SOURCE: JADER FUEL CO. 0B#7 **WELL TYPE:**
COMMENT: MINE #4 PERMIT 325

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
449.9	PLEISTOCENE		CLAY	10.0	0.0	
439.9	PLEISTOCENE		MINE OPENING	29.5	10.0	DAVIS AND DEKOVEN
410.4	TRADEWATER		SANDSTONE	5.5	39.5	
404.9	TRADEWATER		SILTSTONE	12.0	45.0	
392.9	TRADEWATER		GRAY SHALE	8.0	57.0	
384.9	TRADEWATER		GRAY SHALE	12.0	65.0	SOME BKSH AND LS
372.9	TRADEWATER		SANDSTONE	3.0	77.0	

MAPID: 165274B0026F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 25 **QUARTERS/FOOTAGES:** NW NE NW NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.389731 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.628665 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 26.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-PARHAM **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNCONSOLIDATED	15.0	0.0	
445.0			ROCK	8.0	15.0	
-			COAL	0.3		
-			ROCK	3.5		

MAPID: 16503602000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW
QUADRANGLE: HEROD **LONGITUDE:** -88.410409 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.62096 **DATE COLLECTED:** 12 / 0 / 1918
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 685.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Dry Hole
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0				62.0	0.0	"SURFACE 0-62". SAMPLES START AT 70'.
358.0			SANDSTONE	0.0	62.0	

MAPID: 16503608000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HEROD **LONGITUDE:** -88.410399 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.622782 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 1622.0 **LOG TYPE:**
SOURCE: DAVIS BEN H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-487.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	891.0	
-816.0			LIMESTONE	-	1220.0	
-1218.0		BASE BARLOW	LIMESTONE	-	1622.0	

MAPID: 16503608000C **VERSION:** 2 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: HEROD **LONGITUDE:** -88.410399 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.622782 **DATE COLLECTED:** 4 / 0 / 1968
SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2101.0 **LOG TYPE:** Multiple log types
SOURCE: DAVIS BEN H **WELL TYPE:** Dry Hole
COMMENT: E-LOG/SAMPLE STUDY-HM BRISTOL 04/72.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.0			SANDSTONE	688.0	50.0	SAMPLES START AT 50'.
-334.0				0.0	738.0	
-334.0	MISSISSIPPIAN	KINKAID	LIMESTONE	153.0	738.0	TOP OF GOREVILLE
-487.0	MISSISSIPPIAN	DEGONIA	SHALE & SANDSTONE	45.0	891.0	
-532.0	MISSISSIPPIAN	CLORE	CALCAREOUS SHALE	94.0	936.0	
-626.0	MISSISSIPPIAN	PALESTINE	SANDSTONE	36.0	1030.0	
-662.0	MISSISSIPPIAN	MENARD	LIMESTONE	106.0	1066.0	TOP OF ALLARD
-768.0	MISSISSIPPIAN	WALTERSBURG	SANDSTONE/SHALE	48.0	1172.0	
-816.0	MISSISSIPPIAN	VIENNA	LIMESTONE	50.0	1220.0	
-866.0	MISSISSIPPIAN	TAR SPRINGS	SANDSTONE	67.0	1270.0	
-933.0			LIMESTONE	55.0	1337.0	
-988.0	MISSISSIPPIAN	HARDINSBURG	SANDSTONE	92.0	1392.0	
-1080.0	MISSISSIPPIAN	HANEY	LIMESTONE	133.0	1484.0	
-1213.0	MISSISSIPPIAN	BEECH CREEK	LIMESTONE	4.0	1617.0	
-1217.0	MISSISSIPPIAN	WEST BADEN GROUP	SANDSTONE	247.0	1621.0	
-1464.0			LIMESTONE	22.0	1868.0	
-1486.0			SHALE	19.0	1890.0	
-1505.0			LIMESTONE	23.0	1909.0	
-1528.0			SANDSTONE	16.0	1932.0	
-1544.0			LIMESTONE	0.0	1948.0	

MAPID: 165274B0027F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.405578 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.628287 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 11.1 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	1.0	0.0	
-	SPOON	DAVIS	COAL	2.8		
-			ROCK	7.3		

MAPID: 165274B0028F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.406168 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.628751 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 8.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, MINE ENTRY **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			ROCK	4.3	0.0	
435.7	SPOON	DAVIS	COAL	4.0	4.3	
431.7			ROCK	-	8.3	

MAPID: 165274B0029F **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW NW NE NW
QUADRANGLE: RUDEMENT **LONGITUDE:** -88.406179 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.627829 **DATE COLLECTED:** 0 / 0 / 1961
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 89.1 **LOG TYPE:**
SOURCE: FLD NOTES-PARHAM, ABD STRIP **WELL TYPE:** Strip Mine
COMMENT: PROBABLY AUGER C C MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			ROCK	31.5	0.0	
388.5	CARBONDALE	COLCHESTER	COAL	0.6	31.5	
387.9			ROCK	30.0	32.1	
357.9	SPOON	DEKOVEN	COAL	3.0	62.1	
354.9	SPOON		ROCK	21.0	65.1	
333.9	SPOON	DAVIS	COAL	3.0	86.1	
330.9			UNKNOWN	-	89.1	

MAPID: 16502450000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW
QUADRANGLE: HEROD **LONGITUDE:** -88.484161 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.616314 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Survey Sample Study
SOURCE: U.S. FOREST SERVICE **WELL TYPE:** Water Well
COMMENT: SAMPLE STUDY,EC COCKRUM 4/42.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
600.0			CLAYSTONE	8.0	0.0	
592.0			SANDSTONE	0.0	8.0	

MAPID: 16503505000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 410' E line of NE SE

QUADRANGLE: HEROD **LONGITUDE:** -88.450843 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.604684 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 501.0 **LOG TYPE:**

SOURCE: TEXOTA OIL CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.0			LIMESTONE	-	194.0	
99.0		BASE BARLOW	LIMESTONE	-	501.0	

MAPID: 16503505000C **VERSION:** 2 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 410' E line of NE SE

QUADRANGLE: HEROD **LONGITUDE:** -88.450843 **GEOLOGIST:** GK MAYNOR

CONFIDENTIAL: N **LATITUDE:** 37.604684 **DATE COLLECTED:** 10 / 0 / 1965

SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 3172.0 **LOG TYPE:** Multiple log types

SOURCE: TEXOTA OIL CO **WELL TYPE:** Dry Hole

COMMENT: CORR. TO WELL-ID'S 16503631, 16503608.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
600.0				0.0	0.0	SAMPLE TOP-GK MAYNOR 05/87
-	MISSISSIPPIAN	PALESTINE	SANDSTONE	0.0		SAMPLE TOP-GK MAYNOR 05/87
550.0	MISSISSIPPIAN	MENARD	LIMESTONE	88.0	50.0	E-LOG TOP OF ALLARD-GK MAYNOR 05/87
462.0	MISSISSIPPIAN	WALTERSBURG	SHALE	57.0	138.0	E-LOG TOP-GK MAYNOR 05/87
405.0	MISSISSIPPIAN	VIENNA	LIMESTONE	8.0	195.0	E-LOG TOP-GK MAYNOR 05/87
397.0	MISSISSIPPIAN	TAR SPRINGS	SHALE	77.0	203.0	E-LOG TOP-GK MAYNOR 05/87
320.0			LIMESTONE	68.0	280.0	E-LOG TOP-GK MAYNOR 05/87
252.0	MISSISSIPPIAN	HARDINSBURG	SANDSTONE	98.0	348.0	E-LOG TOP-GK MAYNOR 05/87
154.0	MISSISSIPPIAN	HANEY	LIMESTONE	117.0	446.0	E-LOG TOP-GK MAYNOR 05/87
37.0	MISSISSIPPIAN	BEECH CREEK	LIMESTONE	5.0	563.0	E-LOG TOP-GK MAYNOR 05/87
32.0	MISSISSIPPIAN	WEST BADEN GROUP	SANDSTONE	239.0	568.0	E-LOG TOP-GK MAYNOR 05/87
-207.0			LIMESTONE	26.0	807.0	E-LOG TOP-GK MAYNOR 05/87
-233.0			SHALE	27.0	833.0	E-LOG TOP-GK MAYNOR 05/87
-260.0			LIMESTONE	24.0	860.0	E-LOG TOP-GK MAYNOR 05/87
-284.0			SANDSTONE	50.0	884.0	E-LOG TOP-GK MAYNOR 05/87
-334.0			LIMESTONE	211.0	934.0	E-LOG TOP-GK MAYNOR 05/87
-545.0			LIMESTONE	476.0	1145.0	E-LOG TOP-CO.
-1021.0			LIMESTONE	398.0	1621.0	E-LOG TOP?-GK MAYNOR 05/87
-1419.0			LIMESTONE	203.0	2019.0	E-LOG TOP?-GKM 5/87. FLT
-1622.0			LIMESTONE	205.0	2222.0	E-LOG TOP?-GK MAYNOR 05/87
-1827.0	MISSISSIPPIAN	SPRINGVILLE	SHALE	16.0	2427.0	SAMPLE TOP-Y. LASEMI
-1843.0			LIMESTONE	10.0	2443.0	SAMPLE TOP-Y. LASEMI
-1853.0			SHALE	122.0	2453.0	SAMPLE TOP-Y. LASEMI
-1975.0			SHALE	156.0	2575.0	SAMPLE TOP-Y. LASEMI
-2131.0			SHALE	69.0	2731.0	SAMPLE TOP-Y. LASEMI
-2200.0			LIMESTONE	66.0	2800.0	SAMPLE TOP-Y. LASEMI
-2266.0	DEVONIAN	GRAND TOWER	LIMESTONE	207.0	2866.0	E-LOG/SAMPLE TOP-GK MAYNOR 05/87
-2473.0	DEVONIAN	DUTCH CREEK	LIMESTONE AND SANDSTONE	72.0	3073.0	E-LOG TOP-CO.
-2545.0			LIMESTONE	0.0	3145.0	E-LOG TOP-CO.

MAPID: 16502431000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW
QUADRANGLE: HEROD **LONGITUDE:** -88.445783 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.608306 **DATE COLLECTED:** 2 / 0 / 1944
SURFACE ELEVATION (FT.): 552.0 **LOGGED (FT.):** 930.0 **LOG TYPE:** Multiple log types
SOURCE: **WELL TYPE:** Dry Hole
COMMENT: SAMPLE STUDY-D. SPEZIALE 5/44.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
547.0				0.0	5.0	
547.0			LIMESTONE	54.0	5.0	
493.0	MISSISSIPPIAN	HARDINSBURG	SANDSTONE	91.0	59.0	
402.0	MISSISSIPPIAN	HANEY	LIMESTONE	130.0	150.0	
272.0	MISSISSIPPIAN	BEECH CREEK	LIMESTONE	5.0	280.0	
267.0	MISSISSIPPIAN	WEST BADEN GROUP	SANDSTONE	225.0	285.0	
42.0			LIMESTONE	49.0	510.0	"RENAULT"
-7.0			SANDSTONE/SILTSTONE	13.0	559.0	"AUX VASES"
-20.0			LIMESTONE	39.0	572.0	"LEVIAS"
-59.0			SANDSTONE	39.0	611.0	"ROSICLARE"
-98.0			LIMESTONE	0.0	650.0	"FREDONIA"

MAPID: 16524376000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 33 **QUARTERS/FOOTAGES:** 100' N line, 660' E line of NW
QUADRANGLE: HEROD **LONGITUDE:** -88.442082 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.614373 **DATE COLLECTED:** 3 / 31 / 1980
SURFACE ELEVATION (FT.): 590.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
590.0			UNCONSOLIDATED	15.0	0.0	
575.0			ROCK	50.0	15.0	
525.0			COAL	0.5	65.0	
524.5			ROCK	14.5	65.5	

MAPID: 16525648000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: SALINE **TWP/RNG:** 10S 7E **SECTION:** 36 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: HEROD **LONGITUDE:** -88.386514 **GEOLOGIST:** GK MAYNOR

CONFIDENTIAL: N **LATITUDE:** 37.605146 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 690.0 **LOGGED (FT.):** 214.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Water Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
690.0			CLAYSTONE	7.0	0.0	
683.0			SANDSTONE	0.0	7.0	