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Status Report

ILLINOIS STATE GEOLOGICAL SURVEY
PRAIRIE RESEARCH INSTITUTE

Total Records: 2795

Top 3 County Records		Top 3 Log Type Records		Top 3 Coal Records		Top 3 Member Records	
Gallatin	2795	Electric Log	1061	HERRIN	1313	HERRIN COAL	1313
		Drillers Log	967	SPRINGFIELD	1050	SPRINGFIELD COAL	1050
		Survey Core Study	264	DAVIS	902	DAVIS COAL	902

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 - LOWER		**366.5**	366.5	366.5	**0.3**	0.3	0.3
SURVANT - UPPER		**356.5**	356.5	356.5	**0.5**	0.5	0.5
CARTHAGE	LIMESTONE	**155.0**	32.0	384.5	**7.9**	3.0	11.6
NEW HAVEN	COAL	**145.7**	116.0	190.3	**3.7**	0.2	16.0
MACOUPIN	LIMESTONE	**170.6**	84.7	256.5	**3.1**	1.2	5.0
WOMAC	COAL	**160.8**	48.0	345.5	**1.0**	0.3	1.6
CARLINVILLE	LIMESTONE	**160.0**	160.0	160.0	**2.3**	2.3	2.3
CHAPEL	COAL	**235.4**	59.8	648.0	**1.1**	0.2	3.5
TRIVOLI	SANDSTONE	**243.5**	243.5	243.5	**43.7**	43.7	43.7
WEST FRANKLIN	LIMESTONE	**242.0**	18.0	815.0	**6.2**	0.8	27.2
LAKE CREEK	COAL	**195.2**	56.0	334.3	**1.1**	0.9	1.3
DEGRAFF	COAL	**112.2**	69.1	173.3	**0.7**	0.4	0.9
PIASA	LIMESTONE	**186.0**	46.7	815.4	**5.1**	0.3	14.5
DANVILLE	COAL	**295.0**	11.0	840.4	**1.7**	0.2	4.0
ALLENBY	COAL	**230.4**	2.7	796.0	**0.7**	0.0	8.9
SS BELOW NO. 7	SANDSTONE	**293.6**	10.0	574.0	**6.0**	2.2	10.0
BANKSTON FORK	LIMESTONE	**295.1**	17.0	802.0	**4.7**	0.4	26.2
ANVIL ROCK	SANDSTONE	**200.7**	1.0	841.0	**23.1**	1.0	136.9
LAWSON	SHALE	**308.4**	3.5	841.5	**28.6**	3.3	101.0
CONANT	LIMESTONE	**321.3**	37.0	569.4	**1.2**	0.6	3.0
JAMESTOWN	COAL	**293.8**	192.1	459.4	**1.0**	0.1	6.8
BRERETON	LIMESTONE	**266.5**	11.1	902.5	**3.3**	0.2	13.0
ANNA	SHALE	**278.8**	16.1	903.0	**2.7**	0.0	13.8
ENERGY	SHALE	**318.2**	266.1	416.4	**2.2**	1.4	3.3
HERRIN	COAL	**264.0**	10.0	906.0	**3.5**	0.1	10.0
HIGGINSVILLE	LIMESTONE	**331.3**	99.0	536.0	**2.9**	1.0	6.0
VERMILIONVILLE	SANDSTONE	**303.8**	39.0	682.0	**12.8**	4.0	30.0
BRIAR HILL	COAL	**277.1**	5.0	953.5	**2.0**	0.2	12.2
CANTON	SHALE	**322.3**	7.0	720.0	**16.5**	0.8	46.0
ST. DAVID	LIMESTONE	**336.3**	13.5	1023.0	**1.2**	0.0	28.0

TURNER MINE	SHALE	**310.6**	6.5	1023.4	**3.0**	0.1	7.3
DYKERSBURG	SHALE	**497.1**	401.4	592.7	**1.3**	1.0	1.6
SPRINGFIELD	COAL	**338.1**	8.0	1027.0	**4.6**	0.5	8.0
SS BELOW NO. 5	SANDSTONE	**519.7**	344.0	813.0	**25.3**	5.0	48.0
HANOVER	LIMESTONE	**296.2**	154.3	650.3	**1.7**	0.4	3.0
EXCELLO	SHALE	**247.8**	45.0	858.0	**4.2**	1.0	8.0
HOUCHIN CREEK	COAL	**550.1**	42.6	998.0	**2.0**	0.2	6.5
PLEASANTVIEW	SANDSTONE	**95.2**	16.0	193.0	**26.6**	1.0	52.0
SURVANT	COAL	**588.9**	21.0	1030.0	**1.7**	0.2	5.0
OAK GROVE	LIMESTONE	**336.8**	336.8	336.8	**1.0**	1.0	1.0
MECCA QUARRY	SHALE	**174.1**	14.0	759.1	**2.7**	0.2	9.0
COLCHESTER	COAL	**621.7**	15.0	1085.0	**0.6**	0.1	3.0
PALZO	SANDSTONE	**92.2**	5.0	813.2	**32.9**	4.0	60.5
DEKOVEN	COAL	**624.2**	10.0	1118.0	**3.1**	0.1	9.8
LOWER DEKOVEN	COAL	**720.6**	45.3	1140.0	**1.4**	0.1	4.0
DAVIS	COAL	**648.0**	10.0	1164.0	**3.9**	0.8	6.0
CARRIER MILLS	SHALE	**175.0**	175.0	175.0	**3.0**	3.0	3.0
SEAHORNE LS	LIMESTONE	**780.3**	64.5	1195.0	**1.4**	0.3	3.0
STONEFORT	LIMESTONE	**788.9**	185.0	1184.0	**3.1**	0.5	9.9
WISE RIDGE	COAL	**342.0**	211.0	473.0	**0.6**	0.6	0.7
MT. RORAH	COAL	**839.0**	250.0	1208.0	**1.7**	0.3	4.0
WILLIS	COAL	**78.9**	6.0	151.7	**2.2**	0.8	3.2
KINKAID	LIMESTONE	**520.0**	520.0	520.0	**120.0**	120.0	120.0
BASE L KINKAID	LIMESTONE	**1842.3**	1672.0	2001.0	**-**	-	-
DEGONIA	SANDSTONE	**640.0**	640.0	640.0	**50.0**	50.0	50.0
CLORE	SANDSTONE	**690.0**	690.0	690.0	**70.0**	70.0	70.0
PALESTINE	SANDSTONE	**760.0**	760.0	760.0	**50.0**	50.0	50.0
MENARD	LIMESTONE	**810.0**	810.0	810.0	**120.0**	120.0	120.0
BASE L. MENARD	LIMESTONE	**2139.5**	1965.0	2284.0	**-**	-	-
WALTERSBURG	SANDSTONE	**930.0**	930.0	930.0	**50.0**	50.0	50.0
VIENNA	LIMESTONE	**980.0**	980.0	980.0	**10.0**	10.0	10.0
TAR SPRINGS	SANDSTONE	**990.0**	990.0	990.0	**130.0**	130.0	130.0
HARDINSBURG	SANDSTONE	**1150.0**	1150.0	1150.0	**-**	-	-
BASE BARLOW	LIMESTONE	**2557.1**	2409.0	2696.0	**-**	-	-
KARNAK	LIMESTONE	**2929.0**	2760.0	3060.0	**-**	-	-
				Net Coal	**38.5**		

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: 05900103000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.373541 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.896382 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:** Drillers Log

SOURCE: GRAVES I E **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-58.0	CARBONDALE	HERRIN	COAL	4.8	433.0	
-168.0	CARBONDALE	SPRINGFIELD	COAL	4.4	543.0	

MAPID: 05900403000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.357632 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898383 **DATE COLLECTED:** 9 / 0 / 1948

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 3105.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., SHAW GEO H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	647.0	
-257.0	CARBONDALE	SURVANT	COAL	3.0	673.0	
-318.0	CARBONDALE	COLCHESTER	COAL	0.5	734.0	
-348.0	CARBONDALE	DEKOVEN	COAL	3.0	764.0	
-392.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	808.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-398.0	CARBONDALE	DAVIS	COAL	4.0	814.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	845.0	
-466.0	TRADEWATER	MT. RORAH	COAL	1.2	882.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900404000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.373543 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898218 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3143.0 **LOG TYPE:** Electric Log

SOURCE: BALDERSON, J. F., WILSON R F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-250.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	628.0	
-272.0	CARBONDALE	SURVANT	COAL	2.5	650.0	
-356.0	CARBONDALE	COLCHESTER	COAL	0.5	734.0	
-374.0	CARBONDALE	DEKOVEN	COAL	3.0	752.0	
-398.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	776.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-406.0	CARBONDALE	DAVIS	COAL	3.5	784.0	
-434.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	812.0	
-478.0	TRADEWATER	MT. RORAH	COAL	1.2	856.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901405000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 190' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.357357 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907602 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 2663.0 **LOG TYPE:** Electric Log

SOURCE: DORAN THOMAS S, MCKENZIE-PANKEY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	663.0	
-280.0	CARBONDALE	SURVANT	COAL	2.0	680.0	
-364.0	CARBONDALE	COLCHESTER	COAL	0.5	764.0	
-385.0	CARBONDALE	DEKOVEN	COAL	3.0	785.0	
-415.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	815.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-422.0	CARBONDALE	DAVIS	COAL	3.0	822.0	
-449.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	849.0	
-453.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	853.0	
-494.0	TRADEWATER	MT. RORAH	COAL	1.2	894.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901410000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.357717 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902061 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2699.0 **LOG TYPE:** Electric Log

SOURCE: DORAN THOMAS S, PANKEY UNIT "C" 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-256.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	672.0	
-273.0	CARBONDALE	SURVANT	COAL	1.3	689.0	
-354.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-384.0	CARBONDALE	DEKOVEN	COAL	3.0	800.0	
-413.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	829.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-419.0	CARBONDALE	DAVIS	COAL	4.0	835.0	
-452.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	868.0	
-494.0	TRADEWATER	MT. RORAH	COAL	0.5	910.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901734000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.366711 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896466 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 3146.0 **LOG TYPE:** Electric Log

SOURCE: MCKELVY & SIPOHA DRLG., GRAVES JESSE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.0	
-262.0	CARBONDALE	SURVANT	COAL	3.0	675.0	
-347.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-366.0	CARBONDALE	DEKOVEN	COAL	3.0	779.0	
-390.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	803.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-399.0	CARBONDALE	DAVIS	COAL	3.0	812.0	
-425.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	838.0	
-470.0	TRADEWATER	MT. RORAH	COAL	0.5	883.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902183000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.362325 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905705 **DATE COLLECTED:** 2 / 0 / 1958

SURFACE ELEVATION (FT.): 427.0 **LOGGED (FT.):** 2980.0 **LOG TYPE:** Electric Log

SOURCE: BRYANT & BRYANT OIL, MCKENZIE SUSIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	690.0	
-283.0	CARBONDALE	SURVANT	COAL	1.8	710.0	
-365.0	CARBONDALE	COLCHESTER	COAL	0.5	792.0	
-383.0	CARBONDALE	DEKOVEN	COAL	3.0	810.0	
-417.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	844.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-426.0	CARBONDALE	DAVIS	COAL	4.0	853.0	
-402.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	829.0	
-496.0	TRADEWATER	MT. RORAH	COAL	1.2	923.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902235000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.366845 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905669 **DATE COLLECTED:** 6 / 0 / 1958

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 3001.0 **LOG TYPE:** Electric Log

SOURCE: BRYANT & BRYANT OIL, JOHNSON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-261.0	CARBONDALE	SURVANT	COAL	3.0	694.0	
-342.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-366.0	CARBONDALE	DEKOVEN	COAL	3.0	799.0	
-389.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	822.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-397.0	CARBONDALE	DAVIS	COAL	3.9	830.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	855.0	
-427.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	860.0	
-467.0	TRADEWATER	MT. RORAH	COAL	1.2	900.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902466000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.366764 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.900158 **DATE COLLECTED:** 7 / 0 / 1959

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 1700.0 **LOG TYPE:** Electric Log

SOURCE: SANDERS H N **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1308.0	BASE OF PENN.		UNCLASSIFIED	-	1700.0	

MAPID: 05902466000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.366764 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.900158 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2997.0 **LOG TYPE:**

SOURCE: SANDERS H N **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
157.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	235.0	
-163.0	CARBONDALE	SPRINGFIELD	COAL	-	555.0	
-340.0	CARBONDALE	COLCHESTER	COAL	-	732.0	
-1330.0	BASE OF PENN.		UNCLASSIFIED	-	1722.0	
-1471.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1863.0	
-1764.0		BASE L. MENARD	UNCLASSIFIED	-	2156.0	
-2203.0		BASE BARLOW	LIMESTONE	-	2595.0	
-2605.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2997.0	

MAPID: 05902466000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.366764 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.900158 **DATE COLLECTED:** 7 / 0 / 1959

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 3124.0 **LOG TYPE:** Electric Log

SOURCE: SANDERS H N, GRAVES 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-236.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	628.0	
-256.0	CARBONDALE	SURVANT	COAL	2.5	648.0	
-340.0	CARBONDALE	COLCHESTER	COAL	0.5	732.0	
-358.0	CARBONDALE	DEKOVEN	COAL	3.7	750.0	
-386.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	778.0	62 PERCENT SANDSTONE IN DEKOVEN SPLIT
-392.0	CARBONDALE	DAVIS	COAL	3.0	784.0	
-418.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	
-468.0	TRADEWATER	MT. RORAH	COAL	1.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902834000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.36236 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.903924 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 485.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-25.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	440.5	
-29.5	CARBONDALE	LAWSON	CLAYSTONE & SHALE	9.0	444.5	
-38.5	CARBONDALE	LAWSON	SANDSTONE	8.0	453.5	
-46.5	CARBONDALE	LAWSON	SILTY SHALE	8.0	461.5	
-54.5	CARBONDALE	LAWSON	SHALE	8.0	469.5	
-62.5	CARBONDALE	BRERETON	LIMESTONE	3.0	477.5	
-65.5	CARBONDALE	ANNA	BLACK SHALE	1.5	480.5	
-67.0	CARBONDALE	HERRIN	COAL	3.0	482.0	

MAPID: 05900406000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.34598 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894768 **DATE COLLECTED:** 9 / 0 / 1948

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2191.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BRUCE GROVER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-219.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-250.0	CARBONDALE	SURVANT	COAL	1.2	665.0	
-305.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-347.0	CARBONDALE	DEKOVEN	COAL	3.0	762.0	
-377.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	792.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-383.0	CARBONDALE	DAVIS	COAL	4.0	798.0	
-415.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	830.0	
-453.0	TRADEWATER	MT. RORAH	COAL	1.3	868.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900407000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.348302 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.89665 **DATE COLLECTED:** 9 / 0 / 1948

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BRUCE GROVER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-257.0	CARBONDALE	SURVANT	COAL	1.3	660.0	
-321.0	CARBONDALE	COLCHESTER	COAL	0.5	724.0	
-359.0	CARBONDALE	DEKOVEN	COAL	3.5	762.0	
-389.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	792.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-397.0	CARBONDALE	DAVIS	COAL	4.0	800.0	
-428.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	831.0	
-467.0	TRADEWATER	MT. RORAH	COAL	1.2	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900409000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.352914 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894733 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2188.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BURNS CHARLES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-235.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	648.0	
-297.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-337.0	CARBONDALE	DEKOVEN	COAL	1.5	750.0	
-379.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	792.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-385.0	CARBONDALE	DAVIS	COAL	4.0	798.0	
-415.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	828.0	
-450.0	TRADEWATER	MT. RORAH	COAL	1.3	863.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900413000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.339016 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896735 **DATE COLLECTED:** 7 / 0 / 1948

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2138.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., MCKENZIE W H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	589.0	
-261.0	CARBONDALE	SURVANT	COAL	1.3	626.0	
-321.0	CARBONDALE	COLCHESTER	COAL	0.5	686.0	
-338.0	CARBONDALE	DEKOVEN	COAL	1.3	703.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	739.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-382.0	CARBONDALE	DAVIS	COAL	4.0	747.0	
-414.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	779.0	
-454.0	TRADEWATER	MT. RORAH	COAL	1.3	819.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901266000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.353083 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.903992 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 3143.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, DUCKWORTH N H 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-253.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	649.0	
-268.0	CARBONDALE	SURVANT	COAL	2.5	664.0	
-348.0	CARBONDALE	COLCHESTER	COAL	0.5	744.0	
-376.0	CARBONDALE	DEKOVEN	COAL	1.8	772.0	
-399.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	795.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-408.0	CARBONDALE	DAVIS	COAL	3.5	804.0	
-438.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	834.0	
-482.0	TRADEWATER	MT. RORAH	COAL	1.3	878.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901266000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.353083 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.903992 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2997.0 **LOG TYPE:**

SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-172.0	CARBONDALE	SPRINGFIELD	COAL	-	568.0	
-348.0	CARBONDALE	COLCHESTER	COAL	-	744.0	
-1353.0	BASE OF PENN.		UNCLASSIFIED	-	1749.0	
-1492.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1888.0	
-1802.0		BASE L. MENARD	UNCLASSIFIED	-	2198.0	
-2223.0		BASE BARLOW	LIMESTONE	-	2619.0	
-2601.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2997.0	

MAPID: 05901267000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.35315 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907687 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2687.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, MCKENZIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-260.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	640.0	
-278.0	CARBONDALE	SURVANT	COAL	1.8	658.0	
-362.0	CARBONDALE	COLCHESTER	COAL	0.5	742.0	
-385.0	CARBONDALE	DEKOVEN	COAL	3.0	765.0	
-409.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	789.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-416.0	CARBONDALE	DAVIS	COAL	3.8	796.0	
-446.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	826.0	
-490.0	TRADEWATER	MT. RORAH	COAL	1.3	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901422000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.350783 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904035 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 3149.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, SHAIN FRED 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-255.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	665.0	
-270.0	CARBONDALE	SURVANT	COAL	2.5	680.0	
-355.0	CARBONDALE	COLCHESTER	COAL	0.5	765.0	
-382.0	CARBONDALE	DEKOVEN	COAL	3.0	792.0	
-410.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	820.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-415.0	CARBONDALE	DAVIS	COAL	3.5	825.0	
-448.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	858.0	
-455.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	865.0	
-490.0	TRADEWATER	MT. RORAH	COAL	1.3	900.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902598000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.33906 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.908003 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3088.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., HEALY-LEWIS UN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-265.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	635.0	
-280.0	CARBONDALE	SURVANT	COAL	2.0	650.0	
-355.0	CARBONDALE	COLCHESTER	COAL	0.5	725.0	
-399.0	CARBONDALE	DEKOVEN	COAL	3.0	769.0	
-420.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-430.0	CARBONDALE	DAVIS	COAL	4.0	800.0	
-453.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	823.0	
-495.0	TRADEWATER	MT. RORAH	COAL	1.4	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902598000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.33906 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.908003 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1340.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 05903400000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 1320' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.352101 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.907709 **DATE COLLECTED:** 3 / 4 / 1969

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 577.6 **LOG TYPE:** Multiple log types

SOURCE: PEABODY COAL CO. 22-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-Z

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	68.0	0.0	
-			SHALE	186.8	68.0	
-			LIMESTONE	3.9	254.8	
-			SHALE	54.9	258.7	
-			LIMESTONE	2.3	313.6	
-			SHALE	76.8	315.9	
-	CARBONDALE	DANVILLE	COAL	0.4	392.7	
-	CARBONDALE		SHALE	28.9	393.1	
-	CARBONDALE		SHALE	7.5	421.9	
-	CARBONDALE		SHALE	29.7	429.4	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	459.1	
-	CARBONDALE	ANNA	BLACK SHALE	1.8	463.1	
-	CARBONDALE	HERRIN	COAL	4.8	464.9	
-	CARBONDALE		SHALE	49.8	469.7	
-	CARBONDALE	BRIAR HILL	COAL	1.4	519.5	
-	CARBONDALE		SHALE	15.5	520.9	
-	CARBONDALE		SANDSTONE	2.5	536.4	
-	CARBONDALE		SHALE	28.4	538.9	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.7	567.3	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	569.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.6	570.8	
-	CARBONDALE		SHALE	0.1	575.4	WITH PYRITE
-	CARBONDALE		SHALE	2.1	575.5	

MAPID: 05903400000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 1320' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.352101 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.907709 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 469.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 22-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-4.3	CARBONDALE	DANVILLE	COAL	0.4	394.3	
-4.7	CARBONDALE		GRAY SHALE	28.9	394.7	
-33.6	CARBONDALE	BANKSTON FORK	LIMESTONE	7.7	423.6	
-41.3	CARBONDALE	LAWSON	SILTY SHALE	29.5	431.3	
-70.8	CARBONDALE	BRERETON	LIMESTONE	2.6	460.8	
-73.3	CARBONDALE	ANNA	BLACK SHALE	1.7	463.3	
-75.0	CARBONDALE	HERRIN	COAL	4.8	465.0	

MAPID: 05900116000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320557 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906144 **DATE COLLECTED:** 7 / 0 / 1942

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 2970.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, EDWARDS W F 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	640.0	
-312.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-350.0	CARBONDALE	DEKOVEN	COAL	3.0	758.0	
-378.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	786.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-386.0	CARBONDALE	DAVIS	COAL	3.0	794.0	
-416.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	824.0	
-422.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	830.0	
-456.0	TRADEWATER	MT. RORAH	COAL	1.3	864.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900116000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320557 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.906144 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 4080.0 **LOG TYPE:**
SOURCE: HEATH B M, EDWARDS W 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-49.0	CARBONDALE	HERRIN	COAL	4.0	457.0	
-149.0	CARBONDALE	SPRINGFIELD	COAL	4.0	557.0	

MAPID: 05900117000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.327432 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.898594 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 3980.0 **LOG TYPE:**
SOURCE: CARTER OC, KIMSALL O 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-52.0	CARBONDALE	HERRIN	COAL	4.0	450.0	
-152.0	CARBONDALE	SPRINGFIELD	COAL	4.0	550.0	

MAPID: 05900118000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SE NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.322831 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.902365 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 4300.0 **LOG TYPE:**
SOURCE: CARTER OC, VINYARD R 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-50.0	CARBONDALE	HERRIN	COAL	4.0	480.0	
-150.0	CARBONDALE	SPRINGFIELD	COAL	5.0	580.0	

MAPID: 05900119000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1999' N line, 668' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.321695 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.903455 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 4080.0 **LOG TYPE:**

SOURCE: CARTER OC, VINYARD R 0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-50.0	CARBONDALE	HERRIN	COAL	4.0	458.0	
-150.0	CARBONDALE	SPRINGFIELD	COAL	4.0	558.0	

MAPID: 05900119000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1999' N line, 668' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.321695 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.903455 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 462.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
20.0	CARBONDALE	DANVILLE	COAL	2.0	390.0	
18.0	CARBONDALE		SILTY SHALE	28.0	392.0	
-10.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	420.0	
-17.0	CARBONDALE	LAWSON	BLACK SHALE	1.0	427.0	
-18.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	428.0	
-24.0	CARBONDALE	LAWSON	SANDSTONE	6.0	434.0	
-30.0	CARBONDALE	LAWSON	SILTY SHALE	13.0	440.0	
-43.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	453.0	
-46.0	CARBONDALE	ANNA	BLACK SHALE	1.0	456.0	
-47.0	CARBONDALE	HERRIN	COAL	5.0	457.0	

MAPID: 05900119000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1999' N line, 668' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.321695 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.903455 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2962.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-49.0	CARBONDALE	HERRIN	COAL	3.0	459.0	
-102.0	CARBONDALE	BRIAR HILL	COAL	-	512.0	
-150.0	CARBONDALE	SPRINGFIELD	COAL	4.0	560.0	BLACK SHALE ROOF
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	-	634.0	

MAPID: 05900119000C **VERSION:** 4 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1999' N line, 668' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.321695 **GEOLOGIST:** HINES

CONFIDENTIAL: N **LATITUDE:** 37.903455 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2962.0 **LOG TYPE:** Survey Sample Study

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Oil and Gas Test

COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900119000C **VERSION:** 5 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1999' N line, 668' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.321695 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.903455 **DATE COLLECTED:** 9 / 0 / 1942

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 560.0 **LOG TYPE:** Survey Sample Study

SOURCE: CARTER COAL CO 2 **WELL TYPE:** Dry Hole

COMMENT: COAL DIVISION CONTROL WELL #55

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
408.0			NO RECORD	200.0	0.0	
208.0			SILTSTONE	46.0	200.0	WITH SHALE AND SANDSTONE
162.0			LIMESTONE	5.0	246.0	
157.0			SHALE	3.0	251.0	
154.0			UNDERCLAY	2.0	254.0	
152.0			SANDSTONE/SHALE	6.0	256.0	
146.0			LIMESTONE	4.0	262.0	
142.0			SANDSTONE/SHALE	8.0	266.0	
134.0			BLACK SHALE	6.0	274.0	
128.0			UNDERCLAY	4.0	280.0	
124.0			LIMESTONE	2.0	284.0	
122.0			SHALE & SANDSTONE	4.0	286.0	
118.0			LIMESTONE	6.0	290.0	
112.0			SANDSTONE	20.0	296.0	
92.0			SHALE	66.0	316.0	
26.0			BLACK SHALE	2.0	382.0	
24.0			COAL	2.0	384.0	THICKNESS ESTIMATED
22.0			SHALE	2.0	386.0	
20.0			BLACK SHALE	2.0	388.0	
18.0			COAL	2.0	390.0	WITH CLAYSTONE
16.0			SHALE	12.0	392.0	
4.0			SILTSTONE	6.0	404.0	
-2.0			SHALE	10.0	410.0	WITH SILTSTONE
-12.0			LIMESTONE	7.0	420.0	
-19.0			BLACK SHALE	1.0	427.0	
-20.0			SHALE	6.0	428.0	
-26.0			SANDSTONE	6.0	434.0	
-32.0			SILTSTONE	13.0	440.0	WITH SHALE
-45.0			LIMESTONE	3.0	453.0	
-48.0			BLACK SHALE	1.0	456.0	
-49.0			COAL	5.0	457.0	THICKNESS ESTIMATED
-54.0			UNDERCLAY	4.0	462.0	
-58.0			SANDSTONE	4.0	466.0	
-62.0			LIMESTONE	2.0	470.0	
-64.0			SILTSTONE	14.0	472.0	
-78.0			SHALE	4.0	486.0	
-82.0			SILTSTONE	40.0	490.0	WITH SANDSTONE AND SHALE
-122.0			SANDSTONE	5.0	530.0	BLACK
-127.0			SILTSTONE	15.0	535.0	

-142.0	SHALE	4.0	550.0	
-146.0	LIMESTONE	1.0	554.0	
-147.0	BLACK SHALE	2.0	555.0	
-149.0	COAL	1.0	557.0	THICKNESS ESTIMATED
-150.0	SANDSTONE	2.0	558.0	

MAPID: 05900120000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.322756 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.894819 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 4040.0 **LOG TYPE:**

SOURCE: CARTER OC, WHIPPLE H 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-22.0	CARBONDALE	HERRIN	COAL	4.0	426.0	
-121.0	CARBONDALE	SPRINGFIELD	COAL	5.0	525.0	

MAPID: 05900389000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.332084 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.898565 **DATE COLLECTED:** 6 / 0 / 1945

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 1694.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1305.0	BASE OF PENN.		UNCLASSIFIED	-	1694.0	

MAPID: 05900422000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.327414 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894792 **DATE COLLECTED:** 1 / 0 / 1949

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: WIX E T, AUD GUY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-191.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	598.0	
-201.0	CARBONDALE	SURVANT	COAL	1.3	608.0	
-279.0	CARBONDALE	COLCHESTER	COAL	0.5	686.0	
-307.0	CARBONDALE	DEKOVEN	COAL	3.0	714.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	740.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-338.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-373.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	780.0	
-379.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	786.0	
-417.0	TRADEWATER	MT. RORAH	COAL	1.3	824.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900429000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.332072 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896742 **DATE COLLECTED:** 6 / 0 / 1948

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2195.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., EUBANKS T & R **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-208.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	592.0	
-236.0	CARBONDALE	SURVANT	COAL	1.5	620.0	
-306.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-325.0	CARBONDALE	DEKOVEN	COAL	2.8	709.0	
-358.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	742.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-366.0	CARBONDALE	DAVIS	COAL	3.0	750.0	
-298.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	682.0	
-305.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	689.0	
-438.0	TRADEWATER	MT. RORAH	COAL	1.2	822.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900432000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.334361 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894803 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2140.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., EUBANKS-OLIVER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-192.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-291.0	CARBONDALE	COLCHESTER	COAL	0.5	654.0	
-317.0	CARBONDALE	DEKOVEN	COAL	1.4	680.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	708.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-351.0	CARBONDALE	DAVIS	COAL	3.5	714.0	
-382.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	745.0	
-423.0	TRADEWATER	MT. RORAH	COAL	1.0	786.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901423000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.325159 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904283 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 3125.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., BENNETT C R **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-234.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	620.0	
-260.0	CARBONDALE	SURVANT	COAL	1.3	646.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.5	706.0	
-359.0	CARBONDALE	DEKOVEN	COAL	3.0	745.0	
-383.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	769.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-391.0	CARBONDALE	DAVIS	COAL	4.0	777.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	808.0	
-461.0	TRADEWATER	MT. RORAH	COAL	1.3	847.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901423000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.325159 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.904283 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2976.0 **LOG TYPE:**

SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-152.0	CARBONDALE	SPRINGFIELD	COAL	-	538.0	
-318.0	CARBONDALE	COLCHESTER	COAL	-	704.0	
-1322.0	BASE OF PENN.		UNCLASSIFIED	-	1708.0	
-1463.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1849.0	
-1754.0		BASE L. MENARD	UNCLASSIFIED	-	2140.0	
-2213.0		BASE BARLOW	LIMESTONE	-	2599.0	
-2590.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2976.0	

MAPID: 05901424000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.329772 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902332 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3056.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, MEYER H J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	635.0	
-262.0	CARBONDALE	SURVANT	COAL	0.8	665.0	
-315.0	CARBONDALE	COLCHESTER	COAL	0.5	718.0	
-352.0	CARBONDALE	DEKOVEN	COAL	3.0	755.0	
-382.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	785.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-387.0	CARBONDALE	DAVIS	COAL	4.0	790.0	
-420.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	823.0	
-435.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	838.0	
-460.0	TRADEWATER	MT. RORAH	COAL	1.2	863.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901425000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.325174 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906106 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2975.0 **LOG TYPE:** Electric Log

SOURCE: LOVELACE, D. H. DRLG., PHIPPS FRIEDA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-234.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	630.0	
-263.0	CARBONDALE	SURVANT	COAL	1.2	659.0	
-319.0	CARBONDALE	COLCHESTER	COAL	0.5	715.0	
-362.0	CARBONDALE	DEKOVEN	COAL	3.0	758.0	
-384.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	780.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-394.0	CARBONDALE	DAVIS	COAL	4.0	790.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	818.0	
-429.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	825.0	
-459.0	TRADEWATER	MT. RORAH	COAL	1.3	855.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924610000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.336753 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906091 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	674.0	
-359.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-399.0	CARBONDALE	DEKOVEN	COAL	3.0	810.0	
-427.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	838.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-435.0	CARBONDALE	DAVIS	COAL	4.0	846.0	
-457.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	868.0	
-467.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	878.0	
-501.0	TRADEWATER	MT. RORAH	COAL	2.0	912.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900121000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.315912 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906123 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 2972.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, EDWARDS W F 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-234.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	650.0	
-266.0	CARBONDALE	SURVANT	COAL	1.8	682.0	
-324.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-362.0	CARBONDALE	DEKOVEN	COAL	3.0	778.0	
-389.0	CARBONDALE	LOWER DEKOVEN	COAL	0.1	805.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-394.0	CARBONDALE	DAVIS	COAL	3.5	810.0	
-426.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	842.0	
-434.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	850.0	
-467.0	TRADEWATER	MT. RORAH	COAL	1.3	883.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900121000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.315912 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.906123 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 4160.0 **LOG TYPE:**

SOURCE: HEATH B M, EDWARDS W 0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-53.0	CARBONDALE	HERRIN	COAL	4.0	469.0	
-153.0	CARBONDALE	SPRINGFIELD	COAL	5.0	569.0	

MAPID: 05900247000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.312367 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.903246 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2981.0 **LOG TYPE:**

SOURCE: HALBERT & HEATH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-166.0	CARBONDALE	SPRINGFIELD	COAL	-	554.0	
-338.0	CARBONDALE	COLCHESTER	COAL	-	726.0	
-1322.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	
-1466.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1854.0	
-1758.0		BASE L. MENARD	UNCLASSIFIED	-	2146.0	
-2205.0		BASE BARLOW	LIMESTONE	-	2593.0	
-2593.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2981.0	

MAPID: 05900247000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.312367 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.903246 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 3880.0 **LOG TYPE:**

SOURCE: HLBRTHEATH, BENER GREG0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-66.0	CARBONDALE	HERRIN	COAL	-	454.0	
-165.0	CARBONDALE	SPRINGFIELD	COAL	-	553.0	

MAPID: 05900247000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.312367 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.903246 **DATE COLLECTED:** 8 / 0 / 1943

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2961.0 **LOG TYPE:** Electric Log

SOURCE: HALBERT & HEATH, BENNER-GREGG **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-251.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	639.0	
-267.0	CARBONDALE	SURVANT	COAL	2.8	655.0	
-337.0	CARBONDALE	COLCHESTER	COAL	0.5	725.0	
-369.0	CARBONDALE	DEKOVEN	COAL	3.0	757.0	
-397.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	785.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-402.0	CARBONDALE	DAVIS	COAL	3.0	790.0	
-436.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	824.0	
-476.0	TRADEWATER	MT. RORAH	COAL	1.2	864.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900433000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.308965 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907968 **DATE COLLECTED:** 11 / 0 / 1945

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2645.0 **LOG TYPE:** Electric Log

SOURCE: BARTMES, ROSS, BENNER T C 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-245.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	628.0	
-331.0	CARBONDALE	COLCHESTER	COAL	0.5	714.0	
-370.0	CARBONDALE	DEKOVEN	COAL	3.0	753.0	
-393.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	776.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-400.0	CARBONDALE	DAVIS	COAL	4.0	783.0	
-435.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	818.0	
-440.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	823.0	
-473.0	TRADEWATER	MT. RORAH	COAL	0.5	856.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900435000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.318228 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904284 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2966.0 **LOG TYPE:** Electric Log

SOURCE: WIX E T, GREGG ROBERT E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-243.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	647.0	
-272.0	CARBONDALE	SURVANT	COAL	1.5	676.0	
-334.0	CARBONDALE	COLCHESTER	COAL	0.5	738.0	
-356.0	CARBONDALE	DEKOVEN	COAL	3.5	760.0	
-382.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	786.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-388.0	CARBONDALE	DAVIS	COAL	4.0	792.0	
-421.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	825.0	
-461.0	TRADEWATER	MT. RORAH	COAL	0.5	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901741000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.306593 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.900511 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 3146.0 **LOG TYPE:** Electric Log

SOURCE: FALCON OIL CORP, MOYE WINFERD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	640.0	
-250.0	CARBONDALE	SURVANT	COAL	1.8	658.0	
-327.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-343.0	CARBONDALE	DEKOVEN	COAL	3.0	751.0	
-372.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	780.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-379.0	CARBONDALE	DAVIS	COAL	3.8	787.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	820.0	
-452.0	TRADEWATER	MT. RORAH	COAL	1.2	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901741000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.306593 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.900511 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 408.0 **LOGGED (FT.):** 1714.0 **LOG TYPE:** Electric Log

SOURCE: FALCON OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-327.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	735.0	
-380.0	SPOON	DAVIS	UNCLASSIFIED	-	788.0	
-1306.0	BASE OF PENN.		UNCLASSIFIED	-	1714.0	

MAPID: 05902566000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.315864 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898456 **DATE COLLECTED:** 8 / 0 / 1961

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 3152.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., BENNER THOMPSO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-233.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	632.0	
-259.0	CARBONDALE	SURVANT	COAL	2.5	658.0	
-321.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-350.0	CARBONDALE	DEKOVEN	COAL	1.5	749.0	
-376.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	775.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-386.0	CARBONDALE	DAVIS	COAL	3.0	785.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	818.0	
-456.0	TRADEWATER	MT. RORAH	COAL	1.4	855.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902566000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.315864 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.898456 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 450.0 **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
29.0	CARBONDALE	DANVILLE	COAL	2.0	370.0	
27.0	CARBONDALE		SILTY SHALE	24.0	372.0	
3.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	396.0	
-1.0	CARBONDALE	LAWSON	SILTY SHALE	10.0	400.0	
-11.0	CARBONDALE	LAWSON	SANDSTONE	29.0	410.0	
-40.0	CARBONDALE	LAWSON	SHALE	4.0	439.0	
-44.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	1.5	443.0	
-45.5	CARBONDALE	ANNA	BLACK SHALE	1.5	444.5	
-47.0	CARBONDALE	HERRIN	COAL	4.0	446.0	

MAPID: 05900003000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.294912 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.902338 **DATE COLLECTED:** 0 / 0 / 1910
SURFACE ELEVATION (FT.): 402.2 **LOGGED (FT.):** 4022.0 **LOG TYPE:** Drillers Log
SOURCE: OMAHA OG 0001, RANDOLPH J **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-77.8	CARBONDALE	HERRIN	COAL	7.0	480.0	
-168.8	CARBONDALE	SPRINGFIELD	COAL	5.5	571.0	

MAPID: 05900122000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.294912 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.902338 **DATE COLLECTED:** 8 / 0 / 1942
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1716.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1313.0	BASE OF PENN.		UNCLASSIFIED	-	1716.0	

MAPID: 05900122000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.294912 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.902338 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 4030.0 **LOG TYPE:**

SOURCE: CARTER OC, BROCKETT G0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-67.0	CARBONDALE	HERRIN	COAL	4.0	470.0	
-165.0	CARBONDALE	SPRINGFIELD	COAL	4.0	568.0	

MAPID: 05900122000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.294912 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902338 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3085.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, BROCKETT GEO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-255.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	658.0	
-335.0	CARBONDALE	COLCHESTER	COAL	0.5	738.0	
-371.0	CARBONDALE	DEKOVEN	COAL	2.0	774.0	
-407.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	810.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-413.0	CARBONDALE	DAVIS	COAL	3.5	816.0	
-447.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	850.0	
-455.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	858.0	
-487.0	TRADEWATER	MT. RORAH	COAL	0.5	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901379000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.299568 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896818 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2916.0 **LOG TYPE:** Electric Log

SOURCE: HALBERT RALPH C, MYER ELMER C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-228.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	599.0	
-254.0	CARBONDALE	SURVANT	COAL	1.8	625.0	
-311.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-338.0	CARBONDALE	DEKOVEN	COAL	2.5	709.0	
-377.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	748.0	73 PERCENT SANDSTONE IN DEKOVEN SPLIT
-385.0	CARBONDALE	DAVIS	COAL	4.0	756.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	790.0	
-424.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	795.0	
-467.0	TRADEWATER	MT. RORAH	COAL	1.3	838.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901708000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.283195 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.90786 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2914.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG, HILL C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-285.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	700.0	
-365.0	CARBONDALE	COLCHESTER	COAL	0.5	780.0	
-400.0	CARBONDALE	DEKOVEN	COAL	2.8	815.0	
-427.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	842.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-434.0	CARBONDALE	DAVIS	COAL	3.0	849.0	
-475.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	
-519.0	TRADEWATER	MT. RORAH	COAL	1.8	934.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902154000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.287851 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896816 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 3075.0 **LOG TYPE:** Electric Log

SOURCE: HERLEY, DAVID F., GRAVES J W ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-302.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	735.0	
-376.0	CARBONDALE	COLCHESTER	COAL	0.5	809.0	
-409.0	CARBONDALE	DEKOVEN	COAL	2.8	842.0	
-441.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	874.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-445.0	CARBONDALE	DAVIS	COAL	4.0	878.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	910.0	
-525.0	TRADEWATER	MT. RORAH	COAL	1.2	958.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902300000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.287867 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.902324 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 2987.0 **LOG TYPE:**

SOURCE: O'NEAL, C. E. & CO. **WELL TYPE:** Producer-Oil

COMMENT: WELL MAY BE FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-195.0	CARBONDALE	SPRINGFIELD	COAL	-	640.0	
-361.0	CARBONDALE	COLCHESTER	COAL	-	806.0	
-1321.0	BASE OF PENN.		UNCLASSIFIED	-	1766.0	
-1477.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1922.0	
-1756.0		BASE L. MENARD	UNCLASSIFIED	-	2201.0	
-2186.0		BASE BARLOW	LIMESTONE	-	2631.0	
-2542.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2987.0	

MAPID: 05902300000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.287867 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.902324 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 445.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-21.0	CARBONDALE	DANVILLE	COAL	3.0	466.0	
-24.0	CARBONDALE		SHALE & SANDSTONE	34.0	469.0	
-58.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	503.0	
-63.0	CARBONDALE	LAWSON	SHALE	4.0	508.0	
-67.0	CARBONDALE	LAWSON	SANDSTONE	5.0	512.0	
-72.0	CARBONDALE	LAWSON	SHALE	13.0	517.0	
-85.0	CARBONDALE	BRERETON	LIMESTONE	4.0	530.0	
-89.0	CARBONDALE	ANNA	BLACK SHALE	2.0	534.0	
-91.0	CARBONDALE	HERRIN	COAL	5.0	536.0	

MAPID: 05902300000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.287867 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902324 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 445.0 **LOGGED (FT.):** 3087.0 **LOG TYPE:** Electric Log

SOURCE: O'NEAL, C. E. & CO., MURPHY IRA W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-278.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	723.0	
-305.0	CARBONDALE	SURVANT	COAL	2.0	750.0	
-365.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.0	845.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	870.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-431.0	CARBONDALE	DAVIS	COAL	3.0	876.0	
-465.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	910.0	
-473.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	918.0	
-505.0	TRADEWATER	MT. RORAH	COAL	1.3	950.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900123000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.280876 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.894956 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3083.0 **LOG TYPE:** Electric Log
SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-113.0	CARBONDALE	HERRIN	COAL	4.0	508.0	
-165.0	CARBONDALE	BRIAR HILL	COAL	-	560.0	
-231.0	CARBONDALE	SPRINGFIELD	COAL	5.0	626.0	BLACK SHALE ROOF
-301.0	CARBONDALE	HOUCHIN CREEK	COAL	-	696.0	

MAPID: 05900123000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.280876 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.894956 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3950.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, COX ISAAC 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-113.0	CARBONDALE	HERRIN	COAL	4.0	508.0	
-230.0	CARBONDALE	SPRINGFIELD	COAL	4.0	625.0	

MAPID: 05900123000C **VERSION:** 3 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.280876 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.894956 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:**
SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
123.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	272.0	
-230.0	CARBONDALE	SPRINGFIELD	COAL	-	625.0	
-398.0	CARBONDALE	COLCHESTER	COAL	-	793.0	
-1395.0	BASE OF PENN.		UNCLASSIFIED	-	1790.0	
-1488.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1883.0	
-1767.0		BASE L. MENARD	UNCLASSIFIED	-	2162.0	
-2191.0		BASE BARLOW	LIMESTONE	-	2586.0	
-2555.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2950.0	

MAPID: 05900123000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.280876 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894956 **DATE COLLECTED:** 6 / 0 / 1942

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3083.0 **LOG TYPE:** Electric Log

SOURCE: SINCLAIR WYOMING OIL, COX ISAAC N **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-307.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	702.0	
-335.0	CARBONDALE	SURVANT	COAL	2.0	730.0	
-397.0	CARBONDALE	COLCHESTER	COAL	0.5	792.0	
-433.0	CARBONDALE	DEKOVEN	COAL	3.0	828.0	
-455.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	850.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-465.0	CARBONDALE	DAVIS	COAL	4.0	860.0	
-503.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	898.0	
-545.0	TRADEWATER	MT. RORAH	COAL	1.3	940.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900123000C **VERSION:** 5 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.280876 **GEOLOGIST:** HINES

CONFIDENTIAL: N **LATITUDE:** 37.894956 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 3083.0 **LOG TYPE:** Survey Sample Study

SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Oil and Gas Test

COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900436000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.269074 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.90039 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2774.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-93.0	CARBONDALE	DANVILLE	COAL	-	484.0	
-96.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	8.0	487.0	
-121.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	512.0	
-128.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	13.0	519.0	
-159.0	CARBONDALE	HERRIN	COAL	3.0	550.0	
-204.0	CARBONDALE	BRIAR HILL	COAL	-	595.0	
-212.0	CARBONDALE	CANTON	SANDSTONE/SHALE	23.0	603.0	
-263.0	CARBONDALE	SPRINGFIELD	COAL	4.0	654.0	BLACK SHALE ROOF
-267.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	5.0	658.0	
-354.0	CARBONDALE	HOUCHIN CREEK	COAL	-	745.0	

MAPID: 05900436000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.269074 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.90039 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 558.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-99.0	CARBONDALE	DANVILLE	COAL	3.0	490.0	
-102.0	CARBONDALE		SHALE & SANDSTONE	24.0	493.0	
-126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	517.0	
-130.0	CARBONDALE	LAWSON	SILTY SHALE	27.0	521.0	
-157.0	CARBONDALE	BRERETON	LIMESTONE	4.0	548.0	
-161.0	CARBONDALE	ANNA	BLACK SHALE	2.0	552.0	
-163.0	CARBONDALE	HERRIN	COAL	4.0	554.0	

MAPID: 05901427000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.266853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.900452 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2761.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG, AWALT C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-371.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	765.0	
-389.0	CARBONDALE	SURVANT	COAL	1.8	783.0	
-450.0	CARBONDALE	COLCHESTER	COAL	0.5	844.0	
-486.0	CARBONDALE	DEKOVEN	COAL	3.0	880.0	
-523.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	917.0	58 PERCENT SANDSTONE IN DEKOVEN SPLIT
-530.0	CARBONDALE	DAVIS	COAL	3.0	924.0	
-572.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	966.0	
-576.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	970.0	
-631.0	TRADEWATER	MT. RORAH	COAL	3.0	1025.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901427000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.266853 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.900452 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1763.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1369.0	BASE OF PENN.		UNCLASSIFIED	-	1763.0	

MAPID: 05901428000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.278526 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907846 **DATE COLLECTED:** 8 / 0 / 1954

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 2936.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG, BLADES L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-303.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	740.0	
-318.0	CARBONDALE	SURVANT	COAL	3.0	755.0	
-385.0	CARBONDALE	COLCHESTER	COAL	0.5	822.0	
-416.0	CARBONDALE	DEKOVEN	COAL	4.0	853.0	
-444.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	881.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-453.0	CARBONDALE	DAVIS	COAL	3.0	890.0	
-498.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	935.0	
-537.0	TRADEWATER	MT. RORAH	COAL	1.7	974.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901429000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.27155 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905969 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2914.0 **LOG TYPE:** Electric Log

SOURCE: INLAND PRODUCERS CO, DENHAM-JOHNSTON COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-321.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	720.0	
-336.0	CARBONDALE	SURVANT	COAL	4.8	735.0	
-393.0	CARBONDALE	COLCHESTER	COAL	0.5	792.0	
-426.0	CARBONDALE	DEKOVEN	COAL	1.8	825.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	860.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-466.0	CARBONDALE	DAVIS	COAL	3.0	865.0	
-511.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	910.0	
-563.0	TRADEWATER	MT. RORAH	COAL	3.0	962.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901431000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.27156 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.907824 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2927.0 **LOG TYPE:** Electric Log
SOURCE: FALCON OIL CORP, DENHAM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-312.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	715.0	
-316.0	CARBONDALE	SURVANT	COAL	1.8	719.0	
-387.0	CARBONDALE	COLCHESTER	COAL	0.5	790.0	
-417.0	CARBONDALE	DEKOVEN	COAL	3.0	820.0	
-457.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	860.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-463.0	CARBONDALE	DAVIS	COAL	3.0	866.0	
-507.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	910.0	
-512.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	915.0	
-557.0	TRADEWATER	MT. RORAH	COAL	1.8	960.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901432000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.273843 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.904152 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 3000.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, N. V., EST. OF, HAMILTON, ETAL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-321.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	723.0	
-338.0	CARBONDALE	SURVANT	COAL	1.5	740.0	
-402.0	CARBONDALE	COLCHESTER	COAL	0.5	804.0	
-438.0	CARBONDALE	DEKOVEN	COAL	2.0	840.0	
-467.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	869.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-473.0	CARBONDALE	DAVIS	COAL	3.0	875.0	
-514.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	916.0	
-520.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	922.0	
-567.0	TRADEWATER	MT. RORAH	COAL	1.7	969.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901434000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.276215 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.90416 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 3010.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, N. V., EST. OF, HAMILTON, ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-320.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	741.0	
-337.0	CARBONDALE	SURVANT	COAL	1.5	758.0	
-403.0	CARBONDALE	COLCHESTER	COAL	0.5	824.0	
-433.0	CARBONDALE	DEKOVEN	COAL	3.0	854.0	
-459.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	880.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-468.0	CARBONDALE	DAVIS	COAL	3.0	889.0	
-511.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	932.0	
-517.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	938.0	
-562.0	TRADEWATER	MT. RORAH	COAL	2.0	983.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901437000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.26917 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904137 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2922.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG, JOHNSTON F J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-361.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	755.0	
-375.0	CARBONDALE	SURVANT	COAL	1.8	769.0	
-431.0	CARBONDALE	COLCHESTER	COAL	0.5	825.0	
-466.0	CARBONDALE	DEKOVEN	COAL	1.3	860.0	
-501.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	895.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-508.0	CARBONDALE	DAVIS	COAL	3.0	902.0	
-551.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	945.0	
-556.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	950.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901705000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.266843 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898596 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2922.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN & STEBER DRLG, AWALT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-368.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	765.0	
-395.0	CARBONDALE	SURVANT	COAL	1.8	792.0	
-451.0	CARBONDALE	COLCHESTER	COAL	0.5	848.0	
-491.0	CARBONDALE	DEKOVEN	COAL	3.0	888.0	
-523.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	920.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-533.0	CARBONDALE	DAVIS	COAL	2.8	930.0	
-573.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	970.0	
-581.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	978.0	
-633.0	TRADEWATER	MT. RORAH	COAL	0.8	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901705000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.266843 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898596 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2940.0 **LOG TYPE:**

SOURCE: MURVIN & STEBER DRLG **WELL TYPE:** Producer-Oil

COMMENT: WELL MAY BE FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-278.0	CARBONDALE	SPRINGFIELD	COAL	-	675.0	
-487.0	CARBONDALE	COLCHESTER	COAL	-	884.0	
-1367.0	BASE OF PENN.		UNCLASSIFIED	-	1764.0	
-1512.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1909.0	
-1779.0		BASE L. MENARD	UNCLASSIFIED	-	2176.0	
-2180.0		BASE BARLOW	LIMESTONE	-	2577.0	
-2543.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2940.0	

MAPID: 05901718000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.273828 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.900474 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 3022.0 **LOG TYPE:** Electric Log

SOURCE: JAMES, FRANCIS M., TARRANT RALPH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-317.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	709.0	
-341.0	CARBONDALE	SURVANT	COAL	0.8	733.0	
-401.0	CARBONDALE	COLCHESTER	COAL	0.5	793.0	
-436.0	CARBONDALE	DEKOVEN	COAL	3.0	828.0	
-463.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	855.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-471.0	CARBONDALE	DAVIS	COAL	3.5	863.0	
-508.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	900.0	
-513.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	905.0	
-548.0	TRADEWATER	MT. RORAH	COAL	0.8	940.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900438000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.271806 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881993 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log

SOURCE: BAKER, B. A., COCK GLASS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-281.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	663.0	
-310.0	CARBONDALE	SURVANT	COAL	1.8	692.0	
-369.0	CARBONDALE	COLCHESTER	COAL	0.5	751.0	
-404.0	CARBONDALE	DEKOVEN	COAL	3.0	786.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	810.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-440.0	CARBONDALE	DAVIS	COAL	4.5	822.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	859.0	
-498.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	880.0	
-524.0	TRADEWATER	MT. RORAH	COAL	3.0	906.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900439000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.269318 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885694 **DATE COLLECTED:** 5 / 0 / 1951

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3054.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B., MOYE EDWARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-338.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	716.0	
-424.0	CARBONDALE	COLCHESTER	COAL	0.5	802.0	
-462.0	CARBONDALE	DEKOVEN	COAL	3.0	840.0	
-492.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	870.0	52 PERCENT SANDSTONE IN DEKOVEN SPLIT
-500.0	CARBONDALE	DAVIS	COAL	4.0	878.0	
-531.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	909.0	
-536.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	914.0	
-590.0	TRADEWATER	MT. RORAH	COAL	2.0	968.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900439000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.269318 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885694 **DATE COLLECTED:** 5 / 0 / 1951

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1712.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1334.0	BASE OF PENN.		UNCLASSIFIED	-	1712.0	

MAPID: 05903378000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 990' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.276354 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.891299 **DATE COLLECTED:** 12 / 0 / 1968

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 3005.0 **LOG TYPE:** Electric Log

SOURCE: ZIPCO OIL CO., BURTON MABEL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-299.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	693.0	
-316.0	CARBONDALE	SURVANT	COAL	2.0	710.0	
-381.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-429.0	CARBONDALE	DEKOVEN	COAL	3.0	823.0	
-454.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	848.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-462.0	CARBONDALE	DAVIS	COAL	3.5	856.0	
-498.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	892.0	
-502.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	896.0	
-556.0	TRADEWATER	MT. RORAH	COAL	1.5	950.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903378000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 990' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.276354 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.891299 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 505.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-38.5	CARBONDALE	DANVILLE	COAL	2.5	432.5	
-41.0	CARBONDALE		SHALE & SANDSTONE	36.0	435.0	
-77.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	471.0	
-81.0	CARBONDALE	LAWSON	SILTY SHALE	22.0	475.0	
-103.0	CARBONDALE	BRERETON	LIMESTONE	3.0	497.0	
-106.0	CARBONDALE	ANNA	BLACK SHALE	2.0	500.0	
-108.0	CARBONDALE	HERRIN	COAL	3.0	502.0	

MAPID: 05900100000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** NW NW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.299513 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.885702 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 361.5 **LOGGED (FT.):** 3615.0 **LOG TYPE:** Drillers Log

SOURCE: BLACKARD H **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-38.5	CARBONDALE	HERRIN	COAL	7.0	400.0	
-128.5	CARBONDALE	SPRINGFIELD	COAL	5.0	490.0	DEPTH UNCERTAIN

MAPID: 05901274000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 500' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.288453 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893134 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 3016.0 **LOG TYPE:** Electric Log

SOURCE: WHITE, CHARLES C., KINSALL J E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-267.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	672.0	
-297.0	CARBONDALE	SURVANT	COAL	1.8	702.0	
-359.0	CARBONDALE	COLCHESTER	COAL	0.5	764.0	
-390.0	CARBONDALE	DEKOVEN	COAL	3.0	795.0	
-420.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	825.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-428.0	CARBONDALE	DAVIS	COAL	4.0	833.0	
-465.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	870.0	
-471.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	876.0	
-513.0	TRADEWATER	MT. RORAH	COAL	0.8	918.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901453000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.285708 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885711 **DATE COLLECTED:** 1 / 0 / 1955

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2990.0 **LOG TYPE:** Electric Log

SOURCE: GLASS, THEO G., RISTER COM 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-265.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	635.0	
-280.0	CARBONDALE	SURVANT	COAL	2.5	650.0	
-353.0	CARBONDALE	COLCHESTER	COAL	0.5	723.0	
-386.0	CARBONDALE	DEKOVEN	COAL	3.0	756.0	
-415.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	785.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-425.0	CARBONDALE	DAVIS	COAL	4.0	795.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	833.0	
-470.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	840.0	
-520.0	TRADEWATER	MT. RORAH	COAL	1.2	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901453000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.285708 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885711 **DATE COLLECTED:** 1 / 0 / 1955

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1695.0 **LOG TYPE:** Electric Log

SOURCE: GLASS, THEO G. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-352.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	722.0	
-428.0	SPOON	DAVIS	UNCLASSIFIED	-	798.0	
-1325.0	BASE OF PENN.		UNCLASSIFIED	-	1695.0	

MAPID: 05901455000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.290265 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.889423 **DATE COLLECTED:** 6 / 0 / 1954

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2590.0 **LOG TYPE:** Electric Log

SOURCE: GLASS, THEO G., WEST IVAN 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-267.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	647.0	
-283.0	CARBONDALE	SURVANT	COAL	2.0	663.0	
-360.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-388.0	CARBONDALE	DEKOVEN	COAL	3.0	768.0	
-418.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	798.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-430.0	CARBONDALE	DAVIS	COAL	5.0	810.0	
-455.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	835.0	
-463.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	843.0	
-510.0	TRADEWATER	MT. RORAH	COAL	2.0	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901702000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 390' N line, 330' E line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.292656 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881842 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2896.0 **LOG TYPE:** Electric Log

SOURCE: RIM OIL CO, COX-MEYER COMM 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-248.0	CARBONDALE	SURVANT	COAL	2.5	612.0	
-316.0	CARBONDALE	COLCHESTER	COAL	3.0	680.0	
-336.0	CARBONDALE	DEKOVEN	COAL	2.8	700.0	
-368.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	732.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-382.0	CARBONDALE	DAVIS	COAL	3.8	746.0	
-416.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	780.0	
-430.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	794.0	
-481.0	TRADEWATER	MT. RORAH	COAL	2.5	845.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902538000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.294947 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89313 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 449.0 **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
9.5	CARBONDALE	DANVILLE	COAL	1.0	380.5	
8.5	CARBONDALE		SHALE & SANDSTONE	32.0	381.5	
-23.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	413.5	
-26.5	CARBONDALE	LAWSON	SILTY SHALE	21.0	416.5	
-47.5	CARBONDALE	BRERETON	LIMESTONE	6.0	437.5	
-53.5	CARBONDALE	ANNA	BLACK SHALE	1.5	443.5	
-55.0	CARBONDALE	HERRIN	COAL	4.0	445.0	

MAPID: 05900004000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2300' S line, 400' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.302058 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.885566 **DATE COLLECTED:** 0 / 0 / 1910

SURFACE ELEVATION (FT.): 362.4 **LOGGED (FT.):** 3624.0 **LOG TYPE:** Drillers Log

SOURCE: OMAHA OG, DAVIS M M **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-7.6	CARBONDALE	HERRIN	COAL	6.5	370.0	
-119.6	CARBONDALE	SPRINGFIELD	COAL	3.0	482.0	

MAPID: 05900004000C **VERSION:** 2 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2300' S line, 400' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.302058 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.885566 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.4 **LOGGED (FT.):** 585.0 **LOG TYPE:** Drillers Log

SOURCE: OMAHA OIL & GAS CO. **WELL TYPE:** Unsuccessful or Unknown Results

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.4	MODESTO		UNCONSOLIDATED	97.0	0.0	
265.4	MODESTO		SANDSTONE	8.0	97.0	
257.4	MODESTO		SHALE	70.0	105.0	
187.4	MODESTO		LIMESTONE	20.0	175.0	
167.4	MODESTO		SHALE	85.0	195.0	
82.4	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	280.0	UNCERTAIN CORRELATION
72.4	CARBONDALE		SHALE	40.0	290.0	
32.4	CARBONDALE		SANDSTONE	15.0	330.0	
17.4	CARBONDALE		SHALE	21.0	345.0	
-3.6	CARBONDALE	BRERETON	LIMESTONE	4.0	366.0	UNCERTAIN CORRELATION
-7.6	CARBONDALE	HERRIN	COAL	6.5	370.0	UNCERTAIN CORRELATION
-14.1	CARBONDALE		SHALE	105.5	376.5	
-119.6	CARBONDALE	SPRINGFIELD	COAL	3.0	482.0	UNCERTAIN CORRELATION
-122.6	CARBONDALE		SHALE	75.0	485.0	
-197.6	CARBONDALE		LIMESTONE	3.0	560.0	
-200.6	CARBONDALE		SHALE	16.0	563.0	
-216.6	CARBONDALE		LIMESTONE	6.0	579.0	

MAPID: 05900387000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 495' E line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.30238 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.883827 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 3081.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DAVIS HEIRS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-189.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	552.0	
-217.0	CARBONDALE	SURVANT	COAL	1.8	580.0	
-273.0	CARBONDALE	COLCHESTER	COAL	0.5	636.0	
-307.0	CARBONDALE	DEKOVEN	COAL	1.3	670.0	
-337.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	700.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-347.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-387.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-449.0	TRADEWATER	MT. RORAH	COAL	2.8	812.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900387000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 495' E line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.30238 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.883827 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1622.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1259.0	BASE OF PENN.		UNCLASSIFIED	-	1622.0	

MAPID: 05900442000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.313414 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880088 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2095.0 **LOG TYPE:** Electric Log

SOURCE: PACO PETROLEUM CORP, BRUCE OTIS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	436.0	
-94.0	CARBONDALE	SURVANT	COAL	1.3	464.0	
-149.0	CARBONDALE	COLCHESTER	COAL	0.5	519.0	
-184.0	CARBONDALE	DEKOVEN	COAL	3.0	554.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	585.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-224.0	CARBONDALE	DAVIS	COAL	4.0	594.0	
-258.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	628.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-262.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	632.0	
-314.0	TRADEWATER	MT. RORAH	COAL	2.5	684.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901275000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 370' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.311095 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885544 **DATE COLLECTED:** 4 / 0 / 1953

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2175.0 **LOG TYPE:** Electric Log

SOURCE: AFFELD OIL CO., UTLEY HARRY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-161.0	CARBONDALE	SURVANT	COAL	2.0	550.0	
-211.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-251.0	CARBONDALE	DEKOVEN	COAL	3.0	640.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	670.0	74 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	3.5	683.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	MT. RORAH	COAL	1.8	772.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901459000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1575' N line, 450' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.302248 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.889676 **DATE COLLECTED:** 4 / 0 / 1946

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 130.0 **LOG TYPE:** Drillers Log

SOURCE: OMAHA CITY **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		UNCONSOLIDATED	68.0	0.0	
332.0			SHALE	27.0	68.0	
305.0			SANDSTONE	7.0	95.0	
298.0			LIMESTONE	4.0	102.0	
294.0			SHALE	6.0	106.0	
288.0			BLACK SHALE	2.0	112.0	
286.0			COAL	2.0	114.0	
284.0			UNDERCLAY	14.0	116.0	

MAPID: 05924000000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 380' N line, 330' W line of SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.318061 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881792 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-67.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	437.0	
-93.0	CARBONDALE	SURVANT	COAL	1.0	463.0	
-152.0	CARBONDALE	COLCHESTER	COAL	0.5	522.0	
-185.0	CARBONDALE	DEKOVEN	COAL	3.0	555.0	
-212.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	582.0	41 PERCENT SANDSTONE IN DEKOVEN SPLIT
-226.0	CARBONDALE	DAVIS	COAL	4.0	596.0	
-267.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	637.0	
-332.0	TRADEWATER	MT. RORAH	COAL	1.3	702.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924006000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.31807 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.883752 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-79.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	444.0	
-165.0	CARBONDALE	COLCHESTER	COAL	0.5	530.0	
-201.0	CARBONDALE	DEKOVEN	COAL	3.0	566.0	
-227.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	592.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-241.0	CARBONDALE	DAVIS	COAL	4.0	606.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	644.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900124000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.329702 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.883703 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3690.0 **LOG TYPE:**

SOURCE: POWERS R R, WEST L F 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
124.0	CARBONDALE	HERRIN	COAL	2.0	245.0	
26.0	CARBONDALE	SPRINGFIELD	COAL	4.0	343.0	

MAPID: 05900125000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.327371 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.883715 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 3640.0 **LOG TYPE:**

SOURCE: POWERS ETL, WEST R G 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
123.0	CARBONDALE	HERRIN	COAL	3.0	241.0	
23.0	CARBONDALE	SPRINGFIELD	COAL	4.0	341.0	

MAPID: 05900444000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.332109 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.892977 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
126.0	CARBONDALE	DANVILLE	COAL	-	238.0	
122.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	6.0	242.0	
89.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	57.0	275.0	
26.0	CARBONDALE	HERRIN	COAL	3.0	338.0	
-28.0	CARBONDALE	BRIAR HILL	COAL	-	392.0	
-39.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	9.0	403.0	
-76.0	CARBONDALE	SPRINGFIELD	COAL	4.0	440.0	BLACK SHALE & LIMESTONE ROOF
-88.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	12.0	452.0	
-150.0	CARBONDALE	HOUCHIN CREEK	COAL	-	514.0	

MAPID: 05900444000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.332109 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.892977 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 342.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
126.0	CARBONDALE	DANVILLE	COAL	2.0	238.0	
124.0	CARBONDALE		SHALE & SANDSTONE	35.0	240.0	
89.0	CARBONDALE	LAWSON	SANDSTONE	60.0	275.0	
29.0	CARBONDALE	BRERETON	LIMESTONE	2.5	335.0	
26.5	CARBONDALE	ANNA	BLACK SHALE	1.5	337.5	
25.0	CARBONDALE	HERRIN	COAL	3.5	339.0	

MAPID: 05900444000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.332109 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892977 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BEASLEY HARRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-182.0	CARBONDALE	SURVANT	COAL	2.0	546.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	609.0	
-272.0	CARBONDALE	DEKOVEN	COAL	3.0	636.0	
-302.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	666.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-311.0	CARBONDALE	DAVIS	COAL	4.0	675.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	706.0	
-349.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	713.0	
-381.0	TRADEWATER	MT. RORAH	COAL	1.3	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900446000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.336709 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.879932 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2080.0 **LOG TYPE:** Electric Log

SOURCE: KEASLER HUBERT, BISHOP J W 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-26.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	421.0	
-105.0	CARBONDALE	COLCHESTER	COAL	0.5	500.0	
-145.0	CARBONDALE	DEKOVEN	COAL	3.0	540.0	
-181.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	576.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-188.0	CARBONDALE	DAVIS	COAL	2.6	583.0	
-224.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	619.0	
-260.0	TRADEWATER	MT. RORAH	COAL	2.0	655.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900447000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320369 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.88374 **DATE COLLECTED:** 2 / 0 / 1950

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2481.0 **LOG TYPE:** Electric Log

SOURCE: MURDOCK C H, DUVALL S 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-111.0	CARBONDALE	SURVANT	COAL	2.0	484.0	
-173.0	CARBONDALE	COLCHESTER	COAL	0.5	546.0	
-211.0	CARBONDALE	DEKOVEN	COAL	3.0	584.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	612.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-251.0	CARBONDALE	DAVIS	COAL	4.0	624.0	
-287.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	660.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-293.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	666.0	
-327.0	TRADEWATER	MT. RORAH	COAL	1.5	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901393000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.327384 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.88188 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2755.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., BISHOP WILEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	410.0	
-56.0	CARBONDALE	SURVANT	COAL	2.0	423.0	
-127.0	CARBONDALE	COLCHESTER	COAL	0.5	494.0	
-163.0	CARBONDALE	DEKOVEN	COAL	3.0	530.0	
-193.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	560.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-205.0	CARBONDALE	DAVIS	COAL	4.0	572.0	
-241.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	608.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-293.0	TRADEWATER	MT. RORAH	COAL	2.0	660.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901393000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.327384 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.88188 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1490.0 **LOG TYPE:** Electric Log
SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1123.0	BASE OF PENN.		UNCLASSIFIED	-	1490.0	

MAPID: 05902492000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.32039 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.889281 **DATE COLLECTED:** 5 / 0 / 1960
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2185.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., DIXON BURNIS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-162.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	542.0	
-176.0	CARBONDALE	SURVANT	COAL	1.8	556.0	
-240.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-275.0	CARBONDALE	DEKOVEN	COAL	3.0	655.0	
-305.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	685.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-314.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	730.0	
-396.0	TRADEWATER	MT. RORAH	COAL	1.8	776.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900002000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SE NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.34132 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.887364 **DATE COLLECTED:** 0 / 0 / 1921
SURFACE ELEVATION (FT.): 390.7 **LOGGED (FT.):** 3907.0 **LOG TYPE:** Drillers Log
SOURCE: KLEVALLAOG0001, DAVIS W E **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
57.7	CARBONDALE	HERRIN	COAL	5.5	333.0	
-44.3	CARBONDALE	SPRINGFIELD	COAL	5.0	435.0	

MAPID: 05900386000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.341328 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.889244 **DATE COLLECTED:** 4 / 0 / 1948

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2196.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., DAVIS MILLAGE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	570.0	
-182.0	CARBONDALE	SURVANT	COAL	1.0	596.0	
-244.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-280.0	CARBONDALE	DEKOVEN	COAL	3.0	694.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	724.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	4.0	734.0	
-351.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	765.0	
-359.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	773.0	
-390.0	TRADEWATER	MT. RORAH	COAL	0.8	804.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900451000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.352891 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892911 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 414.0 **LOGGED (FT.):** 2188.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, BURNS-PENCE COM 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-202.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	616.0	
-232.0	CARBONDALE	SURVANT	COAL	1.2	646.0	
-291.0	CARBONDALE	COLCHESTER	COAL	0.5	705.0	
-328.0	CARBONDALE	DEKOVEN	COAL	3.0	742.0	
-370.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	784.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-377.0	CARBONDALE	DAVIS	COAL	4.0	791.0	
-406.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	820.0	
-446.0	TRADEWATER	MT. RORAH	COAL	0.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900454000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.350537 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881659 **DATE COLLECTED:** 7 / 0 / 1947

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2965.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. & HEATH, CONT OIL-BRUCE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	483.0	
-113.0	CARBONDALE	SURVANT	COAL	1.0	509.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-206.0	CARBONDALE	DEKOVEN	COAL	3.0	602.0	
-234.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	630.0	84 PERCENT SANDSTONE IN DEKOVEN SPLIT
-248.0	CARBONDALE	DAVIS	COAL	4.0	644.0	
-279.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	675.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-287.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	683.0	
-312.0	TRADEWATER	MT. RORAH	COAL	0.8	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900454000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.350537 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.881659 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 307.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
175.0	CARBONDALE	DANVILLE	COAL	1.0	221.0	
174.0	CARBONDALE		SHALE & SANDSTONE	30.0	222.0	
144.0	CARBONDALE	LAWSON	SANDSTONE	45.0	252.0	
99.0	CARBONDALE		SHALE	4.0	297.0	
95.0	CARBONDALE	BRERETON	LIMESTONE	2.5	301.0	
92.5	CARBONDALE	ANNA	BLACK SHALE	1.5	303.5	
91.0	CARBONDALE	HERRIN	COAL	2.5	305.0	

MAPID: 05900455000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.348247 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.889209 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log

SOURCE: KEASLER HUBERT **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-227.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	646.0	
-305.0	SPOON	DAVIS	UNCLASSIFIED	-	724.0	
-1241.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 05900456000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.348264 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892933 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., KEASLER SAMUEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-186.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-213.0	CARBONDALE	SURVANT	COAL	1.7	642.0	
-276.0	CARBONDALE	COLCHESTER	COAL	0.5	705.0	
-311.0	CARBONDALE	DEKOVEN	COAL	2.8	740.0	
-337.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	766.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-347.0	CARBONDALE	DAVIS	COAL	4.0	776.0	
-380.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	809.0	
-421.0	TRADEWATER	MT. RORAH	COAL	0.8	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900459000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.341334 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892968 **DATE COLLECTED:** 11 / 0 / 1947

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2112.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., OLIVER J W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-214.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	583.0	
-244.0	CARBONDALE	SURVANT	COAL	1.0	613.0	
-306.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-338.0	CARBONDALE	DEKOVEN	COAL	3.0	707.0	
-369.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	738.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-377.0	CARBONDALE	DAVIS	COAL	4.0	746.0	
-408.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	777.0	
-412.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	781.0	
-447.0	TRADEWATER	MT. RORAH	COAL	1.3	816.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900464000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.343629 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.891056 **DATE COLLECTED:** 5 / 0 / 1948

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2133.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., TARRANT MILTON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	567.0	
-192.0	CARBONDALE	SURVANT	COAL	1.0	595.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	655.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	693.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	723.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-329.0	CARBONDALE	DAVIS	COAL	4.0	732.0	
-361.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	764.0	
-368.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	771.0	
-400.0	TRADEWATER	MT. RORAH	COAL	1.3	803.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901378000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.34591 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881772 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2907.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D, BRUCE JAMES L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-51.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	461.0	
-75.0	CARBONDALE	SURVANT	COAL	1.5	485.0	
-134.0	CARBONDALE	COLCHESTER	COAL	0.5	544.0	
-173.0	CARBONDALE	DEKOVEN	COAL	3.0	583.0	
-202.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	612.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-215.0	CARBONDALE	DAVIS	COAL	4.0	625.0	
-250.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-260.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	670.0	
-284.0	TRADEWATER	MT. RORAH	COAL	1.3	694.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901972000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.345929 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.883592 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Nuclear Log

SOURCE: ATLAS DRLG. CO., THE, GREER ALBERT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-124.0	CARBONDALE	SURVANT	COAL	3.0	533.0	
-161.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-197.0	CARBONDALE	DEKOVEN	COAL	3.0	606.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	639.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-237.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-274.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	
-281.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	690.0	
-309.0	TRADEWATER	MT. RORAH	COAL	1.8	718.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900385000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.368927 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885149 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3078.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, COLNON J T TR 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-191.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	561.0	
-216.0	CARBONDALE	SURVANT	COAL	1.3	586.0	
-278.0	CARBONDALE	COLCHESTER	COAL	0.5	648.0	
-316.0	CARBONDALE	DEKOVEN	COAL	3.0	686.0	
-343.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	713.0	83 PERCENT SANDSTONE IN DEKOVEN SPLIT
-355.0	CARBONDALE	DAVIS	COAL	3.0	725.0	
-387.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	757.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-424.0	TRADEWATER	MT. RORAH	COAL	0.0	794.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900385000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.368927 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.885149 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2932.0 **LOG TYPE:**

SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
199.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	171.0	
-114.0	CARBONDALE	SPRINGFIELD	COAL	-	484.0	
-272.0	CARBONDALE	COLCHESTER	COAL	-	642.0	
-1309.0	BASE OF PENN.		UNCLASSIFIED	-	1679.0	
-1454.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1824.0	
-1749.0		BASE L. MENARD	UNCLASSIFIED	-	2119.0	
-2185.0		BASE BARLOW	LIMESTONE	-	2555.0	
-2562.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2932.0	

MAPID: 05900466000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.36662 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.881413 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2136.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., GUMBEL RUTH T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	543.0	
-206.0	CARBONDALE	SURVANT	COAL	1.5	566.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	634.0	
-296.0	CARBONDALE	DEKOVEN	COAL	2.5	656.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	690.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-340.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-375.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	735.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-380.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	740.0	
-415.0	TRADEWATER	MT. RORAH	COAL	0.8	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900467000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.362062 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.891009 **DATE COLLECTED:** 1 / 0 / 1949

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2213.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, JOHNSON MARION E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-216.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-244.0	CARBONDALE	SURVANT	COAL	0.8	624.0	
-302.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-342.0	CARBONDALE	DEKOVEN	COAL	1.0	722.0	
-380.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	760.0	81 PERCENT SANDSTONE IN DEKOVEN SPLIT
-390.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-422.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	802.0	
-430.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	810.0	
-460.0	TRADEWATER	MT. RORAH	COAL	1.3	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901772000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.362055 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885065 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1666.0 **LOG TYPE:** Electric Log

SOURCE: KEYSTONE OIL CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1310.0	BASE OF PENN.		UNCLASSIFIED	-	1666.0	

MAPID: 05901772000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.362055 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885065 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 375.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
75.5	CARBONDALE	DANVILLE	COAL	1.0	280.5	
74.5	CARBONDALE		SHALE & SANDSTONE	31.0	281.5	
43.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	312.5	
38.5	CARBONDALE	LAWSON	SANDSTONE	45.0	317.5	
-6.5	CARBONDALE		SHALE	4.0	362.5	
-10.5	CARBONDALE	BRERETON	LIMESTONE	4.5	366.5	
-15.0	CARBONDALE	ANNA	BLACK SHALE	1.0	371.0	
-16.0	CARBONDALE	HERRIN	COAL	3.5	372.0	

MAPID: 05901772000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.362055 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.885065 **DATE COLLECTED:** 9 / 0 / 1955
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2894.0 **LOG TYPE:** Electric Log
SOURCE: KEYSTONE OIL CO, DUCKWORTH ANNIE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-199.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-224.0	CARBONDALE	SURVANT	COAL	1.2	580.0	
-282.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-324.0	CARBONDALE	DEKOVEN	COAL	2.0	680.0	
-361.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	717.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-368.0	CARBONDALE	DAVIS	COAL	4.0	724.0	
-404.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	
-444.0	TRADEWATER	MT. RORAH	COAL	1.2	800.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900384000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.361967 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.875881 **DATE COLLECTED:** 7 / 0 / 1947
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., WOOLCOTT H & C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	468.0	
-206.0	CARBONDALE	COLCHESTER	COAL	0.5	558.0	
-238.0	CARBONDALE	DEKOVEN	COAL	3.0	590.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	615.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-276.0	CARBONDALE	DAVIS	COAL	4.0	628.0	
-312.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	664.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-358.0	TRADEWATER	MT. RORAH	COAL	1.2	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901377000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1650' S line, 380' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373149 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.868388 **DATE COLLECTED:** 1 / 0 / 1953

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3016.0 **LOG TYPE:** Electric Log

SOURCE: SLADE DON, SHORB CHAS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	493.0	
-128.0	CARBONDALE	SURVANT	COAL	1.8	510.0	
-191.0	CARBONDALE	COLCHESTER	COAL	0.5	573.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	616.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	643.0	79 PERCENT SANDSTONE IN DEKOVEN SPLIT
-278.0	CARBONDALE	DAVIS	COAL	3.5	660.0	
-310.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	692.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-316.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	698.0	
-358.0	TRADEWATER	MT. RORAH	COAL	3.0	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901377000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1650' S line, 380' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373149 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868388 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 308.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
130.0	CARBONDALE	LAWSON	SILTY SHALE	23.0	252.0	
107.0	CARBONDALE	LAWSON	SANDSTONE	22.0	275.0	
85.0	CARBONDALE		SHALE	2.0	297.0	
83.0	CARBONDALE	BRERETON	LIMESTONE	4.0	299.0	
79.0	CARBONDALE	ANNA	BLACK SHALE	2.0	303.0	
77.0	CARBONDALE	HERRIN	COAL	3.0	305.0	

MAPID: 05901749000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.368862 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.875709 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3028.0 **LOG TYPE:** Electric Log

SOURCE: TURNER, J. D., BROTHERS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-157.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-177.0	CARBONDALE	SURVANT	COAL	2.5	535.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-273.0	CARBONDALE	DEKOVEN	COAL	3.0	631.0	
-308.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	666.0	56 PERCENT SANDSTONE IN DEKOVEN SPLIT
-322.0	CARBONDALE	DAVIS	COAL	3.8	680.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	715.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-362.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	720.0	
-412.0	TRADEWATER	MT. RORAH	COAL	2.5	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902416000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.357218 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.864771 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2908.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., WOLF 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-38.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	398.0	
-59.0	CARBONDALE	SURVANT	COAL	1.8	419.0	
-128.0	CARBONDALE	COLCHESTER	COAL	0.5	488.0	
-162.0	CARBONDALE	DEKOVEN	COAL	3.0	522.0	
-188.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	548.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-204.0	CARBONDALE	DAVIS	COAL	4.0	564.0	
-240.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	600.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-244.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	604.0	
-298.0	TRADEWATER	MT. RORAH	COAL	2.5	658.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902505000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.361818 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.866543 **DATE COLLECTED:** 7 / 0 / 1960

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2874.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., WOLF R A ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
-94.0	CARBONDALE	SURVANT	COAL	1.8	459.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	534.0	
-190.0	CARBONDALE	DEKOVEN	COAL	3.0	555.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	580.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-230.0	CARBONDALE	DAVIS	COAL	4.0	595.0	
-267.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	632.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-273.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	638.0	
-325.0	TRADEWATER	MT. RORAH	COAL	2.0	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902505000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.361818 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.866543 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2794.0 **LOG TYPE:**

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
10.0	CARBONDALE	SPRINGFIELD	COAL	-	355.0	
-167.0	CARBONDALE	COLCHESTER	COAL	-	532.0	
-1161.0	BASE OF PENN.		UNCLASSIFIED	-	1526.0	
-1307.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1672.0	
-1600.0		BASE L. MENARD	UNCLASSIFIED	-	1965.0	
-2044.0		BASE BARLOW	LIMESTONE	-	2409.0	
-2429.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2794.0	

MAPID: 05902600000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' E line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.357396 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.877939 **DATE COLLECTED:** 10 / 0 / 1961
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 1545.0 **LOG TYPE:** Electric Log
SOURCE: PETROMIN CORP **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1190.0	BASE OF PENN.		UNCLASSIFIED	-	1545.0	

MAPID: 05900005000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.343598 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.878038 **DATE COLLECTED:** 0 / 0 / 1917
SURFACE ELEVATION (FT.): 415.4 **LOGGED (FT.):** 4154.0 **LOG TYPE:** Drillers Log
SOURCE: OHIO OIL, FORESTER W0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
185.4	CARBONDALE	HERRIN	COAL	10.0	230.0	

MAPID: 05900006000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.35152 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.867635 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 357.8 **LOGGED (FT.):** 508.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR COAL CO. 100 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
213.8	CARBONDALE	HERRIN	COAL	4.3	144.0	
98.8	CARBONDALE	SPRINGFIELD	COAL	4.3	259.0	

MAPID: 05900006000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.35152 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.867635 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 508.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
263.0	CARBONDALE	LAWSON	CONGLOMERATE	2.0	95.0	
261.0	CARBONDALE	LAWSON	SANDSTONE	42.0	97.0	
219.0	CARBONDALE	BRERETON	LIMESTONE	2.5	139.0	
216.5	CARBONDALE	ANNA	BLACK SHALE	2.5	141.5	
214.0	CARBONDALE	HERRIN	COAL	4.3	144.0	

MAPID: 05900006000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.35152 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.867635 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 357.8 **LOGGED (FT.):** 508.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD & SON 100 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.8	PLEISTOCENE		SANDY CLAY	30.0	0.0	
327.8	PLEISTOCENE		SAND	65.0	30.0	QUICKSAND AND GRAVEL
262.8	CARBONDALE		CONGLOMERATE	2.0	95.0	
260.8	CARBONDALE		WHITE SANDSTONE	3.0	97.0	
257.8	CARBONDALE		BROWN SANDSTONE	7.0	100.0	
250.8	CARBONDALE		SANDSTONE	32.0	107.0	
218.8	CARBONDALE	BRERETON	GRAY LIMESTONE	2.5	139.0	
216.3	CARBONDALE	ANNA	SHALE	2.5	141.5	
213.8	CARBONDALE	HERRIN	COAL	4.3	144.0	
209.5	CARBONDALE		UNDERCLAY	2.7	148.3	
206.8	CARBONDALE		SHALE WITH LIMESTONE	11.0	151.0	
195.8	CARBONDALE		SANDY SHALE	5.0	162.0	
190.8	CARBONDALE		SANDSTONE	25.0	167.0	
165.8	CARBONDALE		SHALE	7.0	192.0	
158.8	CARBONDALE	BRIAR HILL	COAL	0.6	199.0	
158.2	CARBONDALE	BRIAR HILL	DARK SHALE	0.8	199.6	
157.4	CARBONDALE	BRIAR HILL	COAL	0.6	200.4	
156.8	CARBONDALE	BRIAR HILL	DARK SHALE	2.5	201.0	
154.3	CARBONDALE	BRIAR HILL	COAL	0.5	203.5	
153.8	CARBONDALE		DARK SHALE	8.0	204.0	
145.8	CARBONDALE		SANDY SHALE	3.0	212.0	
142.8	CARBONDALE		SANDSTONE	17.0	215.0	
125.8	CARBONDALE		DARK SHALE	22.5	232.0	
103.3	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.0	254.5	
102.3	CARBONDALE		DARK SHALE	1.2	255.5	
101.1	CARBONDALE	SPRINGFIELD	COAL	0.3	256.7	
100.8	CARBONDALE	SPRINGFIELD	SHALE	1.2	257.0	
99.6	CARBONDALE	SPRINGFIELD	PYRITE	0.5	258.2	HARD
99.1	CARBONDALE	SPRINGFIELD	COAL	4.3	258.7	
94.8	CARBONDALE		UNDERCLAY	2.0	263.0	
92.8	CARBONDALE		LIGHT SHALE	15.0	265.0	
77.8	CARBONDALE		SHALE	14.0	280.0	SANDY; DARK
63.8	CARBONDALE		DARK SHALE	37.0	294.0	
26.8	CARBONDALE	EXCELLO	SHALE	3.0	331.0	
23.8	CARBONDALE	EXCELLO	DARK SHALE	2.5	334.0	
21.3	CARBONDALE	HOUCHIN CREEK	COAL	1.9	336.5	
19.4	CARBONDALE		UNDERCLAY	1.6	338.4	
17.8	CARBONDALE		SHALE	16.5	340.0	
1.3	CARBONDALE	SURVANT - UPPER	COAL	0.5	356.5	

0.8	CARBONDALE		SHALE	3.0	357.0	
-2.2	CARBONDALE		DARK SHALE	6.5	360.0	
-8.7	CARBONDALE	SURVANT - LOWER	COAL	0.3	366.5	
-9.0	CARBONDALE		DARK SHALE	1.3	366.8	
-10.4	CARBONDALE		SANDSTONE	2.8	368.2	
-13.2	CARBONDALE		SHALE	4.0	371.0	SANDSTONE BANDS
-17.2	CARBONDALE		SANDSTONE	3.0	375.0	
-20.2	CARBONDALE		DARK SHALE	30.0	378.0	
-50.2	CARBONDALE	MECCA QUARRY	SHALE	6.0	408.0	
-56.2	CARBONDALE	COLCHESTER	COAL	0.3	414.0	
-56.5	CARBONDALE		SANDY SHALE	1.7	414.3	
-58.2	CARBONDALE		LIGHT SHALE	4.0	416.0	
-62.2	CARBONDALE		SANDSTONE	8.0	420.0	
-70.2	CARBONDALE		SANDY SHALE	2.0	428.0	
-72.2	CARBONDALE		SHALE	17.0	430.0	
-89.2	CARBONDALE		GRAY LIMESTONE	0.5	447.0	
-89.7	CARBONDALE		SHALE	2.5	447.5	
-92.2	CARBONDALE		DARK SHALE	5.0	450.0	
-97.2	CARBONDALE	DEKOVEN	COAL	2.4	455.0	
-99.6	CARBONDALE		UNDERCLAY	0.6	457.4	
-100.2	CARBONDALE		SANDSTONE	12.0	458.0	
-112.2	CARBONDALE		SHALE	4.0	470.0	SANDY; DARK
-116.2	CARBONDALE		DARK SHALE	16.5	474.0	
-132.7	CARBONDALE	LOWER DEKOVEN	COAL	0.7	490.5	
-133.4	CARBONDALE		DARK SHALE	4.8	491.2	
-138.2	CARBONDALE		SHALE	5.0	496.0	
-143.2	CARBONDALE	DAVIS	COAL	4.0	501.0	
-147.2	TRADEWATER		UNDERCLAY	3.0	505.0	

MAPID: 05900470000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.338999 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.878094 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2938.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
253.0	CARBONDALE	DANVILLE	COAL	-	150.0	
213.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	36.0	190.0	
167.0	CARBONDALE	HERRIN	COAL	4.0	236.0	
115.0	CARBONDALE	BRIAR HILL	COAL	-	288.0	
67.0	CARBONDALE	SPRINGFIELD	COAL	4.0	336.0	BLACK SHALE ROOF
57.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	20.0	346.0	
-7.0	CARBONDALE	HOUCHIN CREEK	COAL	-	410.0	

MAPID: 05901460000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 660' N line, 330' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.343587 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.877152 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2072.0 **LOG TYPE:** Electric Log

SOURCE: GLASS, THEO G., BRUCE GUY COMM 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
12.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	398.0	
-64.0	CARBONDALE	COLCHESTER	COAL	0.5	474.0	
-105.0	CARBONDALE	DEKOVEN	COAL	3.0	515.0	
-140.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	550.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-148.0	CARBONDALE	DAVIS	COAL	4.0	558.0	
-182.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	592.0	
-190.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	600.0	
-234.0	TRADEWATER	MT. RORAH	COAL	3.0	644.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902391000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 345' N line, 330' W line of SW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.345771 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.866766 **DATE COLLECTED:** 1 / 0 / 1959

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3408.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., MCGINLEY ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
19.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	352.0	
-3.0	CARBONDALE	SURVANT	COAL	1.7	374.0	
-67.0	CARBONDALE	COLCHESTER	COAL	0.5	438.0	
-100.0	CARBONDALE	DEKOVEN	COAL	3.0	471.0	
-129.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	500.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-143.0	CARBONDALE	DAVIS	COAL	4.0	514.0	
-179.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	550.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-187.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	558.0	
-241.0	TRADEWATER	MT. RORAH	COAL	2.0	612.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902401000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 660' S line, 330' E line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.343511 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86957 **DATE COLLECTED:** 4 / 0 / 1959

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2866.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., BRUCE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
29.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	380.0	
-6.0	CARBONDALE	SURVANT	COAL	2.0	415.0	
-51.0	CARBONDALE	COLCHESTER	COAL	0.5	460.0	
-91.0	CARBONDALE	DEKOVEN	COAL	2.5	500.0	
-121.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	530.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-131.0	CARBONDALE	DAVIS	COAL	4.0	540.0	
-166.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	575.0	
-174.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	583.0	
-227.0	TRADEWATER	MT. RORAH	COAL	2.0	636.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902445000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 415' W line of SE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.350061 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.866745 **DATE COLLECTED:** 5 / 0 / 1959

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2734.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., MCGINLEY ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
16.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	340.0	
-4.0	CARBONDALE	SURVANT	COAL	1.8	360.0	
-72.0	CARBONDALE	COLCHESTER	COAL	0.5	428.0	
-106.0	CARBONDALE	DEKOVEN	COAL	2.8	462.0	
-137.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	493.0	57 PERCENT SANDSTONE IN DEKOVEN SPLIT
-147.0	CARBONDALE	DAVIS	COAL	4.0	503.0	
-184.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	540.0	
-189.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	545.0	
-247.0	TRADEWATER	MT. RORAH	COAL	3.0	603.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902446000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338944 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.872456 **DATE COLLECTED:** 3 / 0 / 1959

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 2777.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., EDWARDS TEE ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
23.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	372.0	
-6.0	CARBONDALE	SURVANT	COAL	1.2	401.0	
-58.0	CARBONDALE	COLCHESTER	COAL	0.5	453.0	
-93.0	CARBONDALE	DEKOVEN	COAL	3.0	488.0	
-121.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	516.0	72 PERCENT SANDSTONE IN DEKOVEN SPLIT
-133.0	CARBONDALE	DAVIS	COAL	4.0	528.0	
-169.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	564.0	
-176.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	571.0	
-227.0	TRADEWATER	MT. RORAH	COAL	1.8	622.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902550000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.350405 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.870501 **DATE COLLECTED:** 3 / 0 / 1961

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2729.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., IRELAND COMM 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	362.0	
-19.0	CARBONDALE	SURVANT	COAL	1.8	380.0	
-87.0	CARBONDALE	COLCHESTER	COAL	0.5	448.0	
-119.0	CARBONDALE	DEKOVEN	COAL	3.0	480.0	
-149.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	510.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-163.0	CARBONDALE	DAVIS	COAL	4.0	524.0	
-199.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	560.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-203.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	564.0	
-263.0	TRADEWATER	MT. RORAH	COAL	2.5	624.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902565000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 390' S line, 380' W line of NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.35485 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.872434 **DATE COLLECTED:** 8 / 0 / 1961

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1476.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1118.0	BASE OF PENN.		UNCLASSIFIED	-	1476.0	

MAPID: 05902571000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.352632 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.864767 **DATE COLLECTED:** 8 / 0 / 1961

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., MURPHY MARGARET A-5 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-3.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	355.0	
-27.0	CARBONDALE	SURVANT	COAL	1.5	379.0	
-90.0	CARBONDALE	COLCHESTER	COAL	0.5	442.0	
-124.0	CARBONDALE	DEKOVEN	COAL	3.0	476.0	
-157.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	509.0	53 PERCENT SANDSTONE IN DEKOVEN SPLIT
-168.0	CARBONDALE	DAVIS	COAL	4.0	520.0	
-206.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	558.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-209.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	561.0	
-268.0	TRADEWATER	MT. RORAH	COAL	2.0	620.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900126000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324947 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.867037 **DATE COLLECTED:** 4 / 0 / 1941

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1739.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, KUDER ALICE W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
63.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	318.0	
-19.0	CARBONDALE	COLCHESTER	COAL	0.5	400.0	
-53.0	CARBONDALE	DEKOVEN	COAL	4.0	434.0	
-83.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	464.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-91.0	CARBONDALE	DAVIS	COAL	4.0	472.0	
-124.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	505.0	
-129.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	510.0	
-181.0	TRADEWATER	MT. RORAH	COAL	2.5	562.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900126000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** NE SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324947 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.867037 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3780.0 **LOG TYPE:**
SOURCE: CARTER OC, KUDER A W 0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
249.0	CARBONDALE	HERRIN	COAL	-	129.0	
147.0	CARBONDALE	SPRINGFIELD	COAL	4.0	231.0	DEPTH UNCERTAIN

MAPID: 05900127000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.327259 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.865153 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**
SOURCE: CARTER OC, KUDER A W 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
254.0	CARBONDALE	HERRIN	COAL	-	120.0	
149.0	CARBONDALE	SPRINGFIELD	COAL	5.0	225.0	DEPTH UNCERTAIN

MAPID: 05900128000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.329643 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.872565 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**
SOURCE: CARTER OC, DUCKWORTH 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
227.0	CARBONDALE	HERRIN	COAL	-	145.0	
122.0	CARBONDALE	SPRINGFIELD	COAL	4.0	250.0	DEPTH UNCERTAIN

MAPID: 05900129000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.329586 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.865127 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 3650.0 **LOG TYPE:**
SOURCE: CARTER OC, YORK R M 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
250.0	CARBONDALE	HERRIN	COAL	-	115.0	
145.0	CARBONDALE	SPRINGFIELD	COAL	-	220.0	DEPTH UNCERTAIN

MAPID: 05900130000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.322621 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.867063 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3790.0 **LOG TYPE:**
SOURCE: TOMBS&SMTH, PATTON C W0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
242.0	CARBONDALE	HERRIN	COAL	2.0	137.0	
130.0	CARBONDALE	SPRINGFIELD	COAL	3.0	249.0	CORRELATION UNCERTAIN

MAPID: 05900131000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331943 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868823 **DATE COLLECTED:** 4 / 0 / 1941
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, MCGINLEY W J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
63.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	315.0	
-22.0	CARBONDALE	COLCHESTER	COAL	0.5	400.0	
-58.0	CARBONDALE	DEKOVEN	COAL	4.0	436.0	
-80.0	CARBONDALE	LOWER DEKOVEN	COAL	0.1	458.0	33 PERCENT SANDSTONE IN DEKOVEN SPLIT
-96.0	CARBONDALE	DAVIS	COAL	4.0	474.0	
-130.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	508.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-136.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	514.0	
-186.0	TRADEWATER	MT. RORAH	COAL	0.8	564.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900131000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331943 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.868823 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3780.0 **LOG TYPE:**
SOURCE: CARTER OC, MCGINLEY W0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
251.0	CARBONDALE	HERRIN	COAL	-	127.0	
146.0	CARBONDALE	SPRINGFIELD	COAL	4.0	232.0	DEPTH UNCERTAIN

MAPID: 05901082000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 990' E line of SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.327232 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.86703 **DATE COLLECTED:** 6 / 0 / 1952
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1446.0 **LOG TYPE:** Electric Log
SOURCE: BROWN, JAMES G. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1069.0	BASE OF PENN.		UNCLASSIFIED	-	1446.0	

MAPID: 05902196000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.336614 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.868755 **DATE COLLECTED:** 3 / 0 / 1958
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2833.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, MCGINLEY-TEACHERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
59.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	325.0	
29.0	CARBONDALE	SURVANT	COAL	1.0	355.0	
-26.0	CARBONDALE	COLCHESTER	COAL	0.5	410.0	
-60.0	CARBONDALE	DEKOVEN	COAL	3.0	444.0	
-94.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	478.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-101.0	CARBONDALE	DAVIS	COAL	4.0	485.0	
-138.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	522.0	
-198.0	TRADEWATER	MT. RORAH	COAL	2.5	582.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902394000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.329643 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874446 **DATE COLLECTED:** 1 / 0 / 1959

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3180.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., DUCKWORTH, ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
19.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	355.0	
4.0	CARBONDALE	SURVANT	COAL	1.5	370.0	
-59.0	CARBONDALE	COLCHESTER	COAL	0.5	433.0	
-95.0	CARBONDALE	DEKOVEN	COAL	3.0	469.0	
-123.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	497.0	72 PERCENT SANDSTONE IN DEKOVEN SPLIT
-136.0	CARBONDALE	DAVIS	COAL	4.0	510.0	
-174.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	548.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-178.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	552.0	
-231.0	TRADEWATER	MT. RORAH	COAL	1.8	605.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902409000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 400' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320341 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.878044 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2390.0 **LOG TYPE:** Electric Log

SOURCE: SKILLET FORK OIL, PRITCHETT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-29.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	390.0	
-59.0	CARBONDALE	SURVANT	COAL	0.8	420.0	
-111.0	CARBONDALE	COLCHESTER	COAL	0.5	472.0	
-149.0	CARBONDALE	DEKOVEN	COAL	3.0	510.0	
-179.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	540.0	63 PERCENT SANDSTONE IN DEKOVEN SPLIT
-192.0	CARBONDALE	DAVIS	COAL	3.0	553.0	
-228.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	589.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-234.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	595.0	
-289.0	TRADEWATER	MT. RORAH	COAL	3.0	650.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902409000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 400' N line, 330' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320341 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.878044 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 208.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
217.5	CARBONDALE	DANVILLE	COAL	2.5	143.5	
215.0	CARBONDALE		SILTY SHALE	33.0	146.0	
182.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	179.0	
177.0	CARBONDALE	LAWSON	SILTY SHALE	15.0	184.0	
162.0	CARBONDALE	BRERETON	LIMESTONE	3.0	199.0	
159.0	CARBONDALE	ANNA	BLACK SHALE	2.0	202.0	
157.0	CARBONDALE	HERRIN	COAL	4.0	204.0	

MAPID: 05924586000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.322696 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876326 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-5.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	363.0	
-32.0	CARBONDALE	SURVANT	COAL	2.0	390.0	
-88.0	CARBONDALE	COLCHESTER	COAL	0.5	446.0	
-123.0	CARBONDALE	DEKOVEN	COAL	4.0	481.0	
-152.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	510.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-165.0	CARBONDALE	DAVIS	COAL	4.0	523.0	
-197.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	555.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-204.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	562.0	
-256.0	TRADEWATER	MT. RORAH	COAL	3.0	614.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924754000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.320334 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-13.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	370.0	
-41.0	CARBONDALE	SURVANT	COAL	2.0	398.0	
-95.0	CARBONDALE	COLCHESTER	COAL	0.5	452.0	
-131.0	CARBONDALE	DEKOVEN	COAL	4.0	488.0	
-159.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	516.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-173.0	CARBONDALE	DAVIS	COAL	5.0	530.0	
-208.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	565.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-213.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	570.0	
-267.0	TRADEWATER	MT. RORAH	COAL	2.3	624.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902329000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 360' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313274 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.872701 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2854.0 **LOG TYPE:** Electric Log

SOURCE: CARTER JAMES E, UTLEY R L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-10.0	CARBONDALE	HOUCHIN CREEK	COAL	2.8	372.0	
-27.0	CARBONDALE	SURVANT	COAL	1.8	389.0	
-101.0	CARBONDALE	COLCHESTER	COAL	0.5	463.0	
-135.0	CARBONDALE	DEKOVEN	COAL	3.0	497.0	
-160.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	522.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-176.0	CARBONDALE	DAVIS	COAL	4.0	538.0	
-208.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	570.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-268.0	TRADEWATER	MT. RORAH	COAL	2.5	630.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902349000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.311029 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86903 **DATE COLLECTED:** 3 / 0 / 1959

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2782.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, MOORE BERNARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
10.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	364.0	
-1.0	CARBONDALE	SURVANT	COAL	1.6	375.0	
-88.0	CARBONDALE	COLCHESTER	COAL	0.5	462.0	
-124.0	CARBONDALE	DEKOVEN	COAL	3.0	498.0	
-149.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	523.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-166.0	CARBONDALE	DAVIS	COAL	4.0	540.0	
-194.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	568.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-198.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	572.0	
-254.0	TRADEWATER	MT. RORAH	COAL	2.5	628.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902368000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 430' S line, 330' E line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.315645 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.865553 **DATE COLLECTED:** 1 / 0 / 1959

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2737.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, PATTON CHAS W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	306.0	
23.0	CARBONDALE	SURVANT	COAL	1.8	335.0	
-47.0	CARBONDALE	COLCHESTER	COAL	0.5	405.0	
-84.0	CARBONDALE	DEKOVEN	COAL	3.0	442.0	
-112.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	470.0	64 PERCENT SANDSTONE IN DEKOVEN SPLIT
-125.0	CARBONDALE	DAVIS	COAL	4.0	483.0	
-154.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	512.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-160.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	518.0	
-216.0	TRADEWATER	MT. RORAH	COAL	2.8	574.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902374000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317993 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.868951 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3373.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC., MCGINLEY ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
28.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	330.0	
11.0	CARBONDALE	SURVANT	COAL	1.5	347.0	
-57.0	CARBONDALE	COLCHESTER	COAL	0.5	415.0	
-93.0	CARBONDALE	DEKOVEN	COAL	3.0	451.0	
-118.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	476.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-133.0	CARBONDALE	DAVIS	COAL	4.0	491.0	
-162.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	520.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-167.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	525.0	
-222.0	TRADEWATER	MT. RORAH	COAL	2.5	580.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902374000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317993 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868951 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1434.0 **LOG TYPE:** Electric Log

SOURCE: ATHENE DEV. CO., INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1076.0	BASE OF PENN.		UNCLASSIFIED	-	1434.0	

MAPID: 05902377000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.304092 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.865441 **DATE COLLECTED:** 1 / 0 / 1959

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: CARTER JAMES E, UTLEY JOHN S B-1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	410.0	
-65.0	CARBONDALE	SURVANT	COAL	1.0	440.0	
-118.0	CARBONDALE	COLCHESTER	COAL	0.5	493.0	
-158.0	CARBONDALE	DEKOVEN	COAL	3.0	533.0	
-185.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	560.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-199.0	CARBONDALE	DAVIS	COAL	4.0	574.0	
-233.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	608.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-238.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	613.0	
-295.0	TRADEWATER	MT. RORAH	COAL	2.5	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902406000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 990' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.304083 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876476 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2919.0 **LOG TYPE:** Electric Log

SOURCE: OSLAGER JOHN J, BLACKARD W H 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	488.0	
-126.0	CARBONDALE	SURVANT	COAL	1.5	500.0	
-200.0	CARBONDALE	COLCHESTER	COAL	0.5	574.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	608.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	635.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-274.0	CARBONDALE	DAVIS	COAL	4.0	648.0	
-309.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	683.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-316.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	690.0	
-371.0	TRADEWATER	MT. RORAH	COAL	1.3	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902406000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 990' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.304083 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.876476 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **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
155.0	CARBONDALE	DANVILLE	COAL	2.0	219.0	
153.0	CARBONDALE		SILTY SHALE	22.0	221.0	
131.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	243.0	
127.0	CARBONDALE	LAWSON	SILTY SHALE	15.0	247.0	
112.0	CARBONDALE	LAWSON	SANDSTONE	25.0	262.0	
87.0	CARBONDALE	ANNA	BLACK SHALE	2.0	287.0	
85.0	CARBONDALE	HERRIN	COAL	4.0	289.0	

MAPID: 05902429000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.304101 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86911 **DATE COLLECTED:** 4 / 0 / 1959

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2429.0 **LOG TYPE:** Electric Log

SOURCE: CARTER JAMES E, UTLEY JOHN S 1-D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-71.0	CARBONDALE	SURVANT	COAL	1.0	445.0	
-136.0	CARBONDALE	COLCHESTER	COAL	0.5	510.0	
-171.0	CARBONDALE	DEKOVEN	COAL	3.0	545.0	
-196.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	570.0	36 PERCENT SANDSTONE IN DEKOVEN SPLIT
-212.0	CARBONDALE	DAVIS	COAL	4.0	586.0	
-241.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	615.0	55% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-246.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	620.0	
-300.0	TRADEWATER	MT. RORAH	COAL	2.5	674.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900485000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1650' S line, 2204' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.289759 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.86912 **DATE COLLECTED:** 5 / 0 / 1951

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1607.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1232.0	BASE OF PENN.		UNCLASSIFIED	-	1607.0	

MAPID: 05900485000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1650' S line, 2204' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.289759 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.86912 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 337.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
103.0	CARBONDALE	DANVILLE	COAL	1.0	272.0	
102.0	CARBONDALE		SILTY SHALE	30.0	273.0	
72.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.0	303.0	
70.0	CARBONDALE	LAWSON	SILTY SHALE	22.0	305.0	
48.0	CARBONDALE	BRERETON	LIMESTONE	5.0	327.0	
43.0	CARBONDALE	ANNA	BLACK SHALE	2.0	332.0	
41.0	CARBONDALE	HERRIN	COAL	3.0	334.0	

MAPID: 05900485000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1650' S line, 2204' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.289759 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86912 **DATE COLLECTED:** 5 / 0 / 1951

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2989.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., MYERS HARM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-155.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	530.0	
-174.0	CARBONDALE	SURVANT	COAL	1.5	549.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-279.0	CARBONDALE	DEKOVEN	COAL	3.0	654.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	679.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-320.0	CARBONDALE	DAVIS	COAL	4.0	695.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-357.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	732.0	
-405.0	TRADEWATER	MT. RORAH	COAL	1.5	780.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903614000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of NW NE

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.288111 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.878274 **DATE COLLECTED:** 9 / 0 / 1972

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3025.0 **LOG TYPE:** Electric Log

SOURCE: MURVIN, JOHN B., BROCKSCHMIDT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-244.0	CARBONDALE	SURVANT	COAL	1.8	620.0	
-322.0	CARBONDALE	COLCHESTER	COAL	2.0	698.0	
-344.0	CARBONDALE	DEKOVEN	COAL	3.0	720.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	750.0	63 PERCENT SANDSTONE IN DEKOVEN SPLIT
-389.0	CARBONDALE	DAVIS	COAL	4.0	765.0	
-424.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	800.0	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-429.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	805.0	
-488.0	TRADEWATER	MT. RORAH	COAL	2.0	864.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901971000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.280811 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.865466 **DATE COLLECTED:** 5 / 0 / 1956

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2970.0 **LOG TYPE:** Electric Log

SOURCE: MORAN, E. F., INC., RISTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-146.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	526.0	
-166.0	CARBONDALE	SURVANT	COAL	3.0	546.0	
-240.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-275.0	CARBONDALE	DEKOVEN	COAL	3.0	655.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	678.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-314.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-347.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	727.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-354.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	734.0	
-395.0	TRADEWATER	MT. RORAH	COAL	1.7	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902494000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274108 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.870941 **DATE COLLECTED:** 4 / 0 / 1960

SURFACE ELEVATION (FT.): 380.5 **LOGGED (FT.):** 1648.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1267.5	BASE OF PENN.		UNCLASSIFIED	-	1648.0	

MAPID: 05902494000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274108 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.870941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
35.5	CARBONDALE	DANVILLE	COAL	2.5	345.5	
33.0	CARBONDALE		SHALE & SANDSTONE	20.0	348.0	
13.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	368.0	
8.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	5.0	373.0	
3.0	CARBONDALE	LAWSON	SANDSTONE	6.0	378.0	
-3.0	CARBONDALE	LAWSON	SILTY SHALE	13.0	384.0	
-16.0	CARBONDALE	HERRIN	COAL	5.0	397.0	

MAPID: 05902494000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274108 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.870941 **DATE COLLECTED:** 4 / 0 / 1960

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3012.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., MEYER EMIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-213.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	593.0	
-288.0	CARBONDALE	COLCHESTER	COAL	0.5	668.0	
-320.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	725.0	68 PERCENT SANDSTONE IN DEKOVEN SPLIT
-360.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-390.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	770.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-395.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	775.0	
-435.0	TRADEWATER	MT. RORAH	COAL	1.2	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900486000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262222 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.907795 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 3060.0 **LOG TYPE:**

SOURCE: KELLEY KATHLEEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-357.0	CARBONDALE	SPRINGFIELD	COAL	-	777.0	
-563.0	CARBONDALE	COLCHESTER	COAL	-	983.0	
-1434.0	BASE OF PENN.		UNCLASSIFIED	-	1854.0	
-1581.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	2001.0	
-1864.0		BASE L. MENARD	UNCLASSIFIED	-	2284.0	
-2276.0		BASE BARLOW	LIMESTONE	-	2696.0	
-2640.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	3060.0	

MAPID: 05900486000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262222 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.907795 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 685.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-205.5	CARBONDALE	DANVILLE	COAL	2.5	625.5	
-208.0	CARBONDALE		SHALE & SANDSTONE	25.0	628.0	
-233.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	653.0	
-236.0	CARBONDALE	LAWSON	SANDSTONE	9.0	656.0	
-245.0	CARBONDALE	LAWSON	SILTY SHALE	12.0	665.0	
-257.0	CARBONDALE	BRERETON	LIMESTONE	3.0	677.0	
-260.0	CARBONDALE	ANNA	BLACK SHALE	2.0	680.0	
-262.0	CARBONDALE	HERRIN	COAL	3.0	682.0	

MAPID: 05900486000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262222 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.907795 **DATE COLLECTED:** 1 / 0 / 1952
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 1855.0 **LOG TYPE:** Electric Log
SOURCE: KELLEY KATHLEEN **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1435.0	BASE OF PENN.		UNCLASSIFIED	-	1855.0	

MAPID: 05900486000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262222 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.907795 **DATE COLLECTED:** 1 / 0 / 1952
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 3188.0 **LOG TYPE:** Electric Log
SOURCE: KELLEY KATHLEEN, BLACKARD SILAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-460.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	880.0	
-483.0	CARBONDALE	SURVANT	COAL	1.0	903.0	
-538.0	CARBONDALE	COLCHESTER	COAL	0.5	958.0	
-567.0	CARBONDALE	DEKOVEN	COAL	3.0	987.0	
-605.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1025.0	71 PERCENT SANDSTONE IN DEKOVEN SPLIT
-610.0	CARBONDALE	DAVIS	COAL	4.0	1030.0	
-660.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1080.0	
-665.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1085.0	
-728.0	TRADEWATER	MT. RORAH	COAL	2.0	1148.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901276000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.257027 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905945 **DATE COLLECTED:** 9 / 0 / 1952

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 2898.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., BLAZER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-429.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	873.0	
-506.0	CARBONDALE	COLCHESTER	COAL	0.5	950.0	
-536.0	CARBONDALE	DEKOVEN	COAL	2.8	980.0	
-576.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	1020.0	67 PERCENT SANDSTONE IN DEKOVEN SPLIT
-584.0	CARBONDALE	DAVIS	COAL	3.0	1028.0	
-631.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1075.0	
-636.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1080.0	
-691.0	TRADEWATER	MT. RORAH	COAL	1.2	1135.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901774000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262276 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.896761 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2947.0 **LOG TYPE:** Electric Log

SOURCE: FULK, PERRY, AWALT RICHARD 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-375.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	778.0	
-400.0	CARBONDALE	SURVANT	COAL	1.0	803.0	
-455.0	CARBONDALE	COLCHESTER	COAL	0.5	858.0	
-490.0	CARBONDALE	DEKOVEN	COAL	3.5	893.0	
-520.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	923.0	76 PERCENT SANDSTONE IN DEKOVEN SPLIT
-527.0	CARBONDALE	DAVIS	COAL	3.5	930.0	
-564.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	967.0	
-627.0	TRADEWATER	MT. RORAH	COAL	2.0	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901774000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.262276 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896761 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2968.0 **LOG TYPE:**
SOURCE: FULK, PERRY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-301.0	CARBONDALE	SPRINGFIELD	COAL	-	704.0	
-452.0	CARBONDALE	COLCHESTER	COAL	-	855.0	
-1377.0	BASE OF PENN.		UNCLASSIFIED	-	1780.0	
-1520.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1923.0	
-1799.0		BASE L. MENARD	UNCLASSIFIED	-	2202.0	
-2209.0		BASE BARLOW	LIMESTONE	-	2612.0	
-2565.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2968.0	

MAPID: 05901277000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.238559 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.896811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2987.0 **LOG TYPE:**
SOURCE: GRIFFITH, S. B. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-426.0	CARBONDALE	SPRINGFIELD	COAL	-	810.0	
-651.0	CARBONDALE	COLCHESTER	COAL	-	1035.0	
-1586.0	BASE OF PENN.		UNCLASSIFIED	-	1970.0	
-	KINKAID	BASE L KINKAID	UNCLASSIFIED	-		UNIT ABSENT
-1856.0		BASE L. MENARD	UNCLASSIFIED	-	2240.0	
-2260.0		BASE BARLOW	LIMESTONE	-	2644.0	
-2603.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2987.0	

MAPID: 05901277000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.238559 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.896811 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 761.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-313.0	CARBONDALE	DANVILLE	COAL	3.0	697.0	
-316.0	CARBONDALE		SHALE & SANDSTONE	20.0	700.0	
-336.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	720.0	
-340.0	CARBONDALE	LAWSON	SILTY SHALE	8.0	724.0	
-348.0	CARBONDALE	LAWSON	SANDSTONE	6.0	732.0	
-354.0	CARBONDALE	LAWSON	SILTY SHALE	12.5	738.0	
-366.5	CARBONDALE	BRERETON	LIMESTONE	4.5	750.5	
-371.0	CARBONDALE	ANNA	BLACK SHALE	2.0	755.0	
-373.0	CARBONDALE	HERRIN	COAL	4.0	757.0	

MAPID: 05901277000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.238559 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.896811 **DATE COLLECTED:** 6 / 0 / 1953
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3108.0 **LOG TYPE:** Electric Log
SOURCE: GRIFFITH, S. B., GRUMLEY R J **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-566.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	950.0	
-589.0	CARBONDALE	SURVANT	COAL	1.8	973.0	
-651.0	CARBONDALE	COLCHESTER	COAL	0.5	1035.0	
-694.0	CARBONDALE	DEKOVEN	COAL	3.0	1078.0	
-727.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1111.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-740.0	CARBONDALE	DAVIS	COAL	4.0	1124.0	
-759.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1143.0	
-798.0	TRADEWATER	MT. RORAH	COAL	1.5	1182.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901278000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 860' N line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.236122 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902654 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: GRIFFITH, S. B., HALE JAMES ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-537.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	932.0	
-550.0	CARBONDALE	SURVANT	COAL	1.5	945.0	
-607.0	CARBONDALE	COLCHESTER	COAL	0.5	1002.0	
-651.0	CARBONDALE	DEKOVEN	COAL	3.0	1046.0	
-688.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	1083.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-697.0	CARBONDALE	DAVIS	COAL	4.0	1092.0	
-724.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1119.0	
-730.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1125.0	
-763.0	TRADEWATER	MT. RORAH	COAL	3.0	1158.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901392000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.23139 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902262 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2952.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., BLAZIER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-457.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	843.0	
-534.0	CARBONDALE	COLCHESTER	COAL	0.5	920.0	
-574.0	CARBONDALE	DEKOVEN	COAL	3.0	960.0	
-604.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	990.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-610.0	CARBONDALE	DAVIS	COAL	4.0	996.0	
-634.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1020.0	
-644.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1030.0	
-669.0	TRADEWATER	MT. RORAH	COAL	1.8	1055.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901392000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.23139 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.902262 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1863.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1477.0	BASE OF PENN.		UNCLASSIFIED	-	1863.0	

MAPID: 05902969000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.238347 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.905942 **DATE COLLECTED:** 10 / 0 / 1964
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:** Electric Log
SOURCE: GRIFFITH, S. B., HARVEY-BLAZIER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-545.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	935.0	
-564.0	CARBONDALE	SURVANT	COAL	1.8	954.0	
-618.0	CARBONDALE	COLCHESTER	COAL	0.5	1008.0	
-659.0	CARBONDALE	DEKOVEN	COAL	2.8	1049.0	
-698.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1088.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-705.0	CARBONDALE	DAVIS	COAL	4.0	1095.0	
-737.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1127.0	
-743.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1133.0	
-770.0	TRADEWATER	MT. RORAH	COAL	1.3	1160.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900132000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.210447 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.907457 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 4010.0 **LOG TYPE:**
SOURCE: SKELLY OC, HALE HUGH 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-258.0	CARBONDALE	HERRIN	COAL	3.0	659.0	
-354.0	CARBONDALE	SPRINGFIELD	COAL	4.0	755.0	

MAPID: 05900487000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.217448 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.903916 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2678.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., HALE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-452.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	862.0	
-466.0	CARBONDALE	SURVANT	COAL	1.5	876.0	
-543.0	CARBONDALE	COLCHESTER	COAL	0.5	953.0	
-563.0	CARBONDALE	DEKOVEN	COAL	3.0	973.0	
-595.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1005.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-604.0	CARBONDALE	DAVIS	COAL	3.8	1014.0	
-633.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1043.0	
-640.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1050.0	
-659.0	TRADEWATER	MT. RORAH	COAL	1.4	1069.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900487000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.217448 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.903916 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 2016.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1606.0	BASE OF PENN.		UNCLASSIFIED	-	2016.0	

MAPID: 05901025000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.215231 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902016 **DATE COLLECTED:** 4 / 0 / 1952

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 3034.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., HALE HUGH K **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-459.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	871.0	
-478.0	CARBONDALE	SURVANT	COAL	1.5	890.0	
-541.0	CARBONDALE	COLCHESTER	COAL	0.5	953.0	
-578.0	CARBONDALE	DEKOVEN	COAL	3.0	990.0	
-609.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1021.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-620.0	CARBONDALE	DAVIS	COAL	4.0	1032.0	
-635.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1047.0	
-637.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1049.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901093000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.224574 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894829 **DATE COLLECTED:** 2 / 0 / 1953

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2648.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., ROARK MILDRED **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-472.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	855.0	
-482.0	CARBONDALE	SURVANT	COAL	2.0	865.0	
-541.0	CARBONDALE	COLCHESTER	COAL	0.5	924.0	
-581.0	CARBONDALE	DEKOVEN	COAL	3.0	964.0	
-615.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	998.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-622.0	CARBONDALE	DAVIS	COAL	4.0	1005.0	
-656.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1039.0	
-662.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1045.0	
-702.0	TRADEWATER	MT. RORAH	COAL	1.5	1085.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901264000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.222079 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.902145 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 2682.0 **LOG TYPE:** Electric Log

SOURCE: GRIFFITH, S. B., HALE HUGH K **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-442.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	866.0	
-457.0	CARBONDALE	SURVANT	COAL	1.4	881.0	
-518.0	CARBONDALE	COLCHESTER	COAL	0.5	942.0	
-560.0	CARBONDALE	DEKOVEN	COAL	3.0	984.0	
-591.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1015.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-598.0	CARBONDALE	DAVIS	COAL	4.0	1022.0	
-628.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1052.0	
-671.0	TRADEWATER	MT. RORAH	COAL	1.7	1095.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901280000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 335' W line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.212725 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.90751 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2306.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., HALE HUGH K **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-467.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	868.0	
-487.0	CARBONDALE	SURVANT	COAL	1.8	888.0	
-539.0	CARBONDALE	COLCHESTER	COAL	0.5	940.0	
-579.0	CARBONDALE	DEKOVEN	COAL	3.0	980.0	
-612.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1013.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-619.0	CARBONDALE	DAVIS	COAL	4.0	1020.0	
-651.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1052.0	
-649.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	1050.0	
-689.0	TRADEWATER	MT. RORAH	COAL	1.5	1090.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901284000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.222181 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.896608 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 671.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-218.5	CARBONDALE	DANVILLE	COAL	3.0	601.5	
-221.5	CARBONDALE		SHALE & SANDSTONE	30.0	604.5	
-251.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	634.5	
-255.0	CARBONDALE	LAWSON	SILTY SHALE	4.0	638.0	
-259.0	CARBONDALE	LAWSON	SANDSTONE	8.0	642.0	
-267.0	CARBONDALE	LAWSON	SILTY SHALE	11.0	650.0	
-278.0	CARBONDALE	BRERETON	LIMESTONE	3.0	661.0	
-281.0	CARBONDALE	ANNA	BLACK SHALE	3.0	664.0	
-284.0	CARBONDALE	HERRIN	COAL	4.0	667.0	

MAPID: 05901479000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.224227 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907721 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2936.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., BEASLEY EDNA ET AL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-453.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	842.0	
-466.0	CARBONDALE	SURVANT	COAL	3.0	855.0	
-525.0	CARBONDALE	COLCHESTER	COAL	0.5	914.0	
-563.0	CARBONDALE	DEKOVEN	COAL	3.0	952.0	
-596.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	985.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-604.0	CARBONDALE	DAVIS	COAL	4.0	993.0	
-638.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	1027.0	
-666.0	TRADEWATER	MT. RORAH	COAL	1.8	1055.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901723000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.21762 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898382 **DATE COLLECTED:** 1 / 0 / 1955

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3028.0 **LOG TYPE:** Electric Log

SOURCE: GRIFFITH, S. B., HALE HELEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-465.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	868.0	
-483.0	CARBONDALE	SURVANT	COAL	3.5	886.0	
-546.0	CARBONDALE	COLCHESTER	COAL	0.5	949.0	
-587.0	CARBONDALE	DEKOVEN	COAL	2.8	990.0	
-620.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	1023.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-630.0	CARBONDALE	DAVIS	COAL	4.0	1033.0	
-653.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1056.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901723000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.21762 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.898382 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2960.0 **LOG TYPE:**

SOURCE: GRIFFITH, S. B. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-380.0	CARBONDALE	SPRINGFIELD	COAL	-	783.0	
-543.0	CARBONDALE	COLCHESTER	COAL	-	946.0	
-1599.0	BASE OF PENN.		UNCLASSIFIED	-	2002.0	
-	KINKAID	BASE L KINKAID	UNCLASSIFIED	-		UNIT ABSENT
-1810.0		BASE L. MENARD	UNCLASSIFIED	-	2213.0	
-2206.0		BASE BARLOW	LIMESTONE	-	2609.0	
-2557.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2960.0	

MAPID: 05900133000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.201314 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.907287 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 3082.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, N. V., EST. OF **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-272.0	CARBONDALE	HERRIN	COAL	3.0	684.0	
-312.0	CARBONDALE	BRIAR HILL	COAL	-	724.0	
-366.0	CARBONDALE	SPRINGFIELD	COAL	4.0	778.0	BLACK SHALE ROOF
-462.0	CARBONDALE	HOUCHIN CREEK	COAL	-	874.0	

MAPID: 05900133000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.201314 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.907287 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 4120.0 **LOG TYPE:**
SOURCE: DUNCAN INC, KNIGHT S S0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-272.0	CARBONDALE	HERRIN	COAL	5.0	684.0	
-367.0	CARBONDALE	SPRINGFIELD	COAL	5.0	779.0	

MAPID: 05900133000C **VERSION:** 3 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.201314 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.907287 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 3082.0 **LOG TYPE:** Survey Sample Study
SOURCE: DUNCAN, N. V., EST. OF **WELL TYPE:** Oil and Gas Test
COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900369000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 960' S line, 330' W line
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208574 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.896265 **DATE COLLECTED:** 0 / 0 / 1945
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 4130.0 **LOG TYPE:**
SOURCE: CARTER OC, HALE R H 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-277.0	CARBONDALE	HERRIN	COAL	3.0	690.0	
-379.0	CARBONDALE	SPRINGFIELD	COAL	3.0	792.0	

MAPID: 05900369000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 960' S line, 330' W line
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208574 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.896265 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 713.5 **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
-223.0	CARBONDALE	DANVILLE	COAL	2.0	636.0	
-225.0	CARBONDALE		SHALE & SANDSTONE	36.0	638.0	
-261.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	674.0	
-263.0	CARBONDALE	LAWSON	SILTY SHALE	9.0	676.0	
-272.0	CARBONDALE	LAWSON	SANDSTONE	7.0	685.0	
-279.0	CARBONDALE	LAWSON	SILTY SHALE	12.0	692.0	
-291.0	CARBONDALE	BRERETON	LIMESTONE	3.0	704.0	
-294.0	CARBONDALE	ANNA	BLACK SHALE	2.0	707.0	
-296.0	CARBONDALE	HERRIN	COAL	4.5	709.0	

MAPID: 05900369000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 960' S line, 330' W line
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208574 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.896265 **DATE COLLECTED:** 1 / 0 / 1945
SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2039.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1626.0	BASE OF PENN.		UNCLASSIFIED	-	2039.0	

MAPID: 05901095000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208362 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.901886 **DATE COLLECTED:** 6 / 0 / 1953

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 2720.0 **LOG TYPE:** Nuclear Log

SOURCE: IN FARM BUR. COOP. ASSOC, HOWELL, CHAUNC **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-467.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	882.0	
-489.0	CARBONDALE	SURVANT	COAL	2.0	904.0	
-555.0	CARBONDALE	COLCHESTER	COAL	0.5	970.0	
-583.0	CARBONDALE	DEKOVEN	COAL	4.0	998.0	
-615.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1030.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-622.0	CARBONDALE	DAVIS	COAL	4.5	1037.0	
-637.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1052.0	
-653.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1068.0	
-693.0	TRADEWATER	MT. RORAH	COAL	2.0	1108.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901096000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.192249 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905249 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log

SOURCE: BARKER, EARNEST I., JONES HALLECK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-429.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	838.0	
-446.0	CARBONDALE	SURVANT	COAL	2.0	855.0	
-513.0	CARBONDALE	COLCHESTER	COAL	0.5	922.0	
-541.0	CARBONDALE	DEKOVEN	COAL	2.0	950.0	
-585.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	994.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-591.0	CARBONDALE	DAVIS	COAL	3.0	1000.0	
-626.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1035.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901096000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.192249 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.905249 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2948.0 **LOG TYPE:**

SOURCE: BARKER, EARNEST I. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-326.0	CARBONDALE	SPRINGFIELD	COAL	-	735.0	
-512.0	CARBONDALE	COLCHESTER	COAL	-	921.0	
-1375.0	BASE OF PENN.		UNCLASSIFIED	-	1784.0	
-1495.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1904.0	
-1812.0		BASE L. MENARD	UNCLASSIFIED	-	2221.0	
-2187.0		BASE BARLOW	LIMESTONE	-	2596.0	
-2539.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2948.0	

MAPID: 05924146000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.205887 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.907383 **DATE COLLECTED:** 3 / 5 / 1982

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: CRYSTAL OIL COMPANY, HOWELL, MAURICE #7 **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-458.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	883.0	
-471.0	CARBONDALE	SURVANT	COAL	2.0	896.0	
-540.0	CARBONDALE	COLCHESTER	COAL	0.5	965.0	
-571.0	CARBONDALE	DEKOVEN	COAL	3.0	996.0	
-607.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	1032.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-615.0	CARBONDALE	DAVIS	COAL	4.5	1040.0	
-643.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1068.0	
-662.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1087.0	
-694.0	TRADEWATER	MT. RORAH	COAL	2.0	1119.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924148000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.206148 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.900017 **DATE COLLECTED:** 2 / 22 / 1982

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: CRYSTAL OIL COMPANY, HALE-BLAZIER #1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-475.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	894.0	
-497.0	CARBONDALE	SURVANT	COAL	3.0	916.0	
-566.0	CARBONDALE	COLCHESTER	COAL	1.8	985.0	
-596.0	CARBONDALE	DEKOVEN	COAL	3.0	1015.0	
-628.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1047.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-635.0	CARBONDALE	DAVIS	COAL	4.0	1054.0	
-655.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1074.0	
-658.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1077.0	
-701.0	TRADEWATER	MT. RORAH	COAL	1.0	1120.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924152000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.203914 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.898148 **DATE COLLECTED:** 3 / 25 / 1982

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: CRYSTAL OIL COMPANY, HALE-BLAZIER #3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-478.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	883.0	
-503.0	CARBONDALE	SURVANT	COAL	2.0	908.0	
-566.0	CARBONDALE	COLCHESTER	COAL	0.5	971.0	
-593.0	CARBONDALE	DEKOVEN	COAL	3.0	998.0	
-635.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1040.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-641.0	CARBONDALE	DAVIS	COAL	4.0	1046.0	
-659.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1064.0	
-671.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1076.0	
-730.0	TRADEWATER	MT. RORAH	COAL	2.0	1135.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900506000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.190004 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.90339 **DATE COLLECTED:** 9 / 0 / 1945

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2888.0 **LOG TYPE:** Electric Log

SOURCE: RED BANK OIL CO, BOYD C H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-588.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	982.0	
-606.0	CARBONDALE	SURVANT	COAL	2.0	1000.0	
-672.0	CARBONDALE	COLCHESTER	COAL	0.5	1066.0	
-698.0	CARBONDALE	DEKOVEN	COAL	3.0	1092.0	
-732.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	1126.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-740.0	CARBONDALE	DAVIS	COAL	4.0	1134.0	
-756.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1150.0	
-768.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1162.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900509000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.173905 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.901371 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2994.0 **LOG TYPE:**

SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-38.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	424.0	
-402.0	CARBONDALE	SPRINGFIELD	COAL	-	788.0	
-578.0	CARBONDALE	COLCHESTER	COAL	-	964.0	
-1450.0	BASE OF PENN.		UNCLASSIFIED	-	1836.0	
-1573.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1959.0	
-1875.0		BASE L. MENARD	UNCLASSIFIED	-	2261.0	
-2249.0		BASE BARLOW	LIMESTONE	-	2635.0	
-2608.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2994.0	

MAPID: 05900510000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.190109 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.899691 **DATE COLLECTED:** 12 / 0 / 1945

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2595.0 **LOG TYPE:** Electric Log

SOURCE: RED BANK OIL CO, BOYD T H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-594.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	984.0	
-620.0	CARBONDALE	SURVANT	COAL	1.8	1010.0	
-682.0	CARBONDALE	COLCHESTER	COAL	0.5	1072.0	
-718.0	CARBONDALE	DEKOVEN	COAL	3.0	1108.0	
-746.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1136.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-752.0	CARBONDALE	DAVIS	COAL	3.8	1142.0	
-787.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1177.0	
-794.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1184.0	
-818.0	TRADEWATER	MT. RORAH	COAL	1.4	1208.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901496000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.173979 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.897731 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., BOYD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-496.0	CARBONDALE	HOUCHIN CREEK	COAL	0.2	880.0	
-524.0	CARBONDALE	SURVANT	COAL	2.5	908.0	
-580.0	CARBONDALE	COLCHESTER	COAL	0.5	964.0	
-626.0	CARBONDALE	DEKOVEN	COAL	3.0	1010.0	
-651.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1035.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-660.0	CARBONDALE	DAVIS	COAL	4.0	1044.0	
-694.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1078.0	
-699.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1083.0	
-736.0	TRADEWATER	MT. RORAH	COAL	1.3	1120.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902005000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SE
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.173942 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.89955 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1832.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-580.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	964.0	
-661.0	SPOON	DAVIS	UNCLASSIFIED	-	1045.0	
-1448.0	BASE OF PENN.		UNCLASSIFIED	-	1832.0	

MAPID: 05903392000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1750' N line, 330' E line
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.173873 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.902912 **DATE COLLECTED:** 5 / 0 / 1957
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 3010.0 **LOG TYPE:** Electric Log
SOURCE: COLLINS BROTHERS OIL CO., BOYD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-507.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	895.0	
-527.0	CARBONDALE	SURVANT	COAL	2.0	915.0	
-590.0	CARBONDALE	COLCHESTER	COAL	0.5	978.0	
-634.0	CARBONDALE	DEKOVEN	COAL	3.0	1022.0	
-662.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	1050.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-669.0	CARBONDALE	DAVIS	COAL	4.0	1057.0	
-702.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1090.0	
-707.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1095.0	
-732.0	TRADEWATER	MT. RORAH	COAL	1.5	1120.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903392000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1750' N line, 330' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.173873 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.902912 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 715.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-261.5	CARBONDALE	DANVILLE	COAL	2.5	649.5	
-264.0	CARBONDALE		SHALE & SANDSTONE	29.0	652.0	
-293.0	CARBONDALE	LAWSON	SILTY SHALE	3.0	681.0	
-296.0	CARBONDALE	LAWSON	SANDSTONE	7.0	684.0	
-303.0	CARBONDALE	LAWSON	SILTY SHALE	16.0	691.0	
-319.0	CARBONDALE	BRERETON	LIMESTONE	3.0	707.0	
-322.0	CARBONDALE	ANNA	BLACK SHALE	2.0	710.0	
-324.0	CARBONDALE	HERRIN	COAL	3.0	712.0	

MAPID: 05900511000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.16239 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906765 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CITIES SERVICE OIL CO., BAYLEY JOHN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-464.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	854.0	
-484.0	CARBONDALE	SURVANT	COAL	1.5	874.0	
-542.0	CARBONDALE	COLCHESTER	COAL	0.5	932.0	
-592.0	CARBONDALE	DEKOVEN	COAL	3.0	982.0	
-616.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1006.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-626.0	CARBONDALE	DAVIS	COAL	4.0	1016.0	
-660.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1050.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-688.0	TRADEWATER	MT. RORAH	COAL	1.5	1078.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901097000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.162535 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.904945 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 3065.0 **LOG TYPE:** Electric Log

SOURCE: CITIES SERVICE OIL CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-226.0	CARBONDALE	DANVILLE	COAL	-	617.0	
-247.0	CARBONDALE	ANVIL ROCK		18.0	638.0	
-279.0	CARBONDALE	HERRIN	COAL	-	670.0	
-291.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	8.0	682.0	
-321.0	CARBONDALE	BRIAR HILL	COAL	-	712.0	
-329.0	CARBONDALE	CANTON		20.0	720.0	
-375.0	CARBONDALE	SPRINGFIELD	COAL	3.0	766.0	BLACK SHALE ROOF
-464.0	CARBONDALE	HOUCHIN CREEK	COAL	-	855.0	

MAPID: 05901097000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.162535 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904945 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 674.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-228.5	CARBONDALE	DANVILLE	COAL	2.5	620.5	
-231.0	CARBONDALE		SHALE & SANDSTONE	12.0	623.0	
-243.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	635.0	
-245.5	CARBONDALE	LAWSON	SILTY SHALE	3.0	637.5	
-248.5	CARBONDALE	LAWSON	SANDSTONE	16.0	640.5	
-264.5	CARBONDALE	LAWSON	SILTY SHALE	10.0	656.5	
-274.5	CARBONDALE	BRERETON	LIMESTONE	2.5	666.5	
-277.0	CARBONDALE	ANNA	BLACK SHALE	2.0	669.0	
-279.0	CARBONDALE	HERRIN	COAL	3.0	671.0	

MAPID: 05901097000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.162535 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904945 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 1800.0 **LOG TYPE:** Electric Log

SOURCE: CITIES SERVICE OIL CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1409.0	BASE OF PENN.		UNCLASSIFIED	-	1800.0	

MAPID: 05901501000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.171716 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.895899 **DATE COLLECTED:** 6 / 0 / 1954

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2315.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., HALE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-481.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	865.0	
-512.0	CARBONDALE	SURVANT	COAL	3.5	896.0	
-568.0	CARBONDALE	COLCHESTER	COAL	0.5	952.0	
-613.0	CARBONDALE	DEKOVEN	COAL	3.0	997.0	
-641.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1025.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-648.0	CARBONDALE	DAVIS	COAL	5.0	1032.0	
-682.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1066.0	
-718.0	TRADEWATER	MT. RORAH	COAL	1.4	1102.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901711000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.155636 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904933 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log

SOURCE: CITIES SERVICE OIL CO., QUESTELL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-445.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	850.0	
-468.0	CARBONDALE	SURVANT	COAL	1.8	873.0	
-529.0	CARBONDALE	COLCHESTER	COAL	0.5	934.0	
-577.0	CARBONDALE	DEKOVEN	COAL	4.0	982.0	
-608.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	1013.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-615.0	CARBONDALE	DAVIS	COAL	5.0	1020.0	
-653.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1058.0	
-658.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1063.0	
-695.0	TRADEWATER	MT. RORAH	COAL	1.2	1100.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901811000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.160411 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.895875 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2966.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., FEEHRER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-431.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	850.0	
-463.0	CARBONDALE	SURVANT	COAL	2.0	882.0	
-511.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-566.0	CARBONDALE	DEKOVEN	COAL	3.0	985.0	
-593.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1012.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-601.0	CARBONDALE	DAVIS	COAL	5.0	1020.0	
-635.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1054.0	
-641.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1060.0	
-673.0	TRADEWATER	MT. RORAH	COAL	2.0	1092.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901844000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.164988 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.894076 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2957.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., FEEHRER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-456.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	845.0	
-489.0	CARBONDALE	SURVANT	COAL	3.0	878.0	
-538.0	CARBONDALE	COLCHESTER	COAL	0.5	927.0	
-589.0	CARBONDALE	DEKOVEN	COAL	3.0	978.0	
-619.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	1008.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-626.0	CARBONDALE	DAVIS	COAL	5.0	1015.0	
-661.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	1050.0	
-666.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1055.0	
-693.0	TRADEWATER	MT. RORAH	COAL	1.5	1082.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902010000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.160275 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.901323 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2975.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., BAYLEY JOHN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-446.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	845.0	
-469.0	CARBONDALE	SURVANT	COAL	1.8	868.0	
-530.0	CARBONDALE	COLCHESTER	COAL	0.5	929.0	
-581.0	CARBONDALE	DEKOVEN	COAL	4.0	980.0	
-609.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1008.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-616.0	CARBONDALE	DAVIS	COAL	4.0	1015.0	
-651.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	1050.0	
-686.0	TRADEWATER	MT. RORAH	COAL	2.5	1085.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902010000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.160275 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.901323 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2972.0 **LOG TYPE:**
SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
29.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	370.0	
-346.0	CARBONDALE	SPRINGFIELD	COAL	-	745.0	
-526.0	CARBONDALE	COLCHESTER	COAL	-	925.0	
-1391.0	BASE OF PENN.		UNCLASSIFIED	-	1790.0	
-1521.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1920.0	
-1847.0		BASE L. MENARD	UNCLASSIFIED	-	2246.0	
-2210.0		BASE BARLOW	LIMESTONE	-	2609.0	
-2573.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2972.0	

MAPID: 05902022000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of SE NW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.167021 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.903166 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2981.0 **LOG TYPE:** Electric Log
SOURCE: SPIRES H V, GLOVER CLYDE 4 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-486.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	874.0	
-504.0	CARBONDALE	SURVANT	COAL	1.8	892.0	
-569.0	CARBONDALE	COLCHESTER	COAL	0.5	957.0	
-614.0	CARBONDALE	DEKOVEN	COAL	4.0	1002.0	
-640.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1028.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-647.0	CARBONDALE	DAVIS	COAL	5.0	1035.0	
-684.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1072.0	
-690.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1078.0	
-712.0	TRADEWATER	MT. RORAH	COAL	1.5	1100.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902171000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.171531 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.904986 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 3010.0 **LOG TYPE:** Electric Log

SOURCE: SPIRES H V, NEVILLE F E 6 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-512.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	900.0	
-532.0	CARBONDALE	SURVANT	COAL	2.0	920.0	
-594.0	CARBONDALE	COLCHESTER	COAL	0.5	982.0	
-638.0	CARBONDALE	DEKOVEN	COAL	2.5	1026.0	
-665.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1053.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-672.0	CARBONDALE	DAVIS	COAL	3.8	1060.0	
-707.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1095.0	
-712.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1100.0	
-740.0	TRADEWATER	MT. RORAH	COAL	1.5	1128.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05923889000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 460' N line, 460' E line of SW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.169943 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.895536 **DATE COLLECTED:** 10 / 0 / 1976

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3068.0 **LOG TYPE:** Nuclear Log

SOURCE: COLLINS BROTHERS OIL CO., FEEHRER **WELL TYPE:** Water Injection

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-480.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	865.0	
-510.0	CARBONDALE	SURVANT	COAL	2.5	895.0	
-565.0	CARBONDALE	COLCHESTER	COAL	0.5	950.0	
-610.0	CARBONDALE	DEKOVEN	COAL	4.0	995.0	
-635.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	1020.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-645.0	CARBONDALE	DAVIS	COAL	5.0	1030.0	
-683.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1068.0	
-685.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1070.0	
-618.0	TRADEWATER	MT. RORAH	COAL	2.0	1003.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900378000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.165188 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.884948 **DATE COLLECTED:** 6 / 0 / 1948

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 1800.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1411.0	BASE OF PENN.		UNCLASSIFIED	-	1800.0	

MAPID: 05901839000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.167339 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.888612 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., EDWARDS COMM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-433.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	823.0	
-456.0	CARBONDALE	SURVANT	COAL	3.0	846.0	
-522.0	CARBONDALE	COLCHESTER	COAL	0.5	912.0	
-565.0	CARBONDALE	DEKOVEN	COAL	2.8	955.0	
-594.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	984.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-604.0	CARBONDALE	DAVIS	COAL	5.0	994.0	
-639.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1029.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-643.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	1033.0	
-670.0	TRADEWATER	MT. RORAH	COAL	2.0	1060.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901848000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.1582 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892243 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 2928.0 **LOG TYPE:** Electric Log

SOURCE: BANE, T. M., SPARROW THOS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-413.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	825.0	
-442.0	CARBONDALE	SURVANT	COAL	3.0	854.0	
-498.0	CARBONDALE	COLCHESTER	COAL	0.5	910.0	
-549.0	CARBONDALE	DEKOVEN	COAL	4.0	961.0	
-576.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	988.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-586.0	CARBONDALE	DAVIS	COAL	5.0	998.0	
-618.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1030.0	
-622.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	1034.0	
-650.0	TRADEWATER	MT. RORAH	COAL	1.4	1062.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901956000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.17179 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892264 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3057.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., DURBIN-RAMSEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-472.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	856.0	
-496.0	CARBONDALE	SURVANT	COAL	1.5	880.0	
-560.0	CARBONDALE	COLCHESTER	COAL	0.5	944.0	
-601.0	CARBONDALE	DEKOVEN	COAL	4.0	985.0	
-631.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1015.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-641.0	CARBONDALE	DAVIS	COAL	4.0	1025.0	
-676.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1060.0	
-710.0	TRADEWATER	MT. RORAH	COAL	1.4	1094.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902009000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.158279 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.888564 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2973.0 **LOG TYPE:** Electric Log
SOURCE: CALIENTE OIL COMPANY, SPARROW-NAAS COM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-392.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	782.0	
-420.0	CARBONDALE	SURVANT	COAL	1.8	810.0	
-476.0	CARBONDALE	COLCHESTER	COAL	0.5	866.0	
-520.0	CARBONDALE	DEKOVEN	COAL	3.0	910.0	
-545.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	935.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-556.0	CARBONDALE	DAVIS	COAL	4.0	946.0	
-588.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	978.0	
-593.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	983.0	
-640.0	TRADEWATER	MT. RORAH	COAL	1.7	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902390000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.165225 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.883115 **DATE COLLECTED:** 1 / 0 / 1959
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3083.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., EDWARDS GEO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-408.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	791.0	
-443.0	CARBONDALE	SURVANT	COAL	1.7	826.0	
-503.0	CARBONDALE	COLCHESTER	COAL	0.5	886.0	
-535.0	CARBONDALE	DEKOVEN	COAL	2.3	918.0	
-560.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	943.0	72 PERCENT SANDSTONE IN DEKOVEN SPLIT
-573.0	CARBONDALE	DAVIS	COAL	4.0	956.0	
-605.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	988.0	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-642.0	TRADEWATER	MT. RORAH	COAL	1.8	1025.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903539000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 1650' N line, 660' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.170718 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.888618 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 652.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-204.5	CARBONDALE	DANVILLE	COAL	1.0	589.5	
-205.5	CARBONDALE		SHALE & SANDSTONE	26.0	590.5	
-231.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	616.5	
-232.5	CARBONDALE	LAWSON	SILTY SHALE	27.0	617.5	
-259.5	CARBONDALE	BRERETON	LIMESTONE	3.0	644.5	
-262.5	CARBONDALE	ANNA	BLACK SHALE	1.5	647.5	
-264.0	CARBONDALE	HERRIN	COAL	3.0	649.0	

MAPID: 05900377000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.181057 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892277 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 3130.0 **LOG TYPE:** Electric Log

SOURCE: YINGLING SAMUEL C, HALE R H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-498.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	894.0	
-520.0	CARBONDALE	SURVANT	COAL	1.4	916.0	
-588.0	CARBONDALE	COLCHESTER	COAL	0.5	984.0	
-618.0	CARBONDALE	DEKOVEN	COAL	4.0	1014.0	
-644.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	1040.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-654.0	CARBONDALE	DAVIS	COAL	5.0	1050.0	
-689.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1085.0	
-696.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1092.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901098000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 990' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.176389 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89227 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1840.0 **LOG TYPE:** Electric Log

SOURCE: WHALEY OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-578.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	962.0	
-656.0	SPOON	DAVIS	UNCLASSIFIED	-	1040.0	
-1456.0	BASE OF PENN.		UNCLASSIFIED	-	1840.0	

MAPID: 05901098000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 990' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.176389 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.89227 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 682.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-225.0	CARBONDALE	DANVILLE	COAL	1.0	609.0	
-226.0	CARBONDALE		SHALE & SANDSTONE	32.0	610.0	
-258.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	642.0	
-261.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	11.0	645.0	
-272.0	CARBONDALE	LAWSON	SANDSTONE	11.0	656.0	
-283.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	667.0	
-289.0	CARBONDALE	BRERETON	LIMESTONE	3.0	673.0	
-292.0	CARBONDALE	ANNA	BLACK SHALE	2.0	676.0	
-294.0	CARBONDALE	HERRIN	COAL	4.0	678.0	

MAPID: 05901098000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 990' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.176389 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.89227 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3106.0 **LOG TYPE:** Electric Log

SOURCE: WHALEY OIL CORP, HALE R H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-489.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	873.0	
-515.0	CARBONDALE	SURVANT	COAL	1.5	899.0	
-567.0	CARBONDALE	COLCHESTER	COAL	0.5	951.0	
-620.0	CARBONDALE	DEKOVEN	COAL	3.0	1004.0	
-645.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1029.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-656.0	CARBONDALE	DAVIS	COAL	4.0	1040.0	
-688.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1072.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-694.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	1078.0	
-726.0	TRADEWATER	MT. RORAH	COAL	1.4	1110.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901505000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.178887 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885043 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 3070.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., EDWARDS I D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-478.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	864.0	
-514.0	CARBONDALE	SURVANT	COAL	5.0	900.0	
-573.0	CARBONDALE	COLCHESTER	COAL	0.5	959.0	
-608.0	CARBONDALE	DEKOVEN	COAL	3.0	994.0	
-628.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	1014.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-643.0	CARBONDALE	DAVIS	COAL	4.0	1029.0	
-675.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1061.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-680.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	1066.0	
-714.0	TRADEWATER	MT. RORAH	COAL	1.5	1100.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900376000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.194918 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892375 **DATE COLLECTED:** 9 / 0 / 1945

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3046.0 **LOG TYPE:** Electric Log

SOURCE: STANDARD DRLG, BOYD T H 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-455.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	840.0	
-480.0	CARBONDALE	SURVANT	COAL	1.4	865.0	
-549.0	CARBONDALE	COLCHESTER	COAL	0.5	934.0	
-587.0	CARBONDALE	DEKOVEN	COAL	3.0	972.0	
-610.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	995.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-621.0	CARBONDALE	DAVIS	COAL	6.0	1006.0	
-645.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901099000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.195135 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885182 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3089.0 **LOG TYPE:** Electric Log

SOURCE: TEXACO, INC., MOYE UNIT 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-531.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	915.0	
-559.0	CARBONDALE	SURVANT	COAL	1.7	943.0	
-626.0	CARBONDALE	COLCHESTER	COAL	0.5	1010.0	
-658.0	CARBONDALE	DEKOVEN	COAL	3.0	1042.0	
-684.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	1068.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-696.0	CARBONDALE	DAVIS	COAL	5.0	1080.0	
-715.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1099.0	
-719.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1103.0	
-751.0	TRADEWATER	MT. RORAH	COAL	1.2	1135.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901099000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.195135 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.885182 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3089.0 **LOG TYPE:** Electric Log

SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-260.0	CARBONDALE	DANVILLE	COAL	-	644.0	
-354.0	CARBONDALE	ANVIL ROCK		77.0	738.0	
-403.0	CARBONDALE	BRIAR HILL	COAL	-	787.0	
-476.0	CARBONDALE	SPRINGFIELD	COAL	4.0	860.0	BLACK SHALE & LIMESTONE ROOF
-526.0	CARBONDALE	HOUCHIN CREEK	COAL	-	910.0	

MAPID: 05902053000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.197317 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.888788 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 673.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-203.5	CARBONDALE	DANVILLE	COAL	1.5	588.5	
-205.0	CARBONDALE		SILTY SHALE	37.0	590.0	
-242.0	CARBONDALE	LAWSON	SILTY SHALE	21.0	627.0	
-263.0	CARBONDALE	LAWSON	SANDSTONE	21.0	648.0	
-284.0	CARBONDALE	HERRIN	COAL	4.0	669.0	

MAPID: 05902802000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208774 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.890936 **DATE COLLECTED:** 5 / 0 / 1962

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: WEST DRLG. CO., HALE HUGH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-478.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	885.0	
-498.0	CARBONDALE	SURVANT	COAL	1.4	905.0	
-566.0	CARBONDALE	COLCHESTER	COAL	0.5	973.0	
-597.0	CARBONDALE	DEKOVEN	COAL	3.0	1004.0	
-636.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1043.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-647.0	CARBONDALE	DAVIS	COAL	4.0	1054.0	
-678.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1085.0	
-683.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1090.0	
-713.0	TRADEWATER	MT. RORAH	COAL	1.4	1120.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902802000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.208774 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.890936 **DATE COLLECTED:** 5 / 0 / 1962

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 2026.0 **LOG TYPE:** Electric Log

SOURCE: WEST DRLG. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1619.0	BASE OF PENN.		UNCLASSIFIED	-	2026.0	

MAPID: 05924499000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.195135 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885182 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-528.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	916.0	
-555.0	CARBONDALE	SURVANT	COAL	1.8	943.0	
-622.0	CARBONDALE	COLCHESTER	COAL	0.5	1010.0	
-654.0	CARBONDALE	DEKOVEN	COAL	4.0	1042.0	
-678.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	1066.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-694.0	CARBONDALE	DAVIS	COAL	6.0	1082.0	
-748.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1136.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900375000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.211475 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.88019 **DATE COLLECTED:** 1 / 0 / 1947

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 3141.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., HILL CHAS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-467.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	876.0	
-487.0	CARBONDALE	SURVANT	COAL	2.8	896.0	
-555.0	CARBONDALE	COLCHESTER	COAL	0.5	964.0	
-593.0	CARBONDALE	DEKOVEN	COAL	4.0	1002.0	
-629.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1038.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-641.0	CARBONDALE	DAVIS	COAL	5.0	1050.0	
-673.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1082.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-680.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1089.0	
-711.0	TRADEWATER	MT. RORAH	COAL	1.4	1120.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900526000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.218093 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.887454 **DATE COLLECTED:** 12 / 0 / 1949

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 3090.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., HOLLAND J P **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-456.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	844.0	
-482.0	CARBONDALE	SURVANT	COAL	2.0	870.0	
-540.0	CARBONDALE	COLCHESTER	COAL	0.5	928.0	
-576.0	CARBONDALE	DEKOVEN	COAL	3.0	964.0	
-620.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1008.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-632.0	CARBONDALE	DAVIS	COAL	4.0	1020.0	
-662.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1050.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-672.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	1060.0	
-697.0	TRADEWATER	MT. RORAH	COAL	0.8	1085.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900527000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.220771 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880212 **DATE COLLECTED:** 9 / 0 / 1947

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2331.0 **LOG TYPE:** Electric Log

SOURCE: MEALY & WOLFE, MILLS L M 1 **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-489.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	864.0	
-509.0	CARBONDALE	SURVANT	COAL	1.5	884.0	
-580.0	CARBONDALE	COLCHESTER	COAL	0.5	955.0	
-609.0	CARBONDALE	DEKOVEN	COAL	3.0	984.0	
-645.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1020.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-661.0	CARBONDALE	DAVIS	COAL	4.5	1036.0	
-691.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1066.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-699.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1074.0	
-730.0	TRADEWATER	MT. RORAH	COAL	1.8	1105.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900530000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.225421 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880222 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2755.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, MURPHY IRA W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-500.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	874.0	
-520.0	CARBONDALE	SURVANT	COAL	1.8	894.0	
-592.0	CARBONDALE	COLCHESTER	COAL	0.5	966.0	
-626.0	CARBONDALE	DEKOVEN	COAL	3.0	1000.0	
-660.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1034.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-674.0	CARBONDALE	DAVIS	COAL	4.0	1048.0	
-702.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1076.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-709.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1083.0	
-738.0	TRADEWATER	MT. RORAH	COAL	2.8	1112.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901100000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.217808 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.892881 **DATE COLLECTED:** 5 / 0 / 1953

SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2678.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., HOLLAND-WILLIS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-467.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	880.0	
-489.0	CARBONDALE	SURVANT	COAL	1.8	902.0	
-555.0	CARBONDALE	COLCHESTER	COAL	0.5	968.0	
-589.0	CARBONDALE	DEKOVEN	COAL	3.0	1002.0	
-619.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1032.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-629.0	CARBONDALE	DAVIS	COAL	4.0	1042.0	
-662.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1075.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-668.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	1081.0	
-703.0	TRADEWATER	MT. RORAH	COAL	1.8	1116.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901100000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.217808 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.892881 **DATE COLLECTED:** 5 / 0 / 1953

SURFACE ELEVATION (FT.): 413.0 **LOGGED (FT.):** 2022.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1609.0	BASE OF PENN.		UNCLASSIFIED	-	2022.0	

MAPID: 05901188000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.227151 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.889388 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 2978.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., NOEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-452.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	858.0	
-469.0	CARBONDALE	SURVANT	COAL	2.0	875.0	
-533.0	CARBONDALE	COLCHESTER	COAL	0.5	939.0	
-564.0	CARBONDALE	DEKOVEN	COAL	2.8	970.0	
-606.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1012.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-614.0	CARBONDALE	DAVIS	COAL	4.5	1020.0	
-645.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1051.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-658.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1064.0	
-682.0	TRADEWATER	MT. RORAH	COAL	1.8	1088.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901271000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.226905 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893052 **DATE COLLECTED:** 1 / 0 / 1954

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., SANDERS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-456.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	855.0	
-476.0	CARBONDALE	SURVANT	COAL	5.0	875.0	
-534.0	CARBONDALE	COLCHESTER	COAL	0.5	933.0	
-567.0	CARBONDALE	DEKOVEN	COAL	4.0	966.0	
-609.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1008.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-616.0	CARBONDALE	DAVIS	COAL	5.0	1015.0	
-647.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1046.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-651.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1050.0	
-696.0	TRADEWATER	MT. RORAH	COAL	3.0	1095.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901509000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2310' N line, 990' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.224975 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.887547 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 681.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-215.5	CARBONDALE	DANVILLE	COAL	3.0	617.5	
-218.5	CARBONDALE		SHALE & SANDSTONE	26.0	620.5	
-244.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	646.5	
-248.5	CARBONDALE	LAWSON	SILTY SHALE	6.0	650.5	
-254.5	CARBONDALE	LAWSON	SANDSTONE	5.0	656.5	
-259.5	CARBONDALE	LAWSON	GRAY SHALE	10.0	661.5	
-269.5	CARBONDALE	BRERETON	LIMESTONE	3.5	671.5	
-273.0	CARBONDALE	ANNA	BLACK SHALE	3.0	675.0	
-276.0	CARBONDALE	HERRIN	COAL	3.0	678.0	

MAPID: 05903477000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.222574 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.889323 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2686.0 **LOG TYPE:** Electric Log

SOURCE: M & W DRLG CO, MILLS LEE 4 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-469.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	878.0	
-489.0	CARBONDALE	SURVANT	COAL	1.8	898.0	
-551.0	CARBONDALE	COLCHESTER	COAL	0.5	960.0	
-586.0	CARBONDALE	DEKOVEN	COAL	2.5	995.0	
-627.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	1036.0	88 PERCENT SANDSTONE IN DEKOVEN SPLIT
-637.0	CARBONDALE	DAVIS	COAL	4.0	1046.0	
-666.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1075.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-672.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1081.0	
-701.0	TRADEWATER	MT. RORAH	COAL	0.8	1110.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900374000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 1650' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.233802 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893117 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1894.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-543.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	924.0	
-623.0	SPOON	DAVIS	UNCLASSIFIED	-	1004.0	
-1513.0	BASE OF PENN.		UNCLASSIFIED	-	1894.0	

MAPID: 05900374000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 1650' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.233802 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893117 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 653.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-213.0	CARBONDALE	DANVILLE	COAL	2.0	594.0	
-215.0	CARBONDALE		SHALE & SANDSTONE	22.0	596.0	
-237.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	618.0	
-242.0	CARBONDALE	LAWSON	SILTY SHALE	19.0	623.0	
-261.0	CARBONDALE	BRERETON	LIMESTONE	4.0	642.0	
-265.0	CARBONDALE	ANNA	BLACK SHALE	3.0	646.0	
-268.0	CARBONDALE	HERRIN	COAL	4.0	649.0	

MAPID: 05900374000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 1650' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.233802 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893117 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., ALLYN ABIJAH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-460.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	841.0	
-479.0	CARBONDALE	SURVANT	COAL	1.8	860.0	
-542.0	CARBONDALE	COLCHESTER	COAL	0.5	923.0	
-577.0	CARBONDALE	DEKOVEN	COAL	3.0	958.0	
-614.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	995.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-622.0	CARBONDALE	DAVIS	COAL	5.0	1003.0	
-639.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1020.0	
-649.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1030.0	
-679.0	TRADEWATER	MT. RORAH	COAL	3.0	1060.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900373000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.257557 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.885746 **DATE COLLECTED:** 2 / 0 / 1948

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3141.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., DOWNEN JOHN T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-382.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	760.0	
-402.0	CARBONDALE	SURVANT	COAL	1.8	780.0	
-472.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-498.0	CARBONDALE	DEKOVEN	COAL	5.0	876.0	
-527.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	905.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-536.0	CARBONDALE	DAVIS	COAL	5.0	914.0	
-564.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	942.0	
-577.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	955.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900373000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.257557 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.885746 **DATE COLLECTED:** 2 / 0 / 1948

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1734.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1354.0	BASE OF PENN.		UNCLASSIFIED	-	1734.0	

MAPID: 05903542000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 361' N line, 2596' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.25426 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.893076 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 948.1 **LOG TYPE:** Survey Core Study

SOURCE: AMAX-AYRSHIRE NH-6 **WELL TYPE:** Coal Test

COMMENT: COPY INFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.0			UNKNOWN	582.0	0.0	O-HERRIN
-194.0	CARBONDALE		SILTSTONE	5.0	582.0	
-199.0	CARBONDALE		UNKNOWN	74.0	587.0	
-273.0	CARBONDALE		GRAY SHALE	8.0	661.0	
-281.0	CARBONDALE		SHALE	2.0	669.0	
-283.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	671.0	
-284.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	672.3	
-286.2	CARBONDALE	SPRINGFIELD	COAL	4.0	674.2	
-290.2	CARBONDALE		UNCLASSIFIED	4.0	678.2	SEATROCK
-294.2	CARBONDALE		GRAY SHALE	4.8	682.2	
-299.0	CARBONDALE	DEKOVEN	COAL	4.0	687.0	
-303.0	CARBONDALE		UNKNOWN	213.0	691.0	
-516.0			UNCLASSIFIED	2.5	904.0	SEATROCK
-518.5			SANDSTONE	5.5	906.5	
-524.0			SANDSTONE	3.0	912.0	
-527.0			DARK SHALE	5.0	915.0	
-532.0			SHALE	8.0	920.0	
-540.0			SILTY SHALE	2.6	928.0	
-542.6			COAL	1.5	930.6	
-544.1			UNCLASSIFIED	4.0	932.1	SEATROCK
-548.1			DARK SHALE	8.0	936.1	BROKEN
-556.1			CLAYSTONE	4.0	944.1	BOX SAYS DAIRS COAL

MAPID: 05903542000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 361' N line, 2596' W line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.25426 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893076 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 582.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COLLIERIES CORP. NH-6 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-141.9	CARBONDALE	DANVILLE	COAL	0.5	529.9	
-142.4	CARBONDALE		ARGILLACEOUS SANDSTONE	13.0	530.4	
-155.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	543.4	
-161.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	549.4	
-171.4	CARBONDALE	LAWSON	SILTY SHALE	10.0	559.4	
-181.4	CARBONDALE	CONANT	LIMESTONE	0.6	569.4	
-182.0	CARBONDALE		GRAY SHALE	2.5	570.0	
-184.5	CARBONDALE	BRERETON	LIMESTONE	3.5	572.5	
-188.0	CARBONDALE	ANNA	BLACK SHALE	2.0	576.0	
-190.0	CARBONDALE	HERRIN	COAL	4.0	578.0	

MAPID: 05900001000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.253166 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.874741 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 368.5 **LOGGED (FT.):** 751.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR F.K. 102 **WELL TYPE:** Unsuccessful or Unknown Results

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.5	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0	
330.5	BOND		SANDY SHALE	18.0	38.0	
312.5	BOND		DARK SHALE	1.0	56.0	
311.5	BOND		COAL	0.8	57.0	
310.7	BOND		UNDERCLAY	3.2	57.8	
307.5	BOND		SANDY SHALE	3.0	61.0	
304.5	BOND		DARK SHALE	17.0	64.0	
287.5	BOND		COAL	0.9	81.0	BONEY
286.6	BOND		UNDERCLAY	1.1	81.9	
285.5	BOND		SHALE	12.0	83.0	
273.5	BOND		DARK SHALE	10.0	95.0	
263.5	BOND	CARTHAGE	LIMESTONE	4.0	105.0	
259.5	MODESTO		SANDY SHALE	39.0	109.0	
220.5	MODESTO		DARK SHALE	10.0	148.0	
210.5	MODESTO		SHALE	16.0	158.0	
194.5	MODESTO		DARK SHALE	56.0	174.0	
138.5	MODESTO		LIMESTONE	1.0	230.0	
137.5	MODESTO		BLACK SHALE	3.0	231.0	
134.5	MODESTO		SHALE	12.0	234.0	
122.5	MODESTO		LIMESTONE	2.0	246.0	
120.5	MODESTO		SHALE	5.0	248.0	
115.5	MODESTO		DARK SHALE	83.5	253.0	
32.0	MODESTO		COAL	0.5	336.5	
31.5	MODESTO		UNDERCLAY	3.0	337.0	
28.5	MODESTO		SHALE	5.0	340.0	
23.5	MODESTO		DARK SHALE	12.0	345.0	
11.5	MODESTO		SANDSTONE	3.0	357.0	
8.5	MODESTO		DARK SHALE	24.0	360.0	
-15.5	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	384.0	
-23.5	MODESTO		UNDERCLAY	1.0	392.0	
-24.5	MODESTO		SANDSTONE	2.0	393.0	
-26.5	MODESTO		DARK SHALE	2.0	395.0	
-28.5	MODESTO		CALCAREOUS SHALE	5.0	397.0	
-33.5	MODESTO		LIMESTONE	3.0	402.0	
-36.5	MODESTO		SANDSTONE	30.0	405.0	
-66.5	MODESTO		SHALE	101.0	435.0	
-167.5	MODESTO		DARK SHALE	41.1	536.0	
-208.6	CARBONDALE	DANVILLE	COAL	1.7	577.1	
-210.3	CARBONDALE		UNDERCLAY	3.3	578.8	

-213.5	CARBONDALE		SHALE	5.0	582.0	
-218.5	CARBONDALE		SANDSTONE	8.0	587.0	
-226.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	8.0	595.0	
-234.5	CARBONDALE		SHALE	9.0	603.0	
-243.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	612.0	
-251.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.0	620.0	
-259.5	CARBONDALE		DARK SHALE	2.0	628.0	
-261.5	CARBONDALE	BRERETON	LIMESTONE	2.5	630.0	
-264.0	CARBONDALE	ANNA	BLACK SHALE	1.8	632.5	
-265.8	CARBONDALE	HERRIN	COAL	0.4	634.3	
-266.2	CARBONDALE	HERRIN	PYRITE	0.0	634.7	
-266.2	CARBONDALE	HERRIN	COAL	2.4	634.7	
-268.6	CARBONDALE	HERRIN	SHALE	0.2	637.1	BLUE
-268.8	CARBONDALE	HERRIN	COAL	1.2	637.3	
-269.9	CARBONDALE		UNDERCLAY	4.6	638.4	
-274.5	CARBONDALE		SHALE	20.0	643.0	
-294.5	CARBONDALE		DARK SHALE	16.0	663.0	
-310.5	CARBONDALE		BLACK SHALE	6.9	679.0	
-317.4	CARBONDALE	BRIAR HILL	COAL	1.5	685.9	
-318.9	CARBONDALE		DARK SHALE	5.6	687.4	
-324.5	CARBONDALE		SHALE	3.0	693.0	
-327.5	CARBONDALE		SANDSTONE	18.0	696.0	
-345.5	CARBONDALE		SANDY SHALE	27.0	714.0	
-372.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	741.0	
-376.0	CARBONDALE	SPRINGFIELD	COAL	4.9	744.5	
-380.9	CARBONDALE		CALCAREOUS SHALE	1.6	749.4	

MAPID: 05900001000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.253166 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.874741 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 368.5 **LOGGED (FT.):** 3685.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR F K0102 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-265.5	CARBONDALE	HERRIN	COAL	4.2	634.0	
-376.5	CARBONDALE	SPRINGFIELD	COAL	4.9	745.0	

MAPID: 05901385000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.255462 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.87656 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-152.0	CARBONDALE	DANVILLE	COAL	-	524.0	
-164.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	536.0	
-176.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	548.0	
-182.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	12.0	554.0	
-210.0	CARBONDALE	HERRIN	COAL	3.0	582.0	
-222.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	6.0	594.0	
-262.0	CARBONDALE	BRIAR HILL	COAL	-	634.0	
-265.0	CARBONDALE	CANTON	SANDSTONE/SHALE	25.0	637.0	
-324.0	CARBONDALE	SPRINGFIELD	COAL	4.0	696.0	BLACK SHALE ROOF
-362.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	34.0	734.0	
-400.0	CARBONDALE	HOUCHIN CREEK	COAL	-	772.0	

MAPID: 05901385000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line

QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.255462 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.87656 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 584.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-154.5	CARBONDALE	DANVILLE	COAL	2.5	526.5	
-157.0	CARBONDALE		SHALE & SANDSTONE	20.0	529.0	
-177.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	549.0	
-180.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	25.0	552.5	
-205.5	CARBONDALE	BRERETON	LIMESTONE	2.0	577.5	
-207.5	CARBONDALE	ANNA	BLACK SHALE	1.5	579.5	
-209.0	CARBONDALE	HERRIN	COAL	3.0	581.0	

MAPID: 05901385000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.255462 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.87656 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1770.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1398.0	BASE OF PENN.		UNCLASSIFIED	-	1770.0	

MAPID: 05901385000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 990' N line, 2310' E line
QUADRANGLE: NORRIS CITY **LONGITUDE:** -88.255462 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.87656 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, RISTER ALVEY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-413.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	785.0	
-421.0	CARBONDALE	SURVANT	COAL	1.5	793.0	
-493.0	CARBONDALE	COLCHESTER	COAL	0.5	865.0	
-530.0	CARBONDALE	DEKOVEN	COAL	3.5	902.0	
-558.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	930.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-572.0	CARBONDALE	DAVIS	COAL	4.0	944.0	
-603.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	975.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-648.0	TRADEWATER	MT. RORAH	COAL	2.8	1020.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900531000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.246269 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876625 **DATE COLLECTED:** 1 / 0 / 1951

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3320.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L, BRAMLET BESSIE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-579.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	952.0	
-601.0	CARBONDALE	SURVANT	COAL	1.8	974.0	
-674.0	CARBONDALE	COLCHESTER	COAL	3.0	1047.0	
-694.0	CARBONDALE	DEKOVEN	COAL	3.0	1067.0	
-722.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1095.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-740.0	CARBONDALE	DAVIS	COAL	3.5	1113.0	
-769.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1142.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-803.0	TRADEWATER	MT. RORAH	COAL	1.0	1176.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900531000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.246269 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.876625 **DATE COLLECTED:** 1 / 0 / 1951

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1956.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1583.0	BASE OF PENN.		UNCLASSIFIED	-	1956.0	

MAPID: 05900134000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.223179 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.8784 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**

SOURCE: MRPHY&MLSN, SPENCE 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-305.0	CARBONDALE	HERRIN	COAL	4.0	680.0	
-415.0	CARBONDALE	SPRINGFIELD	COAL	4.0	790.0	

MAPID: 05900372000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.223268 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.87477 **DATE COLLECTED:** 2 / 0 / 1948

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: MEALY & WOLFE, MURPHY NORVIN 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-475.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	870.0	
-511.0	CARBONDALE	SURVANT	COAL	3.0	906.0	
-565.0	CARBONDALE	COLCHESTER	COAL	0.5	960.0	
-605.0	CARBONDALE	DEKOVEN	COAL	3.0	1000.0	
-629.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1024.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-645.0	CARBONDALE	DAVIS	COAL	4.0	1040.0	
-673.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1068.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-677.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1072.0	
-711.0	TRADEWATER	MT. RORAH	COAL	3.0	1106.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900532000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.214031 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86756 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 2678.0 **LOG TYPE:** Electric Log

SOURCE: IN FARM BUR. COOP. ASSOC, MOYE G F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-453.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	843.0	
-485.0	CARBONDALE	SURVANT	COAL	2.0	875.0	
-540.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-573.0	CARBONDALE	DEKOVEN	COAL	3.5	963.0	
-606.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	996.0	86 PERCENT SANDSTONE IN DEKOVEN SPLIT
-618.0	CARBONDALE	DAVIS	COAL	5.0	1008.0	
-647.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1037.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-680.0	TRADEWATER	MT. RORAH	COAL	1.3	1070.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900537000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.218536 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.878384 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1976.0 **LOG TYPE:** Electric Log

SOURCE: SCHOONMAKER, GEORGE C. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1601.0	BASE OF PENN.		UNCLASSIFIED	-	1976.0	

MAPID: 05901511000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.223425 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.871183 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 674.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-213.5	CARBONDALE	DANVILLE	COAL	2.5	605.5	
-216.0	CARBONDALE		SHALE & SANDSTONE	32.0	608.0	
-248.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	640.0	
-253.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	20.0	645.0	
-273.0	CARBONDALE	BRERETON	LIMESTONE	2.5	665.0	
-275.5	CARBONDALE	ANNA	BLACK SHALE	2.5	667.5	
-278.0	CARBONDALE	HERRIN	COAL	4.0	670.0	

MAPID: 05902063000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.21393 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874771 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 3112.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., MOYE BEATRICE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-458.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	845.0	
-487.0	CARBONDALE	SURVANT	COAL	3.0	874.0	
-548.0	CARBONDALE	COLCHESTER	COAL	0.5	935.0	
-578.0	CARBONDALE	DEKOVEN	COAL	3.0	965.0	
-613.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1000.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-626.0	CARBONDALE	DAVIS	COAL	5.0	1013.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-638.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1025.0	
-658.0	TRADEWATER	MT. RORAH	COAL	0.5	1045.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902063000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.21393 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.874771 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1973.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1586.0	BASE OF PENN.		UNCLASSIFIED	-	1973.0	

MAPID: 05900538000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.206919 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876508 **DATE COLLECTED:** 5 / 0 / 1948

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 3151.0 **LOG TYPE:** Electric Log

SOURCE: IN FARM BUR. COOP. ASSOC, DOWNEN HARRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-444.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	836.0	
-472.0	CARBONDALE	SURVANT	COAL	4.0	864.0	
-531.0	CARBONDALE	COLCHESTER	COAL	0.5	923.0	
-573.0	CARBONDALE	DEKOVEN	COAL	3.0	965.0	
-600.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	992.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-611.0	CARBONDALE	DAVIS	COAL	5.0	1003.0	
-631.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1023.0	
-674.0	TRADEWATER	MT. RORAH	COAL	0.8	1066.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900539000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.19764 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.878046 **DATE COLLECTED:** 12 / 0 / 1947

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 3140.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., MOYE W R **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-501.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	902.0	
-525.0	CARBONDALE	SURVANT	COAL	1.7	926.0	
-588.0	CARBONDALE	COLCHESTER	COAL	0.5	989.0	
-625.0	CARBONDALE	DEKOVEN	COAL	4.0	1026.0	
-649.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	1050.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-665.0	CARBONDALE	DAVIS	COAL	4.5	1066.0	
-697.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1098.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-729.0	TRADEWATER	MT. RORAH	COAL	1.5	1130.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900540000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.20926 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874743 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3125.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., REEDER L H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-448.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	825.0	
-477.0	CARBONDALE	SURVANT	COAL	3.0	854.0	
-538.0	CARBONDALE	COLCHESTER	COAL	0.5	915.0	
-575.0	CARBONDALE	DEKOVEN	COAL	3.7	952.0	
-606.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	983.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-623.0	CARBONDALE	DAVIS	COAL	4.5	1000.0	
-653.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1030.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-659.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	1036.0	
-691.0	TRADEWATER	MT. RORAH	COAL	1.3	1068.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900541000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.197725 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874466 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2309.0 **LOG TYPE:** Electric Log

SOURCE: PAPPAS, G. H. & PACO PET, WILSON GEO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-478.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	856.0	
-513.0	CARBONDALE	SURVANT	COAL	3.5	891.0	
-568.0	CARBONDALE	COLCHESTER	COAL	0.5	946.0	
-606.0	CARBONDALE	DEKOVEN	COAL	3.0	984.0	
-626.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1004.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-642.0	CARBONDALE	DAVIS	COAL	4.0	1020.0	
-672.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1050.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-678.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	1056.0	
-706.0	TRADEWATER	MT. RORAH	COAL	4.0	1084.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901391000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202404 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.87111 **DATE COLLECTED:** 12 / 0 / 1947
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1894.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-1519.0	BASE OF PENN.		UNCLASSIFIED	-	1894.0	

MAPID: 05901391000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202404 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.87111 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	1.5		
-	CARBONDALE		SILTY SHALE	50.0		
-	CARBONDALE	LAWSON	SANDSTONE	83.0		

MAPID: 05901391000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202404 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.87111 **DATE COLLECTED:** 12 / 0 / 1947
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD., MOYE W R **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-430.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	805.0	
-463.0	CARBONDALE	SURVANT	COAL	3.0	838.0	
-517.0	CARBONDALE	COLCHESTER	COAL	0.5	892.0	
-565.0	CARBONDALE	DEKOVEN	COAL	2.8	940.0	
-586.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	961.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-605.0	CARBONDALE	DAVIS	COAL	4.0	980.0	
-635.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1010.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-640.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1015.0	
-670.0	TRADEWATER	MT. RORAH	COAL	1.4	1045.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924768000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.20465 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.874633 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-442.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	820.0	
-472.0	CARBONDALE	SURVANT	COAL	2.0	850.0	
-528.0	CARBONDALE	COLCHESTER	COAL	0.5	906.0	
-576.0	CARBONDALE	DEKOVEN	COAL	2.6	954.0	
-595.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	973.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-612.0	CARBONDALE	DAVIS	COAL	4.5	990.0	
-642.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1020.0	
-647.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	1025.0	
-672.0	TRADEWATER	MT. RORAH	COAL	0.8	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900135000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174894 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.865022 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**

SOURCE: DUNCAN INC, GREER 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-169.0	CARBONDALE	HERRIN	COAL	4.0	541.0	
-267.0	CARBONDALE	SPRINGFIELD	COAL	4.0	639.0	

MAPID: 05900135000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174894 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.865022 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 549.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-113.5	CARBONDALE	DANVILLE	COAL	1.0	488.5	
-114.5	CARBONDALE		SHALE & SANDSTONE	24.0	489.5	
-138.5	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	6.0	513.5	
-144.5	CARBONDALE	LAWSON	SILTY SHALE	22.0	519.5	
-166.5	CARBONDALE	BRERETON	LIMESTONE	2.5	541.5	
-169.0	CARBONDALE	ANNA	BLACK SHALE	2.0	544.0	
-171.0	CARBONDALE	HERRIN	COAL	3.5	546.0	

MAPID: 05900135000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174894 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.865022 **DATE COLLECTED:** 9 / 0 / 1941

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3030.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, N. V., EST. OF, GREER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-367.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	742.0	
-407.0	CARBONDALE	SURVANT	COAL	2.0	782.0	
-459.0	CARBONDALE	COLCHESTER	COAL	0.5	834.0	
-489.0	CARBONDALE	DEKOVEN	COAL	2.8	864.0	
-507.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	882.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-529.0	CARBONDALE	DAVIS	COAL	5.0	904.0	
-562.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	937.0	53% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-569.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	944.0	
-591.0	TRADEWATER	MT. RORAH	COAL	0.0	966.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900542000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.190769 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.876068 **DATE COLLECTED:** 5 / 0 / 1949

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3090.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, N. V., EST. OF, SWITZER ELMER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-467.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	848.0	
-507.0	CARBONDALE	SURVANT	COAL	3.0	888.0	
-567.0	CARBONDALE	COLCHESTER	COAL	0.5	948.0	
-599.0	CARBONDALE	DEKOVEN	COAL	3.0	980.0	
-627.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	1008.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-642.0	CARBONDALE	DAVIS	COAL	6.0	1023.0	
-655.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1036.0	
-689.0	TRADEWATER	MT. RORAH	COAL	0.0	1070.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902108000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181595 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.872421 **DATE COLLECTED:** 6 / 0 / 1957

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2945.0 **LOG TYPE:** Electric Log

SOURCE: ATLAS DRLG. CO., THE, DOWIN H L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-442.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	828.0	
-487.0	CARBONDALE	SURVANT	COAL	2.5	873.0	
-544.0	CARBONDALE	COLCHESTER	COAL	2.0	930.0	
-578.0	CARBONDALE	DEKOVEN	COAL	3.0	964.0	
-596.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	982.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-613.0	CARBONDALE	DAVIS	COAL	4.0	999.0	
-637.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1023.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-643.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1029.0	
-670.0	TRADEWATER	MT. RORAH	COAL	1.8	1056.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902108000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181595 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.872421 **DATE COLLECTED:** 6 / 0 / 1957

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1800.0 **LOG TYPE:** Electric Log

SOURCE: ATLAS DRLG. CO., THE **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1414.0	BASE OF PENN.		UNCLASSIFIED	-	1800.0	

MAPID: 05900543000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.165402 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.875823 **DATE COLLECTED:** 9 / 0 / 1946

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3042.0 **LOG TYPE:** Electric Log

SOURCE: ROBINSON & PUCKETT, INC., DOWNEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-394.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	767.0	
-436.0	CARBONDALE	SURVANT	COAL	4.0	809.0	
-493.0	CARBONDALE	COLCHESTER	COAL	0.5	866.0	
-529.0	CARBONDALE	DEKOVEN	COAL	3.0	902.0	
-545.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	918.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-560.0	CARBONDALE	DAVIS	COAL	4.5	933.0	
-589.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	962.0	
-595.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	968.0	
-622.0	TRADEWATER	MT. RORAH	COAL	1.8	995.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900544000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.172528 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.866808 **DATE COLLECTED:** 11 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3015.0 **LOG TYPE:** Electric Log

SOURCE: CALSTAR PETRO. CO., GREEN CARRIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-379.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	753.0	
-422.0	CARBONDALE	SURVANT	COAL	3.0	796.0	
-476.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-505.0	CARBONDALE	DEKOVEN	COAL	3.0	879.0	
-526.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	900.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-545.0	CARBONDALE	DAVIS	COAL	4.0	919.0	
-576.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	950.0	41% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-606.0	TRADEWATER	MT. RORAH	COAL	1.8	980.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900544000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.172528 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.866808 **DATE COLLECTED:** 11 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1722.0 **LOG TYPE:** Electric Log

SOURCE: CALSTAR PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1348.0	BASE OF PENN.		UNCLASSIFIED	-	1722.0	

MAPID: 05900545000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156504 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86661 **DATE COLLECTED:** 7 / 0 / 1949

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2821.0 **LOG TYPE:** Electric Log

SOURCE: COCHRAN A L, MOYE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-323.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	687.0	
-368.0	CARBONDALE	SURVANT	COAL	3.0	732.0	
-419.0	CARBONDALE	COLCHESTER	COAL	0.5	783.0	
-466.0	CARBONDALE	DEKOVEN	COAL	3.5	830.0	
-473.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	837.0	20 PERCENT SANDSTONE IN DEKOVEN SPLIT
-491.0	CARBONDALE	DAVIS	COAL	4.5	855.0	
-524.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	888.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-528.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	892.0	
-555.0	TRADEWATER	MT. RORAH	COAL	0.8	919.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901722000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.172117 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.877753 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., MUSGRAVE LEONA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-438.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	820.0	
-473.0	CARBONDALE	SURVANT	COAL	1.7	855.0	
-538.0	CARBONDALE	COLCHESTER	COAL	0.5	920.0	
-581.0	CARBONDALE	DEKOVEN	COAL	4.0	963.0	
-594.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	976.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-608.0	CARBONDALE	DAVIS	COAL	4.0	990.0	
-641.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1023.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-646.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	1028.0	
-673.0	TRADEWATER	MT. RORAH	COAL	1.3	1055.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901722000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.172117 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.877753 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 622.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-181.0	CARBONDALE	DANVILLE	COAL	3.0	563.0	
-184.0	CARBONDALE		SHALE & SANDSTONE	20.0	566.0	
-204.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	586.0	
-208.0	CARBONDALE	LAWSON	SANDSTONE	6.0	590.0	
-214.0	CARBONDALE	LAWSON	SILTY SHALE	16.0	596.0	
-230.0	CARBONDALE	BRERETON	LIMESTONE	4.0	612.0	
-234.0	CARBONDALE	ANNA	BLACK SHALE	2.0	616.0	
-236.0	CARBONDALE	HERRIN	COAL	4.0	618.0	

MAPID: 05902078000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163418 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86488 **DATE COLLECTED:** 1 / 0 / 1957

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2974.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, MOYE KELLY E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-347.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	723.0	
-392.0	CARBONDALE	SURVANT	COAL	2.5	768.0	
-444.0	CARBONDALE	COLCHESTER	COAL	0.5	820.0	
-486.0	CARBONDALE	DEKOVEN	COAL	2.5	862.0	
-501.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	877.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-518.0	CARBONDALE	DAVIS	COAL	5.0	894.0	
-554.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	930.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-559.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	935.0	
-584.0	TRADEWATER	MT. RORAH	COAL	1.8	960.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900091000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: EMMA **LONGITUDE:** -88.121313 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.908766 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Measured section
SOURCE: NEW HAVEN **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-130.0	CARBONDALE	HERRIN	COAL	-	500.0	

MAPID: 05901935000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.134791 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.910476 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log
SOURCE: CLARK & CLARK PETROL, MITCHELL C H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-402.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	795.0	
-426.0	CARBONDALE	SURVANT	COAL	1.8	819.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.5	882.0	
-532.0	CARBONDALE	DEKOVEN	COAL	3.5	925.0	
-572.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	965.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-578.0	CARBONDALE	DAVIS	COAL	5.0	971.0	
-607.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	
-617.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	1010.0	
-647.0	TRADEWATER	MT. RORAH	COAL	0.8	1040.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901935000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.134791 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.910476 **DATE COLLECTED:** 2 / 0 / 1956
SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 1770.0 **LOG TYPE:** Electric Log
SOURCE: CLARK & CLARK PETROL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1377.0	BASE OF PENN.		UNCLASSIFIED	-	1770.0	

MAPID: 05901936000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.134737 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.914079 **DATE COLLECTED:** 1 / 0 / 1956

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2962.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, GARRISON W C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-411.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	780.0	
-441.0	CARBONDALE	SURVANT	COAL	1.8	810.0	
-501.0	CARBONDALE	COLCHESTER	COAL	0.5	870.0	
-541.0	CARBONDALE	DEKOVEN	COAL	3.0	910.0	
-576.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	945.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-581.0	CARBONDALE	DAVIS	COAL	4.0	950.0	
-616.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	985.0	
-629.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	998.0	
-673.0	TRADEWATER	MT. RORAH	COAL	2.0	1042.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902039000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.130278 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.910508 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2850.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., ROARK TOWN LOTS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-387.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	755.0	
-412.0	CARBONDALE	SURVANT	COAL	1.8	780.0	
-472.0	CARBONDALE	COLCHESTER	COAL	0.5	840.0	
-516.0	CARBONDALE	DEKOVEN	COAL	3.0	884.0	
-552.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	920.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-560.0	CARBONDALE	DAVIS	COAL	4.0	928.0	
-589.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	957.0	
-592.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	960.0	
-626.0	TRADEWATER	MT. RORAH	COAL	0.8	994.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900547000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.137412 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893903 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2632.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT & WILLIS, INC., MEDLIN DORCIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-344.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	743.0	
-369.0	CARBONDALE	SURVANT	COAL	1.8	768.0	
-431.0	CARBONDALE	COLCHESTER	COAL	0.5	830.0	
-471.0	CARBONDALE	DEKOVEN	COAL	4.8	870.0	
-499.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	898.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-507.0	CARBONDALE	DAVIS	COAL	6.0	906.0	
-537.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	936.0	
-546.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	945.0	
-570.0	TRADEWATER	MT. RORAH	COAL	1.3	969.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901395000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.150978 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906756 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 2964.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, QUESTALL HAZEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-425.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	836.0	
-447.0	CARBONDALE	SURVANT	COAL	1.8	858.0	
-506.0	CARBONDALE	COLCHESTER	COAL	0.5	917.0	
-558.0	CARBONDALE	DEKOVEN	COAL	3.0	969.0	
-587.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	998.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-595.0	CARBONDALE	DAVIS	COAL	4.0	1006.0	
-637.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1048.0	
-640.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1051.0	
-679.0	TRADEWATER	MT. RORAH	COAL	2.0	1090.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901396000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.153384 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.903109 **DATE COLLECTED:** 4 / 0 / 1951

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2972.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., MOBLEY WM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-431.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	830.0	
-456.0	CARBONDALE	SURVANT	COAL	1.8	855.0	
-513.0	CARBONDALE	COLCHESTER	COAL	0.5	912.0	
-564.0	CARBONDALE	DEKOVEN	COAL	3.9	963.0	
-591.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	990.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-600.0	CARBONDALE	DAVIS	COAL	4.0	999.0	
-633.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1032.0	
-666.0	TRADEWATER	MT. RORAH	COAL	1.3	1065.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901776000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.13946 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.906843 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2270.0 **LOG TYPE:** Electric Log

SOURCE: HOSKINS & WARD OIL, ARMSTRONG-DAGLEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-405.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	796.0	
-429.0	CARBONDALE	SURVANT	COAL	2.0	820.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.5	880.0	
-543.0	CARBONDALE	DEKOVEN	COAL	3.0	934.0	
-577.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	968.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-584.0	CARBONDALE	DAVIS	COAL	4.0	975.0	
-614.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1005.0	
-624.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	1015.0	
-654.0	TRADEWATER	MT. RORAH	COAL	1.5	1045.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901815000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.15118 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.899494 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 628.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-185.0	CARBONDALE	DANVILLE	COAL	3.0	580.0	
-188.0	CARBONDALE		SHALE & SANDSTONE	11.0	583.0	
-199.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	24.0	594.0	
-223.0	CARBONDALE	BRERETON	LIMESTONE	4.0	618.0	
-227.0	CARBONDALE	ANNA	BLACK SHALE	2.0	622.0	
-229.0	CARBONDALE	HERRIN	COAL	4.0	624.0	

MAPID: 05901838000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.146453 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.903135 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log

SOURCE: COLLINS BROTHERS OIL CO., WILSON GEO T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-414.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	809.0	
-435.0	CARBONDALE	SURVANT	COAL	2.0	830.0	
-497.0	CARBONDALE	COLCHESTER	COAL	0.5	892.0	
-549.0	CARBONDALE	DEKOVEN	COAL	4.0	944.0	
-581.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	976.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-588.0	CARBONDALE	DAVIS	COAL	4.9	983.0	
-619.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1014.0	
-625.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1020.0	
-655.0	TRADEWATER	MT. RORAH	COAL	1.4	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901973000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.141802 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.904971 **DATE COLLECTED:** 3 / 0 / 1956

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 1743.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1355.0	BASE OF PENN.		UNCLASSIFIED	-	1743.0	

MAPID: 05901975000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.148905 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.897656 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2952.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B., MOBLEY WM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-397.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	785.0	
-422.0	CARBONDALE	SURVANT	COAL	1.4	810.0	
-481.0	CARBONDALE	COLCHESTER	COAL	0.5	869.0	
-535.0	CARBONDALE	DEKOVEN	COAL	3.0	923.0	
-564.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	952.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-572.0	CARBONDALE	DAVIS	COAL	5.0	960.0	
-602.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	990.0	
-612.0	TRADEWATER	STONEFORT	LIMESTONE	1.7	1000.0	
-637.0	TRADEWATER	MT. RORAH	COAL	1.8	1025.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902142000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.14424 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.899476 **DATE COLLECTED:** 8 / 0 / 1957

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2863.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., BALDWIN-MITCHELL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-398.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	780.0	
-423.0	CARBONDALE	SURVANT	COAL	1.8	805.0	
-486.0	CARBONDALE	COLCHESTER	COAL	0.5	868.0	
-537.0	CARBONDALE	DEKOVEN	COAL	2.5	919.0	
-571.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	953.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-578.0	CARBONDALE	DAVIS	COAL	4.0	960.0	
-614.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	996.0	
-620.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	1002.0	
-658.0	TRADEWATER	MT. RORAH	COAL	2.0	1040.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902142000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.14424 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.899476 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2561.0 **LOG TYPE:**

SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
79.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	303.0	
-303.0	CARBONDALE	SPRINGFIELD	COAL	-	685.0	
-484.0	CARBONDALE	COLCHESTER	COAL	-	866.0	
-1358.0	BASE OF PENN.		UNCLASSIFIED	-	1740.0	
-1495.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1877.0	
-1785.0		BASE L. MENARD	UNCLASSIFIED	-	2167.0	
-2179.0		BASE BARLOW	LIMESTONE	-	2561.0	

MAPID: 05900401000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.125933 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.901317 **DATE COLLECTED:** 9 / 0 / 1946

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DAVIS THOMAS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-347.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	790.0	
-377.0	CARBONDALE	SURVANT	COAL	0.8	820.0	
-442.0	CARBONDALE	COLCHESTER	COAL	0.5	885.0	
-487.0	CARBONDALE	DEKOVEN	COAL	4.0	930.0	
-513.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	956.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-522.0	CARBONDALE	DAVIS	COAL	4.0	965.0	
-557.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	
-563.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	1006.0	
-592.0	TRADEWATER	MT. RORAH	COAL	3.0	1035.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900401000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.125933 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.901317 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 443.0 **LOGGED (FT.):** 2918.0 **LOG TYPE:**

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
127.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	316.0	
-251.0	CARBONDALE	SPRINGFIELD	COAL	-	694.0	
-441.0	CARBONDALE	COLCHESTER	COAL	-	884.0	
-1333.0	BASE OF PENN.		UNCLASSIFIED	-	1776.0	
-1484.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1927.0	
-1766.0		BASE L. MENARD	UNCLASSIFIED	-	2209.0	
-2162.0		BASE BARLOW	LIMESTONE	-	2605.0	
-2475.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2918.0	

MAPID: 05900548000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 932' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.133015 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893889 **DATE COLLECTED:** 3 / 0 / 1949

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2202.0 **LOG TYPE:** Electric Log

SOURCE: ANGLE, CLARENCE, MEDLIN DORCIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-334.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	716.0	
-363.0	CARBONDALE	SURVANT	COAL	2.0	745.0	
-428.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-467.0	CARBONDALE	DEKOVEN	COAL	4.0	849.0	
-494.0	CARBONDALE	LOWER DEKOVEN	COAL	1.7	876.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-501.0	CARBONDALE	DAVIS	COAL	6.0	883.0	
-534.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	916.0	
-566.0	TRADEWATER	MT. RORAH	COAL	2.5	948.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901026000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: EMMA **LONGITUDE:** -88.121485 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.897603 **DATE COLLECTED:** 4 / 0 / 1952

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3015.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., HINES HARRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-323.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	692.0	
-356.0	CARBONDALE	SURVANT	COAL	2.0	725.0	
-423.0	CARBONDALE	COLCHESTER	COAL	0.5	792.0	
-466.0	CARBONDALE	DEKOVEN	COAL	3.0	835.0	
-489.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	858.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-498.0	CARBONDALE	DAVIS	COAL	4.0	867.0	
-534.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	903.0	
-541.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	910.0	
-569.0	TRADEWATER	MT. RORAH	COAL	1.5	938.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902129000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 1650' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.123926 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893883 **DATE COLLECTED:** 7 / 0 / 1964

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2945.0 **LOG TYPE:** Electric Log

SOURCE: VAN DEN BARK JAS H, SMITH COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-316.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	670.0	
-349.0	CARBONDALE	SURVANT	COAL	1.8	703.0	
-410.0	CARBONDALE	COLCHESTER	COAL	0.5	764.0	
-455.0	CARBONDALE	DEKOVEN	COAL	3.0	809.0	
-479.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	833.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-488.0	CARBONDALE	DAVIS	COAL	4.0	842.0	
-521.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	875.0	
-528.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	882.0	
-551.0	TRADEWATER	MT. RORAH	COAL	1.5	905.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902129000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 1650' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.123926 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893883 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 489.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-88.0	CARBONDALE	DANVILLE	COAL	3.0	442.0	
-91.0	CARBONDALE		SHALE & SANDSTONE	8.0	445.0	
-99.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	453.0	
-102.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	22.0	456.0	
-124.0	CARBONDALE	BRERETON	LIMESTONE	5.0	478.0	
-129.0	CARBONDALE	ANNA	BLACK SHALE	2.0	483.0	
-131.0	CARBONDALE	HERRIN	COAL	4.0	485.0	

MAPID: 05902941000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: EMMA **LONGITUDE:** -88.119327 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893877 **DATE COLLECTED:** 5 / 0 / 1963

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1656.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, THOMAS A. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1300.0	BASE OF PENN.		UNCLASSIFIED	-	1656.0	

MAPID: 05900549000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: EMMA **LONGITUDE:** -88.112316 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.901333 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2816.0 **LOG TYPE:**

SOURCE: GILLIAN, J. H. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
145.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	204.0	
-231.0	CARBONDALE	SPRINGFIELD	COAL	-	580.0	
-421.0	CARBONDALE	COLCHESTER	COAL	-	770.0	
-1325.0	BASE OF PENN.		UNCLASSIFIED	-	1674.0	
-1463.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1812.0	
-1737.0		BASE L. MENARD	UNCLASSIFIED	-	2086.0	
-2132.0		BASE BARLOW	LIMESTONE	-	2481.0	
-2467.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2816.0	

MAPID: 05900549000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: EMMA **LONGITUDE:** -88.112316 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.901333 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2965.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAN, J. H. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-103.0	CARBONDALE	DANVILLE	COAL	-	452.0	
-113.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	462.0	
-123.0	CARBONDALE	ANVIL ROCK		12.0	472.0	
-181.0	CARBONDALE	BRIAR HILL	COAL	-	530.0	
-183.0	CARBONDALE	CANTON	SANDSTONE/SILTSTONE	20.0	532.0	
-230.0	CARBONDALE	SPRINGFIELD	COAL	5.0	579.0	BLACK SHALE ROOF
-321.0	CARBONDALE	HOUCHIN CREEK	COAL	-	670.0	

MAPID: 05900549000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW
QUADRANGLE: EMMA **LONGITUDE:** -88.112316 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.901333 **DATE COLLECTED:** 6 / 0 / 1950
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2965.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAN, J. H., DECKER CLARENCE 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-326.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-361.0	CARBONDALE	SURVANT	COAL	1.5	710.0	
-426.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-477.0	CARBONDALE	DEKOVEN	COAL	3.0	826.0	
-501.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	850.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-513.0	CARBONDALE	DAVIS	COAL	4.0	862.0	
-550.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	899.0	
-560.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	909.0	
-586.0	TRADEWATER	MT. RORAH	COAL	1.3	935.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902153000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.101068 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893855 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2980.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., WISEHART LEONA W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-290.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	645.0	
-328.0	CARBONDALE	SURVANT	COAL	1.4	683.0	
-390.0	CARBONDALE	COLCHESTER	COAL	0.5	745.0	
-445.0	CARBONDALE	DEKOVEN	COAL	1.4	800.0	
-465.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	820.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-473.0	CARBONDALE	DAVIS	COAL	2.5	828.0	
-520.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	875.0	
-528.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	883.0	
-554.0	TRADEWATER	MT. RORAH	COAL	1.4	909.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902201000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 430' S line, 330' E line of NW NW

QUADRANGLE: EMMA **LONGITUDE:** -88.114539 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.905341 **DATE COLLECTED:** 4 / 0 / 1958

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2821.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, FORD H C EST **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-340.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	690.0	
-375.0	CARBONDALE	SURVANT	COAL	1.4	725.0	
-439.0	CARBONDALE	COLCHESTER	COAL	0.5	789.0	
-489.0	CARBONDALE	DEKOVEN	COAL	3.0	839.0	
-512.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	862.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-520.0	CARBONDALE	DAVIS	COAL	4.0	870.0	
-555.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	905.0	
-565.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	915.0	
-595.0	TRADEWATER	MT. RORAH	COAL	1.8	945.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902901000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 470' E line of SW SW

QUADRANGLE: EMMA **LONGITUDE:** -88.115251 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.893872 **DATE COLLECTED:** 2 / 0 / 1963

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1657.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, THOMAS A. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1297.0	BASE OF PENN.		UNCLASSIFIED	-	1657.0	

MAPID: 05902967000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: EMMA **LONGITUDE:** -88.112463 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.893869 **DATE COLLECTED:** 9 / 0 / 1964

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO., MEDLIN DORCIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-286.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	650.0	
-326.0	CARBONDALE	SURVANT	COAL	2.0	690.0	
-378.0	CARBONDALE	COLCHESTER	COAL	0.5	742.0	
-441.0	CARBONDALE	DEKOVEN	COAL	3.0	805.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	825.0	77 PERCENT SANDSTONE IN DEKOVEN SPLIT
-471.0	CARBONDALE	DAVIS	COAL	4.0	835.0	
-506.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	870.0	
-512.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	876.0	
-538.0	TRADEWATER	MT. RORAH	COAL	1.2	902.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902974000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2310' S line, 2310' E line
QUADRANGLE: EMMA **LONGITUDE:** -88.107808 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.899329 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 356.0 **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
-153.5	CARBONDALE	DANVILLE	COAL	2.5	509.5	
-156.0	CARBONDALE		SHALE & SANDSTONE	8.0	512.0	
-164.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	520.0	
-168.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	7.0	524.0	
-175.0	CARBONDALE	LAWSON	SANDSTONE	7.0	531.0	
-182.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	538.0	
-194.0	CARBONDALE	BRERETON	LIMESTONE	4.0	550.0	
-198.0	CARBONDALE	ANNA	BLACK SHALE	2.0	554.0	
-200.0	CARBONDALE	HERRIN	COAL	4.0	556.0	

MAPID: 05900351000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: EMMA **LONGITUDE:** -88.094734 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.878854 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 3540.0 **LOG TYPE:**
SOURCE: OIL MANGMT, GOFORTH 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-48.0	CARBONDALE	HERRIN	COAL	3.0	402.0	
-146.0	CARBONDALE	SPRINGFIELD	COAL	4.0	500.0	

MAPID: 05900352000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: EMMA **LONGITUDE:** -88.090087 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.878833 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: CARTER OC, WILLAMS JA0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-50.0	CARBONDALE	HERRIN	COAL	3.0	402.0	
-147.0	CARBONDALE	SPRINGFIELD	COAL	4.0	499.0	

MAPID: 05900356000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: EMMA **LONGITUDE:** -88.090463 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.880671 **DATE COLLECTED:** 9 / 0 / 1944
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2130.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, WILLIAMS J A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-226.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-278.0	CARBONDALE	SURVANT	COAL	1.8	632.0	
-331.0	CARBONDALE	COLCHESTER	COAL	0.5	685.0	
-398.0	CARBONDALE	DEKOVEN	COAL	2.0	752.0	
-406.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	760.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-414.0	CARBONDALE	DAVIS	COAL	3.0	768.0	
-466.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	820.0	
-480.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	834.0	
-496.0	TRADEWATER	MT. RORAH	COAL	1.4	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900356000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: EMMA **LONGITUDE:** -88.090463 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.880671 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 3540.0 **LOG TYPE:**
SOURCE: CARTER OC, WILLAMS JA0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-50.0	CARBONDALE	HERRIN	COAL	3.0	404.0	
-146.0	CARBONDALE	SPRINGFIELD	COAL	4.0	500.0	

MAPID: 05900357000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: EMMA **LONGITUDE:** -88.097057 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.878863 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:** Electric Log
SOURCE: LEACH & SWANN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
158.0	CARBONDALE	BRIAR HILL	COAL	-	200.0	
86.0	CARBONDALE	SPRINGFIELD	COAL	6.0	272.0	BLACK SHALE ROOF
23.0	CARBONDALE	HOUCHIN CREEK	COAL	-	335.0	

MAPID: 05900357000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EMMA **LONGITUDE:** -88.097057 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.878863 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:**

SOURCE: OIL MANGMT, GOFRTH YNG0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-58.0	CARBONDALE	HERRIN	COAL	3.0	416.0	
-156.0	CARBONDALE	SPRINGFIELD	COAL	4.0	514.0	

MAPID: 05900357000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EMMA **LONGITUDE:** -88.097057 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.878863 **DATE COLLECTED:** 9 / 0 / 1944

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:** Electric Log

SOURCE: LEACH & SWANN, GOFORTH-YOUNG 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-287.0	CARBONDALE	SURVANT	COAL	1.7	645.0	
-337.0	CARBONDALE	COLCHESTER	COAL	0.5	695.0	
-418.0	CARBONDALE	DEKOVEN	COAL	4.0	776.0	
-418.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	776.0	
-430.0	CARBONDALE	DAVIS	COAL	4.0	788.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	832.0	
-488.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	846.0	

MAPID: 05900550000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of NW

QUADRANGLE: EMMA **LONGITUDE:** -88.098928 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.888163 **DATE COLLECTED:** 7 / 0 / 1951

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2798.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., BARR ARVAL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-293.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	647.0	
-332.0	CARBONDALE	SURVANT	COAL	1.3	686.0	
-389.0	CARBONDALE	COLCHESTER	COAL	0.5	743.0	
-458.0	CARBONDALE	DEKOVEN	COAL	2.0	812.0	
-472.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	826.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	3.0	832.0	
-535.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	889.0	
-542.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	896.0	
-562.0	TRADEWATER	MT. RORAH	COAL	1.4	916.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900555000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 540' N line, 330' W line of NE SE

QUADRANGLE: EMMA **LONGITUDE:** -88.085133 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.883841 **DATE COLLECTED:** 7 / 0 / 1945

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, WILLIAMS J A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-244.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	594.0	
-196.0	CARBONDALE	SURVANT	COAL	3.0	546.0	
-350.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-420.0	CARBONDALE	DEKOVEN	COAL	2.0	770.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	778.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-436.0	CARBONDALE	DAVIS	COAL	4.0	786.0	
-482.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	832.0	
-496.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	846.0	
-512.0	TRADEWATER	MT. RORAH	COAL	0.8	862.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901514000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: EMMA **LONGITUDE:** -88.091595 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.886184 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:** Electric Log

SOURCE: DOBBS DRLG, BARR ARVAL ET AL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-248.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	599.0	
-299.0	CARBONDALE	SURVANT	COAL	3.0	650.0	
-354.0	CARBONDALE	COLCHESTER	COAL	0.5	705.0	
-418.0	CARBONDALE	DEKOVEN	COAL	3.0	769.0	
-424.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	775.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-433.0	CARBONDALE	DAVIS	COAL	4.0	784.0	
-481.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	832.0	
-492.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	843.0	
-509.0	TRADEWATER	MT. RORAH	COAL	1.5	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901514000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: EMMA **LONGITUDE:** -88.091595 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.886184 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2466.0 **LOG TYPE:**

SOURCE: DOBBS DRLG **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
228.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	123.0	
-164.0	CARBONDALE	SPRINGFIELD	COAL	-	515.0	
-355.0	CARBONDALE	COLCHESTER	COAL	-	706.0	
-1286.0	BASE OF PENN.		UNCLASSIFIED	-	1637.0	
-1426.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1777.0	
-1700.0		BASE L. MENARD	UNCLASSIFIED	-	2051.0	
-2115.0		BASE BARLOW	LIMESTONE	-	2466.0	

MAPID: 05902065000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1650' N line, 1650' W line
QUADRANGLE: EMMA **LONGITUDE:** -88.0944 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.88562 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1635.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY A W **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1284.0	BASE OF PENN.		UNCLASSIFIED	-	1635.0	

MAPID: 05902065000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1650' N line, 1650' W line
QUADRANGLE: EMMA **LONGITUDE:** -88.0944 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.88562 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 468.0 **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	CARBONDALE	DANVILLE	COAL	2.0	411.0	
-62.0	CARBONDALE		SHALE & SANDSTONE	21.0	413.0	
-83.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	434.0	
-86.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	20.0	437.0	
-106.0	CARBONDALE	BRERETON	LIMESTONE	4.5	457.0	
-110.5	CARBONDALE	ANNA	BLACK SHALE	2.5	461.5	
-113.0	CARBONDALE	HERRIN	COAL	4.0	464.0	

MAPID: 05902065000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 1650' N line, 1650' W line
QUADRANGLE: EMMA **LONGITUDE:** -88.0944 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.88562 **DATE COLLECTED:** 10 / 0 / 1956
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2764.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY A W, BARR 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-286.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	637.0	
-384.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-449.0	CARBONDALE	DEKOVEN	COAL	2.5	800.0	
-463.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	814.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-471.0	CARBONDALE	DAVIS	COAL	3.0	822.0	
-529.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	880.0	
-543.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	894.0	
-561.0	TRADEWATER	MT. RORAH	COAL	1.5	912.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900398000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EMMA **LONGITUDE:** -88.110238 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.892044 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2971.0 **LOG TYPE:** Electric Log
SOURCE: GILLIAM DRILLING, ORR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-318.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-355.0	CARBONDALE	SURVANT	COAL	3.0	712.0	
-413.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-477.0	CARBONDALE	DEKOVEN	COAL	3.0	834.0	
-495.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	852.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-504.0	CARBONDALE	DAVIS	COAL	4.0	861.0	
-538.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	895.0	
-547.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	904.0	
-571.0	TRADEWATER	MT. RORAH	COAL	1.4	928.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900558000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: EMMA **LONGITUDE:** -88.103468 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.888293 **DATE COLLECTED:** 8 / 0 / 1951

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, FORD H C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-267.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-302.0	CARBONDALE	SURVANT	COAL	1.7	650.0	
-360.0	CARBONDALE	COLCHESTER	COAL	0.5	708.0	
-432.0	CARBONDALE	DEKOVEN	COAL	2.8	780.0	
-447.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	795.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-456.0	CARBONDALE	DAVIS	COAL	3.0	804.0	
-497.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	845.0	
-507.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	855.0	
-530.0	TRADEWATER	MT. RORAH	COAL	1.4	878.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901193000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: EMMA **LONGITUDE:** -88.105815 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.886386 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B., FORD H C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-297.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	653.0	
-334.0	CARBONDALE	SURVANT	COAL	1.8	690.0	
-394.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-464.0	CARBONDALE	DEKOVEN	COAL	2.5	820.0	
-479.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	835.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-487.0	CARBONDALE	DAVIS	COAL	4.0	843.0	
-526.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	882.0	
-536.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	892.0	
-556.0	TRADEWATER	MT. RORAH	COAL	1.2	912.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901193000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: EMMA **LONGITUDE:** -88.105815 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.886386 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1656.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1300.0	BASE OF PENN.		UNCLASSIFIED	-	1656.0	

MAPID: 05901518000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: EMMA **LONGITUDE:** -88.108169 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880846 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2814.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B., GOFORTH HEIRS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-258.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	612.0	
-296.0	CARBONDALE	SURVANT	COAL	2.8	650.0	
-349.0	CARBONDALE	COLCHESTER	COAL	0.5	703.0	
-425.0	CARBONDALE	DEKOVEN	COAL	3.0	779.0	
-436.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	790.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-446.0	CARBONDALE	DAVIS	COAL	4.0	800.0	
-481.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	835.0	
-493.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	847.0	
-516.0	TRADEWATER	MT. RORAH	COAL	0.8	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901519000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: EMMA **LONGITUDE:** -88.110392 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.884592 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B., MEDLIN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-285.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	638.0	
-322.0	CARBONDALE	SURVANT	COAL	3.0	675.0	
-382.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-440.0	CARBONDALE	DEKOVEN	COAL	3.0	793.0	
-455.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	808.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-467.0	CARBONDALE	DAVIS	COAL	4.5	820.0	
-497.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	
-507.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	860.0	
-529.0	TRADEWATER	MT. RORAH	COAL	2.8	882.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901996000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: EMMA **LONGITUDE:** -88.103651 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880805 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2910.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D, GOFORTH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-306.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	659.0	
-347.0	CARBONDALE	SURVANT	COAL	3.5	700.0	
-397.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-477.0	CARBONDALE	DEKOVEN	COAL	2.0	830.0	
-487.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	840.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-495.0	CARBONDALE	DAVIS	COAL	4.0	848.0	
-537.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	890.0	
-545.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	898.0	
-562.0	TRADEWATER	MT. RORAH	COAL	2.0	915.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902049000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: EMMA **LONGITUDE:** -88.114984 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.880909 **DATE COLLECTED:** 8 / 0 / 1956

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2820.0 **LOG TYPE:** Electric Log

SOURCE: LAUDERDALE OIL PROP, HAVEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-262.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	608.0	
-294.0	CARBONDALE	SURVANT	COAL	1.8	640.0	
-352.0	CARBONDALE	COLCHESTER	COAL	0.5	698.0	
-416.0	CARBONDALE	DEKOVEN	COAL	3.0	762.0	
-432.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	778.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	4.0	790.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	820.0	
-482.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	828.0	
-504.0	TRADEWATER	MT. RORAH	COAL	1.3	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903543000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2640' N line, 990' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.103596 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.88566 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 458.0 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-66.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	420.8	
-70.8	CARBONDALE	LAWSON	SILTY SHALE	21.0	424.8	
-91.8	CARBONDALE	BRERETON	LIMESTONE	5.6	445.8	
-97.4	CARBONDALE	ANNA	BLACK SHALE	0.6	451.4	
-98.0	CARBONDALE	HERRIN	COAL	6.0	452.0	

MAPID: 05925192000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 45' S line, 1422' W line of NE

QUADRANGLE: EMMA **LONGITUDE:** -88.104266 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.885589 **DATE COLLECTED:** 4 / 26 / 1970

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 824.8 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE COAL CO. NH-5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.0			UNKNOWN	446.0	0.0	
-92.0	CARBONDALE	BRERETON	LIMESTONE	5.5	446.0	
-97.5	CARBONDALE	ANNA	BLACK SHALE	0.5	451.5	
-98.0	CARBONDALE	HERRIN	COAL	6.0	452.0	
-104.0	CARBONDALE		SILTSTONE	2.0	458.0	
-106.0	CARBONDALE		UNKNOWN	329.5	460.0	NOT CORED
-435.5	CARBONDALE		GRAY SHALE	1.8	789.5	
-437.3	CARBONDALE		GRAY SHALE	6.2	791.3	
-443.5	CARBONDALE		SHALE	4.0	797.5	WITH SIDERITE
-447.5	CARBONDALE		DARK SHALE	1.2	801.5	
-448.7	CARBONDALE	DEKOVEN	COAL	1.0	802.7	
-449.7	CARBONDALE		GRAY SHALE	1.8	803.7	
-451.5	CARBONDALE		SHALE	8.0	805.5	
-459.5	CARBONDALE		DARK SHALE	2.0	813.5	
-461.5	CARBONDALE	DAVIS	COAL	1.3	815.5	
-462.8	TRADEWATER		GRAY SHALE	8.1	816.8	PYRITIC

MAPID: 05900560000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.119527 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.879067 **DATE COLLECTED:** 1 / 0 / 1949

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2938.0 **LOG TYPE:** Electric Log

SOURCE: JARVIS, S. D., ETAL, DAVIS MAX **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-259.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	614.0	
-297.0	CARBONDALE	SURVANT	COAL	3.0	652.0	
-347.0	CARBONDALE	COLCHESTER	COAL	0.5	702.0	
-407.0	CARBONDALE	DEKOVEN	COAL	3.0	762.0	
-422.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	777.0	67 PERCENT SANDSTONE IN DEKOVEN SPLIT
-433.0	CARBONDALE	DAVIS	COAL	5.0	788.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	818.0	
-473.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	828.0	
-493.0	TRADEWATER	MT. RORAH	COAL	1.2	848.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900561000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 280' N line, 330' W line of SW NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.135179 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.890376 **DATE COLLECTED:** 3 / 0 / 1949

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2180.0 **LOG TYPE:** Electric Log

SOURCE: ANGLE, CLARENCE, EGLI LULA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-331.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	702.0	
-363.0	CARBONDALE	SURVANT	COAL	1.3	734.0	
-421.0	CARBONDALE	COLCHESTER	COAL	0.5	792.0	
-462.0	CARBONDALE	DEKOVEN	COAL	3.0	833.0	
-491.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	862.0	84 PERCENT SANDSTONE IN DEKOVEN SPLIT
-499.0	CARBONDALE	DAVIS	COAL	4.0	870.0	
-531.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	902.0	
-561.0	TRADEWATER	MT. RORAH	COAL	1.3	932.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902041000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: EMMA **LONGITUDE:** -88.121631 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.888361 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log

SOURCE: ARTNELL CO., HOOKER 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-282.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-326.0	CARBONDALE	SURVANT	COAL	3.0	678.0	
-376.0	CARBONDALE	COLCHESTER	COAL	0.5	728.0	
-423.0	CARBONDALE	DEKOVEN	COAL	2.8	775.0	
-448.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	800.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-458.0	CARBONDALE	DAVIS	COAL	4.0	810.0	
-488.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	840.0	
-496.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	848.0	
-518.0	TRADEWATER	MT. RORAH	COAL	1.5	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902041000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: EMMA **LONGITUDE:** -88.121631 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.888361 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 1666.0 **LOG TYPE:** Electric Log
SOURCE: ARTNELL CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-373.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	725.0	
-458.0	SPOON	DAVIS	UNCLASSIFIED	-	810.0	
-1314.0	BASE OF PENN.		UNCLASSIFIED	-	1666.0	

MAPID: 05902972000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 332' N line, 810' W line
QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.133475 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.892064 **DATE COLLECTED:** 12 / 0 / 1964
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2175.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., EGLI LULA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-331.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	699.0	
-360.0	CARBONDALE	SURVANT	COAL	1.2	728.0	
-422.0	CARBONDALE	COLCHESTER	COAL	0.5	790.0	
-462.0	CARBONDALE	DEKOVEN	COAL	1.7	830.0	
-487.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	855.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-498.0	CARBONDALE	DAVIS	COAL	4.0	866.0	
-527.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	895.0	
-534.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	902.0	
-560.0	TRADEWATER	MT. RORAH	COAL	1.2	928.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903520000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.13175 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.889335 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 823.1 **LOG TYPE:** Company Sample Study

SOURCE: AYRSHIRE COAL CO. NH-1 **WELL TYPE:** Coal Test

COMMENT: COPYINFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-92.0	CARBONDALE	BRERETON	LIMESTONE	2.3	449.0	HARD; GRAY
-94.3	CARBONDALE	ANNA	BLACK SHALE	1.2	451.3	FISSILE
-95.5	CARBONDALE	HERRIN	COAL	5.0	452.5	COAL REMOVED DEPTH AND THICKNESS
-100.5	CARBONDALE		CLAYSTONE & SILTSTONE	1.0	457.5	GRAY
-101.5	CARBONDALE		SILTSTONE	1.3	458.5	GRAY
-102.8	CARBONDALE		ROCK	77.2	459.8	NOT CURED
-180.0	CARBONDALE		SHALE	5.2	537.0	
-185.2	CARBONDALE	ST. DAVID	ARGILLACEOUS LIMESTONE	1.2	542.2	
-186.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	543.4	FISSILE
-188.0	CARBONDALE	SPRINGFIELD	COAL	5.0	545.0	
-193.0	CARBONDALE		CLAYSTONE & SILTSTONE	1.5	550.0	GRAY
-194.5	CARBONDALE		ROCK	245.0	551.5	NOT CURED
-439.5	CARBONDALE	DEKOVEN	COAL	1.5	796.5	LOWER BENCH? COMP NOTES
-441.0	CARBONDALE		CLAYSTONE & SILTSTONE	2.2	798.0	GRAY
-443.2	CARBONDALE		DARK SHALE	3.8	800.2	
-447.0	CARBONDALE		BLACK SHALE	3.2	804.0	FISSILE
-450.2	CARBONDALE	DAVIS	COAL	6.0	807.2	
-456.2	TRADEWATER		SILTY CLAYSTONE	4.0	813.2	
-460.2	TRADEWATER		SILTSTONE	2.8	817.2	GRAY
-463.0	TRADEWATER		SILTY SANDSTONE	1.2	820.0	LIGHT GRAY
-464.2	TRADEWATER		MICACEOUS SILTSTONE	0.8	821.2	GRAY
-465.0	TRADEWATER		SILTY SHALE	1.1	822.0	

MAPID: 05903520000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 1320' W line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.13175 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.889335 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 457.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COLLIERIES CORP. NH-1 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-52.5	CARBONDALE	DANVILLE	COAL	3.0	409.5	
-55.5	CARBONDALE		SILTY SHALE	7.5	412.5	
-63.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	420.0	
-68.5	CARBONDALE	LAWSON	SILTY SHALE	23.0	425.5	
-91.5	CARBONDALE	BRERETON	LIMESTONE	2.3	448.5	
-93.8	CARBONDALE	ANNA	BLACK SHALE	1.2	450.8	
-95.0	CARBONDALE	HERRIN	COAL	5.0	452.0	

MAPID: 05900567000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.15371 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.89036 **DATE COLLECTED:** 12 / 0 / 1950

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3048.0 **LOG TYPE:** Electric Log

SOURCE: LAGRANGE PETROLEUM, MARTIN FRANK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-386.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	776.0	
-419.0	CARBONDALE	SURVANT	COAL	3.0	809.0	
-470.0	CARBONDALE	COLCHESTER	COAL	0.5	860.0	
-521.0	CARBONDALE	DEKOVEN	COAL	3.0	911.0	
-547.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	937.0	87 PERCENT SANDSTONE IN DEKOVEN SPLIT
-555.0	CARBONDALE	DAVIS	COAL	4.5	945.0	
-580.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	970.0	
-620.0	TRADEWATER	MT. RORAH	COAL	2.0	1010.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901917000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.142318 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.879257 **DATE COLLECTED:** 1 / 0 / 1956

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log

SOURCE: TEXACO, INC., MOBLEY HORACE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-313.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	668.0	
-350.0	CARBONDALE	SURVANT	COAL	2.0	705.0	
-407.0	CARBONDALE	COLCHESTER	COAL	0.5	762.0	
-450.0	CARBONDALE	DEKOVEN	COAL	3.5	805.0	
-474.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	829.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-483.0	CARBONDALE	DAVIS	COAL	4.5	838.0	
-516.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	871.0	
-524.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	879.0	
-547.0	TRADEWATER	MT. RORAH	COAL	2.5	902.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902578000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1650' N line, 550' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.138278 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.888447 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1681.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1314.0	BASE OF PENN.		UNCLASSIFIED	-	1681.0	

MAPID: 05902578000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1650' N line, 550' E line

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.138278 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.888447 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 508.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-92.0	CARBONDALE	DANVILLE	COAL	2.5	459.0	
-94.5	CARBONDALE		SHALE & SANDSTONE	9.0	461.5	
-103.5	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	1.5	470.5	
-105.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	7.0	472.0	
-112.0	CARBONDALE	LAWSON	SANDSTONE	9.0	479.0	
-121.0	CARBONDALE	LAWSON	GRAY SHALE	11.0	488.0	
-132.0	CARBONDALE	BRERETON	LIMESTONE	4.0	499.0	
-136.0	CARBONDALE	ANNA	BLACK SHALE	2.0	503.0	
-138.0	CARBONDALE	HERRIN	COAL	3.0	505.0	

MAPID: 05902800000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.146853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.884807 **DATE COLLECTED:** 5 / 0 / 1962

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2193.0 **LOG TYPE:** Electric Log

SOURCE: SHAW, OBIE, MOBLEY HORACE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-350.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	725.0	
-385.0	CARBONDALE	SURVANT	COAL	1.8	760.0	
-445.0	CARBONDALE	COLCHESTER	COAL	0.5	820.0	
-485.0	CARBONDALE	DEKOVEN	COAL	3.0	860.0	
-509.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	884.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-520.0	CARBONDALE	DAVIS	COAL	5.0	895.0	
-543.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	918.0	
-546.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	921.0	
-573.0	TRADEWATER	MT. RORAH	COAL	1.4	948.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902963000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.151607 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.879281 **DATE COLLECTED:** 10 / 0 / 1964

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3005.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., MOBLEY-GIVENS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-347.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	720.0	
-376.0	CARBONDALE	SURVANT	COAL	1.5	749.0	
-442.0	CARBONDALE	COLCHESTER	COAL	0.5	815.0	
-477.0	CARBONDALE	DEKOVEN	COAL	2.8	850.0	
-502.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	875.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-512.0	CARBONDALE	DAVIS	COAL	4.0	885.0	
-541.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	914.0	
-550.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	923.0	
-575.0	TRADEWATER	MT. RORAH	COAL	1.4	948.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903198000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1050' S line, 670' W line of NE

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.143295 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.888595 **DATE COLLECTED:** 10 / 0 / 1965

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 2220.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., EGLI LULA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-359.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	758.0	
-394.0	CARBONDALE	SURVANT	COAL	1.8	793.0	
-451.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-491.0	CARBONDALE	DEKOVEN	COAL	4.0	890.0	
-517.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	916.0	77 PERCENT SANDSTONE IN DEKOVEN SPLIT
-531.0	CARBONDALE	DAVIS	COAL	4.0	930.0	
-561.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	960.0	
-568.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	967.0	
-599.0	TRADEWATER	MT. RORAH	COAL	1.4	998.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900395000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147111 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.871997 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: ALLEN, W. O., EBERWINE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-307.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	672.0	
-351.0	CARBONDALE	SURVANT	COAL	3.0	716.0	
-402.0	CARBONDALE	COLCHESTER	COAL	0.5	767.0	
-455.0	CARBONDALE	DEKOVEN	COAL	4.0	820.0	
-463.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	828.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-475.0	CARBONDALE	DAVIS	COAL	5.0	840.0	
-511.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	876.0	
-517.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	882.0	
-541.0	TRADEWATER	MT. RORAH	COAL	2.8	906.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900573000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.149602 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.864743 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2322.0 **LOG TYPE:** Electric Log

SOURCE: MORAN, E. F., INC., FROMM J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-296.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	664.0	
-346.0	CARBONDALE	SURVANT	COAL	2.5	714.0	
-394.0	CARBONDALE	COLCHESTER	COAL	0.5	762.0	
-445.0	CARBONDALE	DEKOVEN	COAL	3.0	813.0	
-454.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	822.0	33 PERCENT SANDSTONE IN DEKOVEN SPLIT
-468.0	CARBONDALE	DAVIS	COAL	5.0	836.0	
-498.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	866.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-509.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	877.0	
-531.0	TRADEWATER	MT. RORAH	COAL	0.8	899.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900574000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.151825 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.868391 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2912.0 **LOG TYPE:** Electric Log

SOURCE: GILPIN SAM A, MOYE LILLIE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-309.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-354.0	CARBONDALE	SURVANT	COAL	2.5	720.0	
-404.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-456.0	CARBONDALE	DEKOVEN	COAL	4.0	822.0	
-466.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	832.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-481.0	CARBONDALE	DAVIS	COAL	4.0	847.0	
-506.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	872.0	
-514.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	880.0	
-539.0	TRADEWATER	MT. RORAH	COAL	1.3	905.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901521000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.151942 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.864762 **DATE COLLECTED:** 5 / 0 / 1954

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1295.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 05901523000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.140171 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.871956 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2927.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., LIGHTNER J H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-297.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	646.0	
-342.0	CARBONDALE	SURVANT	COAL	2.5	691.0	
-394.0	CARBONDALE	COLCHESTER	COAL	2.0	743.0	
-447.0	CARBONDALE	DEKOVEN	COAL	3.0	796.0	
-454.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	803.0	
-469.0	CARBONDALE	DAVIS	COAL	4.0	818.0	
-500.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	849.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-508.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	857.0	
-526.0	TRADEWATER	MT. RORAH	COAL	1.3	875.0	

MAPID: 05901523000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.140171 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.871956 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2927.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-59.0	CARBONDALE	DANVILLE	COAL	-	408.0	
-75.0	CARBONDALE	ANVIL ROCK		10.0	424.0	
-146.0	CARBONDALE	BRIAR HILL	COAL	-	495.0	
-201.0	CARBONDALE	SPRINGFIELD	COAL	4.0	550.0	BLACK SHALE ROOF
-293.0	CARBONDALE	HOUCHIN CREEK	COAL	-	642.0	

MAPID: 05901524000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1650' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147274 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.868368 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., MOYE LILLIE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-290.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	660.0	
-335.0	CARBONDALE	SURVANT	COAL	2.0	705.0	
-384.0	CARBONDALE	COLCHESTER	COAL	0.5	754.0	
-438.0	CARBONDALE	DEKOVEN	COAL	3.0	808.0	
-448.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	818.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-459.0	CARBONDALE	DAVIS	COAL	4.0	829.0	
-490.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	860.0	
-498.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	868.0	
-518.0	TRADEWATER	MT. RORAH	COAL	1.4	888.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901524000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1650' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147274 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.868368 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 470.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-44.5	CARBONDALE	DANVILLE	COAL	3.0	414.5	
-47.5	CARBONDALE		SHALE & SANDSTONE	19.0	417.5	
-66.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.5	436.5	
-69.0	CARBONDALE	LAWSON	SILTY SHALE	2.0	439.0	
-71.0	CARBONDALE	LAWSON	SANDSTONE	8.0	441.0	
-79.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	449.0	
-91.0	CARBONDALE	BRERETON	LIMESTONE	3.5	461.0	
-94.5	CARBONDALE	ANNA	BLACK SHALE	2.5	464.5	
-97.0	CARBONDALE	HERRIN	COAL	3.0	467.0	

MAPID: 05901968000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.140284 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.866488 **DATE COLLECTED:** 5 / 0 / 1956

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2934.0 **LOG TYPE:** Electric Log

SOURCE: SLAGTER PRODUCING CO., GIVENS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-265.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	635.0	
-310.0	CARBONDALE	SURVANT	COAL	2.5	680.0	
-355.0	CARBONDALE	COLCHESTER	COAL	0.5	725.0	
-414.0	CARBONDALE	DEKOVEN	COAL	3.0	784.0	
-422.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	792.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-435.0	CARBONDALE	DAVIS	COAL	4.0	805.0	
-465.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	835.0	
-475.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	845.0	
-506.0	TRADEWATER	MT. RORAH	COAL	1.8	876.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901525000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.119714 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.868039 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., LIGHTNER J C 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-221.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	568.0	
-266.0	CARBONDALE	SURVANT	COAL	2.5	613.0	
-308.0	CARBONDALE	COLCHESTER	COAL	0.5	655.0	
-385.0	CARBONDALE	DEKOVEN	COAL	3.0	732.0	
-390.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	737.0	
-398.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-432.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	779.0	
-443.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	790.0	
-458.0	TRADEWATER	MT. RORAH	COAL	1.5	805.0	

MAPID: 05901742000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 990' S line, 990' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.126462 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.873606 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2927.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H, BAILEY JOHN 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-257.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	612.0	
-305.0	CARBONDALE	SURVANT	COAL	1.4	660.0	
-355.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-423.0	CARBONDALE	DEKOVEN	COAL	2.8	778.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	783.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-438.0	CARBONDALE	DAVIS	COAL	4.0	793.0	
-469.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	824.0	
-480.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	835.0	
-498.0	TRADEWATER	MT. RORAH	COAL	1.2	853.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901742000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 990' S line, 990' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.126462 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.873606 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 1665.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1310.0	BASE OF PENN.		UNCLASSIFIED	-	1665.0	

MAPID: 05902050000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.119555 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.877245 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2819.0 **LOG TYPE:** Electric Log

SOURCE: LAUDERDALE OIL PROP, POSEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-258.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	610.0	
-303.0	CARBONDALE	SURVANT	COAL	3.0	655.0	
-348.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-418.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-426.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	778.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-436.0	CARBONDALE	DAVIS	COAL	5.0	788.0	
-466.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	818.0	
-474.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	826.0	
-496.0	TRADEWATER	MT. RORAH	COAL	2.0	848.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902050000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: EMMA **LONGITUDE:** -88.119555 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.877245 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 427.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-11.5	CARBONDALE	DANVILLE	COAL	1.5	363.5	
-13.0	CARBONDALE		SHALE & SANDSTONE	24.0	365.0	
-37.0	CARBONDALE	LAWSON	SILTY SHALE	4.0	389.0	
-41.0	CARBONDALE	LAWSON	SANDSTONE	14.0	393.0	
-55.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	407.0	
-65.0	CARBONDALE	BRERETON	LIMESTONE	4.5	417.0	
-69.5	CARBONDALE	ANNA	BLACK SHALE	2.5	421.5	
-72.0	CARBONDALE	HERRIN	COAL	3.0	424.0	

MAPID: 05902069000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: EMMA **LONGITUDE:** -88.124128 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.875434 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2786.0 **LOG TYPE:** Electric Log

SOURCE: LAUDERDALE OIL PROP, BAYLEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-257.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	606.0	
-305.0	CARBONDALE	SURVANT	COAL	3.0	654.0	
-351.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-414.0	CARBONDALE	DEKOVEN	COAL	3.0	763.0	
-423.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	772.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-433.0	CARBONDALE	DAVIS	COAL	4.0	782.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	812.0	
-473.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	822.0	
-491.0	TRADEWATER	MT. RORAH	COAL	1.2	840.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902975000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN **LONGITUDE:** -88.133175 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.877386 **DATE COLLECTED:** 1 / 0 / 1965

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2945.0 **LOG TYPE:** Electric Log

SOURCE: BIANUCCI, RAY MANAGEMENT, LIGHTNER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-378.0	CARBONDALE	COLCHESTER	COAL	0.5	733.0	
-434.0	CARBONDALE	DEKOVEN	COAL	3.0	789.0	
-445.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	800.0	4 PERCENT SANDSTONE IN DEKOVEN SPLIT
-459.0	CARBONDALE	DAVIS	COAL	4.0	814.0	
-490.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	845.0	
-501.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	856.0	
-523.0	TRADEWATER	MT. RORAH	COAL	1.3	878.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900136000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EMMA **LONGITUDE:** -88.110525 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.877142 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: KINKAID R, SCHMIDT A 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-55.0	CARBONDALE	HERRIN	COAL	4.0	405.0	
-152.0	CARBONDALE	SPRINGFIELD	COAL	4.0	502.0	

MAPID: 05900136000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EMMA **LONGITUDE:** -88.110525 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.877142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
7.0	CARBONDALE	DANVILLE	COAL	2.0	343.0	
5.0	CARBONDALE		GRAY SHALE	24.0	345.0	
-19.0	CARBONDALE	ALLENBY	COAL	1.0	369.0	
-20.0	CARBONDALE		SHALE	2.0	370.0	
-22.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	372.0	
-26.0	CARBONDALE	LAWSON	BLACK SHALE	1.0	376.0	
-27.0	CARBONDALE	LAWSON	SANDSTONE	11.0	377.0	
-38.0	CARBONDALE	JAMESTOWN	BLACK SHALE	1.0	388.0	
-39.0	CARBONDALE		GRAY SHALE	12.0	389.0	
-51.0	CARBONDALE	BRERETON	LIMESTONE	3.0	401.0	
-54.0	CARBONDALE	ANNA	BLACK SHALE	1.0	404.0	
-55.0	CARBONDALE	HERRIN	COAL	5.0	405.0	

MAPID: 05900136000C **VERSION:** 3 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EMMA **LONGITUDE:** -88.110525 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.877142 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2946.0 **LOG TYPE:** Survey Sample Study
SOURCE: KINCAID **WELL TYPE:** Oil and Gas 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: 05900136000C **VERSION:** 4 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: EMMA **LONGITUDE:** -88.110525 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.877142 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log

SOURCE: KINCAID,R.L. 1 **WELL TYPE:** Coal Test

COMMENT: COAL DIVISION CONTROL WELL #58

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0			NO RECORD	119.0	0.0	
231.0			LIMESTONE	16.0	119.0	
215.0			SHALE	10.0	135.0	
205.0			SANDSTONE	7.0	145.0	
198.0			BLACK SHALE	1.0	152.0	
197.0			SANDSTONE	3.0	153.0	
194.0			LIMESTONE	2.0	156.0	
192.0			SANDSTONE	16.0	158.0	
176.0			LIMESTONE	2.0	174.0	
174.0			SANDSTONE	26.0	176.0	
148.0			SILTSTONE	18.0	202.0	
130.0			SILTSTONE	8.0	220.0	WITH SHALE
122.0			LIMESTONE	2.0	228.0	
120.0			SILTSTONE	60.0	230.0	
60.0	CARBONDALE		SILTSTONE	30.0	290.0	WITH SHALE
30.0	CARBONDALE		SHALE	22.0	320.0	
8.0	CARBONDALE		BLACK SHALE	1.0	342.0	
7.0	CARBONDALE	HERRIN	COAL	2.0	343.0	THICKNESS IMPRECISE
5.0	CARBONDALE		SHALE	23.0	345.0	
-18.0	CARBONDALE		BLACK SHALE	1.0	368.0	
-19.0	CARBONDALE	BRIAR HILL	COAL	1.0	369.0	THICKNESS ESTIMATED
-20.0	CARBONDALE		SHALE	2.0	370.0	
-22.0	CARBONDALE		LIMESTONE	4.0	372.0	
-26.0	CARBONDALE		BLACK SHALE	1.0	376.0	
-27.0	CARBONDALE		SANDSTONE	11.0	377.0	
-38.0	CARBONDALE		BLACK SHALE	1.0	388.0	
-39.0	CARBONDALE		DARK SHALE	12.0	389.0	
-51.0	CARBONDALE	ST. DAVID	BLACK LIMESTONE	3.0	401.0	
-54.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	404.0	
-55.0	CARBONDALE	SPRINGFIELD	COAL	5.0	405.0	THICKNESS IMPRECISE

MAPID: 05902043000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: EMMA **LONGITUDE:** -88.11274 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.877166 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2792.0 **LOG TYPE:** Electric Log

SOURCE: LAUDERDALE OIL PROP, SCHMIDT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-250.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	605.0	
-294.0	CARBONDALE	SURVANT	COAL	3.0	649.0	
-344.0	CARBONDALE	COLCHESTER	COAL	0.5	699.0	
-409.0	CARBONDALE	DEKOVEN	COAL	3.0	764.0	
-418.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	773.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-427.0	CARBONDALE	DAVIS	COAL	4.0	782.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	815.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-470.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	825.0	
-488.0	TRADEWATER	MT. RORAH	COAL	0.8	843.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900343000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: EMMA **LONGITUDE:** -88.092234 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.877001 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**

SOURCE: HAGEMN&PND, STOFLETH A0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-38.0	CARBONDALE	HERRIN	COAL	4.0	388.0	
-135.0	CARBONDALE	SPRINGFIELD	COAL	4.0	485.0	

MAPID: 05900587000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 380' S line, 346' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092458 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.864301 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2139.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., BUSIEK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	542.0	
-248.0	CARBONDALE	SURVANT	COAL	3.0	592.0	
-304.0	CARBONDALE	COLCHESTER	COAL	0.5	648.0	
-380.0	CARBONDALE	DEKOVEN	COAL	4.0	724.0	
-380.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	724.0	
-396.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-430.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	774.0	
-438.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	782.0	
-456.0	TRADEWATER	MT. RORAH	COAL	1.0	800.0	

MAPID: 05900587000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 380' S line, 346' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092458 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.864301 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 1566.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1217.0	BASE OF PENN.		UNCLASSIFIED	-	1566.0	

MAPID: 05900588000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.096836 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.867872 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., BUSIEK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-213.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	562.0	
-265.0	CARBONDALE	SURVANT	COAL	2.0	614.0	
-321.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-388.0	CARBONDALE	DEKOVEN	COAL	5.0	737.0	
-388.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	737.0	
-401.0	CARBONDALE	DAVIS	COAL	4.5	750.0	
-441.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	790.0	
-457.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	806.0	

MAPID: 05900603000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.096851 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.873361 **DATE COLLECTED:** 1 / 0 / 1945

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2137.0 **LOG TYPE:** Electric Log

SOURCE: YINGLING SAMUEL C, STOFLETH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-216.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	568.0	
-264.0	CARBONDALE	SURVANT	COAL	3.0	616.0	
-314.0	CARBONDALE	COLCHESTER	COAL	0.5	666.0	
-386.0	CARBONDALE	DEKOVEN	COAL	3.0	738.0	
-394.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	746.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-404.0	CARBONDALE	DAVIS	COAL	4.0	756.0	
-444.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	796.0	
-458.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	810.0	
-472.0	TRADEWATER	MT. RORAH	COAL	1.2	824.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901195000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2310' N line, 1650' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087806 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.871532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log

SOURCE: DELTA DRILLING CO. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
25.0	CARBONDALE	DANVILLE	COAL	-	325.0	
4.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	346.0	
-24.0	CARBONDALE	HERRIN	COAL	4.0	374.0	
-70.0	CARBONDALE	BRIAR HILL	COAL	-	420.0	
-123.0	CARBONDALE	SPRINGFIELD	COAL	4.0	473.0	BLACK SHALE ROOF
-203.0	CARBONDALE	HOUCHIN CREEK	COAL	-	553.0	

MAPID: 05901195000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 2310' N line, 1650' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087806 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.871532 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 378.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
22.0	CARBONDALE	DANVILLE	COAL	2.0	328.0	
20.0	CARBONDALE		SILTY SHALE	18.0	330.0	
2.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	3.0	348.0	
-1.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	351.0	
-21.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.5	371.0	
-24.5	CARBONDALE	ANNA	BLACK SHALE	0.5	374.5	
-25.0	CARBONDALE	HERRIN	COAL	3.5	375.0	

MAPID: 05901805000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087754 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.867785 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2766.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION, KAY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-201.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-250.0	CARBONDALE	SURVANT	COAL	1.8	599.0	
-300.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-380.0	CARBONDALE	DEKOVEN	COAL	3.0	729.0	
-384.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	733.0	
-394.0	CARBONDALE	DAVIS	COAL	4.0	743.0	
-431.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	780.0	
-449.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	798.0	
-461.0	TRADEWATER	MT. RORAH	COAL	1.2	810.0	

MAPID: 05900609000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' S line, 2200' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074666 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.865704 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2760.0 **LOG TYPE:**

SOURCE: CRAWFORD J L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
-108.0	CARBONDALE	SPRINGFIELD	COAL	-	456.0	
-286.0	CARBONDALE	COLCHESTER	COAL	-	634.0	
-1426.0	BASE OF PENN.		UNCLASSIFIED	-	1774.0	
-	KINKAID	BASE L KINKAID	UNCLASSIFIED	-		UNIT ABSENT
-1700.0		BASE L. MENARD	UNCLASSIFIED	-	2048.0	
-2085.0		BASE BARLOW	LIMESTONE	-	2433.0	
-2412.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2760.0	

MAPID: 05900609000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' S line, 2200' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074666 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.865704 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 366.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
38.5	CARBONDALE	DANVILLE	COAL	2.5	306.5	
36.0	CARBONDALE		SILTY SHALE	21.0	309.0	
15.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	330.0	
11.0	CARBONDALE	LAWSON	SILTY SHALE	23.0	334.0	
-12.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	357.0	
-15.0	CARBONDALE	ANNA	BLACK SHALE	2.0	360.0	
-17.0	CARBONDALE	HERRIN	COAL	4.0	362.0	

MAPID: 05903377000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 7S 10E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078618 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.871394 **DATE COLLECTED:** 9 / 0 / 1968

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 1615.0 **LOG TYPE:** Drillers Log

SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1263.0	BASE OF PENN.		UNCLASSIFIED	-	1615.0	

MAPID: 05900340000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273796 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.85651 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:**

SOURCE: JARVISMARC, DAVIS O 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	4.0	345.0	
-78.0	CARBONDALE	SPRINGFIELD	COAL	5.0	458.0	

MAPID: 05900340000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273796 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.85651 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 352.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
91.5	CARBONDALE	DANVILLE	COAL	1.0	288.5	
90.5	CARBONDALE		SILTY SHALE	29.0	289.5	
61.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	318.5	
57.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	6.0	322.5	
51.5	CARBONDALE	LAWSON	GRAY SHALE	13.0	328.5	
38.5	CARBONDALE	BRERETON	LIMESTONE	4.5	341.5	
34.0	CARBONDALE	ANNA	BLACK SHALE	2.0	346.0	
32.0	CARBONDALE	HERRIN	COAL	4.5	348.0	

MAPID: 05900340000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273796 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.85651 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2970.0 **LOG TYPE:** Electric Log

SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	CARBONDALE	SS BELOW NO. 7		-	40.0	
33.0	CARBONDALE	HERRIN	COAL	-	347.0	
-17.0	CARBONDALE	BRIAR HILL	COAL	-	397.0	
-79.0	CARBONDALE	SPRINGFIELD	COAL	5.0	459.0	BLACK SHALE ROOF
-152.0	CARBONDALE	HOUCHIN CREEK	COAL	-	532.0	

MAPID: 05900340000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273796 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.85651 **DATE COLLECTED:** 12 / 0 / 1943

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1506.0 **LOG TYPE:** Electric Log

SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1126.0	BASE OF PENN.		UNCLASSIFIED	-	1506.0	

MAPID: 05900610000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.280689 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.856445 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2906.0 **LOG TYPE:** Electric Log

SOURCE: MACDONELL CO. OF LIMA, ALLEN FREEMAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-131.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-249.0	CARBONDALE	COLCHESTER	COAL	0.5	626.0	
-276.0	CARBONDALE	DEKOVEN	COAL	3.0	653.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	676.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-317.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	725.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-353.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	730.0	
-398.0	TRADEWATER	MT. RORAH	COAL	2.0	775.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900611000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 420' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274118 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.856438 **DATE COLLECTED:** 4 / 0 / 1947

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2127.0 **LOG TYPE:** Electric Log

SOURCE: BRITISH-AMER. OIL PROD., DAVIS O M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	533.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	637.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-311.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	691.0	89 PERCENT SANDSTONE IN DEKOVEN SPLIT
-330.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-360.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-366.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	746.0	
-406.0	TRADEWATER	MT. RORAH	COAL	2.0	786.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900612000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.26919 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854638 **DATE COLLECTED:** 5 / 0 / 1945

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3013.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., DAVIS ROBERT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-270.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.0	686.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	709.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-341.0	CARBONDALE	DAVIS	COAL	4.5	723.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	754.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-424.0	TRADEWATER	MT. RORAH	COAL	3.0	806.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901481000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.264721 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.863665 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2937.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, ROGERS HEZ **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-219.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-355.0	CARBONDALE	DEKOVEN	COAL	3.0	732.0	
-378.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	755.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-393.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-423.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	800.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-431.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	808.0	
-473.0	TRADEWATER	MT. RORAH	COAL	2.0	850.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902455000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 75' S line, 800' W line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269886 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.85755 **DATE COLLECTED:** 4 / 29 / 1959

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 140.3 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 218 **WELL TYPE:** Coal Test

COMMENT: ABDN - RECGNZED WAS E OF RDGWY FAULT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	5.0	0.0	SOFT; BROWN
370.0	PLEISTOCENE		SANDY CLAY	71.0	5.0	
299.0			SHALE	20.7	76.0	
278.3			LIMESTONE	5.3	96.7	
273.0			SHALE	1.3	102.0	
271.7			SANDY SHALE	5.8	103.3	
266.0			SANDSTONE	8.5	109.0	
257.5			SHALE	22.8	117.5	

MAPID: 05900614000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292127 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.856459 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3000.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., FLAND ERS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-191.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-227.0	CARBONDALE	DEKOVEN	COAL	3.0	608.0	
-249.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	630.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-274.0	CARBONDALE	DAVIS	COAL	4.0	655.0	
-305.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	686.0	75% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-261.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	642.0	
-351.0	TRADEWATER	MT. RORAH	COAL	2.0	732.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901380000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.294377 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.852907 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 292.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
162.0	CARBONDALE	DANVILLE	COAL	1.0	221.0	
161.0	CARBONDALE		SHALE & SANDSTONE	32.0	222.0	
129.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	254.0	
126.0	CARBONDALE	LAWSON	SILTY SHALE	5.0	257.0	
121.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	8.0	262.0	
113.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	270.0	
103.0	CARBONDALE	BRERETON	LIMESTONE	7.0	280.0	
96.0	CARBONDALE	ANNA	BLACK SHALE	2.0	287.0	
94.0	CARBONDALE	HERRIN	COAL	3.0	289.0	

MAPID: 05902104000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.298971 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854689 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2811.0 **LOG TYPE:** Electric Log

SOURCE: SPIRES H V, EDWARD HERDIS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	558.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.0	590.0	
-234.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	615.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	4.0	631.0	
-281.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	662.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-289.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	670.0	
-339.0	TRADEWATER	MT. RORAH	COAL	3.0	720.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902198000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.284136 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.856449 **DATE COLLECTED:** 5 / 0 / 1958

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2587.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S, PIONEER TR & SAV **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-128.0	CARBONDALE	SURVANT	COAL	1.4	511.0	
-216.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-252.0	CARBONDALE	DEKOVEN	COAL	2.8	635.0	
-272.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	655.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-290.0	CARBONDALE	DAVIS	COAL	4.0	673.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	704.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-327.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	710.0	
-367.0	TRADEWATER	MT. RORAH	COAL	1.3	750.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902296000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.283027 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860045 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2970.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S, PEEPLES W A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-150.0	CARBONDALE	SURVANT	COAL	1.8	530.0	
-228.0	CARBONDALE	COLCHESTER	COAL	0.5	608.0	
-265.0	CARBONDALE	DEKOVEN	COAL	3.0	645.0	
-286.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	666.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-305.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	718.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-344.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	724.0	
-390.0	TRADEWATER	MT. RORAH	COAL	2.0	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902453000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292111 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860103 **DATE COLLECTED:** 7 / 0 / 1959

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2987.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S, FLANDERS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	499.0	
-197.0	CARBONDALE	COLCHESTER	COAL	0.5	576.0	
-231.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	634.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-276.0	CARBONDALE	DAVIS	COAL	4.0	655.0	
-306.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	685.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-312.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	691.0	
-351.0	TRADEWATER	MT. RORAH	COAL	1.8	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902453000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292111 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.860103 **DATE COLLECTED:** 7 / 0 / 1959

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1566.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1187.0	BASE OF PENN.		UNCLASSIFIED	-	1566.0	

MAPID: 05900616000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303529 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.858273 **DATE COLLECTED:** 5 / 0 / 1949

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2660.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE & WRATHER OIL, FLANDERS C O **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	434.0	
-67.0	CARBONDALE	SURVANT	COAL	1.8	458.0	
-127.0	CARBONDALE	COLCHESTER	COAL	0.5	518.0	
-167.0	CARBONDALE	DEKOVEN	COAL	3.0	558.0	
-192.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	583.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-210.0	CARBONDALE	DAVIS	COAL	4.0	601.0	
-240.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	631.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-245.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	636.0	
-304.0	TRADEWATER	MT. RORAH	COAL	1.8	695.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901483000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312645 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.859956 **DATE COLLECTED:** 7 / 0 / 1949

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2730.0 **LOG TYPE:** Electric Log

SOURCE: BRIDGES BASIN OIL, EDWARDS HERDIS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
26.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	329.0	
7.0	CARBONDALE	SURVANT	COAL	1.7	348.0	
-58.0	CARBONDALE	COLCHESTER	COAL	0.5	413.0	
-95.0	CARBONDALE	DEKOVEN	COAL	3.0	450.0	
-120.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	475.0	78 PERCENT SANDSTONE IN DEKOVEN SPLIT
-135.0	CARBONDALE	DAVIS	COAL	4.0	490.0	
-169.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	524.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-175.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	530.0	
-229.0	TRADEWATER	MT. RORAH	COAL	2.0	584.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901484000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' N line, 990' E line of NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308123 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.861745 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2959.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-34.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	415.0	
-59.0	CARBONDALE	SURVANT	COAL	1.6	440.0	
-123.0	CARBONDALE	COLCHESTER	COAL	0.5	504.0	
-157.0	CARBONDALE	DEKOVEN	COAL	3.0	538.0	
-179.0	CARBONDALE	LOWER DEKOVEN	COAL	0.9	560.0	79 PERCENT SANDSTONE IN DEKOVEN SPLIT
-199.0	CARBONDALE	DAVIS	COAL	4.0	580.0	
-231.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	612.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-237.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	618.0	
-289.0	TRADEWATER	MT. RORAH	COAL	2.0	670.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902264000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317209 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.852839 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S, BATES JOHN COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
9.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	350.0	
-9.0	CARBONDALE	SURVANT	COAL	1.5	368.0	
-83.0	CARBONDALE	COLCHESTER	COAL	0.5	442.0	
-114.0	CARBONDALE	DEKOVEN	COAL	3.0	473.0	
-139.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	498.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-156.0	CARBONDALE	DAVIS	COAL	4.0	515.0	
-186.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	545.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-191.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	550.0	
-244.0	TRADEWATER	MT. RORAH	COAL	2.0	603.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902264000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317209 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.852839 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1477.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1118.0	BASE OF PENN.		UNCLASSIFIED	-	1477.0	

MAPID: 05902339000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317202 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.863451 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2729.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, MCDANIEL H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
62.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	293.0	
-38.0	CARBONDALE	COLCHESTER	COAL	0.5	393.0	
-76.0	CARBONDALE	DEKOVEN	COAL	3.0	431.0	
-95.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	450.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-110.0	CARBONDALE	DAVIS	COAL	4.0	465.0	
-144.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	499.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-149.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	504.0	
-205.0	TRADEWATER	MT. RORAH	COAL	2.0	560.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902381000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 990' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303562 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.863624 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 228.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
224.0	CARBONDALE	DANVILLE	COAL	1.0	155.0	
223.0	CARBONDALE		SHALE & SANDSTONE	32.0	156.0	
191.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	188.0	
186.0	CARBONDALE	LAWSON	SILTY SHALE	3.0	193.0	
183.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	20.0	196.0	
163.0	CARBONDALE	LAWSON	GRAY SHALE	2.0	216.0	
161.0	CARBONDALE	BRERETON	LIMESTONE	5.0	218.0	
156.0	CARBONDALE	ANNA	BLACK SHALE	2.0	223.0	
154.0	CARBONDALE	HERRIN	COAL	3.0	225.0	

MAPID: 05900137000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333573 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.854801 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**

SOURCE: CARTER OC, CARNAHAN R0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
297.0	CARBONDALE	HERRIN	COAL	-	53.0	
191.0	CARBONDALE	SPRINGFIELD	COAL	4.0	159.0	DEPTH UNCERTAIN

MAPID: 05900138000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335932 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.856644 **DATE COLLECTED:** 10 / 0 / 1941
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, CARNAHAN R L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
116.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	238.0	
30.0	CARBONDALE	COLCHESTER	COAL	1.5	324.0	
4.0	CARBONDALE	DEKOVEN	COAL	2.8	350.0	
-25.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	379.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-36.0	CARBONDALE	DAVIS	COAL	4.0	390.0	
-66.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	420.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-71.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	425.0	
-121.0	TRADEWATER	MT. RORAH	COAL	1.8	475.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900138000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335932 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.856644 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: CARTER OC, CARNAHAN R0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
300.0	CARBONDALE	HERRIN	COAL	-	51.0	
194.0	CARBONDALE	SPRINGFIELD	COAL	4.0	157.0	DEPTH UNCERTAIN

MAPID: 05900139000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326557 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.856513 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 3630.0 **LOG TYPE:**
SOURCE: SEABOARD, COLNAN J T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
288.0	CARBONDALE	HERRIN	COAL	-	75.0	
182.0	CARBONDALE	SPRINGFIELD	COAL	4.0	181.0	DEPTH UNCERTAIN

MAPID: 05900140000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331221 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.852969 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 3540.0 **LOG TYPE:**
SOURCE: CAMERON OC, GREEN IVAN0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
316.0	CARBONDALE	HERRIN	COAL	3.0	38.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	4.0	144.0	

MAPID: 05900141000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321883 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.863425 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3810.0 **LOG TYPE:**
SOURCE: SUN OC, PATTON C W0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	HERRIN	COAL	-	124.0	
151.0	CARBONDALE	SPRINGFIELD	COAL	4.0	230.0	DEPTH UNCERTAIN

MAPID: 05900142000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333634 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.862046 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3760.0 **LOG TYPE:**
SOURCE: CAMERON OC, ROBINSON S0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
278.0	CARBONDALE	HERRIN	COAL	4.0	98.0	
174.0	CARBONDALE	SPRINGFIELD	COAL	4.0	202.0	

MAPID: 05900144000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333557 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.85299 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**
SOURCE: CARTER OC, JONES D M 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
294.0	CARBONDALE	HERRIN	COAL	-	53.0	
188.0	CARBONDALE	SPRINGFIELD	COAL	4.0	159.0	DEPTH UNCERTAIN

MAPID: 05900145000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331234 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.854774 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: CARTER OC, KOVAL JOHN0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
302.0	CARBONDALE	HERRIN	COAL	-	49.0	
196.0	CARBONDALE	SPRINGFIELD	COAL	-	155.0	DEPTH UNCERTAIN

MAPID: 05900146000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3289 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.856545 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 3630.0 **LOG TYPE:**
SOURCE: CARTER OC, KOVAL JOHN0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
294.0	CARBONDALE	HERRIN	COAL	-	69.0	
188.0	CARBONDALE	SPRINGFIELD	COAL	4.0	175.0	DEPTH UNCERTAIN

MAPID: 05900147000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326585 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.863371 **DATE COLLECTED:** 1 / 0 / 1941
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1705.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, KUDER ALICE W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
78.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	285.0	
57.0	CARBONDALE	SURVANT	COAL	1.3	306.0	
-6.0	CARBONDALE	COLCHESTER	COAL	0.5	369.0	
-37.0	CARBONDALE	DEKOVEN	COAL	3.0	400.0	
-62.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	425.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-77.0	CARBONDALE	DAVIS	COAL	4.0	440.0	
-105.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	468.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-112.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	475.0	
-163.0	TRADEWATER	MT. RORAH	COAL	2.0	526.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900147000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326585 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.863371 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 3630.0 **LOG TYPE:**
SOURCE: CARTER OC, KUDER A W 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
265.0	CARBONDALE	HERRIN	COAL	-	98.0	
159.0	CARBONDALE	SPRINGFIELD	COAL	4.0	204.0	DEPTH UNCERTAIN

MAPID: 05900148000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324234 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.863397 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3690.0 **LOG TYPE:**
SOURCE: CARTER OC, KUDER A W 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
260.0	CARBONDALE	HERRIN	COAL	-	109.0	
154.0	CARBONDALE	SPRINGFIELD	COAL	4.0	215.0	DEPTH UNCERTAIN

MAPID: 05900150000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333618 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.860235 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 3640.0 **LOG TYPE:**
SOURCE: CARTER OC, RISTER L 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
303.0	CARBONDALE	HERRIN	COAL	-	61.0	
197.0	CARBONDALE	SPRINGFIELD	COAL	3.0	167.0	DEPTH UNCERTAIN

MAPID: 05900151000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335948 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.858464 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 3610.0 **LOG TYPE:**
SOURCE: CARTER OC, RISTER L 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
305.0	CARBONDALE	HERRIN	COAL	-	56.0	
199.0	CARBONDALE	SPRINGFIELD	COAL	5.0	162.0	DEPTH UNCERTAIN

MAPID: 05900152000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.328939 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.863345 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 3610.0 **LOG TYPE:**
SOURCE: CAMERON OC, RISTER S 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
266.0	CARBONDALE	HERRIN	COAL	-	95.0	
160.0	CARBONDALE	SPRINGFIELD	COAL	4.0	201.0	DEPTH UNCERTAIN

MAPID: 05900154000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331271 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.860189 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3690.0 **LOG TYPE:**
SOURCE: CARTER OC, RISTER S 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
292.0	CARBONDALE	HERRIN	COAL	-	77.0	
186.0	CARBONDALE	SPRINGFIELD	COAL	-	183.0	DEPTH UNCERTAIN

MAPID: 05900156000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324226 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.860048 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:**
SOURCE: CARTER OC, RISTER S 0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
266.0	CARBONDALE	HERRIN	COAL	-	92.0	
160.0	CARBONDALE	SPRINGFIELD	COAL	4.0	198.0	DEPTH UNCERTAIN

MAPID: 05900157000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333641 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.863291 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: KINGWOODOC, ROBINSON 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
254.0	CARBONDALE	HERRIN	COAL	-	121.0	
148.0	CARBONDALE	SPRINGFIELD	COAL	-	227.0	DEPTH UNCERTAIN

MAPID: 05900177000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331284 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.861994 **DATE COLLECTED:** 2 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1720.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, RISTER STELLA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
85.0	CARBONDALE	HOUCHIN CREEK	COAL	0.0	290.0	
63.0	CARBONDALE	SURVANT	COAL	2.5	312.0	
3.0	CARBONDALE	COLCHESTER	COAL	3.0	372.0	
-25.0	CARBONDALE	DEKOVEN	COAL	4.0	400.0	
-41.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	416.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-57.0	CARBONDALE	DAVIS	COAL	5.0	432.0	
-87.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	462.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-91.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	466.0	
-141.0	TRADEWATER	MT. RORAH	COAL	1.8	516.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900177000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331284 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.861994 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: CARTER OC, RISTER S 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
277.0	CARBONDALE	HERRIN	COAL	-	98.0	
171.0	CARBONDALE	SPRINGFIELD	COAL	4.0	204.0	DEPTH UNCERTAIN

MAPID: 05902287000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326563 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.852915 **DATE COLLECTED:** 6 / 0 / 1958
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1408.0 **LOG TYPE:** Electric Log
SOURCE: CULLUM & LAWHEAD **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1058.0	BASE OF PENN.		UNCLASSIFIED	-	1408.0	

MAPID: 05902305000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1000' N line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.32657 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854647 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CULLUM & LAWHEAD, COLNON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	263.0	
78.0	CARBONDALE	SURVANT	COAL	1.4	280.0	
-11.0	CARBONDALE	COLCHESTER	COAL	0.5	369.0	
-37.0	CARBONDALE	DEKOVEN	COAL	3.0	395.0	
-62.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	420.0	68 PERCENT SANDSTONE IN DEKOVEN SPLIT
-78.0	CARBONDALE	DAVIS	COAL	4.0	436.0	
-112.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	470.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-172.0	TRADEWATER	MT. RORAH	COAL	2.0	530.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902344000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335898 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851191 **DATE COLLECTED:** 10 / 0 / 1958

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2857.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, JONES D M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
73.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	280.0	
45.0	CARBONDALE	SURVANT	COAL	1.3	308.0	
-32.0	CARBONDALE	COLCHESTER	COAL	3.0	385.0	
-47.0	CARBONDALE	DEKOVEN	COAL	3.0	400.0	
-72.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	425.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-89.0	CARBONDALE	DAVIS	COAL	4.0	442.0	
-122.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	475.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-182.0	TRADEWATER	MT. RORAH	COAL	1.4	535.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902345000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321901 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85998 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2712.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, KUDER ALICE W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	288.0	
-35.0	CARBONDALE	COLCHESTER	COAL	0.5	394.0	
-65.0	CARBONDALE	DEKOVEN	COAL	3.0	424.0	
-91.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	450.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-106.0	CARBONDALE	DAVIS	COAL	5.0	465.0	
-141.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	500.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-146.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	505.0	
-201.0	TRADEWATER	MT. RORAH	COAL	2.8	560.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902346000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335937 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854828 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2752.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, CARNAHAN R L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
94.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	259.0	
84.0	CARBONDALE	SURVANT	COAL	1.8	269.0	
13.0	CARBONDALE	COLCHESTER	COAL	0.5	340.0	
-15.0	CARBONDALE	DEKOVEN	COAL	3.0	368.0	
-41.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	394.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-57.0	CARBONDALE	DAVIS	COAL	4.5	410.0	
-87.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	440.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-97.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	450.0	
-143.0	TRADEWATER	MT. RORAH	COAL	3.0	496.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900158000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338224 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.851193 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 3570.0 **LOG TYPE:**
SOURCE: CARTER OC, GREGG PAUL0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
250.0	CARBONDALE	HERRIN	COAL	-	107.0	
145.0	CARBONDALE	SPRINGFIELD	COAL	5.0	212.0	DEPTH UNCERTAIN

MAPID: 05900159000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338302 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.858479 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 3590.0 **LOG TYPE:**
SOURCE: TEXAS CO, EDWARDS G 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
279.0	CARBONDALE	HERRIN	COAL	-	80.0	
175.0	CARBONDALE	SPRINGFIELD	COAL	3.0	184.0	DEPTH UNCERTAIN

MAPID: 05901928000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.33829 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.860302 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Electric Log
SOURCE: JAMES, FRANCIS M., EDWARDS GROVER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
90.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	276.0	
71.0	CARBONDALE	SURVANT	COAL	2.0	295.0	
4.0	CARBONDALE	COLCHESTER	COAL	2.0	362.0	
-24.0	CARBONDALE	DEKOVEN	COAL	3.5	390.0	
-54.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	420.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-64.0	CARBONDALE	DAVIS	COAL	4.0	430.0	
-94.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	460.0	
-102.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	468.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902194000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338254 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.856657 **DATE COLLECTED:** 2 / 0 / 1958

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2749.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, COLNON TR COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
110.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	250.0	
90.0	CARBONDALE	SURVANT	COAL	1.3	270.0	
20.0	CARBONDALE	COLCHESTER	COAL	2.0	340.0	
-8.0	CARBONDALE	DEKOVEN	COAL	2.0	368.0	
-35.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	395.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-50.0	CARBONDALE	DAVIS	COAL	4.0	410.0	
-80.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	440.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902194000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338254 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.856657 **DATE COLLECTED:** 2 / 0 / 1958

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1324.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-964.0	BASE OF PENN.		UNCLASSIFIED	-	1324.0	

MAPID: 05902363000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1164' S line, 330' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.350147 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860744 **DATE COLLECTED:** 10 / 0 / 1968

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2822.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., DELAHUNT ELMAR 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-3.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	361.0	
-26.0	CARBONDALE	SURVANT	COAL	1.7	384.0	
-92.0	CARBONDALE	COLCHESTER	COAL	0.5	450.0	
-127.0	CARBONDALE	DEKOVEN	COAL	3.5	485.0	
-156.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	514.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-172.0	CARBONDALE	DAVIS	COAL	4.0	530.0	
-204.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	562.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-212.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	570.0	
-265.0	TRADEWATER	MT. RORAH	COAL	3.0	623.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902384000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.347819 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.858449 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2814.0 **LOG TYPE:** Electric Log

SOURCE: DAVOUST R C CO, DELAHUNT ELMA 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
5.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	353.0	
-17.0	CARBONDALE	SURVANT	COAL	1.8	375.0	
-95.0	CARBONDALE	COLCHESTER	COAL	3.0	453.0	
-122.0	CARBONDALE	DEKOVEN	COAL	3.0	480.0	
-147.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	505.0	68 PERCENT SANDSTONE IN DEKOVEN SPLIT
-165.0	CARBONDALE	DAVIS	COAL	4.5	523.0	
-192.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	550.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-202.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	560.0	
-252.0	TRADEWATER	MT. RORAH	COAL	2.8	610.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902448000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 75' S line, 0' E line of NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.337115 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.85778 **DATE COLLECTED:** 5 / 6 / 1959
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 170 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		SAND	90.0	0.0	CLAY AND GRAVEL
260.0	CARBONDALE		SHALE	53.0	90.0	BLUE GRAY
207.0	CARBONDALE	BRERETON	LIMESTONE	3.0	143.0	
204.0	CARBONDALE	ANNA	SHALE	1.2	146.0	BROKEN
202.8	CARBONDALE	HERRIN	COAL	4.8	147.2	
198.0	CARBONDALE		SHALE	5.3	152.0	
192.7	CARBONDALE		SHALE	35.3	157.3	
157.5	CARBONDALE		BLUE SHALE	15.5	192.5	
142.0	CARBONDALE	BRIAR HILL	COAL	1.0	208.0	
141.0	CARBONDALE		SHALE	24.2	209.0	
116.8	CARBONDALE		SHALE	32.9	233.2	
83.9	CARBONDALE	ST. DAVID	LIMESTONE	0.9	266.1	
83.0	CARBONDALE	TURNER MINE	SHALE	2.5	267.0	
80.5	CARBONDALE	SPRINGFIELD	COAL	4.2	269.5	
76.3	CARBONDALE		SHALE	3.3	273.7	

MAPID: 05902479000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.347756 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.863028 **DATE COLLECTED:** 8 / 0 / 1959
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2810.0 **LOG TYPE:** Electric Log
SOURCE: NATION OIL CO., DELAHUNT ELMAR 3 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
21.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	343.0	
-1.0	CARBONDALE	SURVANT	COAL	1.8	365.0	
-66.0	CARBONDALE	COLCHESTER	COAL	0.5	430.0	
-98.0	CARBONDALE	DEKOVEN	COAL	3.0	462.0	
-126.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	490.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-141.0	CARBONDALE	DAVIS	COAL	4.0	505.0	
-174.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	538.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-178.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	542.0	
-236.0	TRADEWATER	MT. RORAH	COAL	3.0	600.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902520000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338235 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854837 **DATE COLLECTED:** 2 / 0 / 1961

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2670.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, COLNON TR COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	248.0	
91.0	CARBONDALE	SURVANT	COAL	1.8	268.0	
17.0	CARBONDALE	COLCHESTER	COAL	0.5	342.0	
-11.0	CARBONDALE	DEKOVEN	COAL	3.0	370.0	
-36.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	395.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-51.0	CARBONDALE	DAVIS	COAL	4.0	410.0	
-81.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	440.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-90.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	449.0	
-141.0	TRADEWATER	MT. RORAH	COAL	2.0	500.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902572000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.354894 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.862907 **DATE COLLECTED:** 8 / 0 / 1961

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:** Electric Log

SOURCE: DAVOUST R C CO, DELAHUNT 5 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-20.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	378.0	
-42.0	CARBONDALE	SURVANT	COAL	1.6	400.0	
-107.0	CARBONDALE	COLCHESTER	COAL	0.5	465.0	
-140.0	CARBONDALE	DEKOVEN	COAL	3.0	498.0	
-170.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	528.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-182.0	CARBONDALE	DAVIS	COAL	3.5	540.0	
-220.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	578.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-225.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	583.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903488000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.348004 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.863022 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 170.8 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 9-SH **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.8	CARBONDALE		GRAY SHALE	16.0	104.2	
270.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	32.6	120.2	
238.2	CARBONDALE	LAWSON	SANDSTONE	7.0	152.8	
231.2	CARBONDALE		SANDSTONE	2.1	159.8	
229.1	CARBONDALE	BRERETON	LIMESTONE	3.0	161.9	
226.1	CARBONDALE	ANNA	GRAY SHALE	1.1	164.9	
225.0	CARBONDALE	HERRIN	COAL	4.8	166.0	

MAPID: 05924409000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.34536 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854813 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
15.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	350.0	
-10.0	CARBONDALE	SURVANT	COAL	0.5	375.0	
-83.0	CARBONDALE	COLCHESTER	COAL	0.5	448.0	
-115.0	CARBONDALE	DEKOVEN	COAL	3.0	480.0	
-137.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	502.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-155.0	CARBONDALE	DAVIS	COAL	4.0	520.0	
-185.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	550.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900621000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366316 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85844 **DATE COLLECTED:** 12 / 0 / 1950

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2975.0 **LOG TYPE:** Electric Log

SOURCE: EVERHART J WILLIAM, BRUCE CLAUDE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-247.0	CARBONDALE	DEKOVEN	COAL	3.0	638.0	
-279.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	670.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-290.0	CARBONDALE	DAVIS	COAL	3.5	681.0	
-328.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	719.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-379.0	TRADEWATER	MT. RORAH	COAL	1.5	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900621000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366316 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.85844 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 2856.0 **LOG TYPE:**

SOURCE: EVERHART J WILLIAM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
-37.0	CARBONDALE	SPRINGFIELD	COAL	-	428.0	
-209.0	CARBONDALE	COLCHESTER	COAL	-	600.0	
-1209.0	BASE OF PENN.		UNCLASSIFIED	-	1600.0	
-1343.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1734.0	
-1637.0		BASE L. MENARD	UNCLASSIFIED	-	2028.0	
-2073.0		BASE BARLOW	LIMESTONE	-	2464.0	
-2465.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2856.0	

MAPID: 05900622000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373235 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.862923 **DATE COLLECTED:** 8 / 0 / 1951

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2979.0 **LOG TYPE:** Electric Log

SOURCE: EVERHART J WILLIAM, BRUCE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-128.0	CARBONDALE	SURVANT	COAL	1.7	510.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-238.0	CARBONDALE	DEKOVEN	COAL	2.0	620.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	653.0	84 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	4.0	665.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-323.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	705.0	
-363.0	TRADEWATER	MT. RORAH	COAL	2.5	745.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900622000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373235 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.862923 **DATE COLLECTED:** 8 / 0 / 1951

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1595.0 **LOG TYPE:** Electric Log

SOURCE: EVERHART J WILLIAM **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1213.0	BASE OF PENN.		UNCLASSIFIED	-	1595.0	

MAPID: 05901750000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363942 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85115 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 2951.0 **LOG TYPE:** Electric Log

SOURCE: GRANT N L, HUTTON 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-118.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-143.0	CARBONDALE	SURVANT	COAL	1.3	540.0	
-208.0	CARBONDALE	COLCHESTER	COAL	0.5	605.0	
-248.0	CARBONDALE	DEKOVEN	COAL	3.0	645.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	668.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-286.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	719.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-368.0	TRADEWATER	MT. RORAH	COAL	1.2	765.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902450000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.360518 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.853877 **DATE COLLECTED:** 4 / 19 / 1959

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 449.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 173 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SAND/CLAY	71.5	0.0	
-	MODESTO		SHALE	44.5	71.5	
-	MODESTO		LIMESTONE	3.3	116.0	
-	MODESTO		GRAY SANDSTONE	1.2	119.3	
-	MODESTO		SHALE	34.8	120.5	
-	MODESTO		SHALE	13.9	155.3	
-	MODESTO	DEGRAFF	COAL	0.4	169.3	
-	MODESTO		SHALE	9.7	169.7	
-	MODESTO	PIASA	LIMESTONE	5.3	179.3	
-	MODESTO		SHALE	9.9	184.6	
-	MODESTO		SHALE	43.3	194.5	BLUE GRAY
-	MODESTO		SHALE	3.3	237.8	
-	CARBONDALE	DANVILLE	COAL	1.5	241.2	
-	CARBONDALE		SHALE	25.3	242.7	
-	CARBONDALE		SHALE	40.4	268.0	
-	CARBONDALE		SHALE	1.1	308.4	
-	CARBONDALE	BRERETON	LIMESTONE	4.3	309.5	
-	CARBONDALE	HERRIN	COAL	4.6	313.8	
-	CARBONDALE		SHALE	5.2	318.4	
-	CARBONDALE		SANDSTONE	28.1	323.6	
-	CARBONDALE		SHALE	18.2	351.7	
-	CARBONDALE	BRIAR HILL	COAL	0.8	369.8	
-	CARBONDALE		SHALE	61.7	370.7	
-	CARBONDALE		SHALE	6.1	432.3	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.8	438.4	
-	CARBONDALE	TURNER MINE	SHALE	2.9	439.2	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	442.1	
-	CARBONDALE		SHALE	2.9	446.1	

MAPID: 05902563000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 388' S line, 330' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.357132 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.858583 **DATE COLLECTED:** 7 / 0 / 1961

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2794.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., WOOLARD THURMAN 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-50.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	412.0	
-78.0	CARBONDALE	SURVANT	COAL	1.4	440.0	
-138.0	CARBONDALE	COLCHESTER	COAL	0.5	500.0	
-173.0	CARBONDALE	DEKOVEN	COAL	3.0	535.0	
-201.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	563.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-212.0	CARBONDALE	DAVIS	COAL	4.0	574.0	
-248.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	610.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-306.0	TRADEWATER	MT. RORAH	COAL	2.5	668.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902602000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 506' N line, 990' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.359484 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.862408 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2555.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., WOLF R A A2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-59.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	420.0	
-84.0	CARBONDALE	SURVANT	COAL	1.8	445.0	
-164.0	CARBONDALE	COLCHESTER	COAL	0.5	525.0	
-177.0	CARBONDALE	DEKOVEN	COAL	3.5	538.0	
-201.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	562.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-221.0	CARBONDALE	DAVIS	COAL	4.0	582.0	
-257.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	618.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-261.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	622.0	
-314.0	TRADEWATER	MT. RORAH	COAL	2.0	675.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903485000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 990' N line, 990' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.370923 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.861094 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 317.3 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 6-SH **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
207.3	MODESTO		SILTY SHALE	44.5	180.7	
162.8	CARBONDALE	DANVILLE	COAL	1.5	225.2	
161.3	CARBONDALE		SILTY SHALE	29.7	226.7	
131.6	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	3.8	256.4	UPPER BENCH
127.8	CARBONDALE	BANKSTON FORK	SILTY SHALE	1.8	260.2	SHALE PARTING
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	1.2	262.0	LOWER BENCH
124.8	CARBONDALE	LAWSON	SILTY SHALE	5.3	263.2	
119.5	CARBONDALE	LAWSON	SANDSTONE	21.0	268.5	
98.5	CARBONDALE	LAWSON	GRAY SHALE	5.2	289.5	
93.3	CARBONDALE	JAMESTOWN	COAL WITH SHALE PARTINGS	0.1	294.7	
93.2	CARBONDALE		GRAY SHALE	12.5	294.8	
80.7	CARBONDALE	BRERETON	LIMESTONE	4.3	307.3	
76.5	CARBONDALE	ANNA	GRAY SHALE	1.5	311.5	
75.0	CARBONDALE	HERRIN	COAL	4.3	313.0	

MAPID: 05924094000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.37088 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854308 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-107.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	497.0	
-190.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	624.0	
-262.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	652.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-278.0	CARBONDALE	DAVIS	COAL	4.0	668.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	708.0	21% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900625000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.356914 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836326 **DATE COLLECTED:** 12 / 0 / 1947

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log

SOURCE: TEXACO, INC., MAUSEY C 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	485.0	
-124.0	CARBONDALE	SURVANT	COAL	0.5	516.0	
-180.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-224.0	CARBONDALE	DEKOVEN	COAL	3.0	616.0	
-246.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	638.0	63 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	655.0	
-298.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-304.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	696.0	
-333.0	TRADEWATER	MT. RORAH	COAL	1.0	725.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901446000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363871 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.841909 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 2922.0 **LOG TYPE:**

SOURCE: ROTSTEIN DAVID ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
-16.0	CARBONDALE	SPRINGFIELD	COAL	-	420.0	
-176.0	CARBONDALE	COLCHESTER	COAL	-	580.0	
-1232.0	BASE OF PENN.		UNCLASSIFIED	-	1636.0	
-1378.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1782.0	
-1689.0		BASE L. MENARD	UNCLASSIFIED	-	2093.0	
-2116.0		BASE BARLOW	LIMESTONE	-	2520.0	
-2518.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2922.0	

MAPID: 05901447000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363859 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840023 **DATE COLLECTED:** 2 / 0 / 1953

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 2992.0 **LOG TYPE:** Electric Log

SOURCE: ROTSTEIN DAVID ETAL, WOOLARD COMM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-92.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-117.0	CARBONDALE	SURVANT	COAL	1.0	520.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	584.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	629.0	
-247.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	650.0	63 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	4.0	670.0	
-299.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	702.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-307.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	710.0	
-337.0	TRADEWATER	MT. RORAH	COAL	1.3	740.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901751000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366211 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.847443 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 2540.0 **LOG TYPE:** Electric Log

SOURCE: FITCH & GRANT OIL, MOSBY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	518.0	
-151.0	CARBONDALE	SURVANT	COAL	1.8	545.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	603.0	
-256.0	CARBONDALE	DEKOVEN	COAL	2.8	650.0	
-285.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	679.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-304.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-331.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	725.0	
-366.0	TRADEWATER	MT. RORAH	COAL	1.3	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901751000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366211 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.847443 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 394.0 **LOGGED (FT.):** 1625.0 **LOG TYPE:** Electric Log

SOURCE: FITCH & GRANT OIL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1231.0	BASE OF PENN.		UNCLASSIFIED	-	1625.0	

MAPID: 05902454000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 100' S line, 425' W line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.36355 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.843098 **DATE COLLECTED:** 5 / 26 / 1959

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 430.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 172 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0	PLEISTOCENE		UNCONSOLIDATED	68.5	0.0	
336.5	MODESTO		DARK SHALE	15.0	68.5	
321.5	MODESTO		DARK SHALE	30.5	83.5	
291.0	MODESTO		LIMESTONE	4.0	114.0	
287.0	MODESTO		DARK SHALE	0.7	118.0	
286.3	MODESTO		SANDSTONE	0.7	118.7	
285.7	MODESTO		SHALE	1.0	119.3	
284.7	MODESTO		SANDY SHALE	2.7	120.3	
282.0	MODESTO		DARK SHALE	7.0	123.0	
275.0	MODESTO		SHALE WITH LIMESTONE	3.0	130.0	
272.0	MODESTO		SANDSTONE	13.0	133.0	
259.0	MODESTO		DARK SHALE	27.3	146.0	
231.7	MODESTO	DEGRAFF	COAL	0.8	173.3	
231.0	MODESTO		DARK SHALE	0.3	174.0	
230.7	MODESTO		BLUE SHALE	10.8	174.3	
220.0	MODESTO	PIASA	LIMESTONE	3.0	185.0	
217.0	MODESTO		SHALE	21.0	188.0	BLUE RED
196.0	MODESTO		BLUE SHALE	28.8	209.0	
167.2	CARBONDALE	DANVILLE	COAL	1.6	237.8	
165.7	CARBONDALE		SANDSTONE	8.7	239.3	
157.0	CARBONDALE		DARK SHALE	13.6	248.0	
143.4	CARBONDALE	ALLENBY	COAL	0.2	261.6	
143.2	CARBONDALE		SHALE	0.3	261.8	
143.0	CARBONDALE		SHALE	1.6	262.0	
141.4	CARBONDALE		DARK SHALE	1.8	263.6	
139.7	CARBONDALE		BLUE SHALE	1.0	265.3	
138.7	CARBONDALE	BANKSTON FORK	LIMESTONE	7.2	266.3	
131.5	CARBONDALE		SHALE WITH LIMESTONE	0.7	273.5	
130.8	CARBONDALE		DARK SHALE	0.8	274.2	
130.0	CARBONDALE		SHALE	10.0	275.0	
120.0	CARBONDALE		DARK SHALE	12.7	285.0	
107.3	CARBONDALE	BRERETON	LIMESTONE	3.8	297.7	
103.6	CARBONDALE	ANNA	SHALE	0.4	301.4	
103.2	CARBONDALE	HERRIN	COAL	5.2	301.8	SHALE BANDS
98.0	CARBONDALE		UNDERCLAY	2.1	307.0	
95.8	CARBONDALE		SANDSTONE	25.0	309.2	
70.8	CARBONDALE		SHALE	21.0	334.2	
49.8	CARBONDALE	BRIAR HILL	COAL	1.3	355.2	
48.5	CARBONDALE		SANDSTONE	12.5	356.5	

36.0	CARBONDALE		SHALE	9.0	369.0
27.0	CARBONDALE		SANDSTONE	36.6	378.0
-9.6	CARBONDALE		DARK SHALE	3.9	414.6
-13.5	CARBONDALE	SPRINGFIELD	COAL	4.8	418.5
-18.3	CARBONDALE		SHALE	6.8	423.3

MAPID: 05902454000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 100' S line, 425' W line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.36355 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.843098 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 308.2 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
167.1	CARBONDALE	DANVILLE	COAL	1.8	237.9	
165.3	CARBONDALE		SHALE & SANDSTONE	21.5	239.7	
143.8	CARBONDALE	ALLENBY	BONE COAL	0.5	261.2	
143.3	CARBONDALE		CLAYSTONE	4.6	261.7	
138.8	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	266.2	
131.3	CARBONDALE	LAWSON	SILTY SHALE	1.0	273.7	
130.3	CARBONDALE	LAWSON	SANDSTONE	8.5	274.7	
121.8	CARBONDALE	LAWSON	SILTSTONE	1.5	283.2	
120.3	CARBONDALE	LAWSON	GRAY SHALE	13.0	284.7	
107.3	CARBONDALE	BRERETON	LIMESTONE W/ SHALE	4.9	297.7	
102.4	CARBONDALE	ANNA	BLACK SHALE	0.4	302.6	
102.0	CARBONDALE	HERRIN	COAL	5.2	303.0	

MAPID: 05924445000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.361601 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.847438 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-110.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	506.0	
-129.0	CARBONDALE	SURVANT	COAL	2.0	525.0	
-200.0	CARBONDALE	COLCHESTER	COAL	0.5	596.0	
-246.0	CARBONDALE	DEKOVEN	COAL	3.0	642.0	
-270.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	666.0	38 PERCENT SANDSTONE IN DEKOVEN SPLIT
-288.0	CARBONDALE	DAVIS	COAL	4.0	684.0	
-323.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	719.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-326.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	722.0	
-369.0	TRADEWATER	MT. RORAH	COAL	3.0	765.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924491000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3639 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84562 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 406.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-119.0	CARBONDALE	SURVANT	COAL	2.0	525.0	
-192.0	CARBONDALE	COLCHESTER	COAL	0.5	598.0	
-236.0	CARBONDALE	DEKOVEN	COAL	3.0	642.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	667.0	41 PERCENT SANDSTONE IN DEKOVEN SPLIT
-278.0	CARBONDALE	DAVIS	COAL	4.0	684.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	720.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-356.0	TRADEWATER	MT. RORAH	COAL	2.0	762.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900007000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.340538 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.841968 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 445.0 **LOG TYPE:** Drillers Log

SOURCE: TRI COUNTY COAL 1007 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
395.0	PLEISTOCENE		CLAY	25.0	0.0	
370.0	PLEISTOCENE		HARD PAN	15.0	25.0	
355.0	PLEISTOCENE		CLAY	35.0	40.0	
320.0	PLEISTOCENE		HARD PAN	24.0	75.0	
296.0	MODESTO		SHALE	15.0	99.0	
281.0	MODESTO		SHALE	10.0	114.0	
271.0	MODESTO		SHALE	6.0	124.0	
265.0	MODESTO		SHALE	8.0	130.0	
257.0	MODESTO		SHALE	2.0	138.0	
255.0	MODESTO		SHALE	32.0	140.0	
223.0	MODESTO		SHALE	8.0	172.0	
215.0	MODESTO		SHALE	5.0	180.0	
210.0	MODESTO		SHALE	20.0	185.0	
190.0	MODESTO	PIASA	LIMESTONE	3.0	205.0	
187.0	MODESTO		BLUE SHALE	43.3	208.0	
143.7	CARBONDALE	DANVILLE	COAL	1.7	251.3	
142.0	CARBONDALE		SANDSTONE	16.0	253.0	
126.0	CARBONDALE	BANKSTON FORK	LIMESTONE	10.0	269.0	
116.0	CARBONDALE		SHALE	10.0	279.0	
106.0	CARBONDALE		LIMESTONE	2.0	289.0	
104.0	CARBONDALE		BLUE SHALE	16.0	291.0	
88.0	CARBONDALE	BRERETON	LIMESTONE	4.4	307.0	
83.6	CARBONDALE	ANNA	SHALE	1.2	311.4	
82.4	CARBONDALE	HERRIN	COAL	4.5	312.6	
77.9	CARBONDALE		SHALE	0.9	317.1	
77.0	CARBONDALE		CLAYSTONE	2.0	318.0	
75.0	CARBONDALE		SHALE	60.0	320.0	
15.0	CARBONDALE	BRIAR HILL	COAL	1.0	380.0	
14.0	CARBONDALE		SHALE	9.0	381.0	
5.0	CARBONDALE		SHALE	25.0	390.0	
-20.0	CARBONDALE		BLUE SHALE	22.0	415.0	
-42.0	CARBONDALE	TURNER MINE	SHALE	2.0	437.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	4.6	439.0	
-48.6	CARBONDALE		UNDERCLAY/SHALE	1.4	443.6	

MAPID: 05900007000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.340538 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.841968 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3950.0 **LOG TYPE:** Drillers Log
SOURCE: TRI COUNTY1007, OVERTON A **WELL TYPE:** Oil and Gas Test
COMMENT: COAL THICKNESS CONFIDENTIAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
82.0	CARBONDALE	HERRIN	COAL	-	313.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	-	439.0	

MAPID: 05900626000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.352245 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.840048 **DATE COLLECTED:** 9 / 0 / 1951
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 3024.0 **LOG TYPE:** Electric Log
SOURCE: INLAND PRODUCERS CO, ALLEN GEO H **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-129.0	CARBONDALE	SURVANT	COAL	1.3	529.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-240.0	CARBONDALE	DEKOVEN	COAL	3.0	640.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	663.0	70 PERCENT SANDSTONE IN DEKOVEN SPLIT
-283.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	719.0	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-323.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	723.0	
-365.0	TRADEWATER	MT. RORAH	COAL	2.0	765.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902280000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.352371 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.843749 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2910.0 **LOG TYPE:** Electric Log

SOURCE: KEYSTONE OIL CO, MAUSEY CHARLES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-144.0	CARBONDALE	SURVANT	COAL	1.3	540.0	
-212.0	CARBONDALE	COLCHESTER	COAL	0.5	608.0	
-254.0	CARBONDALE	DEKOVEN	COAL	2.0	650.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	674.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-294.0	CARBONDALE	DAVIS	COAL	4.0	690.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	722.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-374.0	TRADEWATER	MT. RORAH	COAL	1.5	770.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902385000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3523 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849325 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2992.0 **LOG TYPE:** Electric Log

SOURCE: CULLUM & LAWHEAD, GREEN CARL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-147.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-77.0	CARBONDALE	SURVANT	COAL	1.3	475.0	
-148.0	CARBONDALE	COLCHESTER	COAL	0.5	546.0	
-182.0	CARBONDALE	DEKOVEN	COAL	3.0	580.0	
-207.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	605.0	59 PERCENT SANDSTONE IN DEKOVEN SPLIT
-224.0	CARBONDALE	DAVIS	COAL	4.0	622.0	
-260.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	658.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-262.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	660.0	
-312.0	TRADEWATER	MT. RORAH	COAL	2.0	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902385000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3523 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.849325 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: CULLUM & LAWHEAD **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-147.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	545.0	
-227.0	SPOON	DAVIS	UNCLASSIFIED	-	625.0	
-1182.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05902449000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346414 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.842863 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 450.2 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 171 **WELL TYPE:** Coal Test

COMMENT: LOCATION APPROXIMATE SECTION CENTER

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.0			UNCONSOLIDATED	79.0	0.0	
313.0	MODESTO		SHALE	47.0	79.0	
266.0	MODESTO		LIMESTONE	4.0	126.0	
262.0	MODESTO		SHALE	11.8	130.0	
250.2	MODESTO		COAL	0.2	141.8	
250.1	MODESTO		SHALE	3.8	141.9	
246.2	MODESTO		SANDSTONE	3.0	145.8	
243.2	MODESTO		GRAY SHALE	4.9	148.8	
238.3	MODESTO		SANDSTONE	7.3	153.7	
231.1	MODESTO		SHALE	15.1	160.9	
216.0			BLACK SHALE	4.3	176.0	
211.7			COAL	0.7	180.3	
211.1			GRAY SHALE	12.1	180.9	
199.0			LIMESTONE	2.2	193.0	
196.8			SHALE	59.8	195.2	
137.0	MODESTO	PIASA	LIMESTONE	1.3	255.0	
135.7	CARBONDALE	DANVILLE	COAL	1.6	256.3	UNCERTAIN CORRELATION
134.1	CARBONDALE		SHALE	18.9	257.9	
115.2	CARBONDALE		COAL	0.2	276.8	
115.0	CARBONDALE		SHALE	30.0	277.0	
85.0	CARBONDALE	BRERETON	LIMESTONE	5.5	307.0	
79.5	CARBONDALE	ANNA	BLACK SHALE	1.5	312.5	
78.0	CARBONDALE	HERRIN	COAL	4.5	314.0	
73.5	CARBONDALE		GRAY SHALE	4.8	318.5	
68.7	CARBONDALE		SANDSTONE	2.9	323.3	
65.7	CARBONDALE		GRAY SHALE	19.6	326.3	
46.2	CARBONDALE		SANDSTONE	8.5	345.8	
37.7	CARBONDALE		SHALE	25.3	354.3	
12.3	CARBONDALE	BRIAR HILL	COAL	1.3	379.7	UNCERTAIN CORRELATION
11.1	CARBONDALE		SHALE	19.3	380.9	
-8.2	CARBONDALE		SANDSTONE	5.3	400.2	
-13.4	CARBONDALE		SHALE	12.8	405.4	
-26.2	CARBONDALE		DARK SHALE	22.1	418.2	
-48.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	440.3	
-49.7	CARBONDALE	SPRINGFIELD	COAL	5.1	441.7	
-54.8	CARBONDALE		GRAY SHALE	3.4	446.8	

MAPID: 05902449000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346414 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.842863 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 318.5 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
141.2	CARBONDALE	DANVILLE	COAL	1.5	250.8	
139.7	CARBONDALE		SHALE & SANDSTONE	19.6	252.3	
120.1	CARBONDALE	ALLENBY	BONE COAL	2.9	271.9	
117.2	CARBONDALE		CLAYSTONE	2.8	274.8	
114.3	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.3	277.7	
109.0	CARBONDALE	LAWSON	CLAYSTONE	0.8	283.0	
108.2	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	14.2	283.8	
94.0	CARBONDALE	LAWSON	SILTY SHALE	5.5	298.0	
88.5	CARBONDALE	LAWSON	GRAY SHALE	2.7	303.5	
85.8	CARBONDALE	BRERETON	LIMESTONE	6.3	306.2	
79.5	CARBONDALE	ANNA	BLACK SHALE	1.5	312.5	
78.0	CARBONDALE	HERRIN	COAL	4.5	314.0	

MAPID: 05902449000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346414 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.842863 **DATE COLLECTED:** 5 / 7 / 1959

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 450.2 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 171 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	PLEISTOCENE		SAND & GRAVEL	79.0	0.0	
313.0	MODESTO		SHALE	47.0	79.0	
266.0	MODESTO		GRAY LIMESTONE	4.0	126.0	
262.0	MODESTO		SHALE	6.0	130.0	
256.0	MODESTO		BLUE SHALE	5.8	136.0	
250.2	MODESTO		COAL	0.2	141.8	
250.1	MODESTO		SHALE	3.4	141.9	
246.7	MODESTO		SHALE	0.4	145.3	
246.2	MODESTO		SHALE & SANDSTONE	1.3	145.8	
245.0	MODESTO		GRAY SANDSTONE	1.8	147.0	
243.2	MODESTO		SHALE	4.9	148.8	
238.3	MODESTO		SHALE & SANDSTONE	7.3	153.7	
231.1	MODESTO		SHALE	5.1	160.9	
226.0	MODESTO		BLUE SHALE	10.1	166.0	
216.0	MODESTO		SHALE	4.3	176.0	
211.7	MODESTO		COAL	0.7	180.3	
211.1	MODESTO		SHALE	12.1	180.9	
199.0	MODESTO		LIMESTONE	2.2	193.0	
196.8	MODESTO		SHALE	6.8	195.2	
190.0	MODESTO		BLUE SHALE	53.0	202.0	
137.0	MODESTO		LIMESTONE	1.3	255.0	
135.7	CARBONDALE	DANVILLE	COAL	1.6	256.3	
134.1	CARBONDALE		SHALE	7.4	257.9	
126.7	CARBONDALE		BLUE SHALE	11.5	265.3	
115.2	CARBONDALE	ALLENBY	COAL	0.2	276.8	
115.0	CARBONDALE		SHALE	2.5	277.0	
112.5	CARBONDALE		BLUE SHALE	27.5	279.5	
85.0	CARBONDALE	BRERETON	LIMESTONE	5.5	307.0	
79.5	CARBONDALE	ANNA	SHALE	1.5	312.5	
78.0	CARBONDALE	HERRIN	COAL	4.5	314.0	
73.5	CARBONDALE		SHALE	4.8	318.5	
68.7	CARBONDALE		GRAY SANDSTONE	2.9	323.3	
65.7	CARBONDALE		SHALE	6.2	326.3	
59.6	CARBONDALE		GRAY SANDSTONE	13.4	332.4	
46.2	CARBONDALE		SHALE	8.5	345.8	
37.7	CARBONDALE		BLUE SHALE	25.3	354.3	
12.3	CARBONDALE	BRIAR HILL	COAL	1.3	379.7	
11.1	CARBONDALE		SHALE	19.3	380.9	
-8.2	CARBONDALE		GRAY SANDSTONE	5.3	400.2	

-13.4	CARBONDALE		SHALE	12.8	405.4
-26.2	CARBONDALE		DARK SHALE	22.1	418.2
-48.3	CARBONDALE	TURNER MINE	SHALE	1.4	440.3
-49.7	CARBONDALE	SPRINGFIELD	COAL	5.1	441.7
-54.8	CARBONDALE		SHALE	3.4	446.8

MAPID: 05902516000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338184 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84937 **DATE COLLECTED:** 3 / 0 / 1961

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2787.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, ADAMS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
35.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	320.0	
6.0	CARBONDALE	SURVANT	COAL	1.4	349.0	
-63.0	CARBONDALE	COLCHESTER	COAL	2.8	418.0	
-90.0	CARBONDALE	DEKOVEN	COAL	3.0	445.0	
-115.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	470.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-135.0	CARBONDALE	DAVIS	COAL	4.0	490.0	
-151.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	506.0	62% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-155.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	510.0	
-215.0	TRADEWATER	MT. RORAH	COAL	1.8	570.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903407000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.342869 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.843791 **DATE COLLECTED:** 7 / 0 / 1969

SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log

SOURCE: JUNIPER OIL & GAS CO, GREGG H C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-72.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-95.0	CARBONDALE	SURVANT	COAL	2.0	498.0	
-167.0	CARBONDALE	COLCHESTER	COAL	0.5	570.0	
-202.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-225.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	628.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-243.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-277.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	680.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-330.0	TRADEWATER	MT. RORAH	COAL	2.5	733.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900008000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.33584 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.840139 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 354.0 **LOG TYPE:** Drillers Log

SOURCE: TRI-COUNTIES COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
158.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	200.0	
136.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	13.0	222.0	
108.0	CARBONDALE	HERRIN	COAL	3.9	250.0	
10.0	CARBONDALE	SPRINGFIELD	COAL	4.8	348.0	

MAPID: 05900008000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.33584 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840139 **DATE COLLECTED:** 0 / 0 / 1920
SURFACE ELEVATION (FT.): 358.3 **LOGGED (FT.):** 3583.0 **LOG TYPE:** Drillers Log
SOURCE: TRI COUNTY1005, WATSON A P **WELL TYPE:** Oil and Gas Test
COMMENT: COAL THICKNESS CONFIDENTIAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
108.3	CARBONDALE	HERRIN	COAL	-	250.0	
10.3	CARBONDALE	SPRINGFIELD	COAL	-	348.0	

MAPID: 05902250000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326545 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.849334 **DATE COLLECTED:** 3 / 0 / 1961
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2764.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, WILLIAMS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
24.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	349.0	
3.0	CARBONDALE	SURVANT	COAL	1.3	370.0	
-69.0	CARBONDALE	COLCHESTER	COAL	0.5	442.0	
-99.0	CARBONDALE	DEKOVEN	COAL	3.0	472.0	
-127.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	500.0	64 PERCENT SANDSTONE IN DEKOVEN SPLIT
-143.0	CARBONDALE	DAVIS	COAL	4.0	516.0	
-163.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	536.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-169.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	542.0	
-222.0	TRADEWATER	MT. RORAH	COAL	3.0	595.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902295000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326504 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.841993 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log
SOURCE: POWERS & HENDRICKS, RAMSEY MARY E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	425.0	
-100.0	CARBONDALE	SURVANT	COAL	3.5	455.0	
-163.0	CARBONDALE	COLCHESTER	COAL	0.5	518.0	
-190.0	CARBONDALE	DEKOVEN	COAL	3.5	545.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	570.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-235.0	CARBONDALE	DAVIS	COAL	4.0	590.0	
-268.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	623.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-274.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	629.0	
-320.0	TRADEWATER	MT. RORAH	COAL	2.0	675.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902351000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331109 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.843815 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 1517.0 **LOG TYPE:** Electric Log
SOURCE: NATION OIL CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1162.0	BASE OF PENN.		UNCLASSIFIED	-	1517.0	

MAPID: 05902351000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331109 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.843815 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2778.0 **LOG TYPE:** Electric Log
SOURCE: NATION OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	3.0	203.0	
-	CARBONDALE	BRIAR HILL	COAL	-	260.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	314.0	BLACK SHALE ROOF
-	CARBONDALE	HOUCHIN CREEK	COAL	-	308.0	

MAPID: 05902351000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331109 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.843815 **DATE COLLECTED:** 9 / 0 / 1958
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: NATION OIL CO., BROCKSCHMIDT GEO 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	392.0	
-65.0	CARBONDALE	SURVANT	COAL	1.3	420.0	
-130.0	CARBONDALE	COLCHESTER	COAL	0.5	485.0	
-156.0	CARBONDALE	DEKOVEN	COAL	3.0	511.0	
-184.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	539.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-200.0	CARBONDALE	DAVIS	COAL	4.0	555.0	
-234.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	589.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-240.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	595.0	
-285.0	TRADEWATER	MT. RORAH	COAL	2.0	640.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902364000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335879 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.845681 **DATE COLLECTED:** 10 / 0 / 1958
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2916.0 **LOG TYPE:** Electric Log
SOURCE: V S & S DRLG CO, INC, PARKER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-12.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	368.0	
-106.0	CARBONDALE	COLCHESTER	COAL	0.5	462.0	
-136.0	CARBONDALE	DEKOVEN	COAL	3.0	492.0	
-160.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	516.0	57 PERCENT SANDSTONE IN DEKOVEN SPLIT
-176.0	CARBONDALE	DAVIS	COAL	4.0	532.0	
-212.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	568.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-217.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	573.0	
-268.0	TRADEWATER	MT. RORAH	COAL	2.0	624.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902438000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.325281 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.8374 **DATE COLLECTED:** 4 / 27 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 387.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 169 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	100.0	0.0	SAND AND GRAVEL
265.0			SHALE	122.5	100.0	BLUE GRAY
142.5			GRAY LIMESTONE	1.0	222.5	
141.5			SHALE	0.6	223.5	
140.9			COAL	1.5	224.1	
139.4			SHALE	0.6	225.6	
138.8	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.2	226.2	
133.7	CARBONDALE	ANVIL ROCK	SHALE	0.3	231.3	
133.3	CARBONDALE		GRAY SANDSTONE	0.3	231.7	
133.0	CARBONDALE		BLUE SHALE	18.2	232.0	
114.8	CARBONDALE	BRERETON	LIMESTONE	4.9	250.2	
109.9	CARBONDALE	ANNA	DARK SHALE	0.6	255.1	
109.3	CARBONDALE	HERRIN	COAL	4.3	255.7	
105.0	CARBONDALE		SHALE	3.2	260.0	
101.8	CARBONDALE		GRAY SANDSTONE	31.8	263.2	
70.0	CARBONDALE		SHALE	5.6	295.0	
64.4	CARBONDALE		BLUE SHALE	20.8	300.6	
43.7	CARBONDALE	BRIAR HILL	COAL	1.2	321.3	
42.5	CARBONDALE		DARK SHALE	1.0	322.5	
41.5	CARBONDALE		BLUE SHALE	26.8	323.5	
14.7	CARBONDALE		SHALE	26.2	350.3	
-11.5	CARBONDALE	ST. DAVID	LIMESTONE	0.5	376.5	
-12.0	CARBONDALE	TURNER MINE	SHALE	2.0	377.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	5.7	379.0	
-19.7	CARBONDALE		SHALE	2.3	384.7	

MAPID: 05903494000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.336997 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.835526 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 255.4 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 15-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
176.8	CARBONDALE	DANVILLE	COAL	0.5	183.2	
176.3	CARBONDALE		ARGILLACEOUS SANDSTONE	28.2	183.7	
148.1	CARBONDALE	ALLENBY	COAL	0.8	211.9	
147.3	CARBONDALE		SILTY SHALE	1.0	212.7	
146.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	213.7	
142.1	CARBONDALE	LAWSON	SILTY SHALE	2.7	217.9	
139.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	1.3	220.6	
138.2	CARBONDALE	LAWSON	SANDSTONE	8.5	221.8	
129.7	CARBONDALE	LAWSON	SILTY SHALE	12.7	230.3	
117.0	CARBONDALE	LAWSON	GRAY SHALE	3.8	243.0	
113.2	CARBONDALE	BRERETON	LIMESTONE	3.8	246.8	
109.5	CARBONDALE	ANNA	GRAY SHALE	0.5	250.5	
109.0	CARBONDALE	HERRIN	COAL	4.4	251.0	

MAPID: 05900628000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.314824 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836495 **DATE COLLECTED:** 3 / 0 / 1948

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2913.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., EDWARDS LUTHER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	462.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	556.0	
-225.0	CARBONDALE	DEKOVEN	COAL	3.0	588.0	
-248.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	611.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	664.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-308.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	671.0	
-353.0	TRADEWATER	MT. RORAH	COAL	2.0	716.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902452000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.305775 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.845619 **DATE COLLECTED:** 5 / 28 / 1959

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 402.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CORP 175 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
-			SHALE	56.0	60.0	THICKNESS GIVEN DOESN'T MATCH DEPTHS
-			SHALE	108.5	116.0	THICKNESS GIVEN DOESN'T MATCH DEPTHS
-			SANDSTONE	5.0	224.5	
-			SHALE	0.8	229.5	
-	CARBONDALE	ALLENBY	COAL	0.3	230.3	
-	CARBONDALE		SHALE	2.5	230.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	233.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	11.9	241.0	
-	CARBONDALE		DARK SHALE	15.5	252.9	
-	CARBONDALE	BRERETON	LIMESTONE	6.4	268.4	THICKNESS GIVEN DOESN'T MATCH DEPTHS
-	CARBONDALE	ANNA	BLACK SHALE	1.0	274.8	
-	CARBONDALE	HERRIN	COAL	4.5	275.8	
-	CARBONDALE		SHALE	53.7	280.3	
-	CARBONDALE	BRIAR HILL	COAL	1.3	334.0	
-	CARBONDALE		SHALE	55.9	335.3	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	391.2	
-	CARBONDALE	SPRINGFIELD	COAL	5.5	393.7	
-	CARBONDALE		SHALE	2.8	399.2	

MAPID: 05902495000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312609 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.845635 **DATE COLLECTED:** 5 / 0 / 1960

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1921.0 **LOG TYPE:** Electric Log

SOURCE: KELLEY&CONRAD&KAYE, GLOVER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-110.0	CARBONDALE	SURVANT	COAL	1.4	480.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	551.0	
-208.0	CARBONDALE	DEKOVEN	COAL	3.0	578.0	
-230.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	600.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-250.0	CARBONDALE	DAVIS	COAL	4.0	620.0	
-280.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	650.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-288.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	658.0	
-338.0	TRADEWATER	MT. RORAH	COAL	2.0	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902942000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.301225 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.845616 **DATE COLLECTED:** 5 / 0 / 1964

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2951.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION, EDWARDS H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-188.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-223.0	CARBONDALE	DEKOVEN	COAL	3.0	600.0	
-243.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	672.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-303.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	680.0	
-353.0	TRADEWATER	MT. RORAH	COAL	1.5	730.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902942000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.301225 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845616 **DATE COLLECTED:** 5 / 0 / 1964

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1203.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05903500000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 990' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317106 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.838321 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 284.5 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 24-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
139.4	CARBONDALE	DANVILLE	COAL	0.3	236.6	
139.1	CARBONDALE		GRAY SHALE	3.8	236.9	
135.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	240.7	
130.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	12.7	245.5	
117.8	CARBONDALE	JAMESTOWN	COAL	0.3	258.2	
117.5	CARBONDALE		SILTY SHALE	11.3	258.5	
106.2	CARBONDALE	BRERETON	LIMESTONE	5.0	269.8	
101.2	CARBONDALE	ANNA	BLACK SHALE	5.2	274.8	
96.0	CARBONDALE	HERRIN	COAL	4.5	280.0	

MAPID: 05900629000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.291904 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836512 **DATE COLLECTED:** 1 / 0 / 1947

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3015.0 **LOG TYPE:** Electric Log

SOURCE: DELTA DRILLING CO., CHAPMAN A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-95.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	476.0	
-179.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-213.0	CARBONDALE	DEKOVEN	COAL	3.0	594.0	
-237.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	618.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.5	636.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	664.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-335.0	TRADEWATER	MT. RORAH	COAL	0.5	716.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902176000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292037 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845619 **DATE COLLECTED:** 11 / 0 / 1957

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1605.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-178.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	558.0	
-290.0	SPOON	DAVIS	UNCLASSIFIED	-	670.0	
-1225.0	BASE OF PENN.		UNCLASSIFIED	-	1605.0	

MAPID: 05902176000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292037 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845619 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 290.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
156.5	CARBONDALE	DANVILLE	COAL	1.5	223.5	
155.0	CARBONDALE		SHALE & SANDSTONE	35.0	225.0	
120.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	260.0	
116.0	CARBONDALE	LAWSON	SILTY SHALE	16.0	264.0	
100.0	CARBONDALE	BRERETON	LIMESTONE	4.0	280.0	
96.0	CARBONDALE	ANNA	BLACK SHALE	3.0	284.0	
93.0	CARBONDALE	HERRIN	COAL	3.0	287.0	

MAPID: 05902176000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.292037 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.845619 **DATE COLLECTED:** 11 / 0 / 1957

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2935.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, HEDGER ROY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	488.0	
-125.0	CARBONDALE	SURVANT	COAL	1.3	505.0	
-245.0	CARBONDALE	DEKOVEN	COAL	3.0	625.0	
-268.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	648.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-286.0	CARBONDALE	DAVIS	COAL	4.0	666.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-330.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	710.0	
-380.0	TRADEWATER	MT. RORAH	COAL	2.0	760.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900630000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273681 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840159 **DATE COLLECTED:** 5 / 0 / 1947

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3003.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., FRIELDS G T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	556.0	
-210.0	CARBONDALE	SURVANT	COAL	1.8	594.0	
-262.0	CARBONDALE	COLCHESTER	COAL	0.5	646.0	
-296.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	704.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-338.0	CARBONDALE	DAVIS	COAL	4.0	722.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	755.0	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-376.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	760.0	
-431.0	TRADEWATER	MT. RORAH	COAL	1.3	815.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900631000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2310' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.28048 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.842028 **DATE COLLECTED:** 5 / 0 / 1948

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1602.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1221.0	BASE OF PENN.		UNCLASSIFIED	-	1602.0	

MAPID: 05900631000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2310' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.28048 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.842028 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 345.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
110.0	CARBONDALE	DANVILLE	COAL	1.0	271.0	
109.0	CARBONDALE		SHALE & SANDSTONE	34.0	272.0	
75.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	306.0	
71.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	24.0	310.0	
47.0	CARBONDALE	BRERETON	LIMESTONE	6.0	334.0	
41.0	CARBONDALE	ANNA	BLACK SHALE	2.0	340.0	
39.0	CARBONDALE	HERRIN	COAL	3.0	342.0	

MAPID: 05900631000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2310' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.28048 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842028 **DATE COLLECTED:** 5 / 0 / 1948

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2160.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, FRIELDS GRADE T 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-201.0	CARBONDALE	SURVANT	COAL	2.5	582.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-305.0	CARBONDALE	DEKOVEN	COAL	3.0	686.0	
-316.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	697.0	37 PERCENT SANDSTONE IN DEKOVEN SPLIT
-331.0	CARBONDALE	DAVIS	COAL	4.0	712.0	
-365.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	746.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-371.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	752.0	
-425.0	TRADEWATER	MT. RORAH	COAL	2.0	806.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900632000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269264 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.825451 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2050.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
230.0	CARBONDALE	DANVILLE	COAL	-	150.0	
164.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	54.0	216.0	
86.0	CARBONDALE	BRIAR HILL	COAL	-	294.0	
76.0	CARBONDALE	CANTON		8.0	304.0	
22.0	CARBONDALE	SPRINGFIELD	COAL	4.0	358.0	BLACK SHALE ROOF
10.0	CARBONDALE	SS BELOW NO. 5		10.0	370.0	
-64.0	CARBONDALE	HOUCHIN CREEK	COAL	-	444.0	

MAPID: 05900632000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269264 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825451 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	LAWSON	SANDSTONE	50.0		

MAPID: 05900632000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269264 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825451 **DATE COLLECTED:** 9 / 0 / 1949

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1506.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1126.0	BASE OF PENN.		UNCLASSIFIED	-	1506.0	

MAPID: 05900632000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269264 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.825451 **DATE COLLECTED:** 9 / 0 / 1949

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2050.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	449.0	
-110.0	CARBONDALE	SURVANT	COAL	1.3	490.0	
-164.0	CARBONDALE	COLCHESTER	COAL	0.5	544.0	
-204.0	CARBONDALE	DEKOVEN	COAL	3.0	584.0	
-220.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	600.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-238.0	CARBONDALE	DAVIS	COAL	4.0	618.0	
-268.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	648.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-313.0	TRADEWATER	MT. RORAH	COAL	1.2	693.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900160000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282685 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.834733 **DATE COLLECTED:** 4 / 0 / 1941

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1586.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN & LESTER **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1204.0	BASE OF PENN.		UNCLASSIFIED	-	1586.0	

MAPID: 05900160000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282685 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.834733 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3820.0 **LOG TYPE:**

SOURCE: DUNCAN N&L, GREEN E 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
94.0	CARBONDALE	HERRIN	COAL	4.0	288.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	3.0	400.0	

MAPID: 05900160000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282685 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.834733 **DATE COLLECTED:** 4 / 0 / 1941

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3049.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN & LESTER, GREEN E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-98.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-230.0	CARBONDALE	DEKOVEN	COAL	3.0	612.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	637.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-268.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-303.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	685.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-308.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902168000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 0' N line, 924' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.296742 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.828211 **DATE COLLECTED:** 10 / 1 / 1957

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 402.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 33 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	80.0	0.0	SAND AND GRAVEL
285.0	MODESTO		SHALE	2.2	80.0	
282.8	MODESTO		SHALE	0.4	82.2	
282.4	MODESTO		GRAY SILTSTONE	0.8	82.6	
281.6	MODESTO		SHALE	7.7	83.4	
273.9	MODESTO		LIMESTONE	0.1	91.1	GRAY TO BLACK
273.8	MODESTO		SHALE	2.1	91.2	GRAY TO BLACK
271.7	MODESTO		SHALE	1.8	93.3	
269.9	MODESTO		SHALE	0.8	95.1	DARK GRAY
269.1	MODESTO		SHALE	0.1	95.9	DARK GRAY
269.0	MODESTO		COAL	0.5	96.0	
268.5	MODESTO		NO RECORD	2.5	96.5	ADJUSTER FOR MARKER
266.0	MODESTO		CLAYSTONE	4.0	99.0	GRAY
262.0	MODESTO		SHALE	1.0	103.0	
261.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.7	104.0	GREENISH GRAY
258.3	MODESTO		SHALE	6.1	106.7	
252.2	MODESTO		SHALE	3.3	112.8	LIGHT GRAY
249.0	MODESTO		SHALE	1.5	116.0	
247.5	MODESTO		SHALE	0.3	117.5	LIGHT GRAY
247.2	MODESTO		SHALE	16.1	117.8	GREENISH GRAY
231.2	MODESTO		GRAY SILTSTONE	1.2	133.8	
230.0	MODESTO		SILTSTONE	0.8	135.0	
229.2	MODESTO		SHALE	10.0	135.8	
219.2	MODESTO		SHALE	1.4	145.8	
217.7	MODESTO		SHALE	3.2	147.3	
214.6	MODESTO		NO RECORD	2.8	150.4	ADJUSTED FOR MARKER
211.7	MODESTO		GRAY SILTSTONE	1.7	153.3	
210.1	MODESTO		SHALE	13.5	154.9	
196.6	MODESTO		SHALE	18.1	168.4	
178.5	MODESTO		SHALE	11.1	186.5	
167.4	MODESTO		SHALE	3.7	197.6	
163.7	CARBONDALE	DANVILLE	COAL	1.5	201.3	
162.2	CARBONDALE		SHALE	1.1	202.8	GREENISH GRAY
161.2	CARBONDALE		GRAY SANDSTONE	0.7	203.8	
160.5	CARBONDALE		SANDSTONE	3.7	204.5	
156.8	CARBONDALE		SHALE	4.6	208.2	GREENISH GRAY
152.2	CARBONDALE		SHALE	3.0	212.8	GREENISH GRAY
149.2	CARBONDALE		SHALE	4.0	215.8	
145.2	CARBONDALE		SHALE	2.9	219.8	GREENISH GRAY

142.3	CARBONDALE		SANDSTONE	0.6	222.7	GREENISH GRAY
141.7	CARBONDALE		SHALY SANDSTONE	2.3	223.3	
139.5	CARBONDALE		SHALE	4.5	225.5	GREENISH GRAY
135.0	CARBONDALE		SHALE	4.6	230.0	
130.4	CARBONDALE		SHALY SANDSTONE	4.0	234.6	GRAY
126.4	CARBONDALE		SHALE	0.9	238.6	GRAY TO BLACK
125.5	CARBONDALE		NO RECORD	0.5	239.5	ADJUSTED FOR MARKER
125.0	CARBONDALE	ALLENBY	COAL	0.3	240.0	
124.7	CARBONDALE		SHALE	3.2	240.3	LIMESTONE NODULES
121.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	243.5	SOFT; GRAY
120.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.1	244.5	GRAYISH BROWN
118.4	CARBONDALE	BANKSTON FORK	SHALE	0.5	246.6	GREENISH GRAY
117.9	CARBONDALE	BANKSTON FORK	LIMESTONE	2.4	247.1	GREENISH GRAY
115.5	CARBONDALE		SHALE	0.4	249.5	
115.1	CARBONDALE		COAL	0.2	249.9	
114.9	CARBONDALE		SHALE	1.3	250.1	
113.6	CARBONDALE	ANVIL ROCK	SILTSTONE	7.1	251.4	HARD; GRAY
106.5	CARBONDALE	ANVIL ROCK	SILTSTONE/SANDSTONE	5.5	258.5	GRAY
101.0	CARBONDALE	ANVIL ROCK	GRAY SILTSTONE	2.8	264.0	
98.2	CARBONDALE		SHALE	2.6	266.8	
95.6	CARBONDALE	BRERETON	LIMESTONE	0.3	269.4	
95.3	CARBONDALE	BRERETON	SHALE	0.2	269.7	
95.2	CARBONDALE	BRERETON	SHALE	0.8	269.8	
94.4	CARBONDALE	BRERETON	GRAY LIMESTONE	4.9	270.6	
89.5	CARBONDALE		NO RECORD	0.5	275.5	ADJUSTED FOR MARKER
89.0	CARBONDALE	ANNA	SHALE	0.4	276.0	
88.6	CARBONDALE	ANNA	SHALE	0.4	276.4	
88.2	CARBONDALE	HERRIN	COAL	4.7	276.8	
83.5	CARBONDALE		SHALE	3.3	281.5	
80.2	CARBONDALE		SHALY LIMESTONE	0.4	284.8	GRAY
79.7	CARBONDALE		SANDSTONE	0.2	285.3	LIMESTONE NOTED; GRAY
79.6	CARBONDALE		SHALY SANDSTONE	14.3	285.4	GRAY
65.2	CARBONDALE		SILTSTONE	1.1	299.8	HARD; GRAY
64.2	CARBONDALE		GRAY SANDSTONE	5.2	300.8	
59.0	CARBONDALE		SILTSTONE	2.0	306.0	HARD; GRAY
57.0	CARBONDALE		SHALE	2.0	308.0	
55.0	CARBONDALE		SHALE & SANDSTONE	12.3	310.0	
42.7	CARBONDALE		SILTSTONE/SANDSTONE	2.3	322.3	GRAY
40.5	CARBONDALE		SILTSTONE	10.2	324.5	
30.3	CARBONDALE		SHALE	4.2	334.7	
26.2	CARBONDALE		NO RECORD	1.2	338.8	ADJUSTED FOR MARKER
25.0	CARBONDALE		SHALE	2.7	340.0	
22.3	CARBONDALE	BRIAR HILL	COAL	1.8	342.7	
20.6	CARBONDALE		SILTSTONE	0.5	344.4	HARD; GRAY
20.1	CARBONDALE		SANDSTONE/SILTSTONE	10.1	344.9	
10.0	CARBONDALE		SANDSTONE/SILTSTONE	7.5	355.0	
2.5	CARBONDALE		SHALE	7.5	362.5	ADJUSTED; 0.75 FEET LIME AT BASE NOTED

-5.0	CARBONDALE		GRAY SANDSTONE	1.7	370.0	
-6.7	CARBONDALE		DARK SHALE	14.3	371.7	
-20.9	CARBONDALE		NO RECORD	1.1	385.9	
-22.0	CARBONDALE		SHALE	1.8	387.0	
-23.8	CARBONDALE	ST. DAVID	LIMESTONE	0.3	388.8	
-24.2	CARBONDALE	ST. DAVID	LIMESTONE	0.8	389.2	
-24.9	CARBONDALE	ST. DAVID	LIMESTONE	0.5	389.9	
-25.4	CARBONDALE	ST. DAVID	LIMESTONE	0.4	390.4	DARK GRAY
-25.8	CARBONDALE	TURNER MINE	SHALE	2.1	390.8	
-27.9	CARBONDALE	SPRINGFIELD	COAL	4.4	392.9	
-32.3	CARBONDALE		UNDERCLAY	1.4	397.3	GRAY
-33.7	CARBONDALE		UNDERCLAY	3.3	398.7	SOFT; GRAY

MAPID: 05903498000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.287331 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.831072 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 279.5 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 21-SH **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
176.3	CARBONDALE	DANVILLE	COAL	1.5	202.7	
174.8	CARBONDALE		ARGILLACEOUS SANDSTONE	33.5	204.2	
141.3	CARBONDALE	ALLENBY	COAL	0.5	237.7	
140.8	CARBONDALE		GRAY SHALE	3.5	238.2	
137.3	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	4.0	241.7	
133.3	CARBONDALE	LAWSON	SHALE & SANDSTONE	23.6	245.7	
109.7	CARBONDALE	BRERETON	LIMESTONE	4.2	269.3	
105.6	CARBONDALE	ANNA	BLACK SHALE	1.6	273.4	
104.0	CARBONDALE	HERRIN	COAL	4.5	275.0	

MAPID: 05901818000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.307935 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.825355 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2901.0 **LOG TYPE:** Electric Log

SOURCE: MINETTE JOHN F, GERSBACKER HRS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-86.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-110.0	CARBONDALE	SURVANT	COAL	0.5	469.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.0	575.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	600.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-261.0	CARBONDALE	DAVIS	COAL	4.0	620.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	652.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-301.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	660.0	
-341.0	TRADEWATER	MT. RORAH	COAL	1.3	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901818000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.307935 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825355 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1560.0 **LOG TYPE:** Electric Log

SOURCE: MINETTE JOHN F **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1201.0	BASE OF PENN.		UNCLASSIFIED	-	1560.0	

MAPID: 05901970000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1580' S line, 1650' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312468 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.825049 **DATE COLLECTED:** 5 / 0 / 1956

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2925.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., LOGAN ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-98.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-200.0	CARBONDALE	COLCHESTER	COAL	0.5	555.0	
-244.0	CARBONDALE	DEKOVEN	COAL	3.0	599.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	620.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-285.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-320.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	675.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-327.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	682.0	
-360.0	TRADEWATER	MT. RORAH	COAL	1.3	715.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901970000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1580' S line, 1650' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312468 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825049 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
168.0	CARBONDALE	DANVILLE	COAL	1.0	187.0	
167.0	CARBONDALE		SILTY SHALE	30.0	188.0	
137.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	218.0	
133.0	CARBONDALE	LAWSON	SILTY SHALE	25.0	222.0	
108.0	CARBONDALE	BRERETON	LIMESTONE	5.0	247.0	
103.0	CARBONDALE	ANNA	BLACK SHALE	2.0	252.0	
101.0	CARBONDALE	HERRIN	COAL	3.0	254.0	

MAPID: 05902012000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319351 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.821536 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY, FRANCIS HARRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	448.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	549.0	
-216.0	CARBONDALE	DEKOVEN	COAL	3.0	588.0	
-238.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-263.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-300.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	672.0	56% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-308.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	680.0	
-338.0	TRADEWATER	MT. RORAH	COAL	1.4	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902012000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319351 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.821536 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-176.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	548.0	
-266.0	SPOON	DAVIS	UNCLASSIFIED	-	638.0	
-1208.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05902102000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319371 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.830934 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1684.0 **LOG TYPE:** Electric Log

SOURCE: HILL WM E, HARRINGTON C 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-71.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	449.0	
-102.0	CARBONDALE	SURVANT	COAL	1.6	480.0	
-152.0	CARBONDALE	COLCHESTER	COAL	0.5	530.0	
-211.0	CARBONDALE	DEKOVEN	COAL	2.5	589.0	
-232.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	610.0	74 PERCENT SANDSTONE IN DEKOVEN SPLIT
-257.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-490.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	868.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-497.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	875.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902378000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 420' S line, 330' W line of NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.32175 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.825526 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2964.0 **LOG TYPE:** Electric Log

SOURCE: FORD, W. P., KIMBRO FRED 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-186.0	CARBONDALE	COLCHESTER	COAL	0.5	542.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	582.0	
-246.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	602.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-269.0	CARBONDALE	DAVIS	COAL	4.0	625.0	
-304.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	660.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-314.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	670.0	
-344.0	TRADEWATER	MT. RORAH	COAL	1.2	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903386000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333441 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.830902 **DATE COLLECTED:** 1 / 0 / 1969

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 3474.0 **LOG TYPE:** Electric Log

SOURCE: JUNIPER OIL & GAS CO, BOURLAND-ROGERS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-87.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-117.0	CARBONDALE	SURVANT	COAL	0.8	480.0	
-187.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-234.0	CARBONDALE	DEKOVEN	COAL	3.0	597.0	
-248.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	611.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-267.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	664.0	62% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-309.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	672.0	
-347.0	TRADEWATER	MT. RORAH	COAL	2.0	710.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903499000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.323965 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.831015 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 246.5 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 17-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
151.5	CARBONDALE	ALLENBY	COAL	0.5	206.5	
151.0	CARBONDALE		GRAY SHALE	1.2	207.0	
149.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	208.2	
144.3	CARBONDALE	LAWSON	CALCAREOUS SHALE	5.5	213.7	
138.8	CARBONDALE	LAWSON	SILTY SHALE	14.9	219.2	
123.9	CARBONDALE	LAWSON	GRAY SHALE	1.3	234.1	
122.6	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.8	235.4	
121.8	CARBONDALE	BRERETON	LIMESTONE	4.8	236.2	
117.0	CARBONDALE	ANNA	GRAY SHALE	1.0	241.0	
116.0	CARBONDALE	HERRIN	COAL	4.5	242.0	

MAPID: 05900009000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.354526 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.821394 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 361.9 **LOGGED (FT.):** 349.0 **LOG TYPE:** Drillers Log

SOURCE: 104 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.9	PLEISTOCENE		CLAY	30.0	0.0	
331.9	PLEISTOCENE		SAND	16.0	30.0	BLUE CLAY
315.9	MODESTO		SANDY SHALE	24.0	46.0	
291.9	MODESTO		SHALE	9.0	70.0	
282.9	MODESTO		SHALE	6.6	79.0	
276.3	MODESTO		COAL	0.7	85.6	
275.6	MODESTO		UNDERCLAY	0.8	86.3	
274.9	MODESTO		SHALE	4.0	87.0	
270.9	MODESTO		SHALY SANDSTONE	9.0	91.0	
261.9	MODESTO		SHALE	12.0	100.0	
249.9	MODESTO	PIASA	WHITE LIMESTONE	4.0	112.0	
245.9	MODESTO		SHALE	16.0	116.0	LIMESTONE NOTED
229.9	MODESTO		SHALE	27.0	132.0	
202.9	MODESTO		DARK SHALE	3.6	159.0	
199.3	CARBONDALE	DANVILLE	PYRITE	0.1	162.6	BAND
199.2	CARBONDALE	DANVILLE	COAL	1.5	162.7	
197.7	CARBONDALE		SANDY SHALE	15.8	164.2	
181.9	CARBONDALE	ALLENBY	COAL	0.4	180.0	SILTY
181.5	CARBONDALE	ALLENBY	SHALE	3.6	180.4	
177.9	CARBONDALE	ALLENBY	COAL	0.3	184.0	SILTY
177.6	CARBONDALE		UNDERCLAY	2.7	184.3	
174.9	CARBONDALE		SHALE	4.0	187.0	
170.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	191.0	
164.9	CARBONDALE	BANKSTON FORK	SHALE	1.0	197.0	
163.9	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	198.0	
161.9	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	200.0	
158.9	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	8.0	203.0	
150.9	CARBONDALE		SHALE	4.0	211.0	
146.9	CARBONDALE		BLUE LIMESTONE	5.0	215.0	
141.9	CARBONDALE	ANNA	SHALE	1.7	220.0	
140.2	CARBONDALE	HERRIN	COAL	3.3	221.7	
136.9	CARBONDALE	HERRIN	SHALE	0.1	225.0	SHALE PARTING
136.8	CARBONDALE	HERRIN	COAL	0.9	225.1	
135.9	CARBONDALE	HERRIN	SHALE	0.0	226.0	SHALE PARTING
135.9	CARBONDALE	HERRIN	COAL	0.3	226.0	
135.6	CARBONDALE		UNDERCLAY	3.4	226.3	
132.1	CARBONDALE		SHALY SANDSTONE	10.3	229.8	
121.9	CARBONDALE		SANDY SHALE	23.0	240.0	
98.9	CARBONDALE		SANDY SHALE	11.0	263.0	

87.9	CARBONDALE		SHALE	3.8	274.0	
84.1	CARBONDALE	BRIAR HILL	COAL	1.5	277.8	
82.6	CARBONDALE		SANDY SHALE	19.8	279.3	
62.9	CARBONDALE		SANDSTONE	5.0	299.0	
57.9	CARBONDALE		SHALY SANDSTONE	12.0	304.0	
45.9	CARBONDALE		GRAY SANDSTONE	5.0	316.0	
40.9	CARBONDALE		SHALE	14.0	321.0	
26.9	CARBONDALE		DARK SHALE	1.0	335.0	
25.9	CARBONDALE	ST. DAVID	BLUE LIMESTONE	1.0	336.0	
24.9	CARBONDALE		SHALE	4.6	337.0	
20.3	CARBONDALE	SPRINGFIELD	COAL	1.3	341.6	
19.1	CARBONDALE	SPRINGFIELD	PYRITE	0.0	342.8	
19.0	CARBONDALE	SPRINGFIELD	COAL	2.0	342.9	
17.0	CARBONDALE	SPRINGFIELD	PYRITE	0.0	344.9	
16.9	CARBONDALE	SPRINGFIELD	COAL	2.4	345.0	
14.5	CARBONDALE	SPRINGFIELD	BONE COAL	0.1	347.4	
14.4	CARBONDALE		SHALE	0.1	347.5	BITUMINOUS
14.4	CARBONDALE		UNDERCLAY	1.5	347.5	HARD

MAPID: 05900009000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.354526 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.821394 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 361.9 **LOGGED (FT.):** 3619.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR F K0104 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
139.9	CARBONDALE	HERRIN	COAL	4.5	222.0	
19.9	CARBONDALE	SPRINGFIELD	COAL	5.8	342.0	

MAPID: 05903401000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.345214 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.830839 **DATE COLLECTED:** 6 / 0 / 1969

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log

SOURCE: JUNIPER OIL & GAS CO, BURNETT-OVERTON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	470.0	
-126.0	CARBONDALE	SURVANT	COAL	2.0	500.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	569.0	
-244.0	CARBONDALE	DEKOVEN	COAL	3.0	618.0	
-266.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	640.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-284.0	CARBONDALE	DAVIS	COAL	4.0	658.0	
-316.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	690.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-324.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	698.0	
-358.0	TRADEWATER	MT. RORAH	COAL	2.0	732.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903401000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.345214 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.830839 **DATE COLLECTED:** 6 / 0 / 1969

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1610.0 **LOG TYPE:** Electric Log

SOURCE: JUNIPER OIL & GAS CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1236.0	BASE OF PENN.		UNCLASSIFIED	-	1610.0	

MAPID: 05903495000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.342724 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.830938 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 240.4 **LOG TYPE:** Survey Core Study
SOURCE: TRUAX-TRAER COAL CO 14-SH **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
185.7	CARBONDALE	DANVILLE	COAL	1.5	174.3	
184.2	CARBONDALE		SHALE & SANDSTONE	18.8	175.8	
165.3	CARBONDALE	ALLENBY	COAL	0.5	194.7	
164.8	CARBONDALE		SHALE & SANDSTONE	6.0	195.2	
158.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	201.2	
153.7	CARBONDALE	LAWSON	GRAY SHALE	0.5	206.3	
153.2	CARBONDALE	LAWSON	SILTY SHALE	23.1	206.8	
130.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.8	230.0	
129.2	CARBONDALE	BRERETON	LIMESTONE	4.8	230.8	
124.4	CARBONDALE	ANNA	GRAY SHALE	0.4	235.6	
124.0	CARBONDALE	HERRIN	COAL	4.4	236.0	

MAPID: 05900101000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373006 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.832579 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 4120.0 **LOG TYPE:** Drillers Log
SOURCE: PARKER C V, MOSEBY **WELL TYPE:** Oil and Gas Test
COMMENT:

MAPID: 05901762000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366087 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.830747 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1608.0 **LOG TYPE:** Electric Log
SOURCE: PARTLOW & COCHONOUR **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1229.0	BASE OF PENN.		UNCLASSIFIED	-	1608.0	

MAPID: 05901762000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366087 **GEOLOGIST:** BRISTOL
CONFIDENTIAL: N **LATITUDE:** 37.830747 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2888.0 **LOG TYPE:**
SOURCE: PARTLOW & COCHONOUR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
-15.0	CARBONDALE	SPRINGFIELD	COAL	-	394.0	
-179.0	CARBONDALE	COLCHESTER	COAL	-	558.0	
-1239.0	BASE OF PENN.		UNCLASSIFIED	-	1618.0	
-1383.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1762.0	
-1690.0		BASE L. MENARD	UNCLASSIFIED	-	2069.0	
-2127.0		BASE BARLOW	LIMESTONE	-	2506.0	
-2509.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2888.0	

MAPID: 05901762000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366087 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.830747 **DATE COLLECTED:** 8 / 0 / 1955
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3035.0 **LOG TYPE:** Electric Log
SOURCE: PARTLOW & COCHONOUR, COX P C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-91.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	470.0	
-126.0	CARBONDALE	SURVANT	COAL	2.0	505.0	
-181.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-226.0	CARBONDALE	DEKOVEN	COAL	3.0	605.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	634.0	66 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	4.0	643.0	
-297.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	676.0	
-303.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	682.0	
-325.0	TRADEWATER	MT. RORAH	COAL	1.2	704.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902170000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 396' S line, 0' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369515 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.829 **DATE COLLECTED:** 9 / 7 / 1957

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 392.7 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 31 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	24.0	0.0	SAND AND GRAVEL
366.0	MODESTO		SILTSTONE	0.8	24.0	MEDIUM GRAY
365.2	MODESTO		COAL	0.1	24.8	1/2 "
365.1	MODESTO		SHALE	1.5	24.9	MEDIUM TO DARK GRAY
363.7	MODESTO		SANDSTONE	10.4	26.3	LIMESTONE NODULES; BLACK SHALE STREAKS
353.2	MODESTO		SILTSTONE	15.3	36.8	MEDIUM GRAY
338.0	MODESTO		GRAY SHALE	9.0	52.0	
329.0	MODESTO		SHALE	11.8	61.0	DARK GRAY
317.2	MODESTO		GRAY LIMESTONE	4.3	72.8	
312.8	MODESTO		LIMESTONE	0.5	77.2	PYRITE
312.3	MODESTO		SANDSTONE	4.8	77.7	PYRITE; LIGHT GRAY TO WHITE
307.5	MODESTO		SHALE	6.8	82.5	DARK GRAY
300.7	MODESTO		SILTSTONE	1.8	89.3	
298.8	MODESTO		SHALE	0.1	91.2	SOFT HACKLY; MEDIUM GRAY
298.7	MODESTO		SANDSTONE	2.5	91.3	SILSTSONE LAMINAE; LIGHT GRAY TO WHITE
296.2	MODESTO		SILTSTONE	0.7	93.8	LIGHT GRAY
295.6	MODESTO		SILTY SANDSTONE	1.0	94.4	LIGHT GRAY TO WHITE
294.6	MODESTO		SILTSTONE	1.2	95.4	SHALY; LIGHT TO MEDIUM GRAY
293.4	MODESTO		WHITE SANDSTONE	0.3	96.6	
293.1	MODESTO		SILTY SANDSTONE	3.9	96.9	WHITE
289.2	MODESTO		SHALE	27.7	100.8	MEDUIM TO DARK GRAY
261.5	MODESTO		COAL	0.5	128.5	BROKEN
261.0	MODESTO		UNDERCLAY	1.8	129.0	GRAY
259.2	MODESTO		SILTSTONE	9.3	130.8	MEDIUM GRAY
249.9	MODESTO		SANDSTONE	0.6	140.1	SILSTSONE LAMINAE; LIGHT GRAY TO WHITE
249.3	MODESTO		SILTSTONE	0.3	140.7	SANDSTONE LAMINAE; MED GRAY
249.0	MODESTO		SANDSTONE	1.3	141.0	THIN SILTSTONE LAMINAE; WHITE
247.7	MODESTO		SILTSTONE	1.7	142.3	MEDIUM GRAY
246.0	MODESTO		SHALE	0.3	144.0	DARK GRAY
245.7	MODESTO		SHALE	4.7	144.3	MEDIUM GRAY
241.0	MODESTO		SHALE	4.1	149.0	DARK GRAY
236.9	MODESTO		LIMESTONE	0.1	153.1	LIGHT GRAY TO WHITE
236.8	MODESTO		SHALE	1.8	153.2	MEDUIM TO DARK GRAY
235.1	MODESTO		SHALE	0.3	154.9	
234.7	MODESTO		UNDERCLAY	0.2	155.3	DARK GRAY
234.6	MODESTO		SHALE	1.8	155.4	
232.7	MODESTO	PIASA	LIMESTONE	0.2	157.3	SHALY ALONG SLICKENSIDED SURFACES
232.6	MODESTO	PIASA	SHALE	0.2	157.4	

232.4	MODESTO	PIASA	LIMESTONE	2.2	157.6	HARD DENSE CALCAREOUS; LIGHT GRAY GREEN
230.2	MODESTO	PIASA	SHALY LIMESTONE	8.1	159.8	BROWN AND RED ALONG PARTING; LIGHT GRAY
222.2	MODESTO	PIASA	LIMESTONE	2.3	167.8	LIGHT GRAY GREEN
219.8	MODESTO		SHALE	0.4	170.2	DARK GRAY BROWN
219.4	MODESTO		SHALE	1.6	170.6	
217.8	MODESTO		SHALE	2.0	172.2	
215.8	MODESTO		SHALE	27.3	174.2	
188.5	MODESTO		SHALE	6.8	201.5	CARBONACEOUS FISSILE
181.7	CARBONDALE	DANVILLE	COAL	1.5	208.3	
180.2	CARBONDALE		GRAY SILTSTONE	3.0	209.8	
177.2	CARBONDALE		SILTY SANDSTONE	1.4	212.8	WHITE TO MEDIUM GRAY
175.7	CARBONDALE		SHALE	9.6	214.3	DARK GRAY
166.2	CARBONDALE	ALLENBY	BONE COAL	0.6	223.8	
165.6	CARBONDALE		UNDERCLAY	4.3	224.4	MEDIUM GRAY
161.3	CARBONDALE		CLAYSTONE	0.3	228.7	
161.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	229.0	VERY HARD; LIGHT GRAY GREEN
155.7	CARBONDALE		GRAY SHALE	3.2	234.3	
152.6	CARBONDALE		SHALE	23.7	237.4	MEDIUM TO DARK GRAY
128.9	CARBONDALE	BRERETON	LIMESTONE	0.5	261.1	DARK GRAY TO BLACK
128.4	CARBONDALE	BRERETON	SHALE	0.2	261.6	
128.2	CARBONDALE	BRERETON	LIMESTONE	3.4	261.8	HARD VERTICAL CALCITE; DARK
124.8	CARBONDALE	ANNA	SHALE	0.8	265.2	FISSILE
124.0	CARBONDALE	HERRIN	COAL	4.2	266.0	
119.8	CARBONDALE		UNDERCLAY	4.2	270.2	MEDIUM GRAY
115.7	CARBONDALE		SILTSTONE	6.0	274.3	MEDIUM GRAY
109.7	CARBONDALE		SANDSTONE	10.8	280.3	MICACEOUS; LIGHT GRAY TO WHITE
98.9	CARBONDALE		SILTSTONE	5.9	291.1	LIGHT GRAY
93.0	CARBONDALE		SHALE	6.5	297.0	HARD SANDSTONE STREAKS; GRAY
86.5	CARBONDALE		GRAY SHALE	17.0	303.5	
69.5	CARBONDALE		GRAY SHALE	5.6	320.5	
63.9	CARBONDALE		LIMESTONE	0.4	326.1	DARK GRAY TO BLACK
63.5	CARBONDALE	BRIAR HILL	COAL	1.7	326.5	
61.8	CARBONDALE		SILTSTONE	1.2	328.2	MEDIUM GRAY
60.7	CARBONDALE		SHALE	0.1	329.3	"SOOTY"
60.6	CARBONDALE		GRAY SHALE	0.8	329.4	
59.7	CARBONDALE		SHALE	1.3	330.3	HARD SILTY MICACEOUS; MED GRAY
58.5	CARBONDALE		SHALE & SANDSTONE	2.0	331.5	LAMND
56.5	CARBONDALE		SANDSTONE	2.8	333.5	CARBON PARTINGS; LIGHT GRAY WHITE
53.7	CARBONDALE		SHALE	0.6	336.3	BLACK AND WHITE SANDSTONE LAMINAE
53.2	CARBONDALE		SANDSTONE	7.8	336.8	LIGHT GRAY TO WHITE
45.3	CARBONDALE		SHALE	3.3	344.7	DARK GRAY
42.1	CARBONDALE		GRAY SILTSTONE	5.1	347.9	
37.0	CARBONDALE		SILTSTONE	5.4	353.0	MEDIUM GRAY
31.6	CARBONDALE		SHALE	19.9	358.4	DARK GRAY
11.7	CARBONDALE	ST. DAVID	LIMESTONE	0.2	378.3	
11.5	CARBONDALE	ST. DAVID	SHALE	0.6	378.5	

10.9	CARBONDALE	ST. DAVID	LIMESTONE	0.4	379.1	HARD PYRITE AND FOSSILIFEROUS; BLACK
10.5	CARBONDALE	TURNER MINE	SHALE	2.0	379.5	FISSILE
8.5	CARBONDALE	TURNER MINE	SHALE	1.7	381.5	FISSILE
6.8	CARBONDALE	SPRINGFIELD	COAL	5.1	383.2	
1.7	CARBONDALE		SILTSTONE	4.4	388.3	

MAPID: 05902812000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.359143 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.823273 **DATE COLLECTED:** 8 / 0 / 1962

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3007.0 **LOG TYPE:** Electric Log

SOURCE: IL BASIN OIL ASSOC., MCCORMICK WM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-44.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	418.0	
-68.0	CARBONDALE	SURVANT	COAL	1.3	442.0	
-146.0	CARBONDALE	COLCHESTER	COAL	0.5	520.0	
-196.0	CARBONDALE	DEKOVEN	COAL	3.0	570.0	
-216.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	590.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-236.0	CARBONDALE	DAVIS	COAL	4.0	610.0	
-271.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	645.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-276.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	650.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924038000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.361474 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828835 **DATE COLLECTED:** 1 / 6 / 1981

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: BEESON, RICHARD W., COX #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	2.0	448.0	
-91.0	CARBONDALE	SURVANT	COAL	2.0	470.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	549.0	
-211.0	CARBONDALE	DEKOVEN	COAL	4.0	590.0	
-234.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	613.0	
-252.0	CARBONDALE	DAVIS	COAL	4.0	631.0	
-291.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	
-295.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	674.0	
-313.0	TRADEWATER	MT. RORAH	COAL	2.5	692.0	

MAPID: 05901091000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364822 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.813139 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 364.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 28 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.0			NO RECORD	22.0	0.0	
373.0	MODESTO		BROWN SHALE	5.0	22.0	
368.0	MODESTO		SOFT SHALE	3.3	27.0	
364.7	MODESTO		DARK SHALE	20.1	30.3	
344.6	MODESTO		SHALE WITH LIMESTONE	4.0	50.4	
340.6	MODESTO		SHALY SANDSTONE	5.1	54.4	GRAY
335.5	MODESTO		SHALE	10.0	59.5	
325.5	MODESTO		GRAY SANDSTONE	3.1	69.5	
322.4	MODESTO		SANDY SHALE	9.5	72.6	
312.9	MODESTO		DARK SHALE	11.8	82.1	
301.2	MODESTO		SHALE	1.0	93.8	
300.2	MODESTO		DARK SHALE	7.2	94.8	
293.0	MODESTO		SHALE	2.2	102.0	
290.8	MODESTO		COAL	0.6	104.2	
290.2	MODESTO		SHALE	2.3	104.8	
288.0	MODESTO		SANDY SHALE	4.7	107.0	
283.3	MODESTO		BLUE SHALE	16.2	111.7	
267.2	MODESTO		DARK SHALE	1.0	127.8	
266.2	MODESTO		BLUE SHALE	4.3	128.8	
261.8	MODESTO	PIASA	LIMESTONE	2.4	133.2	
259.4	MODESTO		BLUE SHALE	7.8	135.6	
251.6	MODESTO		DARK SHALE	1.0	143.4	
250.6	MODESTO		SHALE	2.8	144.4	
247.8	MODESTO		DARK SHALE	4.3	147.2	
243.5	MODESTO		SHALE	10.3	151.5	
233.2	MODESTO		DARK SHALE	7.9	161.8	
225.3	MODESTO		SHALE	17.1	169.7	
208.2	CARBONDALE	DANVILLE	COAL	2.2	186.8	
206.0	CARBONDALE		DARK SHALE	0.5	189.0	
205.5	CARBONDALE		SHALE	2.3	189.5	
203.2	CARBONDALE		DARK SHALE	7.0	191.8	
196.2	CARBONDALE	ALLENBY	COAL	0.3	198.8	
195.9	CARBONDALE	ALLENBY	DARK SHALE	2.2	199.1	
193.7	CARBONDALE	ALLENBY	BONE COAL	0.3	201.3	
193.4	CARBONDALE		SOFT SHALE	1.8	201.6	
191.7	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	7.1	203.3	
184.6	CARBONDALE		BLUE SHALE	2.0	210.4	
182.6	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	15.6	212.4	GRAY
167.0	CARBONDALE		DARK SHALE	8.8	228.0	

158.2	CARBONDALE	BRERETON	LIMESTONE	5.0	236.8	
153.2	CARBONDALE	ANNA	SHALE	2.4	241.8	
150.8	CARBONDALE	HERRIN	COAL	3.0	244.2	
147.8	CARBONDALE	HERRIN	SHALE	0.2	247.2	
147.6	CARBONDALE	HERRIN	COAL	1.2	247.4	
146.4	CARBONDALE		BLUE SHALE	2.0	248.6	
144.4	CARBONDALE		SANDY SHALE	13.6	250.6	
130.8	CARBONDALE		DARK SHALE	33.5	264.2	
97.3	CARBONDALE	BRIAR HILL	COAL	1.5	297.7	
95.8	CARBONDALE		SHALE	1.0	299.2	
94.8	CARBONDALE		SHALY SANDSTONE	31.6	300.2	GRAY
63.2	CARBONDALE		DARK SHALE	22.2	331.8	
41.1	CARBONDALE		SHALE	3.4	353.9	
37.7	CARBONDALE	SPRINGFIELD	COAL	4.3	357.3	
33.3	CARBONDALE		SHALE	2.3	361.7	

MAPID: 05901091000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364822 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813139 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 248.4 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
208.8	CARBONDALE	DANVILLE	COAL	2.3	186.2	
206.5	CARBONDALE		SILTY SHALE	9.3	188.5	
197.2	CARBONDALE	ALLENBY	BONE COAL	2.9	197.8	
194.3	CARBONDALE		CLAYSTONE	1.8	200.7	
192.5	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	6.8	202.5	
185.7	CARBONDALE	LAWSON	GRAY SHALE	2.0	209.3	
183.7	CARBONDALE	LAWSON	SILTSTONE	5.5	211.3	
178.2	CARBONDALE	LAWSON	SANDSTONE	9.6	216.8	
168.6	CARBONDALE	LAWSON	SILTSTONE	4.0	226.4	
164.6	CARBONDALE	LAWSON	GRAY SHALE	5.6	230.4	
159.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	5.6	236.0	
153.4	CARBONDALE	ANNA	BLACK SHALE	2.4	241.6	
151.0	CARBONDALE	HERRIN	COAL	4.4	244.0	

MAPID: 05901196000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363649 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.80677 **DATE COLLECTED:** 10 / 0 / 1973

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1581.0 **LOG TYPE:** Electric Log

SOURCE: RUDY JOHN W EST **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1210.0	BASE OF PENN.		UNCLASSIFIED	-	1581.0	

MAPID: 05901196000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363649 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.80677 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2889.0 **LOG TYPE:**

SOURCE: RUDY JOHN W EST **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
51.0	CARBONDALE	SPRINGFIELD	COAL	-	320.0	
-129.0	CARBONDALE	COLCHESTER	COAL	-	500.0	
-1219.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	
-1370.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1741.0	
-1684.0		BASE L. MENARD	UNCLASSIFIED	-	2055.0	
-2127.0		BASE BARLOW	LIMESTONE	-	2498.0	
-2518.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2889.0	

MAPID: 05901196000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363649 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80677 **DATE COLLECTED:** 10 / 0 / 1973
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log
SOURCE: RUDY JOHN W EST, OLDHAM C I **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-34.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	405.0	
-64.0	CARBONDALE	SURVANT	COAL	1.3	435.0	
-131.0	CARBONDALE	COLCHESTER	COAL	0.5	502.0	
-179.0	CARBONDALE	DEKOVEN	COAL	2.8	550.0	
-201.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	572.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-218.0	CARBONDALE	DAVIS	COAL	3.0	589.0	
-259.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	630.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-269.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	640.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05923783000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.372833 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.815836 **DATE COLLECTED:** 5 / 0 / 1972
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3042.0 **LOG TYPE:** Electric Log
SOURCE: SCHOONMAKER, GEORGE C., TUTTLE WARREN D **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	420.0	
-141.0	CARBONDALE	COLCHESTER	COAL	0.5	512.0	
-189.0	CARBONDALE	DEKOVEN	COAL	2.0	560.0	
-204.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	575.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-229.0	CARBONDALE	DAVIS	COAL	4.0	600.0	
-264.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	635.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-276.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	647.0	
-314.0	TRADEWATER	MT. RORAH	COAL	1.8	685.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900161000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.347493 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.819617 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3850.0 **LOG TYPE:**
SOURCE: EXCHNGE OC, EVANS O 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
130.0	CARBONDALE	HERRIN	COAL	3.0	255.0	
14.0	CARBONDALE	SPRINGFIELD	COAL	4.0	371.0	CORRELATION UNCERTAIN

MAPID: 05900633000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.34986 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.8196 **DATE COLLECTED:** 5 / 0 / 1949
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 1616.0 **LOG TYPE:** Electric Log
SOURCE: LEATHERS EDGAR **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1228.0	BASE OF PENN.		UNCLASSIFIED	-	1616.0	

MAPID: 05902478000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' S line, 1650' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.342745 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.808576 **DATE COLLECTED:** 10 / 0 / 1959
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1922.0 **LOG TYPE:** Electric Log
SOURCE: KENDALL & DAVIS DRLG., MCCORMICK HUGH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-110.0	CARBONDALE	SURVANT	COAL	0.8	485.0	
-165.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-217.0	CARBONDALE	DEKOVEN	COAL	3.0	592.0	
-239.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	614.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	95% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-305.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	680.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902478000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' S line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.342745 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.808576 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 251.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
185.0	CARBONDALE	DANVILLE	COAL	1.0	190.0	
184.0	CARBONDALE		SILTY SHALE	36.0	191.0	
148.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	227.0	
145.0	CARBONDALE	LAWSON	GRAY SHALE	11.0	230.0	
134.0	CARBONDALE	BRERETON	LIMESTONE	5.0	241.0	
129.0	CARBONDALE	ANNA	BLACK SHALE	2.0	246.0	
127.0	CARBONDALE	HERRIN	COAL	3.0	248.0	

MAPID: 05900634000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319372 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.816031 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2991.0 **LOG TYPE:** Electric Log

SOURCE: LOGAN H L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
203.0	CARBONDALE	DANVILLE	COAL	-	184.0	
172.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	215.0	
160.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	23.0	227.0	
131.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
115.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	8.0	272.0	
74.0	CARBONDALE	BRIAR HILL	COAL	-	313.0	
9.0	CARBONDALE	SPRINGFIELD	COAL	4.0	378.0	BLACK SHALE ROOF
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	-	442.0	

MAPID: 05902023000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319353 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.819714 **DATE COLLECTED:** 10 / 0 / 1956

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2882.0 **LOG TYPE:** Electric Log

SOURCE: ERVIN DRILLING CO., LOGAN H L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-69.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	444.0	
-169.0	CARBONDALE	COLCHESTER	COAL	0.5	544.0	
-208.0	CARBONDALE	DEKOVEN	COAL	3.0	583.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-255.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-300.0	TRADEWATER	STONEFORT	LIMESTONE	7.0	675.0	
-330.0	TRADEWATER	MT. RORAH	COAL	2.0	705.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902169000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1550' N line, 900' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321354 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.816347 **DATE COLLECTED:** 10 / 24 / 1957

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 392.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 32 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	30.5	0.0	STARTED CORING
354.5	MODESTO		SANDSTONE	3.8	30.5	LIGHT GRAY
350.7	MODESTO		SHALE	7.0	34.3	MEDUIM TO DARK GRAY
343.7	MODESTO		SHALE	3.0	41.3	THINLY BEDDED HARD; MEDIUM GRAY
340.7	MODESTO		SHALE	4.5	44.3	MEDUIM TO DARK GRAY
336.2	MODESTO		NO RECORD	4.3	48.8	ADJUSTED FOR MARKER
332.0	MODESTO		SHALE	18.5	53.0	MEDIUM GRAY
313.5	MODESTO		SHALE	0.3	71.5	SOFT HACKLY; MEDIUM GRAY
313.2	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	71.8	LIGHT GRAY BROWN
309.2	MODESTO	WEST FRANKLIN	LIMESTONE	0.6	75.8	LIGHT GRAY BROWN
308.7	MODESTO		SILTSTONE	0.4	76.3	CALCAREOUS SANDY LAMINAE; GRAY
308.2	MODESTO		SANDSTONE	0.4	76.8	CALCAREOUS; LIGHT GRAY
307.8	MODESTO		SHALE & SANDSTONE	4.8	77.2	
303.1	MODESTO		SHALE	6.1	81.9	LIGHT GRAY
297.0	MODESTO		COAL	0.3	88.0	
296.7	MODESTO		UNDERCLAY	1.0	88.3	DARK GRAY
295.7	MODESTO		NO RECORD	1.4	89.3	ADJUSTED FOR MARKER
294.3	MODESTO		SHALE	0.6	90.7	MEDIUM GRAY
293.7	MODESTO		SANDSTONE	5.8	91.3	LIGHT GRAY
288.0	MODESTO		GRAY SILTSTONE	0.8	97.0	
287.2	MODESTO		SANDSTONE	6.3	97.8	LIGHT GRAY
280.9	MODESTO		SHALE	2.4	104.1	DARK GRAY
278.5	MODESTO		SHALE	0.1	106.5	DARK GRAY
278.4	MODESTO		SHALE	0.9	106.6	MEDUIM TO DARK GRAY
277.5	MODESTO		SHALE	2.4	107.5	MEDIUM GRAY
275.1	MODESTO		SILTSTONE	8.0	109.9	MEDIUM GRAY
267.1	MODESTO		SILTSTONE	0.8	117.9	THINLY BEDDED; MEDIUM GRAY
266.2	MODESTO		SHALE	8.8	118.8	MEDUIM TO DARK GRAY
257.5	MODESTO		SHALE	6.8	127.5	MEDUIM TO DARK GRAY
250.7	MODESTO		LIMESTONE	0.3	134.3	THINLY BEDDED HARD
250.4	MODESTO		LIMESTONE	0.3	134.6	HARD; DARK GRAY
250.2	MODESTO		SHALE	1.3	134.8	MEDUIM TO DARK GRAY
248.8	MODESTO		COAL	1.1	136.2	
247.7	MODESTO		SHALE	6.8	137.3	MEDUIM TO DARK GRAY
240.9	MODESTO		NO RECORD	1.9	144.1	ADJUSTED FOR MARKER
239.0	MODESTO		SHALE	6.0	146.0	MEDUIM TO DARK GRAY
233.0	MODESTO		CLAYSTONE	0.9	152.0	LIGHT GRAY

232.1	MODESTO		SHALE	6.1	152.9	MEDIUM TO DARK GRAY
226.0	MODESTO		SHALE	19.0	159.0	MEDIUM GRAY
207.0	MODESTO		SHALE	15.3	178.0	MEDIUM GRAY
191.7	MODESTO		LIMESTONE	0.2	193.3	FISSILE; DARK GRAY TO BLACK
191.5	CARBONDALE	DANVILLE	COAL	1.6	193.5	
189.9	CARBONDALE		SILTSTONE	0.9	195.1	MEDIUM GRAY
189.0	CARBONDALE		SILTSTONE	1.7	196.0	HARD MICACEOUS; MEDIUM GRAY
187.3	CARBONDALE		VARRIGATED SHALE	0.6	197.7	FAIRLY HARD
186.7	CARBONDALE		SANDSTONE	0.4	198.3	HARD MICACEOUS; LIGHT GRAY
186.3	CARBONDALE		SILTSTONE	2.2	198.7	MEDIUM GRAY
184.2	CARBONDALE		GRAY SHALE	1.3	200.8	
182.8	CARBONDALE		SHALE	2.3	202.2	MEDUIM TO DARK GRAY
180.6	CARBONDALE		SILTSTONE	0.6	204.4	HARD MICACEOUS; LIGHT GRAY
180.0	CARBONDALE		SANDSTONE	7.0	205.0	VERY FINE; LAMINATED; LIGHT GRAY
173.0	CARBONDALE		SILTSTONE	1.0	212.0	MEDIUM GRAY
172.0	CARBONDALE		SHALE	1.3	213.0	MEDIUM GRAY
170.7	CARBONDALE		SHALE	1.9	214.3	HARD; MEDIUM GRAY
168.8	CARBONDALE		SHALE	1.1	216.2	SOFT HACKLY; DARK GRAY
167.7	CARBONDALE		VARRIGATED SHALE	2.9	217.3	HARD CALCAREOUS SANDSTONE AT BASE
164.8	CARBONDALE	ALLENBY	COAL	0.7	220.2	
164.2	CARBONDALE		UNDERCLAY	0.3	220.8	
163.8	CARBONDALE	BANKSTON FORK	LIMESTONE	2.3	221.2	MEDIUM GRAY
161.6	CARBONDALE	BANKSTON FORK	LIMESTONE	1.4	223.4	LIGHT GRAY
160.2	CARBONDALE		SHALE	0.4	224.8	MEDIUM TO DARK GRAY
159.7	CARBONDALE		SHALE	4.8	225.3	LIGHT GRAY
154.9	CARBONDALE	ANVIL ROCK	SANDSTONE	2.9	230.1	MARKER AT 233'; LIGHT GRAY
152.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	233.0	MARKER AT 251'; LIGHT GRAY
134.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.4	251.0	CALCAREOUS IN BOTTOM 2"; LIGHT GRAY
124.6	CARBONDALE	BRERETON	LIMESTONE	2.5	260.4	HARD; GRAY
122.1	CARBONDALE		SHALE	0.3	262.9	HARD DENSE CALCAREOUS
121.8	CARBONDALE		VARRIGATED SHALE	0.7	263.2	DARK GRAY SHALE MARKER AT 265'
121.2	CARBONDALE		NO RECORD	1.2	263.8	ADJUSTED FOR MARKER
120.0	CARBONDALE	HERRIN	COAL	4.2	265.0	
115.8	CARBONDALE		UNDERCLAY	0.2	269.2	MEDIUM GRAY
115.7	CARBONDALE		UNDERCLAY	3.5	269.3	MEDIUM GRAY
112.2	CARBONDALE		GRAY SHALE	7.8	272.8	
104.3	CARBONDALE		GRAY SILTSTONE	1.7	280.7	
102.7	CARBONDALE		SANDSTONE	3.7	282.3	MICACEOUS SHALY LAMINAE MARKER 286'
99.0	CARBONDALE		SANDSTONE	0.4	286.0	MICACEOUS FINE SHALY LAMINAE MARKER 286'
98.6	CARBONDALE		SILTSTONE	12.0	286.4	MEDIUM GRAY
86.6	CARBONDALE		SILTY SHALE	5.8	298.4	
80.8	CARBONDALE		GRAY SILTSTONE	11.4	304.2	
69.4	CARBONDALE		SHALE	6.0	315.6	DARK GRAY
63.4	CARBONDALE	BRIAR HILL	COAL	0.6	321.6	
62.8	CARBONDALE		NO RECORD	-0.7	322.2	ADJUSTED FOR MARKER
63.5	CARBONDALE	BRIAR HILL	COAL	0.5	321.5	

63.0	CARBONDALE		SHALE	0.9	322.0	
62.1	CARBONDALE		SILTSTONE	3.0	322.9	GRAY TO BLACK
59.1	CARBONDALE		SILTSTONE/SANDSTONE	2.5	325.9	GRAY
56.6	CARBONDALE		SILTSTONE	4.0	328.4	GRAY TO BLACK
52.6	CARBONDALE		GRAY SANDSTONE	5.5	332.4	
47.1	CARBONDALE		SHALE	0.8	337.9	
46.2	CARBONDALE		GRAY SANDSTONE	1.3	338.8	
45.0	CARBONDALE		SANDSTONE	2.0	340.0	
43.0	CARBONDALE		GRAY SILTSTONE	14.5	342.0	
28.5	CARBONDALE		NO RECORD	1.8	356.5	ADJUSTED FOR MARKER
26.7	CARBONDALE		SILTSTONE	16.8	358.3	
10.0	CARBONDALE		SHALE	5.3	375.0	
4.7	CARBONDALE		SHALE	0.8	380.3	
3.9	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.3	381.1	
3.7	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.4	381.3	
3.2	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.0	381.8	
2.2	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.3	382.8	
2.0	CARBONDALE	TURNER MINE	SHALE	2.8	383.0	
-0.8	CARBONDALE	TURNER MINE	SHALE	0.1	385.8	
-0.8	CARBONDALE	SPRINGFIELD	COAL	4.7	385.8	
-5.5	CARBONDALE		SHALE	1.5	390.5	

MAPID: 05902169000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1550' N line, 900' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321354 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.816347 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 269.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
194.1	CARBONDALE	DANVILLE	COAL	1.6	190.9	
192.5	CARBONDALE		SHALE & SANDSTONE	27.7	192.5	
164.8	CARBONDALE	ALLENBY	COAL	0.7	220.2	
164.2	CARBONDALE		CLAYSTONE	0.3	220.8	
163.8	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	3.7	221.2	
160.2	CARBONDALE	LAWSON	GRAY SHALE	0.4	224.8	
159.7	CARBONDALE	LAWSON	CALCAREOUS SHALE	4.8	225.3	
154.9	CARBONDALE	LAWSON	CARBONACEOUS LIMESTONE	30.3	230.1	
124.6	CARBONDALE	BRERETON	LIMESTONE	2.5	260.4	
122.1	CARBONDALE	ANNA	BLACK SHALE	2.1	262.9	
120.0	CARBONDALE	HERRIN	COAL	4.3	265.0	

MAPID: 05902247000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326438 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.817852 **DATE COLLECTED:** 5 / 0 / 1958

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1606.0 **LOG TYPE:** Electric Log

SOURCE: SMITH, HENRY P. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1219.0	BASE OF PENN.		UNCLASSIFIED	-	1606.0	

MAPID: 05902279000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326447 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81603 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2858.0 **LOG TYPE:** Electric Log

SOURCE: TRI-STATE DRLG, REISINGER 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-68.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-163.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.8	586.0	
-233.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-256.0	CARBONDALE	DAVIS	COAL	3.5	633.0	
-293.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	670.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-303.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	680.0	
-323.0	TRADEWATER	MT. RORAH	COAL	1.2	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901713000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317065 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.817866 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2789.0 **LOG TYPE:** Electric Log

SOURCE: ERVIN DRILLING CO., LOGAN H L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	442.0	
-104.0	CARBONDALE	SURVANT	COAL	2.0	480.0	
-159.0	CARBONDALE	COLCHESTER	COAL	0.5	535.0	
-204.0	CARBONDALE	DEKOVEN	COAL	3.0	580.0	
-227.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	603.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-247.0	CARBONDALE	DAVIS	COAL	4.0	623.0	
-284.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	660.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-294.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	670.0	
-319.0	TRADEWATER	MT. RORAH	COAL	2.0	695.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901713000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317065 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.817866 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: ERVIN DRILLING CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1204.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05901763000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 990' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.314762 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.81975 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 363.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
177.5	CARBONDALE	DANVILLE	COAL	1.0	185.5	
176.5	CARBONDALE		SHALE & SANDSTONE	27.0	186.5	
149.5	CARBONDALE	ALLENBY	COAL	0.5	213.5	
149.0	CARBONDALE		CLAYSTONE & SHALE	3.5	214.0	
145.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	217.5	
143.0	CARBONDALE	LAWSON	SILTY SHALE	23.0	220.0	
120.0	CARBONDALE	BRERETON	LIMESTONE	4.0	243.0	
116.0	CARBONDALE	ANNA	BLACK SHALE	2.0	247.0	
114.0	CARBONDALE	HERRIN	COAL	3.0	249.0	

MAPID: 05901809000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312492 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.819776 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2839.0 **LOG TYPE:** Electric Log
SOURCE: ERVIN DRILLING CO., LOGAN H L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-84.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-119.0	CARBONDALE	SURVANT	COAL	2.0	480.0	
-179.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-219.0	CARBONDALE	DEKOVEN	COAL	3.0	580.0	
-244.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	605.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-264.0	CARBONDALE	DAVIS	COAL	4.0	625.0	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	663.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-309.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	670.0	
-339.0	TRADEWATER	MT. RORAH	COAL	1.8	700.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902472000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317112 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.814183 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 2896.0 **LOG TYPE:** Electric Log

SOURCE: TRI-STATE DRLG, LOGAN H L 1-C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-98.0	CARBONDALE	SURVANT	COAL	1.4	490.0	
-153.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-198.0	CARBONDALE	DEKOVEN	COAL	2.5	590.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	2.8	610.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-240.0	CARBONDALE	DAVIS	COAL	5.0	632.0	
-280.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	672.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-288.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	680.0	
-316.0	TRADEWATER	MT. RORAH	COAL	2.0	708.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900102000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.29658 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.814386 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 3600.0 **LOG TYPE:** Measured section

SOURCE: W FRANKLIN **WELL TYPE:** Outcrop

COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
160.0	CARBONDALE	HERRIN	COAL	-	200.0	

MAPID: 05900635000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.283113 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.808962 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2470.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, HENNEBERGER M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
-109.0	CARBONDALE	SURVANT	COAL	0.5	484.0	
-170.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-195.0	CARBONDALE	DEKOVEN	COAL	2.5	570.0	
-223.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	598.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-245.0	CARBONDALE	DAVIS	COAL	4.0	620.0	
-281.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	656.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-300.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	675.0	
-315.0	TRADEWATER	MT. RORAH	COAL	0.5	690.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900635000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.283113 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.808962 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1534.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1159.0	BASE OF PENN.		UNCLASSIFIED	-	1534.0	

MAPID: 05900636000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282937 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818171 **DATE COLLECTED:** 3 / 0 / 1947

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2890.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., SUTTNER F J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	484.0	
-151.0	CARBONDALE	SURVANT	COAL	0.5	530.0	
-207.0	CARBONDALE	COLCHESTER	COAL	0.5	586.0	
-255.0	CARBONDALE	DEKOVEN	COAL	3.0	634.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	642.0	
-285.0	CARBONDALE	DAVIS	COAL	5.0	664.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	700.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-331.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	710.0	
-369.0	TRADEWATER	MT. RORAH	COAL	1.8	748.0	

MAPID: 05903504000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.287564 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.816364 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 331.2 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 26-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION, DEPTHS CORRECTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
237.7	MODESTO	PIASA	LIMESTONE	4.7	137.3	
233.0	MODESTO		GRAY SHALE	27.0	142.0	
206.0	CARBONDALE	DANVILLE	COAL	1.0	169.0	
205.0	CARBONDALE		SHALE & SANDSTONE	79.0	170.0	
126.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	4.8	249.0	
121.2	CARBONDALE	LAWSON	SHALE & SANDSTONE	18.9	253.8	

MAPID: 05901233000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.27387 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.80901 **DATE COLLECTED:** 10 / 28 / 1952

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 355.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
369.0	PLEISTOCENE		UNCONSOLIDATED	71.0	0.0	
298.0	MODESTO		SHALE	3.5	71.0	
294.5	MODESTO		SHALE	73.0	74.5	
221.5	MODESTO		SHALE WITH LIMESTONE	16.5	147.5	
205.0	CARBONDALE	DANVILLE	COAL	1.8	164.0	
203.2	CARBONDALE		SHALE	3.0	165.8	
200.2	CARBONDALE		SHALE	11.3	168.8	
188.9	CARBONDALE		SANDSTONE	7.6	180.1	
181.3	CARBONDALE		DARK SHALE	3.0	187.7	
178.3	CARBONDALE	ALLENBY	COAL	0.3	190.7	
178.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	190.9	
172.6	CARBONDALE	BANKSTON FORK	SHALY LIMESTONE	4.2	196.4	
168.4	CARBONDALE	ANVIL ROCK	SANDSTONE	11.8	200.6	
156.6	CARBONDALE		DARK SHALE	12.0	212.4	
144.6	CARBONDALE	BRERETON	LIMESTONE	5.5	224.4	
139.1	CARBONDALE	ANNA	SHALE	2.3	229.9	
136.7	CARBONDALE	HERRIN	COAL	4.1	232.3	
132.7	CARBONDALE		SHALE	3.3	236.3	
129.3	CARBONDALE		SANDSTONE	5.0	239.7	
124.3	CARBONDALE		SANDY SHALE	25.5	244.7	
98.8	CARBONDALE		SHALE	16.0	270.2	
82.8	CARBONDALE	BRIAR HILL	COAL	1.6	286.2	
81.2	CARBONDALE		SHALE	1.8	287.8	
79.5	CARBONDALE		SHALE	12.7	289.5	
66.8	CARBONDALE		SANDY SHALE	7.8	302.2	
59.1	CARBONDALE		SANDSTONE	14.3	309.9	
44.8	CARBONDALE		SHALE	21.8	324.2	
23.0	CARBONDALE	TURNER MINE	SHALE	2.0	346.0	
21.0	CARBONDALE	SPRINGFIELD	COAL	4.3	348.0	
16.7	CARBONDALE		SHALE	2.7	352.3	

MAPID: 05901233000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.27387 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.80901 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 236.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
203.1	CARBONDALE	DANVILLE	COAL	0.7	165.9	
202.4	CARBONDALE		SHALE & SANDSTONE	26.0	166.6	
176.4	CARBONDALE	ALLENBY	BLACK SHALE	0.3	192.6	
176.1	CARBONDALE		GRAY SHALE	0.8	192.9	
175.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	193.7	
172.1	CARBONDALE	LAWSON	GRAY SHALE	3.6	196.9	
168.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	11.7	200.5	
156.8	CARBONDALE	LAWSON	GRAY SHALE	11.6	212.2	
145.2	CARBONDALE	LAWSON	BLACK SHALE	1.3	223.8	
143.9	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	4.6	225.1	
139.3	CARBONDALE	ANNA	BLACK SHALE	2.3	229.7	
137.0	CARBONDALE	HERRIN	COAL	4.3	232.0	

MAPID: 05901382000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 1035' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.278293 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.812671 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2920.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION, JACKSON JOSIAH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-60.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	428.0	
-112.0	CARBONDALE	SURVANT	COAL	2.0	480.0	
-172.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-227.0	CARBONDALE	DEKOVEN	COAL	3.0	595.0	
-227.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	595.0	
-251.0	CARBONDALE	DAVIS	COAL	4.0	619.0	
-292.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	660.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-302.0	TRADEWATER	STONEFORT	LIMESTONE	9.9	670.0	
-337.0	TRADEWATER	MT. RORAH	COAL	2.0	705.0	

MAPID: 05901382000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 1035' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.278293 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.812671 **DATE COLLECTED:** 2 / 0 / 1954

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1496.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1128.0	BASE OF PENN.		UNCLASSIFIED	-	1496.0	

MAPID: 05901727000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.264662 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818151 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1760.0 **LOG TYPE:** Electric Log

SOURCE: HEPPARD WESLEY C, KANADY ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-429.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	805.0	
-473.0	CARBONDALE	SURVANT	COAL	2.0	849.0	
-524.0	CARBONDALE	COLCHESTER	COAL	0.5	900.0	
-580.0	CARBONDALE	DEKOVEN	COAL	3.5	956.0	
-580.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	956.0	
-604.0	CARBONDALE	DAVIS	COAL	4.0	980.0	
-639.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	1015.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-647.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	1023.0	

MAPID: 05900640000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.271554 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.798102 **DATE COLLECTED:** 7 / 0 / 1951

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2492.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, BAUER M C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-80.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	457.0	
-123.0	CARBONDALE	SURVANT	COAL	0.8	500.0	
-182.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-240.0	CARBONDALE	DEKOVEN	COAL	3.0	617.0	
-240.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	617.0	
-265.0	CARBONDALE	DAVIS	COAL	4.0	642.0	
-305.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	682.0	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-325.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	702.0	
-346.0	TRADEWATER	MT. RORAH	COAL	1.4	723.0	

MAPID: 05900640000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.271554 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.798102 **DATE COLLECTED:** 7 / 0 / 1951

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1550.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-183.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	560.0	
-268.0	SPOON	DAVIS	UNCLASSIFIED	-	645.0	
-1173.0	BASE OF PENN.		UNCLASSIFIED	-	1550.0	

MAPID: 05903491000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' N line, 2310' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274004 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.799887 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Survey Core Study
SOURCE: TRUAX-TRAER COAL CO 10-SH **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
187.0	CARBONDALE	DANVILLE	COAL	2.0	187.0	
185.0	CARBONDALE		SHALE & SANDSTONE	27.2	189.0	
157.9	CARBONDALE	ALLENBY	COAL	0.3	216.1	
157.5	CARBONDALE		GRAY SHALE	1.0	216.5	
156.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	217.5	
150.9	CARBONDALE	LAWSON	SHALE & SANDSTONE	23.8	223.1	
127.1	CARBONDALE	BRERETON	LIMESTONE	3.8	246.9	
123.4	CARBONDALE	ANNA	GRAY SHALE	2.4	250.6	
121.0	CARBONDALE	HERRIN	COAL	4.0	253.0	

MAPID: 05900641000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 990' S line, 330' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.283206 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.794383 **DATE COLLECTED:** 10 / 0 / 1947
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log
SOURCE: PURITAN DRILLING, MCCORMICK JAS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-17.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	400.0	
-61.0	CARBONDALE	SURVANT	COAL	0.5	444.0	
-115.0	CARBONDALE	COLCHESTER	COAL	0.5	498.0	
-173.0	CARBONDALE	DEKOVEN	COAL	3.8	556.0	
-173.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	556.0	
-207.0	CARBONDALE	DAVIS	COAL	5.0	590.0	
-249.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	632.0	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-267.0	TRADEWATER	STONEFORT	LIMESTONE	7.0	650.0	
-293.0	TRADEWATER	MT. RORAH	COAL	3.0	676.0	

MAPID: 05900641000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 990' S line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.283206 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.794383 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
195.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	12.0	188.0	
183.0	CARBONDALE	BRERETON	LIMESTONE	3.5	200.0	
179.5	CARBONDALE	ANNA	BLACK SHALE	2.5	203.5	
177.0	CARBONDALE	HERRIN	COAL	4.0	206.0	

MAPID: 05901237000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 198' N line, 198' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300705 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.805493 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 347.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 17 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.0	PLEISTOCENE		UNCONSOLIDATED	27.5	0.0	
330.5	MODESTO		SANDSTONE	6.3	27.5	
324.2	MODESTO		SANDY SHALE	17.1	33.8	
307.1	MODESTO		DARK SHALE	19.7	50.9	
287.4	MODESTO		COAL	1.2	70.6	
286.2	MODESTO		SHALE	5.4	71.8	
280.8	MODESTO		SANDSTONE	4.3	77.2	
276.6	MODESTO		SHALE	9.7	81.4	LIMESTONE PEBBLES
266.9	MODESTO		SHALE	48.6	91.1	
218.3	CARBONDALE	DANVILLE	COAL	2.1	139.7	
216.2	CARBONDALE		SHALE	2.5	141.8	
213.7	CARBONDALE		SANDY SHALE	14.8	144.3	
199.0	CARBONDALE	ALLENBY	COAL	0.2	159.0	
198.8	CARBONDALE		SHALY SANDSTONE	12.3	159.2	
186.6	CARBONDALE		SANDY SHALE	15.3	171.4	
171.2	CARBONDALE	ANVIL ROCK	SANDSTONE	32.3	186.8	
138.9	CARBONDALE	HERRIN	COAL	1.0	219.1	COAL PARTIALLY ERODED
137.9	CARBONDALE		SHALE	3.0	220.1	
134.9	CARBONDALE		SHALE	7.6	223.1	LIMESTONE PEBBLES
127.3	CARBONDALE		SHALY SANDSTONE	21.8	230.7	
105.6	CARBONDALE		SANDY SHALE	20.2	252.4	
85.4	CARBONDALE		SHALE	9.0	272.6	
76.4	CARBONDALE	BRIAR HILL	COAL	1.8	281.6	
74.7	CARBONDALE		SHALY SANDSTONE	24.2	283.3	
50.5	CARBONDALE		SHALE	22.0	307.5	
28.5	CARBONDALE		SHALE	8.0	329.5	
20.5	CARBONDALE	TURNER MINE	SHALE	2.4	337.5	
18.1	CARBONDALE	SPRINGFIELD	COAL	4.8	339.9	
13.3	CARBONDALE		SHALE	2.3	344.7	

MAPID: 05901237000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** 198' N line, 198' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300705 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.805493 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 219.7 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
218.9	CARBONDALE	DANVILLE	COAL	2.0	139.1	
216.9	CARBONDALE		SHALE & SANDSTONE	45.4	141.1	
171.5	CARBONDALE	LAWSON	SANDSTONE	32.5	186.5	
139.0	CARBONDALE	HERRIN	COAL	0.7	219.0	

MAPID: 05900011000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333503 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.804904 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 266.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTSBURG 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0	PLEISTOCENE		CLAY	15.0	0.0	
358.0	MODESTO		HARD PAN	7.0	15.0	
351.0	MODESTO		SHALE	4.0	22.0	
347.0	MODESTO		SHALE	14.0	26.0	
333.0	MODESTO		LIMESTONE	4.0	40.0	
329.0	MODESTO		SHALE	11.0	44.0	
318.0	MODESTO		SANDSTONE	9.0	55.0	
309.0	MODESTO		SHALE	6.0	64.0	
303.0	MODESTO		SANDSTONE	9.0	70.0	
294.0	MODESTO		SHALE	12.7	79.0	
281.3	MODESTO	DEGRAFF	COAL	0.9	91.7	
280.4	MODESTO		SHALE	25.4	92.6	
255.0	MODESTO		SHALY LIMESTONE	3.0	118.0	
252.0	MODESTO		SANDY SHALE	8.0	121.0	
244.0	MODESTO	PIASA	SHALY LIMESTONE	3.0	129.0	
241.0	MODESTO		SHALE	44.7	132.0	
196.3	CARBONDALE	DANVILLE	COAL	1.8	176.7	
194.6	CARBONDALE		SANDSTONE	5.6	178.4	
189.0	CARBONDALE		SHALE	13.0	184.0	
176.0	CARBONDALE		SANDSTONE	5.0	197.0	
171.0	CARBONDALE		SHALE	3.0	202.0	
168.0	CARBONDALE	ALLENBY	COAL	1.0	205.0	
167.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	206.0	
165.0	CARBONDALE		SANDY SHALE	17.0	208.0	
148.0	CARBONDALE		SHALE	10.0	225.0	
138.0	CARBONDALE	BRERETON	LIMESTONE	3.0	235.0	
135.0	CARBONDALE	ANNA	DARK SHALE	1.3	238.0	
133.7	CARBONDALE	HERRIN	COAL	5.7	239.3	
128.0	CARBONDALE		SHALE	5.0	245.0	
123.0	CARBONDALE		SANDSTONE	10.0	250.0	
113.0	CARBONDALE		SANDY SHALE	6.0	260.0	

MAPID: 05900011000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.333503 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.804904 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 372.9 **LOGGED (FT.):** 3729.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTS 2 **WELL TYPE:** Oil and Gas Test

COMMENT: EXACT LOCATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
133.9	CARBONDALE	HERRIN	COAL	5.7	239.0	

MAPID: 05901088000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1782' N line, 264' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.336119 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.800894 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 346.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.0	PLEISTOCENE		UNCONSOLIDATED	31.5	0.0	
341.5	MODESTO		SHALE	4.5	31.5	
337.0	MODESTO		SHALY SANDSTONE	7.4	36.0	
329.6	MODESTO		SANDY SHALE	12.9	43.4	
316.7	MODESTO		DARK SHALE	16.0	56.3	
300.7	MODESTO		SHALE	11.8	72.3	
288.8	MODESTO		SHALY SANDSTONE	13.7	84.2	GRAY
275.2	MODESTO		DARK SHALE	0.6	97.8	
274.6	MODESTO	DEGRAFF	COAL	0.8	98.4	
273.7	MODESTO		SHALE	1.8	99.3	
272.0	MODESTO	PIASA	LIMESTONE	5.5	101.0	
266.5	MODESTO		SHALE	43.4	106.5	
223.1	CARBONDALE	DANVILLE	COAL	1.6	149.9	
221.5	CARBONDALE		SHALE	5.7	151.5	
215.8	CARBONDALE		GRAY SANDSTONE	8.8	157.2	
207.0	CARBONDALE		SANDSTONE	2.2	166.0	LIMESTONE PEBBLES; GRAY
204.8	CARBONDALE		SHALE	8.0	168.2	
196.8	CARBONDALE		GRAY SANDSTONE	6.2	176.2	
190.7	CARBONDALE	ALLENBY	COAL	0.8	182.3	
189.9	CARBONDALE		SHALE WITH LIMESTONE	3.9	183.1	
186.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	187.0	
182.7	CARBONDALE		SHALE	4.7	190.3	
178.1	CARBONDALE	ANVIL ROCK	SANDSTONE	3.3	194.9	LIMESTONE NOTED
174.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.3	198.3	
169.5	CARBONDALE		SANDY SHALE	4.1	203.5	
165.4	CARBONDALE		DARK SHALE	7.8	207.6	
157.6	CARBONDALE	BRERETON	LIMESTONE	3.8	215.4	
153.7	CARBONDALE		SANDY SHALE	0.9	219.3	
152.8	CARBONDALE	HERRIN	COAL	4.4	220.2	SULFUR AND SHALE PARTINGS
148.4	CARBONDALE		SHALE	2.5	224.6	
145.9	CARBONDALE		SHALY SANDSTONE	11.8	227.1	GRAY
134.1	CARBONDALE		SHALE	4.3	238.9	
129.7	CARBONDALE		SANDY SHALE	32.9	243.3	
96.8	CARBONDALE	BRIAR HILL	COAL	1.7	276.2	
95.2	CARBONDALE		SANDY SHALE	11.0	277.8	
84.2	CARBONDALE		SHALY SANDSTONE	18.1	288.8	
66.1	CARBONDALE		GRAY SANDSTONE	11.3	306.9	
54.8	CARBONDALE		SANDY SHALE	16.6	318.2	
38.2	CARBONDALE		SHALE WITH LIMESTONE	1.8	334.8	

36.4	CARBONDALE	TURNER MINE	SHALE	2.6	336.6
33.8	CARBONDALE	SPRINGFIELD	COAL	4.5	339.2
29.3	CARBONDALE		SHALE	2.3	343.7

MAPID: 05901088000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1782' N line, 264' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.336119 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.800894 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 224.4 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
220.1	CARBONDALE	DANVILLE	COAL	1.6	152.9	
218.5	CARBONDALE		SHALE & SANDSTONE	30.8	154.5	
187.7	CARBONDALE	ALLENBY	COAL	0.4	185.3	
187.3	CARBONDALE		CLAYSTONE	1.8	185.7	
185.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	187.6	
180.4	CARBONDALE	LAWSON	CLAYSTONE	0.2	192.6	
180.3	CARBONDALE	LAWSON	GRAY SHALE	5.3	192.7	
175.0	CARBONDALE	LAWSON	SILTSTONE	2.1	198.0	
172.9	CARBONDALE	LAWSON	SANDSTONE	7.4	200.1	
165.5	CARBONDALE	LAWSON	GRAY SHALE	7.8	207.5	
157.7	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	3.8	215.3	
153.9	CARBONDALE	ANNA	SILTY SHALE	0.9	219.1	
153.0	CARBONDALE	HERRIN	COAL	4.4	220.0	

MAPID: 05901088000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1782' N line, 264' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.336119 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.800894 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 346.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CORP 21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0	PLEISTOCENE		UNCONSOLIDATED	31.5	0.0	
341.5	MODESTO		SHALE	4.5	31.5	
337.0	MODESTO		SANDSTONE/SHALE	20.3	36.0	
316.7	MODESTO		DARK SHALE	16.0	56.3	
300.7	MODESTO		SHALE	11.8	72.3	
288.8	MODESTO		SANDSTONE	13.7	84.2	
275.2	MODESTO		DARK SHALE	0.6	97.8	
274.6	MODESTO		COAL	0.8	98.4	
273.7	MODESTO		SHALE	1.8	99.3	
272.0	MODESTO	PIASA	LIMESTONE	5.5	101.0	
266.5	MODESTO		DARK SHALE	43.3	106.5	
223.2	CARBONDALE	DANVILLE	COAL	1.7	149.8	
221.5	CARBONDALE		SHALE	5.7	151.5	
215.8	CARBONDALE		SANDSTONE	11.0	157.2	
204.8	CARBONDALE		SHALE	8.0	168.2	
196.8	CARBONDALE		SANDSTONE	1.4	176.2	
195.4	CARBONDALE		SANDY SHALE	4.8	177.6	
190.7	CARBONDALE	ALLENBY	COAL	0.8	182.3	
189.9	CARBONDALE		CALCAREOUS SHALE	3.9	183.1	
186.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	187.0	
182.7	CARBONDALE		SHALE	4.7	190.3	
178.1	CARBONDALE		SANDSTONE/LIMESTONE	3.3	194.9	
174.7	CARBONDALE	ANVIL ROCK	SANDSTONE	5.3	198.3	
169.5	CARBONDALE		DARK SHALE	11.9	203.5	
157.6	CARBONDALE	BRERETON	LIMESTONE	3.8	215.4	
153.7	CARBONDALE	ANNA	DARK SHALE	0.9	219.3	
152.8	CARBONDALE	HERRIN	COAL	0.6	220.2	
152.2	CARBONDALE	HERRIN	COAL	0.0	220.8	BONEY
152.2	CARBONDALE	HERRIN	COAL	0.1	220.8	
152.1	CARBONDALE	HERRIN	PYRITE	2.1	220.9	WITH SHALE
150.0	CARBONDALE	HERRIN	COAL	0.5	223.0	
149.6	CARBONDALE	HERRIN	SHALE	0.1	223.4	
149.5	CARBONDALE	HERRIN	COAL	0.5	223.5	
149.0	CARBONDALE	HERRIN	SHALE	0.0	224.0	
149.0	CARBONDALE	HERRIN	COAL	0.3	224.0	
148.7	CARBONDALE	HERRIN	PYRITE	0.0	224.3	
148.7	CARBONDALE	HERRIN	COAL	0.3	224.3	BONE
148.4	CARBONDALE		SHALE	2.5	224.6	
145.9	CARBONDALE		SANDSTONE	11.8	227.1	

134.1	CARBONDALE		DARK SHALE	37.3	238.9	
96.8	CARBONDALE	BRIAR HILL	COAL	1.7	276.2	
95.2	CARBONDALE		SHALE	11.0	277.8	
84.2	CARBONDALE		SANDSTONE	29.3	288.8	
54.8	CARBONDALE		SHALE	16.6	318.2	
38.2	CARBONDALE		SHALE	1.8	334.8	WITH LIMESTONE
36.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	336.6	
33.8	CARBONDALE	SPRINGFIELD	COAL	4.5	339.2	
29.3	CARBONDALE		SHALE	2.3	343.7	

MAPID: 05901960000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321785 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.795698 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2965.0 **LOG TYPE:** Electric Log

SOURCE: VERSULUIS PAUL M, RANSBOTTOM R A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-52.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	428.0	
-99.0	CARBONDALE	SURVANT	COAL	2.8	475.0	
-149.0	CARBONDALE	COLCHESTER	COAL	0.5	525.0	
-204.0	CARBONDALE	DEKOVEN	COAL	4.0	580.0	
-204.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	580.0	
-229.0	CARBONDALE	DAVIS	COAL	6.0	605.0	
-274.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	650.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-287.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	663.0	

MAPID: 05901960000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.321785 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.795698 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1573.0 **LOG TYPE:** Electric Log

SOURCE: VERSULUIS PAUL M **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1197.0	BASE OF PENN.		UNCLASSIFIED	-	1573.0	

MAPID: 05902052000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326492 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.795694 **DATE COLLECTED:** 10 / 0 / 1956

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2885.0 **LOG TYPE:** Electric Log

SOURCE: VERSULUIS PAUL M, RANSBOTTOM J F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-29.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	400.0	
-74.0	CARBONDALE	SURVANT	COAL	0.8	445.0	
-129.0	CARBONDALE	COLCHESTER	COAL	0.5	500.0	
-184.0	CARBONDALE	DEKOVEN	COAL	3.0	555.0	
-192.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	563.0	
-219.0	CARBONDALE	DAVIS	COAL	4.0	590.0	
-254.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	625.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-264.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	635.0	

MAPID: 05901239000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.353326 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.792896 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 342.8 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 20 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0			NO RECORD	17.0	0.0	
395.0	MODESTO		BROWN SHALE	4.0	17.0	
391.0	MODESTO		SHALE	5.8	21.0	
385.2	MODESTO		BLUE SHALE	2.0	26.8	
383.2	MODESTO		SANDY SHALE	10.9	28.8	
372.3	MODESTO		GRAY SANDSTONE	4.2	39.7	
368.2	MODESTO		SANDY SHALE	11.8	43.8	
356.4	MODESTO		SHALE	0.8	55.6	
355.6	MODESTO		DARK SHALE	8.9	56.4	
346.7	MODESTO		SHALE	6.0	65.3	
340.7	MODESTO	DEGRAFF	COAL	0.7	71.3	
340.0	MODESTO		BLUE SHALE	3.5	72.0	
336.5	MODESTO		BLUE SHALE	29.3	75.5	
307.2	MODESTO	PIASA	SHALY LIMESTONE	7.1	104.8	BLUE
300.2	MODESTO		SHALE	1.3	111.8	RED
298.9	MODESTO		SHALE	3.7	113.1	
295.2	MODESTO		SHALE	1.5	116.8	
293.7	MODESTO		DARK SHALE	29.1	118.3	
264.7	CARBONDALE	DANVILLE	COAL	1.8	147.3	
262.8	CARBONDALE		SANDY SHALE	19.0	149.2	
243.8	CARBONDALE		DARK SHALE	5.1	168.2	
238.7	CARBONDALE	ALLENBY	COAL	0.5	173.3	
238.2	CARBONDALE		BLUE SHALE	2.0	173.8	
236.2	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	5.3	175.8	
230.9	CARBONDALE		SANDY SHALE	5.3	181.1	
225.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	17.0	186.3	
208.7	CARBONDALE		DARK SHALE	8.3	203.3	
200.4	CARBONDALE		SHALE	0.8	211.6	
199.6	CARBONDALE	BRERETON	LIMESTONE	4.5	212.4	
195.1	CARBONDALE	ANNA	SHALE	2.3	216.9	
192.7	CARBONDALE	HERRIN	COAL	4.0	219.3	
188.8	CARBONDALE		SHALE	2.9	223.2	
185.9	CARBONDALE		SANDY SHALE	3.8	226.1	
182.0	CARBONDALE		GRAY SANDSTONE	21.3	230.0	
160.7	CARBONDALE		SANDY SHALE	14.0	251.3	
146.7	CARBONDALE		DARK SHALE	14.2	265.3	
132.5	CARBONDALE	BRIAR HILL	COAL	1.9	279.5	
130.6	CARBONDALE		DARK SHALE	51.4	281.4	
79.2	CARBONDALE	TURNER MINE	SHALE	2.3	332.8	

76.8	CARBONDALE	SPRINGFIELD	COAL	4.4	335.2
72.4	CARBONDALE		SHALE	0.2	339.6
72.2	CARBONDALE		BLUE SHALE	3.0	339.8

MAPID: 05901239000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.353326 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.792896 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
265.1	CARBONDALE	DANVILLE	COAL	2.0	146.9	
263.0	CARBONDALE		SHALE & SANDSTONE	23.9	149.0	
239.2	CARBONDALE	ALLENBY	COAL	0.5	172.8	
238.6	CARBONDALE		CLAYSTONE	2.0	173.4	
236.6	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	5.3	175.4	
231.3	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.7	180.7	
230.7	CARBONDALE	LAWSON	SILTSTONE	4.7	181.3	
226.0	CARBONDALE	LAWSON	SANDSTONE	19.0	186.0	
207.0	CARBONDALE	LAWSON	GRAY SHALE	5.8	205.0	
201.3	CARBONDALE	LAWSON	BLACK SHALE	1.4	210.7	
199.8	CARBONDALE	BRERETON	LIMESTONE	4.5	212.2	
195.3	CARBONDALE	ANNA	BLACK SHALE	2.3	216.7	
193.0	CARBONDALE	HERRIN	COAL	4.0	219.0	

MAPID: 05901383000C **VERSION:** 1 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3545 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.791941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:**

SOURCE: DORAN THOMAS S **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
78.0	CARBONDALE	SPRINGFIELD	COAL	-	320.0	
-102.0	CARBONDALE	COLCHESTER	COAL	-	500.0	
-1192.0	BASE OF PENN.		UNCLASSIFIED	-	1590.0	
-1336.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1734.0	
-1632.0		BASE L. MENARD	UNCLASSIFIED	-	2030.0	
-2092.0		BASE BARLOW	LIMESTONE	-	2490.0	
-2482.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2880.0	

MAPID: 05901383000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3545 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.791941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3034.0 **LOG TYPE:** Electric Log

SOURCE: DORAN THOMAS S **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
259.0	CARBONDALE	DANVILLE	COAL	-	136.0	
229.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	166.0	
191.0	CARBONDALE	HERRIN	COAL	4.0	204.0	
173.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	12.0	222.0	
128.0	CARBONDALE	BRIAR HILL	COAL	-	267.0	
122.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	8.0	273.0	
74.0	CARBONDALE	SPRINGFIELD	COAL	5.0	321.0	BLACK SHALE ROOF
51.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE	8.0	344.0	
-3.0	CARBONDALE	HOUCHIN CREEK	COAL	-	398.0	

MAPID: 05901383000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3545 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.791941 **DATE COLLECTED:** 6 / 0 / 1954

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: DORAN THOMAS S **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-107.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	502.0	
-207.0	SPOON	DAVIS	UNCLASSIFIED	-	602.0	
-1185.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05901383000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3545 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791941 **DATE COLLECTED:** 6 / 0 / 1954

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3034.0 **LOG TYPE:** Electric Log

SOURCE: DORAN THOMAS S, JAMES HENRY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-6.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	401.0	
-55.0	CARBONDALE	SURVANT	COAL	0.8	450.0	
-107.0	CARBONDALE	COLCHESTER	COAL	0.5	502.0	
-182.0	CARBONDALE	DEKOVEN	COAL	3.0	577.0	
-182.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	577.0	
-204.0	CARBONDALE	DAVIS	COAL	4.0	599.0	
-230.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	625.0	85% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-248.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	643.0	

MAPID: 05903509000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.374004 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.790719 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 244.5 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 32-SH **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
250.6	CARBONDALE	DANVILLE	COAL	1.7	186.4	
248.9	CARBONDALE		SHALE & SANDSTONE	16.7	188.1	
232.3	CARBONDALE	BANKSTON FORK	LIMESTONE	7.5	204.7	
224.8	CARBONDALE	LAWSON	GRAY SHALE	6.7	212.2	
218.1	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	3.2	218.9	
214.9	CARBONDALE	LAWSON	GRAY SHALE	9.7	222.1	
205.2	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.5	231.8	
204.7	CARBONDALE	BRERETON	LIMESTONE	5.8	232.3	
199.0	CARBONDALE	ANNA	BLACK SHALE	2.0	238.0	
197.0	CARBONDALE	HERRIN	COAL	4.5	240.0	

MAPID: 05902002000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.370537 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.780666 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 1547.0 **LOG TYPE:** Electric Log

SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1210.0	BASE OF PENN.		UNCLASSIFIED	-	1547.0	

MAPID: 05902002000C **VERSION:** 2 **PROJECT:** WVFS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.370537 **GEOLOGIST:** BRISTOL

CONFIDENTIAL: N **LATITUDE:** 37.780666 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2852.0 **LOG TYPE:**

SOURCE: MCINTYRE, PAUL J. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	MODESTO	WEST FRANKLIN	LIMESTONE	-		UNIT ABSENT
99.0	CARBONDALE	SPRINGFIELD	COAL	-	275.0	
-84.0	CARBONDALE	COLCHESTER	COAL	-	458.0	
-1181.0	BASE OF PENN.		UNCLASSIFIED	-	1555.0	
-1324.0	KINKAID	BASE L KINKAID	UNCLASSIFIED	-	1698.0	
-1626.0		BASE L. MENARD	UNCLASSIFIED	-	2000.0	
-2079.0		BASE BARLOW	LIMESTONE	-	2453.0	
-2478.0	ST GENEVIEVE	KARNAK	LIMESTONE	-	2852.0	

MAPID: 05902002000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.370537 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.780666 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2997.0 **LOG TYPE:** Electric Log

SOURCE: MCINTYRE, PAUL J., ELLIS GUY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
15.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	355.0	
-32.0	CARBONDALE	SURVANT	COAL	0.5	402.0	
-90.0	CARBONDALE	COLCHESTER	COAL	0.5	460.0	
-148.0	CARBONDALE	DEKOVEN	COAL	3.0	518.0	
-148.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	518.0	
-177.0	CARBONDALE	DAVIS	COAL	3.0	547.0	
-225.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	595.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-240.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	610.0	

MAPID: 05903486000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.365952 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.782476 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 165.5 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 4-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
284.6	CARBONDALE	DANVILLE	COAL	2.1	94.4	
282.5	CARBONDALE		SHALE & SANDSTONE	24.0	96.5	
258.5	CARBONDALE	ALLENBY	COAL	0.5	120.5	
258.0	CARBONDALE		GRAY SHALE	3.5	121.0	
254.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	124.5	
248.2	CARBONDALE	LAWSON	SILTY SHALE	6.2	130.8	
242.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	11.4	137.0	
230.5	CARBONDALE	LAWSON	SILTY SHALE	3.0	148.5	
227.6	CARBONDALE	LAWSON	GRAY SHALE	3.5	151.4	
224.1	CARBONDALE	BRERETON	LIMESTONE	4.2	154.9	
220.0	CARBONDALE	ANNA	BLACK SHALE	2.0	159.0	
218.0	CARBONDALE	HERRIN	COAL	4.5	161.0	

MAPID: 05903482000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.354458 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777049 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 117.2 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 1-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
330.4	CARBONDALE	DANVILLE	COAL	1.4	44.6	
329.0	CARBONDALE		SHALE & SANDSTONE	33.4	46.0	
295.6	CARBONDALE	ALLENBY	COAL	0.5	79.4	
295.1	CARBONDALE		GRAY SHALE	1.7	79.9	
293.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.9	81.6	
290.5	CARBONDALE	LAWSON	SILTY SHALE	3.1	84.5	
287.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	4.1	87.6	
283.3	CARBONDALE	LAWSON	SILTY SHALE	14.5	91.7	
268.8	CARBONDALE	BRERETON	CALCAREOUS SHALE	0.6	106.2	
268.3	CARBONDALE	ANNA	GRAY SHALE	6.3	106.7	
262.0	CARBONDALE	HERRIN	COAL	4.2	113.0	

MAPID: 05900012000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.33597 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.777106 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.2 **LOGGED (FT.):** 320.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTSBURG 1 **WELL TYPE:** Coal Test

COMMENT: CADY NOTES IN LOG "CANNOT CORRELATE"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
387.2	PLEISTOCENE		CLAY	20.0	0.0	
367.2	PLEISTOCENE		HARD PAN	12.0	20.0	
355.2			SHALE	16.0	32.0	
339.2			COAL	0.3	48.0	
338.9			SHALE	71.7	48.3	
267.2			SANDY SHALE	10.0	120.0	
257.2			SANDSTONE	19.0	130.0	
238.2			SHALE	25.0	149.0	
213.2			SHALE WITH LIMESTONE	1.0	174.0	
212.2			DARK SHALE	2.0	175.0	
210.2			SHALE	10.0	177.0	
200.2			SANDSTONE	7.0	187.0	
193.2			SANDY SHALE	29.0	194.0	
164.2			SHALE	7.0	223.0	
157.2			DARK SHALE	11.0	230.0	
146.2			COAL	2.0	241.0	NO.5?
144.2			SHALY LIMESTONE	3.5	243.0	
140.7			SHALE	7.5	246.5	
133.2			SANDY SHALE	41.0	254.0	
92.2			SHALE	14.0	295.0	
78.2			SHALY LIMESTONE	5.0	309.0	
73.2			LIMESTONE	2.5	314.0	
70.7			SHALE	0.5	316.5	
70.2			COAL	2.0	317.0	NO. 4 1/2? CADY
68.2			DARK SHALE	1.0	319.0	

MAPID: 05900012000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.33597 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.777106 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 387.2 **LOGGED (FT.):** 3872.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTS **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
146.2	CARBONDALE	SPRINGFIELD	COAL	2.0	241.0	CORRELATION UNCERTAIN

MAPID: 05901238000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 264' N line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319367 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.790356 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 332.3 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0	
344.0	MODESTO		SHALE	4.7	32.0	YELLOW
339.3	MODESTO		DARK SHALE	8.5	36.7	
330.8	MODESTO		SHALE	13.8	45.2	
317.1	MODESTO		DARK SHALE	10.2	58.9	
306.9	MODESTO	DEGRAFF	COAL	0.8	69.1	
306.1	MODESTO		SHALE	6.7	69.9	
299.4	MODESTO	PIASA	SHALY LIMESTONE	10.3	76.6	
289.1	MODESTO		SHALE	16.8	86.9	
272.2	MODESTO		SANDY SHALE	2.7	103.8	
269.6	MODESTO		DARK SHALE	26.3	106.4	
243.3	CARBONDALE	DANVILLE	COAL	2.5	132.7	
240.8	CARBONDALE		DARK SHALE	14.1	135.2	
226.7	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	149.3	
202.7	CARBONDALE	ANVIL ROCK	DARK SHALE	7.0	173.3	
195.7	CARBONDALE	ANVIL ROCK	SANDSTONE	28.5	180.3	HERRIN COAL ERODED
167.2	CARBONDALE		SHALE	23.8	208.8	
143.4	CARBONDALE		DARK SHALE	23.8	232.6	
119.6	CARBONDALE	BRIAR HILL	COAL	1.7	256.4	
117.9	CARBONDALE		SHALE	1.4	258.1	
116.5	CARBONDALE		SANDSTONE	29.2	259.5	
87.3	CARBONDALE		DARK SHALE	35.9	288.7	
51.4	CARBONDALE	TURNER MINE	SHALE	2.1	324.6	
49.3	CARBONDALE	SPRINGFIELD	COAL	4.5	326.7	
44.8	CARBONDALE		SHALE	1.1	331.2	

MAPID: 05901728000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326567 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.782738 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2937.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC., COUSER-ABELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
36.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	338.0	
-6.0	CARBONDALE	SURVANT	COAL	2.0	380.0	
-66.0	CARBONDALE	COLCHESTER	COAL	0.5	440.0	
-116.0	CARBONDALE	DEKOVEN	COAL	3.0	490.0	
-116.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	490.0	
-141.0	CARBONDALE	DAVIS	COAL	4.0	515.0	
-184.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	558.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-201.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	575.0	

MAPID: 05901728000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326567 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.782738 **DATE COLLECTED:** 6 / 0 / 1955
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1505.0 **LOG TYPE:** Electric Log
SOURCE: STELLE, JOHN ASSOC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1131.0	BASE OF PENN.		UNCLASSIFIED	-	1505.0	

MAPID: 05903502000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 0' S line, 0' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.318398 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.776235 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 156.5 **LOG TYPE:** Survey Core Study
SOURCE: TRUAX-TRAER COAL CO 22-SH **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
329.9	CARBONDALE		ROCK	60.0	43.1	
269.9	CARBONDALE	LAWSON	SANDSTONE	52.9	103.1	
217.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	0.5	156.0	

MAPID: 05901118000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.279766 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.78607 **DATE COLLECTED:** 9 / 0 / 1952

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 323.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.0	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0	
304.0	MODESTO		SHALE	11.5	75.0	
292.5	MODESTO		SHALE	39.7	86.5	
252.8	CARBONDALE	DANVILLE	COAL	1.6	126.2	
251.2	CARBONDALE		BLUE SHALE	16.4	127.8	
234.8	CARBONDALE		SANDSTONE	9.8	144.2	
225.1	CARBONDALE		DARK SHALE	0.8	153.9	
224.3	CARBONDALE	ALLENBY	COAL	0.7	154.7	
223.7	CARBONDALE	BANKSTON FORK	LIMESTONE	10.3	155.3	
213.3	CARBONDALE	ANVIL ROCK	SANDSTONE	8.7	165.7	
204.7	CARBONDALE		DARK SHALE	17.1	174.3	
187.6	CARBONDALE	BRERETON	LIMESTONE	3.0	191.4	
184.6	CARBONDALE	ANNA	SHALE	1.2	194.4	
183.4	CARBONDALE	HERRIN	COAL	4.4	195.6	
179.0	CARBONDALE		SHALE	2.5	200.0	
176.5	CARBONDALE		SANDY SHALE	21.3	202.5	
155.2	CARBONDALE		DARK SHALE	33.8	223.8	
121.3	CARBONDALE	BRIAR HILL	COAL	1.9	257.7	
119.4	CARBONDALE		SANDY SHALE	12.8	259.6	
106.6	CARBONDALE		SANDSTONE	6.7	272.4	
99.9	CARBONDALE		SHALE	32.6	279.1	
67.3	CARBONDALE		SHALE	2.8	311.7	
64.6	CARBONDALE	SPRINGFIELD	COAL	4.8	314.4	
59.7	CARBONDALE		SHALE	3.8	319.3	

MAPID: 05901384000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273858 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777774 **DATE COLLECTED:** 2 / 0 / 1951

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 2780.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., A FOSTER COMM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
4.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	385.0	
-36.0	CARBONDALE	SURVANT	COAL	2.0	425.0	
-90.0	CARBONDALE	COLCHESTER	COAL	0.5	479.0	
-155.0	CARBONDALE	DEKOVEN	COAL	4.0	544.0	
-155.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	544.0	
-179.0	CARBONDALE	DAVIS	COAL	4.0	568.0	
-226.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	615.0	38% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-239.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	628.0	

MAPID: 05901384000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.273858 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777774 **DATE COLLECTED:** 2 / 0 / 1951

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 1502.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1113.0	BASE OF PENN.		UNCLASSIFIED	-	1502.0	

MAPID: 05903493000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1650' N line, 1650' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.276374 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.787157 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 264.4 **LOG TYPE:** Survey Core Study

SOURCE: TRUAX-TRAER COAL CO 12-SH **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
169.2	CARBONDALE	DANVILLE	COAL	1.8	200.8	
167.4	CARBONDALE		SHALE & SANDSTONE	14.5	202.6	
152.9	CARBONDALE	ALLENBY	COAL	0.7	217.1	
152.2	CARBONDALE	BANKSTON FORK	LIMESTONE	12.9	217.8	
139.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	1.9	230.7	
137.4	CARBONDALE	LAWSON	SANDSTONE	7.0	232.6	
130.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	11.7	239.6	
118.7	CARBONDALE	LAWSON	GRAY SHALE	3.1	251.3	
115.6	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.7	254.4	
115.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.7	255.0	
111.2	CARBONDALE	ANNA	GRAY SHALE	1.3	258.8	
110.0	CARBONDALE	HERRIN	COAL	4.4	260.0	

MAPID: 05900643000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156654 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857432 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2486.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL & RIPLEY, DOWNEN CLYDE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-289.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	650.0	
-337.0	CARBONDALE	SURVANT	COAL	1.2	698.0	
-387.0	CARBONDALE	COLCHESTER	COAL	0.5	748.0	
-431.0	CARBONDALE	DEKOVEN	COAL	3.0	792.0	
-431.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	792.0	
-461.0	CARBONDALE	DAVIS	COAL	4.0	822.0	
-489.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	850.0	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-502.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	863.0	
-547.0	TRADEWATER	MT. RORAH	COAL	2.0	908.0	

MAPID: 05900645000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.161256 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850026 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2993.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY, KIDD & BARRON, DOWNEN LEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-268.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	646.0	
-306.0	CARBONDALE	SURVANT	COAL	0.5	684.0	
-354.0	CARBONDALE	COLCHESTER	COAL	0.5	732.0	
-410.0	CARBONDALE	DEKOVEN	COAL	3.0	788.0	
-410.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	788.0	
-444.0	CARBONDALE	DAVIS	COAL	4.0	822.0	
-472.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	32% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-482.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	860.0	
-535.0	TRADEWATER	MT. RORAH	COAL	1.4	913.0	

MAPID: 05900648000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.158958 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.850043 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2490.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY, KIDD & BARRON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-73.0	CARBONDALE	HERRIN	COAL	4.0	452.0	
-119.0	CARBONDALE	BRIAR HILL	COAL	-	498.0	
-174.0	CARBONDALE	SPRINGFIELD	COAL	4.0	553.0	BLACK SHALE ROOF
-269.0	CARBONDALE	HOUCHIN CREEK	COAL	-	648.0	

MAPID: 05900652000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165743 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.863085 **DATE COLLECTED:** 9 / 0 / 1951

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2693.0 **LOG TYPE:** Electric Log

SOURCE: MACDONELL CO. OF LIMA, MOYE KELLY E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-352.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	728.0	
-394.0	CARBONDALE	SURVANT	COAL	0.8	770.0	
-452.0	CARBONDALE	COLCHESTER	COAL	0.5	828.0	
-487.0	CARBONDALE	DEKOVEN	COAL	3.0	863.0	
-507.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	883.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-522.0	CARBONDALE	DAVIS	COAL	4.0	898.0	
-554.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	930.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-560.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	936.0	
-616.0	TRADEWATER	MT. RORAH	COAL	2.5	992.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901260000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 420' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156573 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.862735 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2951.0 **LOG TYPE:** Electric Log

SOURCE: ATKINS AND HALE, MOYE KELLY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-310.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-355.0	CARBONDALE	SURVANT	COAL	1.5	720.0	
-405.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-450.0	CARBONDALE	DEKOVEN	COAL	3.0	815.0	
-460.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	825.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	4.0	843.0	
-510.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	875.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-520.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	885.0	
-570.0	TRADEWATER	MT. RORAH	COAL	1.4	935.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901529000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.17248 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853704 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:** Electric Log

SOURCE: LINDSKOG KENNETH, MURPHY J C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-300.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	673.0	
-335.0	CARBONDALE	SURVANT	COAL	2.0	708.0	
-377.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-437.0	CARBONDALE	DEKOVEN	COAL	2.5	810.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	834.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-475.0	CARBONDALE	DAVIS	COAL	4.0	848.0	
-507.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	880.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-517.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	890.0	
-567.0	TRADEWATER	MT. RORAH	COAL	1.3	940.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901819000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170234 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849959 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., WILSON-DOWNEN 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-298.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	670.0	
-332.0	CARBONDALE	SURVANT	COAL	2.0	704.0	
-388.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-436.0	CARBONDALE	DEKOVEN	COAL	3.0	808.0	
-458.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	830.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-476.0	CARBONDALE	DAVIS	COAL	4.0	848.0	
-508.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	880.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-518.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	890.0	
-566.0	TRADEWATER	MT. RORAH	COAL	1.3	938.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902240000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 380' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.172445 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.863157 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 538.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-111.5	CARBONDALE	DANVILLE	COAL	1.5	484.5	
-113.0	CARBONDALE		SHALE & SANDSTONE	14.0	486.0	
-127.0	CARBONDALE	ALLENBY	COAL	0.5	500.0	
-127.5	CARBONDALE		CLAYSTONE & SHALE	5.0	500.5	
-132.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.0	505.5	
-137.5	CARBONDALE	LAWSON	SILTY SHALE	20.0	510.5	
-157.5	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	530.5	
-159.5	CARBONDALE	ANNA	BLACK SHALE	2.5	532.5	
-162.0	CARBONDALE	HERRIN	COAL	3.5	535.0	

MAPID: 05902419000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.161157 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.863034 **DATE COLLECTED:** 12 / 0 / 1958

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2827.0 **LOG TYPE:** Electric Log

SOURCE: POUCH, A. J. & CO., MOYE KELLY E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-323.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	699.0	
-369.0	CARBONDALE	SURVANT	COAL	3.0	745.0	
-423.0	CARBONDALE	COLCHESTER	COAL	0.5	799.0	
-452.0	CARBONDALE	DEKOVEN	COAL	1.5	828.0	
-452.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	828.0	
-484.0	CARBONDALE	DAVIS	COAL	4.0	860.0	
-514.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	890.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-524.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	900.0	
-572.0	TRADEWATER	MT. RORAH	COAL	1.3	948.0	

MAPID: 05903328000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156627 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.859298 **DATE COLLECTED:** 11 / 0 / 1967
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1692.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1327.0	BASE OF PENN.		UNCLASSIFIED	-	1692.0	

MAPID: 05900162000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188671 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855638 **DATE COLLECTED:** 5 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-350.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	725.0	
-385.0	CARBONDALE	SURVANT	COAL	0.5	760.0	
-435.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-465.0	CARBONDALE	DEKOVEN	COAL	3.0	840.0	
-500.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	875.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-515.0	CARBONDALE	DAVIS	COAL	4.0	890.0	
-545.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	920.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900162000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188671 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.855638 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**
SOURCE: BLKSTK&DCK, COX J 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-165.0	CARBONDALE	HERRIN	COAL	2.0	537.0	
-270.0	CARBONDALE	SPRINGFIELD	COAL	-	642.0	

MAPID: 05900163000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186362 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.855634 **DATE COLLECTED:** 8 / 0 / 1941
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1758.0 **LOG TYPE:** Electric Log
SOURCE: SINCLAIR WYOMING OIL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1387.0	BASE OF PENN.		UNCLASSIFIED	-	1758.0	

MAPID: 05900163000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186362 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.855634 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, HENSON W 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-158.0	CARBONDALE	HERRIN	COAL	3.0	529.0	
-268.0	CARBONDALE	SPRINGFIELD	COAL	4.0	639.0	

MAPID: 05900164000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188695 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.857596 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, WILLIAMS C0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-171.0	CARBONDALE	HERRIN	COAL	2.0	546.0	
-277.0	CARBONDALE	SPRINGFIELD	COAL	3.5	652.0	

MAPID: 05901531000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.177101 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85368 **DATE COLLECTED:** 6 / 0 / 1951

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2969.0 **LOG TYPE:** Electric Log

SOURCE: CONTINENTAL DRLG COR, DOWNEN LESLIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-318.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	693.0	
-353.0	CARBONDALE	SURVANT	COAL	0.5	728.0	
-400.0	CARBONDALE	COLCHESTER	COAL	0.5	775.0	
-445.0	CARBONDALE	DEKOVEN	COAL	3.0	820.0	
-467.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	842.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-487.0	CARBONDALE	DAVIS	COAL	4.0	862.0	
-515.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-523.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	898.0	
-570.0	TRADEWATER	MT. RORAH	COAL	1.3	945.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901532000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 405' S line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.177052 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850088 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2963.0 **LOG TYPE:** Electric Log

SOURCE: DAVIS ALVA C PETRO, DOWNEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-301.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	670.0	
-343.0	CARBONDALE	SURVANT	COAL	2.0	712.0	
-391.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-426.0	CARBONDALE	DEKOVEN	COAL	3.0	795.0	
-451.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	820.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-468.0	CARBONDALE	DAVIS	COAL	4.0	837.0	
-499.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	868.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-506.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	875.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901797000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184017 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853641 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2880.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., HENSON WALTER 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-350.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	720.0	
-390.0	CARBONDALE	SURVANT	COAL	2.0	760.0	
-440.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-475.0	CARBONDALE	DEKOVEN	COAL	3.0	845.0	
-500.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	870.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-515.0	CARBONDALE	DAVIS	COAL	5.0	885.0	
-545.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	915.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-605.0	TRADEWATER	MT. RORAH	COAL	2.5	975.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902179000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174774 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.85356 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 489.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-58.5	CARBONDALE	DANVILLE	COAL	2.5	428.5	
-61.0	CARBONDALE		SHALE & SANDSTONE	26.0	431.0	
-87.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	457.0	
-90.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	9.0	460.0	
-99.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	469.0	
-111.0	CARBONDALE	BRERETON	LIMESTONE	3.0	481.0	
-114.0	CARBONDALE	ANNA	BLACK SHALE	2.0	484.0	
-116.0	CARBONDALE	HERRIN	COAL	3.0	486.0	

MAPID: 05902903000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184097 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.859556 **DATE COLLECTED:** 5 / 0 / 1963

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2907.0 **LOG TYPE:** Electric Log

SOURCE: BURCH, JAMES H., WILLIAMS MATTIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-354.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	728.0	
-394.0	CARBONDALE	SURVANT	COAL	2.0	768.0	
-436.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-476.0	CARBONDALE	DEKOVEN	COAL	0.5	850.0	
-496.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	870.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-514.0	CARBONDALE	DAVIS	COAL	4.0	888.0	
-541.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	915.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-551.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	925.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924464000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186292 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849733 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-332.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	710.0	
-368.0	CARBONDALE	SURVANT	COAL	3.0	746.0	
-424.0	CARBONDALE	COLCHESTER	COAL	0.5	802.0	
-455.0	CARBONDALE	DEKOVEN	COAL	3.5	833.0	
-485.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	863.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-502.0	CARBONDALE	DAVIS	COAL	5.0	880.0	
-530.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	908.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-538.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	916.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924502000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188591 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849699 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-344.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	720.0	
-385.0	CARBONDALE	SURVANT	COAL	3.0	761.0	
-442.0	CARBONDALE	COLCHESTER	COAL	0.5	818.0	
-473.0	CARBONDALE	DEKOVEN	COAL	3.5	849.0	
-502.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	878.0	47 PERCENT SANDSTONE IN DEKOVEN SPLIT
-518.0	CARBONDALE	DAVIS	COAL	5.0	894.0	
-546.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	922.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-554.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	930.0	
-580.0	TRADEWATER	MT. RORAH	COAL	3.0	956.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900655000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209366 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.863957 **DATE COLLECTED:** 4 / 0 / 1946

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3120.0 **LOG TYPE:** Electric Log

SOURCE: HERNDON DRLG. CO., HARRINGTON HRS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-432.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	808.0	
-466.0	CARBONDALE	SURVANT	COAL	0.5	842.0	
-518.0	CARBONDALE	COLCHESTER	COAL	0.5	894.0	
-550.0	CARBONDALE	DEKOVEN	COAL	3.0	926.0	
-577.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	953.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-596.0	CARBONDALE	DAVIS	COAL	5.0	972.0	
-624.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1000.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-674.0	TRADEWATER	MT. RORAH	COAL	2.0	1050.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901533000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200184 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857686 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2644.0 **LOG TYPE:** Electric Log

SOURCE: O'NEAL, C. E. & CO., HARRINGTON HENRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-377.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	765.0	
-412.0	CARBONDALE	SURVANT	COAL	0.8	800.0	
-466.0	CARBONDALE	COLCHESTER	COAL	0.5	854.0	
-497.0	CARBONDALE	DEKOVEN	COAL	3.0	885.0	
-525.0	CARBONDALE	LOWER DEKOVEN	COAL	4.0	913.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-542.0	CARBONDALE	DAVIS	COAL	4.0	930.0	
-574.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	962.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-624.0	TRADEWATER	MT. RORAH	COAL	1.3	1012.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901533000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200184 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.857686 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 1860.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-1469.0	BASE OF PENN.		UNCLASSIFIED	-	1860.0	

MAPID: 05901788000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202456 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851632 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3038.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., LEVER T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-358.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	735.0	
-393.0	CARBONDALE	SURVANT	COAL	1.4	770.0	
-443.0	CARBONDALE	COLCHESTER	COAL	0.5	820.0	
-477.0	CARBONDALE	DEKOVEN	COAL	3.0	854.0	
-503.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	880.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-525.0	CARBONDALE	DAVIS	COAL	4.0	902.0	
-555.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	932.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-611.0	TRADEWATER	MT. RORAH	COAL	2.0	988.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901788000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202456 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.851632 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	2.0		
-	CARBONDALE		SILTY SHALE	40.0		
-	CARBONDALE	LAWSON	SANDSTONE	23.0		
-	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	15.0		
-	CARBONDALE	LAWSON	SANDSTONE	44.0		

MAPID: 05902515000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209346 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849918 **DATE COLLECTED:** 1 / 0 / 1961

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2922.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO., HARRINGTON JOHN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-419.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	798.0	
-451.0	CARBONDALE	SURVANT	COAL	2.0	830.0	
-506.0	CARBONDALE	COLCHESTER	COAL	0.5	885.0	
-541.0	CARBONDALE	DEKOVEN	COAL	3.0	920.0	
-563.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	942.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-577.0	CARBONDALE	DAVIS	COAL	4.0	956.0	
-611.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	990.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900660000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.227706 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.852249 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2689.0 **LOG TYPE:** Electric Log

SOURCE: BENNETT, BYARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-183.0	CARBONDALE	DANVILLE	COAL	-	570.0	
-187.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	574.0	
-316.0	CARBONDALE	BRIAR HILL	COAL	-	703.0	
-327.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	14.0	714.0	
-380.0	CARBONDALE	SPRINGFIELD	COAL	5.0	767.0	BLACK SHALE ROOF
-426.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	23.0	813.0	
-451.0	CARBONDALE	HOUCHIN CREEK	COAL	-	838.0	

MAPID: 05901398000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.225524 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85611 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3107.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., WILSON-KINSALL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-452.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	831.0	
-481.0	CARBONDALE	SURVANT	COAL	2.0	860.0	
-551.0	CARBONDALE	COLCHESTER	COAL	0.5	930.0	
-571.0	CARBONDALE	DEKOVEN	COAL	0.1	950.0	
-601.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	980.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-619.0	CARBONDALE	DAVIS	COAL	4.0	998.0	
-651.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1030.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-656.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1035.0	
-696.0	TRADEWATER	MT. RORAH	COAL	2.0	1075.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901693000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.223101 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851952 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3098.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., EDWARDS IDA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-427.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	810.0	
-450.0	CARBONDALE	SURVANT	COAL	1.2	833.0	
-517.0	CARBONDALE	COLCHESTER	COAL	0.5	900.0	
-549.0	CARBONDALE	DEKOVEN	COAL	3.0	932.0	
-570.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	953.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-587.0	CARBONDALE	DAVIS	COAL	4.0	970.0	
-620.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1003.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901693000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 990' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.223101 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.851952 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	1.5		
-	CARBONDALE		SHALE & SANDSTONE	49.0		
-	CARBONDALE	LAWSON	SANDSTONE	62.0		

MAPID: 05901926000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211643 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849952 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 3070.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., DILLARD-HARRINGTON 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-414.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	798.0	
-448.0	CARBONDALE	SURVANT	COAL	2.0	832.0	
-501.0	CARBONDALE	COLCHESTER	COAL	0.5	885.0	
-531.0	CARBONDALE	DEKOVEN	COAL	2.0	915.0	
-556.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	940.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-574.0	CARBONDALE	DAVIS	COAL	4.0	958.0	
-601.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	985.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-651.0	TRADEWATER	MT. RORAH	COAL	1.3	1035.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901926000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211643 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.849952 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1960.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1576.0	BASE OF PENN.		UNCLASSIFIED	-	1960.0	

MAPID: 05902013000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216318 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860007 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3043.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK JAMES H, RISTER LURA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-411.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	793.0	
-446.0	CARBONDALE	SURVANT	COAL	3.0	828.0	
-498.0	CARBONDALE	COLCHESTER	COAL	0.5	880.0	
-527.0	CARBONDALE	DEKOVEN	COAL	3.0	909.0	
-554.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	936.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-569.0	CARBONDALE	DAVIS	COAL	4.0	951.0	
-598.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	980.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-648.0	TRADEWATER	MT. RORAH	COAL	2.0	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05924776000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211655 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857873 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-422.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	802.0	
-458.0	CARBONDALE	SURVANT	COAL	2.0	838.0	
-510.0	CARBONDALE	COLCHESTER	COAL	0.5	890.0	
-542.0	CARBONDALE	DEKOVEN	COAL	3.0	922.0	
-568.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	948.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-586.0	CARBONDALE	DAVIS	COAL	4.0	966.0	
-615.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	995.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-625.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1005.0	
-665.0	TRADEWATER	MT. RORAH	COAL	2.0	1045.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901534000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 990' S line, 990' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.232296 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.852176 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2704.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., MILLS CLARENCE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-478.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	855.0	
-505.0	CARBONDALE	SURVANT	COAL	0.5	882.0	
-582.0	CARBONDALE	COLCHESTER	COAL	0.5	959.0	
-613.0	CARBONDALE	DEKOVEN	COAL	3.0	990.0	
-638.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1015.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-653.0	CARBONDALE	DAVIS	COAL	4.0	1030.0	
-683.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1060.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-733.0	TRADEWATER	MT. RORAH	COAL	1.8	1110.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901534000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 990' S line, 990' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.232296 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.852176 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-229.0	CARBONDALE	DANVILLE	COAL	1.0	606.0	
-230.0	CARBONDALE		SHALE & SANDSTONE	42.0	607.0	
-272.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	649.0	
-276.0	CARBONDALE	LAWSON	GRAY SHALE	16.0	653.0	
-292.0	CARBONDALE	BRERETON	LIMESTONE	3.0	669.0	
-295.0	CARBONDALE	ANNA	BLACK SHALE	2.0	672.0	
-297.0	CARBONDALE	HERRIN	COAL	3.0	674.0	

MAPID: 05901536000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230075 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854117 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3100.0 **LOG TYPE:** Electric Log

SOURCE: LAMBERT DAVIS, RISTER TIM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-483.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	862.0	
-511.0	CARBONDALE	SURVANT	COAL	1.8	890.0	
-581.0	CARBONDALE	COLCHESTER	COAL	0.5	960.0	
-616.0	CARBONDALE	DEKOVEN	COAL	3.0	995.0	
-639.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1018.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-653.0	CARBONDALE	DAVIS	COAL	4.0	1032.0	
-686.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1065.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-691.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	1070.0	
-736.0	TRADEWATER	MT. RORAH	COAL	2.0	1115.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901536000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230075 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.854117 **DATE COLLECTED:** 10 / 0 / 1954

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1804.0 **LOG TYPE:** Electric Log

SOURCE: LAMBERT DAVIS **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1425.0	BASE OF PENN.		UNCLASSIFIED	-	1804.0	

MAPID: 05900165000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.262278 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.845533 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3820.0 **LOG TYPE:**

SOURCE: EXCHNGE OC, HUELSING T0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-412.0	CARBONDALE	HERRIN	COAL	3.0	794.0	
-525.0	CARBONDALE	SPRINGFIELD	COAL	-	907.0	

MAPID: 05900165000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.262278 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845533 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 797.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-342.5	CARBONDALE	DANVILLE	COAL	0.5	724.5	
-343.0	CARBONDALE		SHALE & SANDSTONE	37.0	725.0	
-380.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	762.0	
-386.0	CARBONDALE	LAWSON	SILTY SHALE	19.0	768.0	
-405.0	CARBONDALE	BRERETON	LIMESTONE	4.0	787.0	
-409.0	CARBONDALE	ANNA	BLACK SHALE	3.0	791.0	
-412.0	CARBONDALE	HERRIN	COAL	3.5	794.0	

MAPID: 05900165000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.262278 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845533 **DATE COLLECTED:** 2 / 0 / 1940

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1946.0 **LOG TYPE:** Electric Log

SOURCE: EXCHANGE OIL CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1564.0	BASE OF PENN.		UNCLASSIFIED	-	1946.0	

MAPID: 05900165000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.262278 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.845533 **DATE COLLECTED:** 2 / 0 / 1940

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3056.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-616.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	998.0	
-648.0	CARBONDALE	SURVANT	COAL	0.5	1030.0	
-703.0	CARBONDALE	COLCHESTER	COAL	0.5	1085.0	
-736.0	CARBONDALE	DEKOVEN	COAL	3.0	1118.0	
-758.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	1140.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-782.0	CARBONDALE	DAVIS	COAL	4.0	1164.0	
-813.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1195.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903480000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.2299 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.848439 **DATE COLLECTED:** 5 / 0 / 1971

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1775.0 **LOG TYPE:** Electric Log

SOURCE: BEESON, RICHARD W., WALTERS R M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-449.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	831.0	
-470.0	CARBONDALE	SURVANT	COAL	0.8	852.0	
-550.0	CARBONDALE	COLCHESTER	COAL	0.5	932.0	
-588.0	CARBONDALE	DEKOVEN	COAL	2.0	970.0	
-606.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	988.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-622.0	CARBONDALE	DAVIS	COAL	4.0	1004.0	
-654.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1036.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-702.0	TRADEWATER	MT. RORAH	COAL	2.0	1084.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903480000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.2299 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.848439 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	DANVILLE	COAL	2.0		
-	CARBONDALE		SHALE & SANDSTONE	51.0		
-	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	28.0		
-	CARBONDALE	LAWSON	SANDSTONE	44.0		

MAPID: 05900166000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216281 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.84094 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3830.0 **LOG TYPE:**

SOURCE: RYAN OC, CRUNK 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-211.0	CARBONDALE	HERRIN	COAL	2.5	594.0	
-309.0	CARBONDALE	SPRINGFIELD	COAL	4.0	692.0	

MAPID: 05902267000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211674 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846294 **DATE COLLECTED:** 6 / 0 / 1958

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., MOYE RAPHAEL & E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-403.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	786.0	
-435.0	CARBONDALE	SURVANT	COAL	2.0	818.0	
-479.0	CARBONDALE	COLCHESTER	COAL	0.5	862.0	
-514.0	CARBONDALE	DEKOVEN	COAL	3.0	897.0	
-547.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	930.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-562.0	CARBONDALE	DAVIS	COAL	3.5	945.0	
-583.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	966.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-639.0	TRADEWATER	MT. RORAH	COAL	1.5	1022.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902359000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 990' N line, 1650' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216268 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.846379 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1835.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-493.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	875.0	
-568.0	SPOON	DAVIS	UNCLASSIFIED	-	950.0	
-1453.0	BASE OF PENN.		UNCLASSIFIED	-	1835.0	

MAPID: 05902359000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 990' N line, 1650' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216268 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.846379 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 0.0 **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
-	CARBONDALE	DANVILLE	COAL	1.5		
-	CARBONDALE		SHALE & SANDSTONE	50.0		
-	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	17.0		
-	CARBONDALE	LAWSON	SANDSTONE	38.0		

MAPID: 05902359000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 990' N line, 1650' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216268 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846379 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2935.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, MOYE WILLARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-401.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	783.0	
-428.0	CARBONDALE	SURVANT	COAL	0.8	810.0	
-492.0	CARBONDALE	COLCHESTER	COAL	0.5	874.0	
-521.0	CARBONDALE	DEKOVEN	COAL	3.0	903.0	
-552.0	CARBONDALE	LOWER DEKOVEN	COAL	0.5	934.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-566.0	CARBONDALE	DAVIS	COAL	4.0	948.0	
-598.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	980.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902451000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211718 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842637 **DATE COLLECTED:** 5 / 0 / 1959

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3060.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO., WEST-MOYE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-372.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	752.0	
-399.0	CARBONDALE	SURVANT	COAL	0.8	779.0	
-460.0	CARBONDALE	COLCHESTER	COAL	0.5	840.0	
-488.0	CARBONDALE	DEKOVEN	COAL	3.0	868.0	
-520.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	900.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-537.0	CARBONDALE	DAVIS	COAL	4.0	917.0	
-569.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	949.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902906000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.227613 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846633 **DATE COLLECTED:** 6 / 0 / 1963

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1764.0 **LOG TYPE:** Electric Log

SOURCE: HELDT, FREDERICK, WALTERS R M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-451.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	828.0	
-473.0	CARBONDALE	SURVANT	COAL	0.5	850.0	
-549.0	CARBONDALE	COLCHESTER	COAL	2.0	926.0	
-581.0	CARBONDALE	DEKOVEN	COAL	3.0	958.0	
-608.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	985.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-625.0	CARBONDALE	DAVIS	COAL	3.8	1002.0	
-657.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1034.0	31% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-703.0	TRADEWATER	MT. RORAH	COAL	1.5	1080.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900167000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19322 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.842485 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**

SOURCE: AETNA OC, FOSTER L 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-145.0	CARBONDALE	HERRIN	COAL	3.0	516.0	
-257.0	CARBONDALE	SPRINGFIELD	COAL	4.0	628.0	

MAPID: 05900661000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 990' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207172 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.838936 **DATE COLLECTED:** 9 / 0 / 1951

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1900.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1518.0	BASE OF PENN.		UNCLASSIFIED	-	1900.0	

MAPID: 05900663000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 456' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207602 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835285 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., SCHMITT LEO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-310.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	685.0	
-341.0	CARBONDALE	SURVANT	COAL	0.5	716.0	
-405.0	CARBONDALE	COLCHESTER	COAL	0.5	780.0	
-435.0	CARBONDALE	DEKOVEN	COAL	3.0	810.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	836.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-480.0	CARBONDALE	DAVIS	COAL	4.0	855.0	
-515.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	890.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-555.0	TRADEWATER	MT. RORAH	COAL	1.3	930.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901538000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 470' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193213 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842885 **DATE COLLECTED:** 5 / 0 / 1942

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2882.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., FOSTER LANE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-339.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	710.0	
-384.0	CARBONDALE	SURVANT	COAL	2.0	755.0	
-434.0	CARBONDALE	COLCHESTER	COAL	0.5	805.0	
-457.0	CARBONDALE	DEKOVEN	COAL	3.0	828.0	
-484.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	855.0	95 PERCENT SANDSTONE IN DEKOVEN SPLIT
-504.0	CARBONDALE	DAVIS	COAL	4.0	875.0	
-532.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	903.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-539.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	910.0	
-594.0	TRADEWATER	MT. RORAH	COAL	2.0	965.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902269000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207077 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844409 **DATE COLLECTED:** 5 / 0 / 1958

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3019.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., MOYE LILLIS & RUT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-345.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	728.0	
-377.0	CARBONDALE	SURVANT	COAL	2.0	760.0	
-427.0	CARBONDALE	COLCHESTER	COAL	0.5	810.0	
-457.0	CARBONDALE	DEKOVEN	COAL	3.0	840.0	
-497.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	880.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-510.0	CARBONDALE	DAVIS	COAL	4.0	893.0	
-542.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	925.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-587.0	TRADEWATER	MT. RORAH	COAL	1.3	970.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902271000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209354 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.848096 **DATE COLLECTED:** 7 / 0 / 1958

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2925.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., GOFORTH HUBERT L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-412.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	790.0	
-451.0	CARBONDALE	SURVANT	COAL	2.0	829.0	
-504.0	CARBONDALE	COLCHESTER	COAL	0.5	882.0	
-537.0	CARBONDALE	DEKOVEN	COAL	3.0	915.0	
-565.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	943.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-579.0	CARBONDALE	DAVIS	COAL	3.5	957.0	
-612.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	990.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902444000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209447 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840775 **DATE COLLECTED:** 4 / 0 / 1959

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2272.0 **LOG TYPE:** Electric Log

SOURCE: BEELER, MIKE OIL CO., MOYE NOBLE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-363.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	745.0	
-388.0	CARBONDALE	SURVANT	COAL	1.3	770.0	
-453.0	CARBONDALE	COLCHESTER	COAL	0.5	835.0	
-480.0	CARBONDALE	DEKOVEN	COAL	3.0	862.0	
-511.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	893.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-528.0	CARBONDALE	DAVIS	COAL	4.0	910.0	
-560.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	942.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-603.0	TRADEWATER	MT. RORAH	COAL	1.3	985.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902581000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193216 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.840804 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 528.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-77.0	CARBONDALE	DANVILLE	COAL	2.0	450.0	
-79.0	CARBONDALE		SHALE & SANDSTONE	41.0	452.0	
-120.0	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	2.0	493.0	
-122.0	CARBONDALE	LAWSON	SILTY SHALE	14.0	495.0	
-136.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	509.0	
-146.0	CARBONDALE	BRERETON	LIMESTONE	4.0	519.0	
-150.0	CARBONDALE	ANNA	BLACK SHALE	2.0	523.0	
-152.0	CARBONDALE	HERRIN	COAL	3.0	525.0	

MAPID: 05900664000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.190909 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846084 **DATE COLLECTED:** 3 / 0 / 1947

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2391.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., BARNETT J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-346.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	716.0	
-388.0	CARBONDALE	SURVANT	COAL	2.0	758.0	
-444.0	CARBONDALE	COLCHESTER	COAL	0.5	814.0	
-470.0	CARBONDALE	DEKOVEN	COAL	3.0	840.0	
-495.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	865.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-512.0	CARBONDALE	DAVIS	COAL	4.0	882.0	
-543.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	913.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-550.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	920.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900667000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188636 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840715 **DATE COLLECTED:** 9 / 0 / 1947

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:** Electric Log

SOURCE: CLARK ETAL, BARNETT RACHEL 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-295.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	670.0	
-331.0	CARBONDALE	SURVANT	COAL	1.8	706.0	
-387.0	CARBONDALE	COLCHESTER	COAL	0.5	762.0	
-422.0	CARBONDALE	DEKOVEN	COAL	3.0	797.0	
-451.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	826.0	42 PERCENT SANDSTONE IN DEKOVEN SPLIT
-465.0	CARBONDALE	DAVIS	COAL	5.5	840.0	
-497.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	872.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-507.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	882.0	
-547.0	TRADEWATER	MT. RORAH	COAL	2.5	922.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900668000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.177173 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84086 **DATE COLLECTED:** 6 / 0 / 1947

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY A W, BARNETT WM E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-279.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	656.0	
-323.0	CARBONDALE	SURVANT	COAL	2.0	700.0	
-366.0	CARBONDALE	COLCHESTER	COAL	0.5	743.0	
-403.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-430.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	807.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	5.0	821.0	
-478.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	855.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-487.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	864.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900669000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.179379 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846249 **DATE COLLECTED:** 7 / 0 / 1947

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2185.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., DOWNEN J L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-295.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	669.0	
-336.0	CARBONDALE	SURVANT	COAL	2.5	710.0	
-380.0	CARBONDALE	COLCHESTER	COAL	0.5	754.0	
-418.0	CARBONDALE	DEKOVEN	COAL	3.0	792.0	
-442.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	816.0	71 PERCENT SANDSTONE IN DEKOVEN SPLIT
-462.0	CARBONDALE	DAVIS	COAL	4.0	836.0	
-496.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	870.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-508.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	882.0	
-542.0	TRADEWATER	MT. RORAH	COAL	0.8	916.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900675000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184031 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842595 **DATE COLLECTED:** 5 / 0 / 1947

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2545.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., FOSTER FELIX 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-290.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	665.0	
-328.0	CARBONDALE	SURVANT	COAL	3.0	703.0	
-377.0	CARBONDALE	COLCHESTER	COAL	0.5	752.0	
-413.0	CARBONDALE	DEKOVEN	COAL	3.0	788.0	
-441.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	816.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-459.0	CARBONDALE	DAVIS	COAL	4.0	834.0	
-491.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	866.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-501.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	876.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901541000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181627 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.847987 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 1750.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-396.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	768.0	
-480.0	SPOON	DAVIS	UNCLASSIFIED	-	852.0	
-1378.0	BASE OF PENN.		UNCLASSIFIED	-	1750.0	

MAPID: 05901541000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181627 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.847987 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-59.0	CARBONDALE	DANVILLE	COAL	2.0	431.0	
-61.0	CARBONDALE		SHALE & SANDSTONE	27.0	433.0	
-88.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	460.0	
-93.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	20.0	465.0	
-113.0	CARBONDALE	BRERETON	LIMESTONE	3.0	485.0	
-116.0	CARBONDALE	ANNA	BLACK SHALE	2.0	488.0	
-118.0	CARBONDALE	HERRIN	COAL	3.0	490.0	

MAPID: 05901541000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 2310' E line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181627 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.847987 **DATE COLLECTED:** 12 / 0 / 1954
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2996.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., FOSTER FELIX **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-308.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	680.0	
-348.0	CARBONDALE	SURVANT	COAL	2.0	720.0	
-397.0	CARBONDALE	COLCHESTER	COAL	0.5	769.0	
-431.0	CARBONDALE	DEKOVEN	COAL	3.0	803.0	
-463.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	835.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	4.0	850.0	
-510.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	882.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-518.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901542000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188674 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.835373 **DATE COLLECTED:** 3 / 0 / 1953
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-282.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	660.0	
-337.0	CARBONDALE	SURVANT	COAL	2.0	715.0	
-390.0	CARBONDALE	COLCHESTER	COAL	0.5	768.0	
-417.0	CARBONDALE	DEKOVEN	COAL	2.5	795.0	
-443.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	821.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-462.0	CARBONDALE	DAVIS	COAL	4.0	840.0	
-492.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	870.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-502.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900699000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170341 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840907 **DATE COLLECTED:** 12 / 0 / 1947

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2960.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY A W, BARNETT WM E 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-272.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	648.0	
-312.0	CARBONDALE	SURVANT	COAL	2.0	688.0	
-360.0	CARBONDALE	COLCHESTER	COAL	0.5	736.0	
-410.0	CARBONDALE	DEKOVEN	COAL	3.0	786.0	
-430.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	806.0	45 PERCENT SANDSTONE IN DEKOVEN SPLIT
-446.0	CARBONDALE	DAVIS	COAL	4.5	822.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	853.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-494.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900704000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.161262 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.848206 **DATE COLLECTED:** 7 / 0 / 1950

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2493.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, BARNETT-MURPHY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	642.0	
-301.0	CARBONDALE	SURVANT	COAL	0.6	680.0	
-349.0	CARBONDALE	COLCHESTER	COAL	0.5	728.0	
-401.0	CARBONDALE	DEKOVEN	COAL	2.8	780.0	
-423.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	802.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-439.0	CARBONDALE	DAVIS	COAL	4.0	818.0	
-471.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-481.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900708000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.17251 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844514 **DATE COLLECTED:** 7 / 0 / 1947

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2518.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-277.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	662.0	
-315.0	CARBONDALE	SURVANT	COAL	2.0	700.0	
-365.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-405.0	CARBONDALE	DEKOVEN	COAL	3.0	790.0	
-429.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	814.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-443.0	CARBONDALE	DAVIS	COAL	4.0	828.0	
-471.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	856.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-481.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	866.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901752000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 990' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165795 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.837296 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2502.0 **LOG TYPE:** Electric Log

SOURCE: EAKLE & HOLDER PETRO., WESTPHILINGER M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-266.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	642.0	
-314.0	CARBONDALE	SURVANT	COAL	1.8	690.0	
-364.0	CARBONDALE	COLCHESTER	COAL	1.6	740.0	
-404.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-422.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	798.0	20 PERCENT SANDSTONE IN DEKOVEN SPLIT
-439.0	CARBONDALE	DAVIS	COAL	4.0	815.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-488.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	864.0	
-524.0	TRADEWATER	MT. RORAH	COAL	1.5	900.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902133000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.167994 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844533 **DATE COLLECTED:** 7 / 0 / 1957

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2314.0 **LOG TYPE:** Electric Log

SOURCE: MAYHEW OIL CO., BAYLEY & GARRISON 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-275.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.0	
-320.0	CARBONDALE	SURVANT	COAL	2.0	700.0	
-370.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-415.0	CARBONDALE	DEKOVEN	COAL	3.0	795.0	
-435.0	CARBONDALE	LOWER DEKOVEN	COAL	0.7	815.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-453.0	CARBONDALE	DAVIS	COAL	4.0	833.0	
-485.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	865.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-497.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	877.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902180000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165616 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.84453 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 452.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-14.5	CARBONDALE	DANVILLE	COAL	2.0	392.5	
-16.5	CARBONDALE		SHALE & SANDSTONE	30.0	394.5	
-46.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	424.5	
-48.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	19.0	426.5	
-67.5	CARBONDALE	BRERETON	LIMESTONE	3.0	445.5	
-70.5	CARBONDALE	ANNA	BLACK SHALE	1.5	448.5	
-72.0	CARBONDALE	HERRIN	COAL	2.5	450.0	

MAPID: 05902182000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170417 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835497 **DATE COLLECTED:** 1 / 0 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2506.0 **LOG TYPE:** Electric Log

SOURCE: EAKLE & HOLDER PETRO., WESTPHILINGER M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-267.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	647.0	
-311.0	CARBONDALE	SURVANT	COAL	2.0	691.0	
-360.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-402.0	CARBONDALE	DEKOVEN	COAL	3.0	782.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	805.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-440.0	CARBONDALE	DAVIS	COAL	4.0	820.0	
-470.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-485.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05923882000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156694 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840922 **DATE COLLECTED:** 10 / 0 / 1976

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2122.0 **LOG TYPE:** Electric Log

SOURCE: SIMPKINS, JOE OIL DEV., LEACH "A" **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-249.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	595.0	
-296.0	CARBONDALE	SURVANT	COAL	1.8	642.0	
-346.0	CARBONDALE	COLCHESTER	COAL	1.3	692.0	
-392.0	CARBONDALE	DEKOVEN	COAL	2.0	738.0	
-404.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	750.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-424.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-472.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	818.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900711000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.168407 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.82107 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2143.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., WILSON MAX **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-246.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	616.0	
-278.0	CARBONDALE	SURVANT	COAL	0.8	648.0	
-350.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-416.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	786.0	20 PERCENT SANDSTONE IN DEKOVEN SPLIT
-428.0	CARBONDALE	DAVIS	COAL	4.0	798.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	830.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-478.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	848.0	
-514.0	TRADEWATER	MT. RORAH	COAL	2.5	884.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900714000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163659 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828243 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2536.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, LAWLER M L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-258.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	628.0	
-294.0	CARBONDALE	SURVANT	COAL	0.8	664.0	
-354.0	CARBONDALE	COLCHESTER	COAL	0.5	724.0	
-410.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	798.0	53 PERCENT SANDSTONE IN DEKOVEN SPLIT
-446.0	CARBONDALE	DAVIS	COAL	4.0	816.0	
-480.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-497.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	867.0	
-536.0	TRADEWATER	MT. RORAH	COAL	1.5	906.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900720000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.166033 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824654 **DATE COLLECTED:** 7 / 0 / 1949

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2147.0 **LOG TYPE:** Electric Log

SOURCE: WHITE RIVER DRLG, LAWLER JAMES T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-262.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	636.0	
-298.0	CARBONDALE	SURVANT	COAL	2.0	672.0	
-361.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-416.0	CARBONDALE	DEKOVEN	COAL	3.0	790.0	
-430.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	804.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-451.0	CARBONDALE	DAVIS	COAL	4.0	825.0	
-486.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	860.0	56% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-504.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	878.0	
-536.0	TRADEWATER	MT. RORAH	COAL	3.0	910.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900721000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165882 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831869 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2975.0 **LOG TYPE:** Electric Log

SOURCE: KIDD, BARRON, ETAL, LAWLER JAS T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-251.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	627.0	
-289.0	CARBONDALE	SURVANT	COAL	0.5	665.0	
-344.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-390.0	CARBONDALE	DEKOVEN	COAL	3.0	766.0	
-410.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	786.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-428.0	CARBONDALE	DAVIS	COAL	4.0	804.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	836.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-472.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	848.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900721000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165882 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.831869 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2975.0 **LOG TYPE:** Electric Log

SOURCE: KIDD, BARRON, ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
2.0	CARBONDALE	DANVILLE	COAL	-	374.0	
-14.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	7.0	390.0	
-24.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	400.0	
-33.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	409.0	
-57.0	CARBONDALE	HERRIN	COAL	4.0	433.0	
-70.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	9.0	446.0	
-102.0	CARBONDALE	BRIAR HILL	COAL	-	478.0	
-154.0	CARBONDALE	SPRINGFIELD	COAL	3.0	530.0	BLACK SHALE ROOF
-162.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	13.0	538.0	
-246.0	CARBONDALE	HOUCHIN CREEK	COAL	-	622.0	

MAPID: 05901549000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170633 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824696 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2151.0 **LOG TYPE:** Electric Log

SOURCE: WHITE RIVER DRLG, WESTPHAELINGER C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	626.0	
-289.0	CARBONDALE	SURVANT	COAL	2.0	663.0	
-347.0	CARBONDALE	COLCHESTER	COAL	0.5	721.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.0	774.0	
-422.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	796.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-434.0	CARBONDALE	DAVIS	COAL	4.0	808.0	
-466.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	840.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-481.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	855.0	
-524.0	TRADEWATER	MT. RORAH	COAL	2.0	898.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901930000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170447 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.833675 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1630.0 **LOG TYPE:** Electric Log

SOURCE: EAKLE & HOLDER PETRO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1255.0	BASE OF PENN.		UNCLASSIFIED	-	1630.0	

MAPID: 05902918000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.172864 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828314 **DATE COLLECTED:** 10 / 0 / 1963

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2844.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	642.0	
-310.0	CARBONDALE	SURVANT	COAL	1.2	689.0	
-361.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-406.0	CARBONDALE	DEKOVEN	COAL	3.0	785.0	
-421.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	800.0	25 PERCENT SANDSTONE IN DEKOVEN SPLIT
-443.0	CARBONDALE	DAVIS	COAL	4.0	822.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	853.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-491.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	870.0	
-529.0	TRADEWATER	MT. RORAH	COAL	1.4	908.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903544000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 40' N line, 2225' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163224 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.834441 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 423.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-4 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
12.1	CARBONDALE		ARGILLACEOUS SANDSTONE	25.0	361.9	
-12.9	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	386.9	
-16.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	13.0	390.4	
-29.4	CARBONDALE	LAWSON	GRAY SHALE	11.0	403.4	
-40.4	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	4.2	414.4	
-44.6	CARBONDALE	ANNA	BLACK SHALE	1.4	418.6	
-46.0	CARBONDALE	HERRIN	COAL	3.0	420.0	

MAPID: 05903544000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 40' N line, 2225' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163224 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.834441 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 794.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
13.6	CARBONDALE	DANVILLE	COAL	1.5	360.4	
-402.0	CARBONDALE	DEKOVEN	COAL	4.0	776.0	
-406.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	780.0	
-411.0	CARBONDALE	DAVIS	COAL	5.0	785.0	

MAPID: 05903544000C **VERSION:** 3 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 40' N line, 2225' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163224 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.834441 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 804.3 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-4 **WELL TYPE:** Coal Test

COMMENT: COPY INFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-140.0	CARBONDALE		DARK SHALE	6.5	515.0	SILTY
-146.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	521.5	FISSILE
-147.5	CARBONDALE	SPRINGFIELD	COAL	4.7	522.5	
-152.2	CARBONDALE		CLAYSTONE & SILTSTONE	3.8	527.2	
-156.0	CARBONDALE		ARGILLACEOUS SANDSTONE	4.0	531.0	COVE LOSS
-160.0	CARBONDALE		GRAY SHALE	8.0	535.0	
-168.0	CARBONDALE		SHALY LIMESTONE	1.0	543.0	GRAY
-169.0	CARBONDALE		BLACK SHALE	3.0	544.0	
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	6.5	547.0	THICKNESS UNCERT-COAL REMOVED
-178.5	CARBONDALE		CLAYSTONE & SILTSTONE	3.5	553.5	
-182.0	CARBONDALE		ROCK	203.0	557.0	NOT CURED
-385.0	CARBONDALE		SILTSTONE	2.0	760.0	LIGHT GRAY
-387.0	CARBONDALE		GRAY SHALE	13.0	762.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.7	775.0	
-403.7	CARBONDALE		SILTSTONE	2.2	778.7	
-405.9	CARBONDALE		MICACEOUS SANDSTONE	3.7	780.9	
-409.6	CARBONDALE		SILTY SHALE	2.6	784.6	
-412.2	CARBONDALE		BLACK SHALE	7.8	787.2	
-420.0	CARBONDALE	DAVIS	COAL	4.3	795.0	
-424.3	TRADEWATER		CLAYSTONE & SILTSTONE	5.0	799.3	BECOMES SANDY AT BASE

MAPID: 05923800000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' N line, 0' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173977 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.830047 **DATE COLLECTED:** 2 / 18 / 1975

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 555.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 237-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	138.0	0.0	
239.0			SHALE	4.0	138.0	
235.0			BLACK SHALE	0.5	142.0	
234.5			COAL	1.0	142.5	
233.5			SHALE	91.5	143.5	
142.0			SANDSTONE	8.0	235.0	
134.0			SHALE	144.5	243.0	
-10.5	CARBONDALE	DANVILLE	COAL	1.2	387.5	
-11.7	CARBONDALE		SHALE	14.3	388.7	
-26.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	403.0	
-32.0	CARBONDALE	ANVIL ROCK	SANDSTONE	19.7	409.0	
-51.7	CARBONDALE		SHALE	5.0	428.7	
-56.7	CARBONDALE	BRERETON	LIMESTONE	2.3	433.7	
-59.0	CARBONDALE	ANNA	BLACK SHALE	2.3	436.0	
-61.3	CARBONDALE	HERRIN	COAL	3.6	438.3	
-64.9	CARBONDALE		UNDERCLAY	2.0	441.9	
-66.9	CARBONDALE		SANDSTONE	25.3	443.9	
-92.2	CARBONDALE		SHALE	19.0	469.2	
-111.2	CARBONDALE	BRIAR HILL	COAL	1.5	488.2	
-112.7	CARBONDALE		SHALY SANDSTONE	40.4	489.7	
-153.1	CARBONDALE		SHALE	8.0	530.1	
-161.1	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.9	538.1	
-162.0	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	0.9	539.0	BLACK SHALE
-162.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	539.9	
-164.5	CARBONDALE	SPRINGFIELD	COAL	4.1	541.5	
-168.6	CARBONDALE		SHALE	9.4	545.6	

MAPID: 05923801000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1320' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.168367 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.823803 **DATE COLLECTED:** 3 / 4 / 1975

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 549.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 239-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION F-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
226.0			SHALE	43.0	150.0	
183.0			LIMESTONE	3.0	193.0	
180.0			SANDSTONE	9.0	196.0	
171.0			SHALE	153.0	205.0	
18.0			SANDSTONE	10.0	358.0	
8.0	MODESTO		SHALE	24.0	368.0	
-16.0	CARBONDALE	DANVILLE	COAL	1.2	392.0	
-17.2	CARBONDALE		SHALE	17.0	393.2	
-34.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	410.2	
-38.2	CARBONDALE		SHALE	25.3	414.2	
-63.5	CARBONDALE	BRERETON	LIMESTONE	2.2	439.5	
-65.7	CARBONDALE	ANNA	BLACK SHALE	2.4	441.7	
-68.1	CARBONDALE	HERRIN	COAL	3.4	444.1	
-71.5	CARBONDALE		UNDERCLAY	2.5	447.5	
-74.0	CARBONDALE		SANDSTONE	40.0	450.0	
-114.0	CARBONDALE		SHALE	17.0	490.0	
-131.0	CARBONDALE	BRIAR HILL	COAL	2.0	507.0	
-133.0	CARBONDALE		SANDSTONE	18.0	509.0	
-151.0	CARBONDALE		SHALE	6.0	527.0	
-157.0	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	1.0	533.0	
-158.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	534.0	
-159.0	CARBONDALE	SPRINGFIELD	COAL	4.1	535.0	
-163.1	CARBONDALE		SHALE & SANDSTONE	10.0	539.1	

MAPID: 05900723000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184382 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.822757 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., ABELL SARAH E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-247.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	620.0	
-277.0	CARBONDALE	SURVANT	COAL	1.6	650.0	
-352.0	CARBONDALE	COLCHESTER	COAL	0.5	725.0	
-405.0	CARBONDALE	DEKOVEN	COAL	3.0	778.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	798.0	59 PERCENT SANDSTONE IN DEKOVEN SPLIT
-443.0	CARBONDALE	DAVIS	COAL	4.0	816.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-492.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900725000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186442 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831778 **DATE COLLECTED:** 7 / 0 / 1948

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2524.0 **LOG TYPE:** Electric Log

SOURCE: LOHMANN-JOHNSON DRLG., FOSTER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-299.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-338.0	CARBONDALE	SURVANT	COAL	2.0	714.0	
-396.0	CARBONDALE	COLCHESTER	COAL	0.5	772.0	
-422.0	CARBONDALE	DEKOVEN	COAL	3.0	798.0	
-442.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	818.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-464.0	CARBONDALE	DAVIS	COAL	4.0	840.0	
-496.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	872.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-508.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	884.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900728000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.175315 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.821112 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2154.0 **LOG TYPE:** Electric Log

SOURCE: CAPCO OIL CO., MALONEY 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	615.0	
-271.0	CARBONDALE	SURVANT	COAL	2.0	645.0	
-345.0	CARBONDALE	COLCHESTER	COAL	0.5	719.0	
-396.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-412.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	786.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-426.0	CARBONDALE	DAVIS	COAL	5.0	800.0	
-461.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	835.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-478.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	852.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900731000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188976 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820893 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, ABELL J J 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-248.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	622.0	
-280.0	CARBONDALE	SURVANT	COAL	0.8	654.0	
-356.0	CARBONDALE	COLCHESTER	COAL	0.5	730.0	
-386.0	CARBONDALE	DEKOVEN	COAL	3.0	760.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	774.0	40 PERCENT SANDSTONE IN DEKOVEN SPLIT
-421.0	CARBONDALE	DAVIS	COAL	4.0	795.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	828.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-466.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	840.0	
-496.0	TRADEWATER	MT. RORAH	COAL	1.3	870.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901386000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 2260' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181768 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833618 **DATE COLLECTED:** 3 / 0 / 1953

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2571.0 **LOG TYPE:** Electric Log

SOURCE: KEYSTONE OIL CO, FOSTER LANE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-273.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	648.0	
-318.0	CARBONDALE	SURVANT	COAL	2.0	693.0	
-371.0	CARBONDALE	COLCHESTER	COAL	0.5	746.0	
-405.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	800.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-445.0	CARBONDALE	DAVIS	COAL	4.0	820.0	
-475.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-485.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	860.0	
-520.0	TRADEWATER	MT. RORAH	COAL	1.8	895.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901386000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 2260' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.181768 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.833618 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 459.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-23.5	CARBONDALE	DANVILLE	COAL	1.5	398.5	
-25.0	CARBONDALE		SHALE & SANDSTONE	20.0	400.0	
-45.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	420.0	
-49.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	2.0	424.0	
-51.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	426.0	
-61.0	CARBONDALE	LAWSON	GRAY SHALE	14.0	436.0	
-75.0	CARBONDALE	BRERETON	LIMESTONE	3.5	450.0	
-78.5	CARBONDALE	ANNA	BLACK SHALE	2.5	453.5	
-81.0	CARBONDALE	HERRIN	COAL	3.0	456.0	

MAPID: 05901550000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.190993 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831728 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2560.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-292.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	670.0	
-335.0	CARBONDALE	SURVANT	COAL	3.0	713.0	
-392.0	CARBONDALE	COLCHESTER	COAL	0.5	770.0	
-421.0	CARBONDALE	DEKOVEN	COAL	3.0	799.0	
-450.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	828.0	80 PERCENT SANDSTONE IN DEKOVEN SPLIT
-461.0	CARBONDALE	DAVIS	COAL	5.0	839.0	
-492.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.8	870.0	
-502.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901770000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 300' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174944 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833683 **DATE COLLECTED:** 9 / 0 / 1972

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, WILLIAMS VIRGIL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-269.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	645.0	
-314.0	CARBONDALE	SURVANT	COAL	2.0	690.0	
-377.0	CARBONDALE	COLCHESTER	COAL	1.3	753.0	
-404.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-424.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	800.0	55 PERCENT SANDSTONE IN DEKOVEN SPLIT
-442.0	CARBONDALE	DAVIS	COAL	4.0	818.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	850.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-484.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902911000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.175202 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.826486 **DATE COLLECTED:** 8 / 0 / 1963

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2483.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-273.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	648.0	
-317.0	CARBONDALE	SURVANT	COAL	1.6	692.0	
-375.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-410.0	CARBONDALE	DEKOVEN	COAL	3.0	785.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	803.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-450.0	CARBONDALE	DAVIS	COAL	4.0	825.0	
-480.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	855.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-496.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	871.0	
-535.0	TRADEWATER	MT. RORAH	COAL	1.3	910.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903235000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.177571 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.821077 **DATE COLLECTED:** 3 / 0 / 1967

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1684.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1305.0	BASE OF PENN.		UNCLASSIFIED	-	1684.0	

MAPID: 05900109000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205046 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.822556 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3730.0 **LOG TYPE:**

SOURCE: GLOBE ORC, BAHL L 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-95.0	CARBONDALE	HERRIN	COAL	4.0	468.0	
-193.0	CARBONDALE	SPRINGFIELD	COAL	5.0	566.0	

MAPID: 05900110000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200296 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.829857 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3730.0 **LOG TYPE:**

SOURCE: DCKRSN ETL, MOYE C 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-117.0	CARBONDALE	HERRIN	COAL	3.0	490.0	
-232.0	CARBONDALE	SPRINGFIELD	COAL	5.0	605.0	

MAPID: 05900111000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207354 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.822538 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**

SOURCE: GULF REF, BAHL L 0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	HERRIN	COAL	3.0	476.0	
-204.0	CARBONDALE	SPRINGFIELD	COAL	4.0	578.0	

MAPID: 05900112000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205024 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.824375 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 112 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
366.0			SHALE	18.0	4.0	"SOFT PAN"
348.0			SHALE	3.5	22.0	YELLOW
344.5			SANDSTONE	11.4	25.5	
333.1			RASH	0.4	36.9	
332.7			COAL	1.0	37.3	
331.7			UNDERCLAY	5.4	38.3	
326.2			LIMESTONE	2.7	43.8	
323.6			SHALE	19.3	46.4	
304.3			DARK SHALE	17.8	65.7	
286.5			COAL	0.8	83.5	
285.7			SHALE	5.7	84.3	

MAPID: 05900112000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205024 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.824375 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**

SOURCE: GULF REF, BAHL L 0004 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	HERRIN	COAL	2.0	476.0	
-206.0	CARBONDALE	SPRINGFIELD	COAL	4.0	580.0	

MAPID: 05900115000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202585 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831664 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: GREENE I B, GRANT S E 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-101.0	CARBONDALE	HERRIN	COAL	5.0	472.0	
-217.0	CARBONDALE	SPRINGFIELD	COAL	4.0	588.0	

MAPID: 05900168000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202644 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.828029 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: MARTIN R B, BAHL L 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-93.0	CARBONDALE	HERRIN	COAL	4.0	464.0	
-208.0	CARBONDALE	SPRINGFIELD	COAL	4.0	579.0	

MAPID: 05900169000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: GULF REF, BAHL L 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-109.0	CARBONDALE	HERRIN	COAL	4.0	480.0	
-218.0	CARBONDALE	SPRINGFIELD	COAL	4.0	589.0	

MAPID: 05900169000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 489.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-61.0	CARBONDALE	DANVILLE	COAL	2.0	432.0	
-63.0	CARBONDALE		SANDSTONE	6.0	434.0	
-69.0	CARBONDALE	ALLENBY	BONE COAL	2.0	440.0	
-71.0	CARBONDALE		CLAYSTONE	3.0	442.0	
-74.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	445.0	
-79.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	26.0	450.0	
-105.0	CARBONDALE	BRERETON	LIMESTONE	5.0	476.0	
-110.0	CARBONDALE	ANNA	BLACK SHALE	1.0	481.0	
-111.0	CARBONDALE	HERRIN	COAL	7.0	482.0	

MAPID: 05900169000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-107.0	CARBONDALE	HERRIN	COAL	4.0	478.0	
-164.0	CARBONDALE	BRIAR HILL	COAL	-	535.0	
-218.0	CARBONDALE	SPRINGFIELD	COAL	5.0	589.0	BLACK SHALE ROOF
-287.0	CARBONDALE	HOUCHIN CREEK	COAL	-	658.0	

MAPID: 05900169000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:** 12 / 0 / 1942

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2511.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-291.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	662.0	
-321.0	CARBONDALE	SURVANT	COAL	0.8	692.0	
-411.0	CARBONDALE	COLCHESTER	COAL	0.5	782.0	
-426.0	CARBONDALE	DEKOVEN	COAL	4.0	797.0	
-445.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	816.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-465.0	CARBONDALE	DAVIS	COAL	5.0	836.0	
-497.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	868.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-503.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	874.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900169000C **VERSION:** 5 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:** HINES

CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2511.0 **LOG TYPE:** Survey Sample Study

SOURCE: **WELL TYPE:** Oil and Gas 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: 05900169000C **VERSION:** 6 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2310' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205033 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.8262 **DATE COLLECTED:** 11 / 0 / 1942

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 550.0 **LOG TYPE:** Survey Sample Study

SOURCE: GULF REFINING CO. 1 **WELL TYPE:** Dry Hole

COMMENT: COAL DIVISION CONTROL WELL #95

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.0			NO RECORD	120.0	0.0	
251.0			SHALE	30.0	120.0	
221.0			SILTSTONE	2.0	150.0	
219.0			SHALE	15.0	152.0	
204.0			BLACK SHALE	3.0	167.0	
201.0			UNDERCLAY	2.0	170.0	
199.0			SHALE	8.0	172.0	
191.0			LIMESTONE	2.0	180.0	
189.0			SHALE	8.0	182.0	
181.0			SANDSTONE	14.0	190.0	
167.0			SILTSTONE	6.0	204.0	
161.0			SHALE	10.0	210.0	
151.0			LIMESTONE	6.0	220.0	
145.0			SANDSTONE	8.0	226.0	
137.0			SILTSTONE	76.0	234.0	WITH SANDSTONE
61.0			LIMESTONE	4.0	310.0	
57.0			SANDSTONE	16.0	314.0	
41.0			SHALE	6.0	330.0	
35.0			SILTSTONE	20.0	336.0	
15.0			SHALE	20.0	356.0	
-5.0			SILTSTONE	24.0	376.0	
-29.0			SHALE	32.0	400.0	TRACE OF COAL AT 414'
-61.0			BLACK SHALE & COAL	2.0	432.0	
-63.0			SANDSTONE	6.0	434.0	
-69.0			BLACK SHALE & COAL	2.0	440.0	
-71.0			UNDERCLAY	3.0	442.0	
-74.0			LIMESTONE	5.0	445.0	
-79.0			SANDSTONE	26.0	450.0	
-105.0			LIMESTONE	5.0	476.0	
-110.0			BLACK SHALE	1.0	481.0	
-111.0			COAL	7.0	482.0	THICKNESS ESTIMATED
-118.0			SHALE	1.0	489.0	
-119.0			SANDSTONE	12.0	490.0	
-131.0			LIMESTONE	2.0	502.0	
-133.0			SANDSTONE	6.0	504.0	
-139.0			SILTSTONE	6.0	510.0	
-145.0			SHALE	18.0	516.0	
-163.0			BLACK SHALE	1.0	534.0	
-164.0			COAL	1.0	535.0	THICKNESS ESTIMATED

-165.0	SANDSTONE	14.0	536.0

MAPID: 05900170000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209688 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.820701 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**

SOURCE: GULF REF, BAHL L 0005 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-89.0	CARBONDALE	HERRIN	COAL	2.0	463.0	
-197.0	CARBONDALE	SPRINGFIELD	COAL	4.0	571.0	

MAPID: 05900171000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198083 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.824421 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3830.0 **LOG TYPE:**

SOURCE: SKELLY OC, HOGE MYRL 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-112.0	CARBONDALE	HERRIN	COAL	3.0	495.0	
-222.0	CARBONDALE	SPRINGFIELD	COAL	4.0	605.0	

MAPID: 05900172000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207277 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.828001 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**

SOURCE: SKELLY OC, SCHMITT J 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-116.0	CARBONDALE	HERRIN	COAL	5.0	488.0	

MAPID: 05900173000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209665 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.822523 **DATE COLLECTED:** 1 / 0 / 1943
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-282.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	653.0	
-304.0	CARBONDALE	SURVANT	COAL	1.8	675.0	
-388.0	CARBONDALE	COLCHESTER	COAL	0.5	759.0	
-434.0	CARBONDALE	DEKOVEN	COAL	3.0	805.0	
-455.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	826.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-465.0	CARBONDALE	DAVIS	COAL	4.0	836.0	
-495.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	866.0	
-502.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	873.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900173000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209665 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.822523 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: GULF REF, BAHL L 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-108.0	CARBONDALE	HERRIN	COAL	2.0	479.0	
-210.0	CARBONDALE	SPRINGFIELD	COAL	4.0	581.0	

MAPID: 05900174000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198014 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.828053 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3730.0 **LOG TYPE:**
SOURCE: GULF REF, MOYE C 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-116.0	CARBONDALE	HERRIN	COAL	3.0	489.0	
-229.0	CARBONDALE	SPRINGFIELD	COAL	4.0	602.0	

MAPID: 05900175000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207251 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.829823 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3780.0 **LOG TYPE:**

SOURCE: SKELLY OC, SCHMITT J 0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-117.0	CARBONDALE	HERRIN	COAL	4.0	495.0	
-232.0	CARBONDALE	SPRINGFIELD	COAL	4.0	610.0	

MAPID: 05900176000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207328 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.82436 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:**

SOURCE: MARTIN R B, STRAUB COM0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-110.0	CARBONDALE	HERRIN	COAL	4.0	480.0	
-215.0	CARBONDALE	SPRINGFIELD	COAL	4.0	585.0	

MAPID: 05900178000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207226 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.831645 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 3810.0 **LOG TYPE:**

SOURCE: SKELLY OC, SCHMITT J 0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-109.0	CARBONDALE	HERRIN	COAL	4.0	490.0	
-229.0	CARBONDALE	SPRINGFIELD	COAL	4.0	610.0	

MAPID: 05900243000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200394 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824406 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**
SOURCE: ASHLND ORC, RISTER A P0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-132.0	CARBONDALE	HERRIN	COAL	3.0	504.0	
-244.0	CARBONDALE	SPRINGFIELD	COAL	4.0	616.0	

MAPID: 05900244000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NW SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200362 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.826222 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**
SOURCE: SKELLY OC, HOGE MYRL 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-118.0	CARBONDALE	HERRIN	COAL	5.0	492.0	
-230.0	CARBONDALE	SPRINGFIELD	COAL	6.0	604.0	

MAPID: 05900253000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207383 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.820719 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3730.0 **LOG TYPE:**
SOURCE: GULF REF, BAHL L 0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-83.0	CARBONDALE	HERRIN	COAL	4.0	456.0	
-197.0	CARBONDALE	SPRINGFIELD	COAL	4.0	570.0	

MAPID: 05900254000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.204933 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829835 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3740.0 **LOG TYPE:**
SOURCE: MARTIN ETL, BAHL L 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-112.0	CARBONDALE	HERRIN	COAL	3.0	486.0	
-227.0	CARBONDALE	SPRINGFIELD	COAL	4.0	601.0	

MAPID: 05900255000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207303 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.826182 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: MARTIN, STRAUB COM0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-119.0	CARBONDALE	HERRIN	COAL	4.0	490.0	
-227.0	CARBONDALE	SPRINGFIELD	COAL	4.0	598.0	

MAPID: 05900338000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.204904 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831654 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3830.0 **LOG TYPE:**
SOURCE: ASHLND ORC, GRANT S E 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-112.0	CARBONDALE	HERRIN	COAL	3.0	495.0	
-228.0	CARBONDALE	SPRINGFIELD	COAL	5.0	611.0	

MAPID: 05900339000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.204962 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.828016 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**

SOURCE: MARTIN ETL, BAHL L 0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-107.0	CARBONDALE	HERRIN	COAL	3.0	478.0	
-219.0	CARBONDALE	SPRINGFIELD	COAL	4.0	590.0	

MAPID: 05901241000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19567 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829876 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2559.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, DOWNEY L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-282.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	659.0	
-313.0	CARBONDALE	SURVANT	COAL	1.6	690.0	
-377.0	CARBONDALE	COLCHESTER	COAL	0.5	754.0	
-411.0	CARBONDALE	DEKOVEN	COAL	2.0	788.0	
-435.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	812.0	60 PERCENT SANDSTONE IN DEKOVEN SPLIT
-453.0	CARBONDALE	DAVIS	COAL	4.0	830.0	
-485.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	862.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-493.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	870.0	
-527.0	TRADEWATER	MT. RORAH	COAL	1.4	904.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901241000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19567 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829876 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1645.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1297.0	BASE OF PENN.		UNCLASSIFIED	-	1645.0	

MAPID: 05901255000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198109 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.822602 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2217.0 **LOG TYPE:** Electric Log

SOURCE: RICHARDSON, M. H., HOGE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-269.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	648.0	
-304.0	CARBONDALE	SURVANT	COAL	1.3	683.0	
-386.0	CARBONDALE	COLCHESTER	COAL	0.5	765.0	
-409.0	CARBONDALE	DEKOVEN	COAL	3.0	788.0	
-431.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	810.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-444.0	CARBONDALE	DAVIS	COAL	4.0	823.0	
-476.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	855.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-486.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	865.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901255000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198109 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.822602 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 1870.0 **LOG TYPE:** Electric Log

SOURCE: RICHARDSON, M. H. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-386.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	765.0	
-447.0	SPOON	DAVIS	UNCLASSIFIED	-	826.0	
-1491.0	BASE OF PENN.		UNCLASSIFIED	-	1870.0	

MAPID: 05902199000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202604 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829845 **DATE COLLECTED:** 3 / 0 / 1955

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2544.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., GAVEN FRANCES D **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-288.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	660.0	
-318.0	CARBONDALE	SURVANT	COAL	1.6	690.0	
-388.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-420.0	CARBONDALE	DEKOVEN	COAL	3.0	792.0	
-453.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	825.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-468.0	CARBONDALE	DAVIS	COAL	4.0	840.0	
-500.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	872.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-508.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	880.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902386000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202542 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833483 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2957.0 **LOG TYPE:** Electric Log

SOURCE: MORRIS E H, HISH FRANK 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-305.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-335.0	CARBONDALE	SURVANT	COAL	1.3	705.0	
-402.0	CARBONDALE	COLCHESTER	COAL	0.5	772.0	
-430.0	CARBONDALE	DEKOVEN	COAL	3.0	800.0	
-462.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	832.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	4.0	848.0	
-510.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	880.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-520.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	890.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900179000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211947 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824371 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 3710.0 **LOG TYPE:**
SOURCE: GLOBE ORC, HRNGTN HSH0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-113.0	CARBONDALE	HERRIN	COAL	3.0	484.0	
-217.0	CARBONDALE	SPRINGFIELD	COAL	5.0	588.0	

MAPID: 05900180000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211995 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.820721 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 3730.0 **LOG TYPE:**
SOURCE: GLOBE ORC, PILOT HISH0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-87.0	CARBONDALE	HERRIN	COAL	4.0	460.0	
-201.0	CARBONDALE	SPRINGFIELD	COAL	4.0	574.0	

MAPID: 05902178000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211925 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.826187 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1803.0 **LOG TYPE:** Electric Log
SOURCE: HILL WM E **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1428.0	BASE OF PENN.		UNCLASSIFIED	-	1803.0	

MAPID: 05902178000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211925 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.826187 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 514.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-79.5	CARBONDALE	DANVILLE	COAL	2.5	454.5	
-82.0	CARBONDALE		SHALE & SANDSTONE	23.0	457.0	
-105.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	480.0	
-108.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	22.0	483.0	
-130.0	CARBONDALE	BRERETON	LIMESTONE	6.0	505.0	
-136.0	CARBONDALE	ANNA	BLACK SHALE	1.0	511.0	
-137.0	CARBONDALE	HERRIN	COAL	2.5	512.0	

MAPID: 05902178000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211925 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.826187 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log

SOURCE: HILL WM E, HARRINGTON-HISH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-319.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	694.0	
-348.0	CARBONDALE	SURVANT	COAL	1.3	723.0	
-423.0	CARBONDALE	COLCHESTER	COAL	0.5	798.0	
-455.0	CARBONDALE	DEKOVEN	COAL	0.8	830.0	
-485.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	860.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-496.0	CARBONDALE	DAVIS	COAL	4.0	871.0	
-527.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	902.0	
-535.0	TRADEWATER	STONEFORT	LIMESTONE	7.0	910.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902365000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211833 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833497 **DATE COLLECTED:** 10 / 0 / 1958

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: MORRIS E H, HARRINGTON HRS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-309.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	693.0	
-327.0	CARBONDALE	SURVANT	COAL	2.5	711.0	
-370.0	CARBONDALE	COLCHESTER	COAL	0.5	754.0	
-436.0	CARBONDALE	DEKOVEN	COAL	3.8	820.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	845.0	43 PERCENT SANDSTONE IN DEKOVEN SPLIT
-478.0	CARBONDALE	DAVIS	COAL	5.5	862.0	
-514.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	898.0	
-520.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	904.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05903344000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.228075 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.823027 **DATE COLLECTED:** 12 / 0 / 1967

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 3357.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., HISH COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-385.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	764.0	
-426.0	CARBONDALE	SURVANT	COAL	3.0	805.0	
-471.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-530.0	CARBONDALE	DEKOVEN	COAL	3.0	909.0	
-535.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	914.0	
-555.0	CARBONDALE	DAVIS	COAL	4.0	934.0	
-590.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.6	969.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-596.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	975.0	
-627.0	TRADEWATER	MT. RORAH	COAL	1.3	1006.0	

MAPID: 05902097000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239834 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.827119 **DATE COLLECTED:** 3 / 0 / 1957

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1780.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1393.0	BASE OF PENN.		UNCLASSIFIED	-	1780.0	

MAPID: 05902097000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239834 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.827119 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 650.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-188.0	CARBONDALE	DANVILLE	COAL	1.5	575.0	
-189.5	CARBONDALE		SHALE & SANDSTONE	29.0	576.5	
-218.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	605.5	
-222.5	CARBONDALE	LAWSON	SILTY SHALE	23.0	609.5	
-245.5	CARBONDALE	LAWSON	SANDSTONE	13.0	632.5	
-258.5	CARBONDALE	ANNA	BLACK SHALE	1.5	645.5	
-260.0	CARBONDALE	HERRIN	COAL	3.5	647.0	

MAPID: 05902097000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239834 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.827119 **DATE COLLECTED:** 3 / 0 / 1957
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2730.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., BRADLEY COMM **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-448.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	835.0	
-483.0	CARBONDALE	SURVANT	COAL	2.0	870.0	
-532.0	CARBONDALE	COLCHESTER	COAL	0.5	919.0	
-576.0	CARBONDALE	DEKOVEN	COAL	3.0	963.0	
-596.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	983.0	85 PERCENT SANDSTONE IN DEKOVEN SPLIT
-609.0	CARBONDALE	DAVIS	COAL	4.0	996.0	
-638.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	1025.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-646.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	1033.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902120000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239787 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.821649 **DATE COLLECTED:** 6 / 0 / 1957
SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3046.0 **LOG TYPE:** Electric Log
SOURCE: GALLAGHER, VICTOR R., BRADLEY W L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-415.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	789.0	
-455.0	CARBONDALE	SURVANT	COAL	1.6	829.0	
-505.0	CARBONDALE	COLCHESTER	COAL	0.5	879.0	
-561.0	CARBONDALE	DEKOVEN	COAL	3.0	935.0	
-571.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	945.0	65 PERCENT SANDSTONE IN DEKOVEN SPLIT
-582.0	CARBONDALE	DAVIS	COAL	4.0	956.0	
-616.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	990.0	
-621.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	995.0	
-656.0	TRADEWATER	MT. RORAH	COAL	3.0	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902122000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.242078 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.825393 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 1784.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R., BRADLEY COM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-441.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	826.0	
-478.0	CARBONDALE	SURVANT	COAL	2.0	863.0	
-527.0	CARBONDALE	COLCHESTER	COAL	0.5	912.0	
-580.0	CARBONDALE	DEKOVEN	COAL	3.0	965.0	
-595.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	980.0	75 PERCENT SANDSTONE IN DEKOVEN SPLIT
-609.0	CARBONDALE	DAVIS	COAL	4.0	994.0	
-640.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1025.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-645.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1030.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901559000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.24906 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.825613 **DATE COLLECTED:** 12 / 0 / 1951

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1890.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1506.0	BASE OF PENN.		UNCLASSIFIED	-	1890.0	

MAPID: 05900013000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.255998 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.816415 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 766.0 **LOG TYPE:** Drillers Log

SOURCE: F.K. TAYLOR (OPERATOR) **WELL TYPE:** Coal Test

COMMENT: IMPRECISE LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.6			UNCONSOLIDATED	125.0	0.0	
250.6	MODESTO		SHALE	213.5	125.0	
37.1	MODESTO		COAL	0.7	338.5	
36.4	MODESTO		UNDERCLAY	0.8	339.2	
35.6	MODESTO		GRAY SHALE	19.0	340.0	
16.6	MODESTO		SANDSTONE	7.0	359.0	
9.6	MODESTO		SHALE	25.0	366.0	
-15.4	MODESTO		LIMESTONE	6.0	391.0	
-21.4	MODESTO		SHALE	3.0	397.0	
-24.4	MODESTO		SANDSTONE	18.0	400.0	
-42.4	MODESTO		SHALE	161.0	418.0	
-203.4	MODESTO		DARK SHALE	3.7	579.0	
-207.1	CARBONDALE	DANVILLE	COAL	2.1	582.7	UNCERTAIN CORRELATION
-209.2	CARBONDALE		UNDERCLAY	6.3	584.8	
-215.4	CARBONDALE		SANDSTONE	2.0	591.0	
-217.4	CARBONDALE		SHALE	11.5	593.0	
-228.9	CARBONDALE		SANDSTONE	2.2	604.5	
-231.1	CARBONDALE		GRAY SHALE	0.7	606.7	
-231.7	CARBONDALE		COAL	0.5	607.3	
-232.2	CARBONDALE		UNDERCLAY	3.2	607.8	
-235.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	611.0	
-237.9	CARBONDALE		GRAY SHALE	1.0	613.5	
-238.9	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	614.5	
-240.9	CARBONDALE		SHALE	22.5	616.5	
-263.4	CARBONDALE	BRERETON	LIMESTONE	3.0	639.0	
-266.4	CARBONDALE		DARK SHALE	1.0	642.0	
-267.4	CARBONDALE	ANNA	BLACK SHALE	1.2	643.0	
-268.6	CARBONDALE	HERRIN	COAL	3.9	644.2	
-272.5	CARBONDALE		UNDERCLAY	3.9	648.1	
-276.4	CARBONDALE		SHALE	7.0	652.0	
-283.4	CARBONDALE		SANDSTONE	12.0	659.0	
-295.4	CARBONDALE		SHALE	16.0	671.0	
-311.4	CARBONDALE		GRAY SHALE	13.8	687.0	
-325.2	CARBONDALE	BRIAR HILL	COAL	1.8	700.8	
-326.9	CARBONDALE		SHALE	12.5	702.5	
-339.4	CARBONDALE		SANDSTONE	24.0	715.0	
-363.4	CARBONDALE		SHALE	18.0	739.0	
-381.4	CARBONDALE	ST. DAVID	LIMESTONE	0.5	757.0	
-381.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	757.5	

-384.4	CARBONDALE	SPRINGFIELD	COAL WITH SHALE PARTINGS	4.8	760.0
-389.2	CARBONDALE		UNDERCLAY	1.2	764.8

MAPID: 05900013000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.255998 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.816415 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 647.9 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-211.0	CARBONDALE	DANVILLE	COAL	2.1	587.0	
-213.1	CARBONDALE		SHALE & SANDSTONE	22.6	589.1	
-235.6	CARBONDALE	ALLENBY	COAL	0.5	611.6	
-236.1	CARBONDALE		CLAYSTONE	3.2	612.1	
-239.3	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	615.3	
-241.3	CARBONDALE	LAWSON	SILTY SHALE	17.5	617.3	
-258.8	CARBONDALE	LAWSON	GRAY SHALE	5.0	634.8	
-263.8	CARBONDALE	BRERETON	LIMESTONE	3.0	639.8	
-266.8	CARBONDALE	ANNA	BLACK SHALE	1.2	642.8	
-268.0	CARBONDALE	HERRIN	COAL	3.9	644.0	

MAPID: 05900013000C **VERSION:** 3 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.255998 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.816415 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 3756.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR F K 105, HEMPHILL **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-268.4	CARBONDALE	HERRIN	COAL	3.9	644.0	
-384.4	CARBONDALE	SPRINGFIELD	COAL	4.8	760.0	

MAPID: 05900013000C **VERSION:** 4 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.255998 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.816415 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.5 **LOGGED (FT.):** 766.0 **LOG TYPE:** Drillers Log

SOURCE: 105 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.5	PLEISTOCENE		SAND/CLAY	40.0	0.0	
335.5	PLEISTOCENE		SAND	85.0	40.0	
250.5	MODESTO		SHALE	11.0	125.0	
239.5	MODESTO		SHALE	12.0	136.0	
227.5	MODESTO		SANDY SHALE	23.0	148.0	
204.5	MODESTO		SANDY SHALE	14.0	171.0	
190.5	MODESTO		SHALE	22.0	185.0	
168.5	MODESTO		DARK SHALE	10.0	207.0	
158.5	MODESTO		SHALE	5.0	217.0	
153.5	MODESTO		SHALE	10.0	222.0	
143.5	MODESTO		SANDY SHALE	28.0	232.0	
115.5	MODESTO		SHALE	78.5	260.0	
37.0	MODESTO		COAL	0.7	338.5	
36.3	MODESTO		UNDERCLAY	0.8	339.2	
35.5	MODESTO		SHALE	19.0	340.0	
16.5	MODESTO		SHALY SANDSTONE	7.0	359.0	
9.5	MODESTO		SANDY SHALE	20.0	366.0	
-10.5	MODESTO		DARK SHALE	5.0	386.0	
-15.5	MODESTO		LIMESTONE	6.0	391.0	
-21.5	MODESTO		SANDY SHALE	3.0	397.0	
-24.5	MODESTO		SANDSTONE	18.0	400.0	
-42.5	MODESTO		DARK SHALE	3.0	418.0	
-45.5	MODESTO		SHALE	7.0	421.0	
-52.5	MODESTO		BLUE SHALE	6.0	428.0	
-58.5	MODESTO		SANDY SHALE	23.0	434.0	
-81.5	MODESTO		SANDY SHALE	73.0	457.0	
-154.5	MODESTO		SHALE	23.0	530.0	
-177.5	MODESTO		SHALE	26.0	553.0	BROWN BANDS
-203.5	MODESTO		SHALE	3.0	579.0	HARD BANDS; DARK
-206.5	MODESTO		DARK SHALE	0.7	582.0	
-207.2	CARBONDALE	DANVILLE	COAL	2.1	582.7	
-209.3	CARBONDALE		UNDERCLAY	6.3	584.8	
-215.5	CARBONDALE		SANDSTONE	2.0	591.0	
-217.5	CARBONDALE		SHALE	8.0	593.0	
-225.5	CARBONDALE		SANDY SHALE	3.5	601.0	
-229.0	CARBONDALE		SHALY SANDSTONE	2.2	604.5	
-231.2	CARBONDALE		SHALE	0.7	606.7	
-231.8	CARBONDALE	ALLENBY	COAL	0.5	607.3	
-232.3	CARBONDALE		UNDERCLAY	3.2	607.8	

-235.5	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	2.5	611.0	
-238.0	CARBONDALE	BANKSTON FORK	SHALE	1.0	613.5	
-239.0	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	2.0	614.5	
-241.0	CARBONDALE		SANDY SHALE	17.5	616.5	
-258.5	CARBONDALE		SHALE	5.0	634.0	
-263.5	CARBONDALE	BRERETON	BLUE LIMESTONE	3.0	639.0	
-266.5	CARBONDALE	ANNA	DARK SHALE	1.0	642.0	
-267.5	CARBONDALE	ANNA	SHALE	1.2	643.0	BITUMINOUS
-268.7	CARBONDALE	HERRIN	COAL	3.9	644.2	
-272.6	CARBONDALE		UNDERCLAY	3.9	648.1	
-276.5	CARBONDALE		SANDY SHALE	7.0	652.0	
-283.5	CARBONDALE		SANDSTONE	12.0	659.0	
-295.5	CARBONDALE		SANDY SHALE	16.0	671.0	
-311.5	CARBONDALE		SHALE	13.8	687.0	
-325.3	CARBONDALE	BRIAR HILL	COAL	1.8	700.8	
-327.0	CARBONDALE		BLUE SHALE	1.5	702.5	
-328.5	CARBONDALE		SANDY SHALE	11.0	704.0	
-339.5	CARBONDALE		SANDSTONE	13.0	715.0	
-352.5	CARBONDALE		SHALY SANDSTONE	11.0	728.0	
-363.5	CARBONDALE		SANDY SHALE	9.0	739.0	
-372.5	CARBONDALE		DARK SHALE	9.0	748.0	
-381.5	CARBONDALE	ST. DAVID	BLUE LIMESTONE	0.5	757.0	
-382.0	CARBONDALE	TURNER MINE	SHALE	2.5	757.5	
-384.5	CARBONDALE	SPRINGFIELD	COAL	4.8	760.0	
-389.3	CARBONDALE		SANDY CLAYSTONE	1.2	764.8	

MAPID: 05901744000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.260739 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.812723 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 3160.0 **LOG TYPE:** Electric Log

SOURCE: REDWINE NASH ETAL, DUNN FRANCIS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-488.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	862.0	
-541.0	CARBONDALE	SURVANT	COAL	3.0	915.0	
-598.0	CARBONDALE	COLCHESTER	COAL	0.5	972.0	
-661.0	CARBONDALE	DEKOVEN	COAL	3.0	1035.0	
-661.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1035.0	
-676.0	CARBONDALE	DAVIS	COAL	4.0	1050.0	
-711.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	1085.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-722.0	TRADEWATER	STONEFORT	LIMESTONE	7.0	1096.0	
-764.0	TRADEWATER	MT. RORAH	COAL	1.3	1138.0	

MAPID: 05901744000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.260739 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.812723 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 1890.0 **LOG TYPE:** Electric Log

SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1516.0	BASE OF PENN.		UNCLASSIFIED	-	1890.0	

MAPID: 05901755000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.253639 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.810945 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3045.0 **LOG TYPE:** Electric Log

SOURCE: LAMBERT DAVIS, SMITH PAUL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-442.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	822.0	
-488.0	CARBONDALE	SURVANT	COAL	1.6	868.0	
-540.0	CARBONDALE	COLCHESTER	COAL	0.5	920.0	
-600.0	CARBONDALE	DEKOVEN	COAL	4.0	980.0	
-600.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	980.0	
-618.0	CARBONDALE	DAVIS	COAL	4.0	998.0	
-652.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1032.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-665.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1045.0	

MAPID: 05901808000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 990' N line, 330' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.262365 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818152 **DATE COLLECTED:** 10 / 0 / 1955
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1806.0 **LOG TYPE:** Electric Log
SOURCE: HISEY, W. M., LEMONS C & S 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-504.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	879.0	
-548.0	CARBONDALE	SURVANT	COAL	3.0	923.0	
-603.0	CARBONDALE	COLCHESTER	COAL	0.5	978.0	
-659.0	CARBONDALE	DEKOVEN	COAL	3.8	1034.0	
-659.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1034.0	
-680.0	CARBONDALE	DAVIS	COAL	5.0	1055.0	
-710.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	1085.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-719.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	1094.0	
-765.0	TRADEWATER	MT. RORAH	COAL	1.6	1140.0	

MAPID: 05900014000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.247932 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.813804 **DATE COLLECTED:** 0 / 0 / 1910
SURFACE ELEVATION (FT.): 370.6 **LOGGED (FT.):** 3706.0 **LOG TYPE:** Drillers Log
SOURCE: RIGGS E R, HEMPHILL F **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-234.4	CARBONDALE	HERRIN	COAL	7.0	605.0	

MAPID: 05900014000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2640' N line, 0' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.247932 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.813804 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 612.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-204.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	574.0	
-206.0	CARBONDALE	LAWSON	SANDSTONE	12.0	576.0	
-218.0	CARBONDALE	LAWSON	SHALE	10.0	588.0	
-228.0	CARBONDALE	BRERETON	LIMESTONE	7.0	598.0	
-235.0	CARBONDALE	HERRIN	COAL	7.0	605.0	

MAPID: 05902155000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.237397 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.812457 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2720.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R., PITTMAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-400.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	780.0	
-438.0	CARBONDALE	SURVANT	COAL	2.0	818.0	
-489.0	CARBONDALE	COLCHESTER	COAL	0.5	869.0	
-546.0	CARBONDALE	DEKOVEN	COAL	3.0	926.0	
-546.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	926.0	
-569.0	CARBONDALE	DAVIS	COAL	3.8	949.0	
-600.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.6	980.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-615.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	995.0	
-645.0	TRADEWATER	MT. RORAH	COAL	2.0	1025.0	

MAPID: 05902192000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.246749 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.810941 **DATE COLLECTED:** 1 / 0 / 1958

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2755.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R., BRADLEY W L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-444.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	820.0	
-482.0	CARBONDALE	SURVANT	COAL	1.3	858.0	
-534.0	CARBONDALE	COLCHESTER	COAL	0.5	910.0	
-599.0	CARBONDALE	DEKOVEN	COAL	3.0	975.0	
-599.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	975.0	
-619.0	CARBONDALE	DAVIS	COAL	3.5	995.0	
-652.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1028.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-664.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	1040.0	

MAPID: 05902192000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.246749 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.810941 **DATE COLLECTED:** 1 / 0 / 1958

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 1790.0 **LOG TYPE:** Electric Log

SOURCE: GALLAGHER, VICTOR R. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1417.0	BASE OF PENN.		UNCLASSIFIED	-	1790.0	

MAPID: 05990020000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 10' N line, 300' W line of NW SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.237462 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.80971 **DATE COLLECTED:** 4 / 23 / 1987

SURFACE ELEVATION (FT.): 371.4 **LOGGED (FT.):** 708.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 370 **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.4	PLEISTOCENE		CLAY	11.0	0.0	BROWN
360.4	PLEISTOCENE		CLAY	64.0	11.0	BLUE
296.4	PLEISTOCENE		SAND & GRAVEL	18.0	75.0	
278.4	PLEISTOCENE		CLAY	5.0	93.0	BLUE
273.4	MODESTO		SANDY SHALE	30.0	98.0	
243.4	MODESTO		GRAY SHALE	25.0	128.0	
218.4	MODESTO		SANDY SHALE	47.0	153.0	
171.4	MODESTO		GRAY SHALE	32.0	200.0	
139.4	MODESTO		SANDY SHALE	60.0	232.0	
79.4	MODESTO		SANDSTONE	16.0	292.0	
63.4	MODESTO		SANDY SHALE	43.0	308.0	
20.4	MODESTO	WEST FRANKLIN	LIMESTONE	3.6	351.0	
16.8	MODESTO		SANDY SHALE	15.4	354.6	
1.4	MODESTO		GRAY SHALE	12.0	370.0	
-10.6	MODESTO		SANDY SHALE	28.0	382.0	
-38.6	MODESTO		SANDSTONE	2.0	410.0	
-40.6	MODESTO		SANDY SHALE	65.0	412.0	
-105.6	MODESTO		GRAY SHALE	44.0	477.0	
-149.6	CARBONDALE	DANVILLE	COAL	1.5	521.0	
-151.1	CARBONDALE		GRAY SHALE	4.0	522.5	
-155.1	CARBONDALE		SANDSTONE	6.0	526.5	
-161.1	CARBONDALE		SANDY SHALE	17.5	532.5	
-178.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	550.0	
-183.6	CARBONDALE		SANDSTONE	10.0	555.0	
-193.6	CARBONDALE		SANDY SHALE	18.0	565.0	
-211.6	CARBONDALE	BRERETON	LIMESTONE	4.0	583.0	
-215.6	CARBONDALE	BRERETON	LIMESTONE	1.0	587.0	
-216.6	CARBONDALE	HERRIN	COAL	4.2	588.0	
-220.8	CARBONDALE		UNDERCLAY	3.0	592.2	SILTY
-223.8	CARBONDALE		SANDY SHALE	5.0	595.2	LIMY
-228.8	CARBONDALE		SANDY SHALE	31.0	600.2	
-259.8	CARBONDALE		GRAY SHALE	21.8	631.2	
-281.6	CARBONDALE		SANDSTONE	21.0	653.0	
-302.6	CARBONDALE		SANDSTONE	8.0	674.0	BROWN
-310.6	CARBONDALE		SANDSTONE	3.5	682.0	SILTSTONE; SANDSTONE; CLAYSTONE
-314.1	CARBONDALE		SILTY CLAYSTONE	13.0	685.5	
-327.1	CARBONDALE		CALCAREOUS CLAYSTONE	1.4	698.5	
-328.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	699.9	DARK GRAY

-329.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	700.9	
-331.6	CARBONDALE	SPRINGFIELD	COAL	4.6	703.0	
-336.2	CARBONDALE		SANDY SHALE	0.0	707.6	
-336.2	CARBONDALE		UNDERCLAY	0.6	707.6	SILTY

MAPID: 05990021000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1' N line, 25' E line of NE SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.238592 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.809772 **DATE COLLECTED:** 4 / 2 / 1987

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 740.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 368GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	10.5	0.0	BROWN
359.5	PLEISTOCENE		SAND	2.0	10.5	
357.5	PLEISTOCENE		CLAY	63.5	12.5	BLUE
294.0	PLEISTOCENE		SAND & GRAVEL	19.0	76.0	
275.0	MODESTO		SANDSTONE	0.5	95.0	
274.5	MODESTO		SANDY SHALE	14.5	95.5	
260.0	MODESTO		SANDSTONE	2.5	110.0	
257.5	MODESTO		SANDY SHALE	28.0	112.5	
229.5	MODESTO		GRAY SHALE	37.5	140.5	
192.0	MODESTO		BLACK SHALE	3.0	178.0	
189.0	MODESTO		GRAY SHALE	9.0	181.0	
180.0	MODESTO		SANDY SHALE	24.0	190.0	
156.0	MODESTO		GRAY SHALE	30.0	214.0	
126.0	MODESTO		SANDY SHALE	71.0	244.0	
55.0	MODESTO		SANDSTONE	12.0	315.0	
43.0	MODESTO		SANDY SHALE	23.0	327.0	
20.0	MODESTO		GRAY SHALE	13.5	350.0	
6.5	MODESTO		LIMESTONE	3.8	363.5	
2.7	MODESTO		SANDY SHALE	16.7	367.3	
-14.0	MODESTO		SANDSTONE	3.0	384.0	
-17.0	MODESTO		GRAY SHALE	31.0	387.0	
-48.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	418.0	
-50.5	MODESTO		SANDSTONE	3.5	420.5	
-54.0	MODESTO		SANDY SHALE	59.5	424.0	
-113.5	MODESTO		GRAY SHALE	50.0	483.5	
-163.5	CARBONDALE	DANVILLE	COAL	1.5	533.5	
-165.0	CARBONDALE		SANDY SHALE	5.0	535.0	
-170.0	CARBONDALE		SANDSTONE	10.5	540.0	
-180.5	CARBONDALE	ALLENBY	COAL	1.0	550.5	
-181.5	CARBONDALE		SHALE	12.5	551.5	
-194.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	564.0	
-198.0	CARBONDALE		SANDSTONE	12.5	568.0	
-210.5	CARBONDALE		SANDY SHALE	14.5	580.5	
-225.0	CARBONDALE		BLACK SHALE	0.5	595.0	
-225.5	CARBONDALE	BRERETON	LIMESTONE	5.5	595.5	
-231.0	CARBONDALE	ANNA	BLACK SHALE	0.5	601.0	
-231.5	CARBONDALE	HERRIN	COAL	4.3	601.5	
-235.8	CARBONDALE		UNDERCLAY	3.2	605.8	SILTY
-239.0	CARBONDALE		SANDY SHALE	41.0	609.0	

-280.0	CARBONDALE	BRIAR HILL	COAL	0.8	650.0	
-280.8	CARBONDALE		GRAY SHALE	8.0	650.8	
-288.8	CARBONDALE		SANDY SHALE	12.4	658.8	
-301.2	CARBONDALE		SANDSTONE	12.0	671.2	
-313.2	CARBONDALE		SANDSTONE	11.8	683.2	
-325.0	CARBONDALE		SANDY SHALE	7.2	695.0	LAMINITE
-332.2	CARBONDALE		DARK GRAY SHALE	7.1	702.2	
-339.3	CARBONDALE		SHALE	3.1	709.3	FISSILE
-342.4	CARBONDALE		CALCAREOUS CLAYSTONE	0.3	712.4	DARK GRAY
-342.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	712.7	DARK GRAY
-343.7	CARBONDALE	ST. DAVID	GRAY SHALE	1.6	713.7	FISSILE
-345.3	CARBONDALE	ST. DAVID	LIMESTONE	0.5	715.3	GRAY
-345.8	CARBONDALE	TURNER MINE	BLACK SHALE	0.2	715.8	
-346.0	CARBONDALE	SPRINGFIELD	COAL	4.9	716.0	
-350.9	CARBONDALE		UNDERCLAY	4.0	720.9	
-354.9	CARBONDALE		LIMESTONE	0.5	724.9	GRAY
-355.4	CARBONDALE		CLAYSTONE	5.5	725.4	GREEN
-360.9	CARBONDALE		SANDSTONE	3.1	730.9	GRAY
-364.0	CARBONDALE		SILTY CLAYSTONE	6.2	734.0	

MAPID: 05990022000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 300' N line, 300' W line of NE SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239796 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.808982 **DATE COLLECTED:** 3 / 19 / 1987

SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 757.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 366GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.3	PLEISTOCENE		CLAY	12.0	0.0	BROWN
358.3	PLEISTOCENE		CLAY	57.0	12.0	BLUE
301.3	PLEISTOCENE		SAND & GRAVEL	26.0	69.0	
275.3	BOND		GRAY SHALE	1.0	95.0	
274.3	BOND	CARTHAGE	LIMESTONE	3.5	96.0	
270.8	MODESTO		GRAY SHALE	20.5	99.5	
250.3	MODESTO		SANDY SHALE	21.0	120.0	
229.3	MODESTO		GRAY SHALE	42.0	141.0	
187.3	MODESTO		GRAY SHALE	6.5	183.0	
180.8	MODESTO		SANDY SHALE	57.0	189.5	
123.8	MODESTO		GRAY SHALE	50.5	246.5	
73.3	MODESTO		DARK SHALE	3.0	297.0	
70.3	MODESTO		COAL	0.5	300.0	
69.8	MODESTO		GRAY SHALE	4.5	300.5	
65.3	MODESTO		GRAY SHALE	35.0	305.0	
30.3	MODESTO		DARK SHALE	1.5	340.0	
28.8	MODESTO		SANDSTONE	13.5	341.5	
15.3	MODESTO		SHALE	23.0	355.0	
-7.7			UNKNOWN	336.0	378.0	NOT RECORDED
-343.7	CARBONDALE		SANDY SHALE	2.8	714.0	LAMINATE
-346.5	CARBONDALE		SANDY SHALE	7.2	716.8	
-353.7	CARBONDALE		SHALE	4.0	724.0	
-357.7	CARBONDALE		CLAYSTONE	0.5	728.0	
-358.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	728.5	DARK GRAY
-359.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	729.5	
-361.8	CARBONDALE		GRAY SHALE	0.6	732.1	FISSILE
-362.4	CARBONDALE	SPRINGFIELD	COAL	5.1	732.7	
-367.5	CARBONDALE		UNDERCLAY	2.0	737.8	
-369.5	CARBONDALE		LIMESTONE	2.2	739.8	GRAY
-371.7	CARBONDALE		UNKNOWN	0.6	742.0	
-372.3	CARBONDALE		CLAYSTONE	1.4	742.6	GREEN-GRAY
-373.7	CARBONDALE		SILTY CLAYSTONE	3.8	744.0	
-377.5	CARBONDALE		SANDY SHALE	10.0	747.8	LAMINITE

MAPID: 05990023000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 300' N line, 1' E line of NW SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.240843 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.809016 **DATE COLLECTED:** 2 / 25 / 1987

SURFACE ELEVATION (FT.): 368.6 **LOGGED (FT.):** 761.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 365GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.6	PLEISTOCENE		CLAY	9.5	0.0	BROWN
359.1	PLEISTOCENE		SAND	1.5	9.5	
357.6	PLEISTOCENE		CLAY	39.0	11.0	BLUE
318.6	PLEISTOCENE		SAND	3.0	50.0	
315.6	PLEISTOCENE		CLAY	12.0	53.0	BLUE
303.6	PLEISTOCENE		SAND	5.0	65.0	
298.6	PLEISTOCENE		SAND & GRAVEL	16.0	70.0	
282.6	PLEISTOCENE		CLAY	5.0	86.0	BLUE
277.6	PLEISTOCENE		SAND	2.7	91.0	
274.9	MODESTO		GRAY SHALE	8.3	93.7	
266.6	MODESTO		SANDSTONE	7.5	102.0	
259.1	MODESTO		SANDY SHALE	30.5	109.5	
228.6	MODESTO		GRAY SHALE	57.0	140.0	
171.6	MODESTO		BLACK SHALE	2.5	197.0	
169.1	MODESTO		GRAY SHALE	44.5	199.5	
124.6	MODESTO		SANDY SHALE	57.0	244.0	
67.6	MODESTO		GRAY SHALE	45.0	301.0	
22.6	MODESTO		BLACK SHALE	3.0	346.0	
19.6	MODESTO		SANDY SHALE	34.0	349.0	
-14.4	MODESTO	WEST FRANKLIN	LIMESTONE	3.6	383.0	
-18.0	MODESTO		GRAY SHALE	8.4	386.6	
-26.4	MODESTO		SANDSTONE	8.0	395.0	
-34.4	MODESTO		SANDY SHALE	40.0	403.0	
-74.4	MODESTO		GRAY SHALE	60.0	443.0	
-134.4	MODESTO		SANDY SHALE	51.0	503.0	
-185.4	CARBONDALE	DANVILLE	COAL	1.7	554.0	
-187.1	CARBONDALE		GRAY SHALE	1.8	555.7	
-188.9	CARBONDALE		SHALE	23.5	557.5	SANDY
-212.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	581.0	
-216.0	CARBONDALE		SANDSTONE	10.4	584.6	
-226.4	CARBONDALE		SANDY SHALE	17.0	595.0	
-243.4	CARBONDALE		BLACK SHALE	1.5	612.0	
-244.9	CARBONDALE	BRERETON	LIMESTONE	6.0	613.5	
-250.9	CARBONDALE	HERRIN	COAL	4.4	619.5	
-255.3	CARBONDALE		UNDERCLAY	2.6	623.9	SILTY
-257.9	CARBONDALE		SANDY SHALE	1.3	626.5	LIMY
-259.2	CARBONDALE		SANDY SHALE	40.2	627.8	
-299.4	CARBONDALE	BRIAR HILL	COAL	1.6	668.0	
-301.0	CARBONDALE		SANDY SHALE	42.0	669.6	

-343.0	CARBONDALE		SANDSTONE	1.4	711.6
-344.4	CARBONDALE		SANDY SHALE	8.6	713.0
-353.0	CARBONDALE		SILTY SHALE	10.0	721.6
-363.0	CARBONDALE		DARK GRAY SHALE	2.5	731.6
-365.5	CARBONDALE		CALCAREOUS CLAYSTONE	0.4	734.1
-365.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	734.5
-368.4	CARBONDALE	SPRINGFIELD	COAL	4.4	737.0
-372.8	CARBONDALE		UNDERCLAY	7.2	741.4
-380.0	CARBONDALE		SANDSTONE	12.4	748.6

MAPID: 05900181000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216704 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.809976 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 3780.0 **LOG TYPE:**

SOURCE: MCBRIDEINC, HISE SHAN 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-88.0	CARBONDALE	HERRIN	COAL	3.0	466.0	
-206.0	CARBONDALE	SPRINGFIELD	COAL	4.0	584.0	

MAPID: 05900182000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221223 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.80651 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3760.0 **LOG TYPE:**

SOURCE: SNCLR WYOM, SCHMITT W 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-86.0	CARBONDALE	HERRIN	COAL	3.0	462.0	
-200.0	CARBONDALE	SPRINGFIELD	COAL	4.0	576.0	

MAPID: 05900742000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216626 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.819023 **DATE COLLECTED:** 12 / 0 / 1947

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 2534.0 **LOG TYPE:** Electric Log

SOURCE: CLARK CHARLES C, HISH FRANK 1- **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-291.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	660.0	
-387.0	CARBONDALE	COLCHESTER	COAL	0.5	756.0	
-453.0	CARBONDALE	DEKOVEN	COAL	3.0	822.0	
-453.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	822.0	
-473.0	CARBONDALE	DAVIS	COAL	5.0	842.0	
-506.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	875.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-511.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	880.0	
-547.0	TRADEWATER	MT. RORAH	COAL	2.0	916.0	

MAPID: 05900743000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218946 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811848 **DATE COLLECTED:** 12 / 0 / 1951

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:** Electric Log

SOURCE: GOPHER DRILLING CORP, HISE SHAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-276.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	648.0	
-296.0	CARBONDALE	SURVANT	COAL	1.6	668.0	
-370.0	CARBONDALE	COLCHESTER	COAL	0.5	742.0	
-437.0	CARBONDALE	DEKOVEN	COAL	3.0	809.0	
-437.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	809.0	
-458.0	CARBONDALE	DAVIS	COAL	3.5	830.0	
-492.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	864.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-507.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	879.0	

MAPID: 05900743000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218946 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.811848 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2529.0 **LOG TYPE:** Electric Log

SOURCE: GOPHER DRILLING CORP **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-58.0	CARBONDALE	DANVILLE	COAL	-	430.0	
-65.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	437.0	
-72.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	444.0	
-78.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	450.0	
-94.0	CARBONDALE	HERRIN	COAL	4.0	466.0	
-106.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	4.0	478.0	
-138.0	CARBONDALE	BRIAR HILL	COAL	-	510.0	
-145.0	CARBONDALE	CANTON	SANDSTONE/SILTSTONE	21.0	517.0	
-205.0	CARBONDALE	SPRINGFIELD	COAL	5.0	577.0	BLACK SHALE ROOF
-222.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	48.0	594.0	
-271.0	CARBONDALE	HOUCHIN CREEK	COAL	-	643.0	

MAPID: 05901561000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.212164 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81164 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2556.0 **LOG TYPE:** Electric Log

SOURCE: BREHM & TAYLOR, HOFF SARAH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-255.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	630.0	
-375.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-425.0	CARBONDALE	DEKOVEN	COAL	3.0	800.0	
-425.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	800.0	
-445.0	CARBONDALE	DAVIS	COAL	3.0	820.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	852.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-491.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	866.0	

MAPID: 05902549000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' N line, 990' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.214388 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815317 **DATE COLLECTED:** 5 / 0 / 1961

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log

SOURCE: NOBLE JUD, SCHIFF 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-267.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	640.0	
-287.0	CARBONDALE	SURVANT	COAL	1.2	660.0	
-366.0	CARBONDALE	COLCHESTER	COAL	0.5	739.0	
-430.0	CARBONDALE	DEKOVEN	COAL	4.0	803.0	
-430.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	803.0	
-452.0	CARBONDALE	DAVIS	COAL	3.8	825.0	
-485.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	858.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-497.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	870.0	

MAPID: 05902549000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' N line, 990' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.214388 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.815317 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 468.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.5	CARBONDALE	DANVILLE	COAL	3.0	416.5	
-46.5	CARBONDALE		SHALE & SANDSTONE	16.0	419.5	
-62.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	435.5	
-65.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	12.0	438.5	
-77.5	CARBONDALE	LAWSON	GRAY SHALE	10.0	450.5	
-87.5	CARBONDALE	BRERETON	LIMESTONE	4.0	460.5	
-91.5	CARBONDALE	ANNA	BLACK SHALE	1.5	464.5	
-93.0	CARBONDALE	HERRIN	COAL	2.0	466.0	

MAPID: 05902814000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.223441 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806595 **DATE COLLECTED:** 9 / 0 / 1962

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2940.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-287.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	665.0	
-372.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-432.0	CARBONDALE	DEKOVEN	COAL	3.0	810.0	
-432.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	810.0	
-452.0	CARBONDALE	DAVIS	COAL	4.0	830.0	
-487.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	865.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-502.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	880.0	

MAPID: 05902815000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218951 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.808232 **DATE COLLECTED:** 8 / 0 / 1962

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	639.0	
-304.0	CARBONDALE	SURVANT	COAL	3.0	680.0	
-359.0	CARBONDALE	COLCHESTER	COAL	0.5	735.0	
-414.0	CARBONDALE	DEKOVEN	COAL	3.0	790.0	
-414.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	790.0	
-434.0	CARBONDALE	DAVIS	COAL	3.8	810.0	
-469.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	845.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-484.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	860.0	

MAPID: 05924566000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218952 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806437 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-272.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.0	
-375.0	CARBONDALE	COLCHESTER	COAL	0.5	758.0	
-405.0	CARBONDALE	DEKOVEN	COAL	3.0	788.0	
-405.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	788.0	
-426.0	CARBONDALE	DAVIS	COAL	4.0	809.0	
-457.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	840.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-477.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	860.0	

MAPID: 05900183000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209717 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818882 **DATE COLLECTED:** 4 / 0 / 1943

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2901.0 **LOG TYPE:** Electric Log

SOURCE: GLOBE OIL & REF CO, STRAUB A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-255.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	627.0	
-278.0	CARBONDALE	SURVANT	COAL	1.3	650.0	
-368.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-420.0	CARBONDALE	DEKOVEN	COAL	3.8	792.0	
-420.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	792.0	
-442.0	CARBONDALE	DAVIS	COAL	4.3	814.0	
-478.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	850.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-486.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	858.0	
-524.0	TRADEWATER	MT. RORAH	COAL	1.3	896.0	

MAPID: 05900183000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209717 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.818882 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3720.0 **LOG TYPE:**
SOURCE: GLOBE ORC, STRAUB A 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-78.0	CARBONDALE	HERRIN	COAL	3.0	450.0	
-186.0	CARBONDALE	SPRINGFIELD	COAL	5.0	558.0	

MAPID: 05900747000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193533 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.810065 **DATE COLLECTED:** 10 / 0 / 1950
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2517.0 **LOG TYPE:** Electric Log
SOURCE: COY OIL, INC., DOHERTY 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	608.0	
-259.0	CARBONDALE	SURVANT	COAL	0.5	635.0	
-346.0	CARBONDALE	COLCHESTER	COAL	0.5	722.0	
-391.0	CARBONDALE	DEKOVEN	COAL	3.0	767.0	
-391.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	767.0	
-412.0	CARBONDALE	DAVIS	COAL	4.0	788.0	
-444.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	820.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-462.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	838.0	
-489.0	TRADEWATER	MT. RORAH	COAL	1.5	865.0	

MAPID: 05900747000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193533 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.810065 **DATE COLLECTED:** 10 / 0 / 1950
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1848.0 **LOG TYPE:** Electric Log
SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1472.0	BASE OF PENN.		UNCLASSIFIED	-	1848.0	

MAPID: 05900748000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200587 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.808135 **DATE COLLECTED:** 12 / 0 / 1946

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3015.0 **LOG TYPE:** Electric Log

SOURCE: SHAFFER & TOLER DRLG., GREEN EDGAR A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	604.0	
-251.0	CARBONDALE	SURVANT	COAL	1.3	623.0	
-332.0	CARBONDALE	COLCHESTER	COAL	0.5	704.0	
-403.0	CARBONDALE	DEKOVEN	COAL	5.0	775.0	
-403.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	775.0	
-426.0	CARBONDALE	DAVIS	COAL	4.0	798.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	832.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-476.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	848.0	
-510.0	TRADEWATER	MT. RORAH	COAL	4.0	882.0	

MAPID: 05900749000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193546 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81724 **DATE COLLECTED:** 12 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2562.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, MALONEY ELIZA 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-256.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	634.0	
-290.0	CARBONDALE	SURVANT	COAL	0.8	668.0	
-373.0	CARBONDALE	COLCHESTER	COAL	0.5	751.0	
-422.0	CARBONDALE	DEKOVEN	COAL	3.0	800.0	
-422.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	800.0	
-437.0	CARBONDALE	DAVIS	COAL	4.0	815.0	
-472.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	850.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-487.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	865.0	
-514.0	TRADEWATER	MT. RORAH	COAL	2.0	892.0	

MAPID: 05900750000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193528 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806478 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2497.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., MINER WILLARD 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-220.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	594.0	
-242.0	CARBONDALE	SURVANT	COAL	0.5	616.0	
-328.0	CARBONDALE	COLCHESTER	COAL	0.5	702.0	
-389.0	CARBONDALE	DEKOVEN	COAL	4.0	763.0	
-389.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	763.0	
-412.0	CARBONDALE	DAVIS	COAL	3.8	786.0	
-446.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	820.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-464.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	838.0	
-498.0	TRADEWATER	MT. RORAH	COAL	2.0	872.0	

MAPID: 05901565000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1780' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209802 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.814874 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 446.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-26.0	CARBONDALE	DANVILLE	COAL	3.0	399.0	
-29.0	CARBONDALE		SHALE & SANDSTONE	10.0	402.0	
-39.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	412.0	
-42.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	11.0	415.0	
-53.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	426.0	
-63.0	CARBONDALE	BRERETON	LIMESTONE	5.0	436.0	
-68.0	CARBONDALE	ANNA	BLACK SHALE	2.0	441.0	
-70.0	CARBONDALE	HERRIN	COAL	3.0	443.0	

MAPID: 05901820000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207482 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813473 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2668.0 **LOG TYPE:** Electric Log

SOURCE: PINTOZZI OIL CO INC, FILLINGIM H F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	638.0	
-280.0	CARBONDALE	SURVANT	COAL	1.0	655.0	
-388.0	CARBONDALE	DEKOVEN	COAL	4.0	763.0	
-388.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	763.0	
-407.0	CARBONDALE	DAVIS	COAL	4.0	782.0	
-440.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	815.0	
-453.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	828.0	
-477.0	TRADEWATER	MT. RORAH	COAL	1.3	852.0	

MAPID: 05902604000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202817 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815322 **DATE COLLECTED:** 11 / 0 / 1961

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2535.0 **LOG TYPE:** Electric Log

SOURCE: V T DRILLING CO., HISH FRANK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-264.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	645.0	
-294.0	CARBONDALE	SURVANT	COAL	1.3	675.0	
-384.0	CARBONDALE	COLCHESTER	COAL	1.3	765.0	
-423.0	CARBONDALE	DEKOVEN	COAL	3.8	804.0	
-423.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	804.0	
-444.0	CARBONDALE	DAVIS	COAL	4.0	825.0	
-477.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	858.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-489.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	870.0	
-527.0	TRADEWATER	MT. RORAH	COAL	2.5	908.0	

MAPID: 05923816000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.201575 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.812567 **DATE COLLECTED:** 3 / 14 / 1975

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 559.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 228-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.0	PLEISTOCENE		UNCONSOLIDATED	136.0	0.0	
238.0			SHALE	14.0	136.0	
224.0			COAL	0.5	150.0	
223.5			SHALE	54.0	150.5	
169.5			LIMESTONE	3.5	204.5	
166.0			SHALE	0.5	208.0	
165.5			COAL	0.5	208.5	
165.0			UNDERCLAY	2.0	209.0	
163.0			SANDSTONE	18.0	211.0	
145.0			SHALE	7.0	229.0	
138.0			BLACK SHALE	1.0	236.0	
137.0			SHALE	13.0	237.0	
124.0			SANDSTONE	4.0	250.0	
120.0			SHALE	17.0	254.0	
103.0			LIMESTONE	0.5	271.0	
102.5			SHALE	6.0	271.5	
96.5			LIMESTONE	0.5	277.5	
96.0			SHALE	118.0	278.0	
-22.0	CARBONDALE	DANVILLE	COAL	1.0	396.0	
-23.0	CARBONDALE		SHALE	10.5	397.0	
-33.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	407.5	
-39.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	413.0	
-57.0	CARBONDALE		SHALE	5.0	431.0	
-62.0	CARBONDALE	BRERETON	LIMESTONE	3.0	436.0	
-65.0	CARBONDALE	ANNA	SHALE	1.0	439.0	
-66.0	CARBONDALE	ANNA	BLACK SHALE	1.0	440.0	
-67.0	CARBONDALE	HERRIN	COAL	3.6	441.0	
-70.6	CARBONDALE		UNDERCLAY	2.6	444.6	
-73.2	CARBONDALE		SANDSTONE	26.0	447.2	
-99.2	CARBONDALE		SHALE	16.8	473.2	
-116.0	CARBONDALE	BRIAR HILL	COAL	2.0	490.0	
-118.0	CARBONDALE		SHALE	5.0	492.0	
-123.0	CARBONDALE		SANDSTONE	13.5	497.0	
-136.5	CARBONDALE		SANDSTONE/SHALE	20.5	510.5	
-157.0	CARBONDALE		SANDSTONE	5.0	531.0	
-162.0	CARBONDALE		SHALE	9.1	536.0	
-171.1	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	0.7	545.1	
-171.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	545.8	
-174.0	CARBONDALE	SPRINGFIELD	COAL	5.2	548.0	

-179.2	CARBONDALE	SHALE	4.4	553.2
-183.6	CARBONDALE	SANDSTONE	2.0	557.6

MAPID: 05900752000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186708 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.819109 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2570.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, ABELL SARAH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-248.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	624.0	
-278.0	CARBONDALE	SURVANT	COAL	0.8	654.0	
-358.0	CARBONDALE	COLCHESTER	COAL	1.6	734.0	
-398.0	CARBONDALE	DEKOVEN	COAL	3.0	774.0	
-398.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	774.0	
-420.0	CARBONDALE	DAVIS	COAL	4.0	796.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	830.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-467.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	843.0	

MAPID: 05900753000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.189032 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815477 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2525.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, GREENE I B 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	607.0	
-260.0	CARBONDALE	SURVANT	COAL	0.5	636.0	
-348.0	CARBONDALE	COLCHESTER	COAL	0.5	724.0	
-400.0	CARBONDALE	DEKOVEN	COAL	4.2	776.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	776.0	
-424.0	CARBONDALE	DAVIS	COAL	4.0	800.0	
-456.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	832.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-474.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	850.0	
-504.0	TRADEWATER	MT. RORAH	COAL	2.0	880.0	

MAPID: 05900754000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191238 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811861 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2517.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., GREENE E A 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-238.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	614.0	
-274.0	CARBONDALE	SURVANT	COAL	0.5	650.0	
-348.0	CARBONDALE	COLCHESTER	COAL	3.0	724.0	
-394.0	CARBONDALE	DEKOVEN	COAL	3.5	770.0	
-394.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-416.0	CARBONDALE	DAVIS	COAL	4.0	792.0	
-449.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	825.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-469.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	845.0	

MAPID: 05900757000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.180114 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811984 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2977.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, MCGUIRE JOHN C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-222.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-246.0	CARBONDALE	SURVANT	COAL	1.6	620.0	
-326.0	CARBONDALE	COLCHESTER	COAL	0.0	700.0	
-386.0	CARBONDALE	DEKOVEN	COAL	3.0	760.0	
-386.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	760.0	
-398.0	CARBONDALE	DAVIS	COAL	4.0	772.0	
-432.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	806.0	
-454.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	828.0	
-486.0	TRADEWATER	MT. RORAH	COAL	2.0	860.0	

MAPID: 05900761000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.175369 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81929 **DATE COLLECTED:** 11 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2147.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., WILSON MAX 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-227.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	602.0	
-261.0	CARBONDALE	SURVANT	COAL	0.5	636.0	
-339.0	CARBONDALE	COLCHESTER	COAL	0.0	714.0	
-395.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-395.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-416.0	CARBONDALE	DAVIS	COAL	4.0	791.0	
-447.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	822.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-463.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	838.0	
-493.0	TRADEWATER	MT. RORAH	COAL	1.3	868.0	

MAPID: 05901967000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184653 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.808331 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2890.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., KEANE-MCGUIRE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-204.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-232.0	CARBONDALE	SURVANT	COAL	2.0	608.0	
-318.0	CARBONDALE	COLCHESTER	COAL	0.0	694.0	
-364.0	CARBONDALE	DEKOVEN	COAL	5.0	740.0	
-364.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	740.0	
-378.0	CARBONDALE	DAVIS	COAL	4.0	754.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	788.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-429.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	805.0	
-464.0	TRADEWATER	MT. RORAH	COAL	2.0	840.0	

MAPID: 05902087000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1650' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191238 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.810149 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1843.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1467.0	BASE OF PENN.		UNCLASSIFIED	-	1843.0	

MAPID: 05902087000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1650' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191238 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.810149 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 420.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
0.0	CARBONDALE	DANVILLE	COAL	3.5	376.0	
-3.5	CARBONDALE		SILTY SHALE	6.0	379.5	
-9.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	385.5	
-12.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	24.0	388.5	
-36.5	CARBONDALE	BRERETON	LIMESTONE	3.0	412.5	
-39.5	CARBONDALE	ANNA	BLACK SHALE	1.5	415.5	
-41.0	CARBONDALE	HERRIN	COAL	3.5	417.0	

MAPID: 05902116000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191251 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.819034 **DATE COLLECTED:** 8 / 0 / 1957

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2553.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, MCGUIRE HEIRS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-269.0	CARBONDALE	SURVANT	COAL	1.6	643.0	
-346.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-406.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-406.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	780.0	
-428.0	CARBONDALE	DAVIS	COAL	4.0	802.0	
-461.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	835.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-475.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	849.0	
-501.0	TRADEWATER	MT. RORAH	COAL	2.0	875.0	

MAPID: 05902125000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.189063 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.811886 **DATE COLLECTED:** 8 / 0 / 1957

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1873.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1496.0	BASE OF PENN.		UNCLASSIFIED	-	1873.0	

MAPID: 05903347000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.177968 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.80659 **DATE COLLECTED:** 3 / 0 / 1968
SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2940.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., MCGUIRE JOHN M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-241.0	CARBONDALE	SURVANT	COAL	0.5	620.0	
-311.0	CARBONDALE	COLCHESTER	COAL	0.0	690.0	
-363.0	CARBONDALE	DEKOVEN	COAL	3.0	742.0	
-363.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	742.0	
-384.0	CARBONDALE	DAVIS	COAL	4.0	763.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	798.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-439.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	818.0	

MAPID: 05900184000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16858 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.815639 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1694.0 **LOG TYPE:** Electric Log
SOURCE: DELTA DRILLING CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1318.0	BASE OF PENN.		UNCLASSIFIED	-	1694.0	

MAPID: 05900184000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16858 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.815639 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 3640.0 **LOG TYPE:**
SOURCE: DELTA DRC, DOHERTY M 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-41.0	CARBONDALE	HERRIN	COAL	3.0	405.0	
-141.0	CARBONDALE	SPRINGFIELD	COAL	4.0	505.0	

MAPID: 05900184000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16858 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815639 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2941.0 **LOG TYPE:** Electric Log

SOURCE: DELTA DRILLING CO., DOHERTY M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-338.0	CARBONDALE	COLCHESTER	COAL	0.5	714.0	
-394.0	CARBONDALE	DEKOVEN	COAL	3.8	770.0	
-394.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-414.0	CARBONDALE	DAVIS	COAL	5.0	790.0	
-446.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	822.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-464.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	840.0	

MAPID: 05900763000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 430' N line, 990' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163849 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818927 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2151.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., FREY EDWARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-252.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	618.0	
-342.0	CARBONDALE	COLCHESTER	COAL	0.5	708.0	
-412.0	CARBONDALE	DEKOVEN	COAL	3.0	778.0	
-412.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	778.0	
-432.0	CARBONDALE	DAVIS	COAL	5.0	798.0	
-464.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	830.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-484.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	850.0	
-527.0	TRADEWATER	MT. RORAH	COAL	3.0	893.0	

MAPID: 05901569000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173409 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.810236 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2925.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BOWLING WM M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	580.0	
-238.0	CARBONDALE	SURVANT	COAL	1.3	609.0	
-309.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-373.0	CARBONDALE	DEKOVEN	COAL	4.0	744.0	
-373.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	744.0	
-394.0	CARBONDALE	DAVIS	COAL	4.0	765.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	800.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-446.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	817.0	
-488.0	TRADEWATER	MT. RORAH	COAL	2.5	859.0	

MAPID: 05903553000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2590' S line, 1414' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16954 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.812842 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 408.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-3 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
11.1	CARBONDALE	DANVILLE	COAL	2.0	355.9	
9.1	CARBONDALE		SILTY SHALE	13.0	357.9	
-3.9	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	370.9	
-10.9	CARBONDALE	LAWSON	GRAY SHALE	0.2	377.9	
-11.1	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.0	378.1	
-16.0	CARBONDALE	LAWSON	SILTSTONE	6.3	383.0	
-22.3	CARBONDALE	LAWSON	SILTY SHALE	5.5	389.3	
-27.8	CARBONDALE	LAWSON	GRAY SHALE	5.9	394.8	
-33.7	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	0.6	400.7	
-34.3	CARBONDALE	ANNA	BLACK SHALE	3.8	401.3	
-38.0	CARBONDALE	HERRIN	COAL	3.0	405.0	

MAPID: 05903553000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 2590' S line, 1414' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16954 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.812842 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 786.0 **LOG TYPE:** Survey Core Study
SOURCE: AYRSHIRE COAL CO. NH-3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-392.6	CARBONDALE	DEKOVEN	COAL	4.3	759.6	
-396.9	CARBONDALE	LOWER DEKOVEN	COAL	0.0	763.9	
-414.6	CARBONDALE	DAVIS	COAL	4.4	781.6	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900185000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.17129 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.795676 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: ANGLE&ANGL, DAILY JOHN0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-5.0	CARBONDALE	HERRIN	COAL	3.0	380.0	
-117.0	CARBONDALE	SPRINGFIELD	COAL	4.0	492.0	

MAPID: 05900186000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.171244 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.804783 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3690.0 **LOG TYPE:**
SOURCE: EASN&ANGLE, DUFFY M 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-33.0	CARBONDALE	HERRIN	COAL	3.0	402.0	
-143.0	CARBONDALE	SPRINGFIELD	COAL	5.0	512.0	

MAPID: 05900762000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.166706 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.792017 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2942.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO., MALONEY D J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	562.0	
-229.0	CARBONDALE	SURVANT	COAL	2.0	604.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-355.0	CARBONDALE	DEKOVEN	COAL	4.0	730.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	730.0	
-380.0	CARBONDALE	DAVIS	COAL	5.0	755.0	
-417.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	792.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-440.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	815.0	
-465.0	TRADEWATER	MT. RORAH	COAL	2.0	840.0	

MAPID: 05901200000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173598 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.797503 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2657.0 **LOG TYPE:** Electric Log

SOURCE: MOSEBACK PAUL, MALONEY D J 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-195.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	565.0	
-250.0	CARBONDALE	SURVANT	COAL	1.3	620.0	
-300.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-353.0	CARBONDALE	DEKOVEN	COAL	3.0	723.0	
-353.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	723.0	
-376.0	CARBONDALE	DAVIS	COAL	3.8	746.0	
-408.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	778.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-430.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	800.0	
-466.0	TRADEWATER	MT. RORAH	COAL	1.3	836.0	

MAPID: 05901201000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 390' N line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.164321 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.800962 **DATE COLLECTED:** 6 / 0 / 1951

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2997.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DOHERTY ARDELL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-205.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	586.0	
-237.0	CARBONDALE	SURVANT	COAL	0.8	618.0	
-333.0	CARBONDALE	COLCHESTER	COAL	0.0	714.0	
-376.0	CARBONDALE	DEKOVEN	COAL	3.5	757.0	
-376.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	757.0	
-397.0	CARBONDALE	DAVIS	COAL	4.0	778.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	810.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-451.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	832.0	
-485.0	TRADEWATER	MT. RORAH	COAL	3.0	866.0	

MAPID: 05901932000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157274 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804761 **DATE COLLECTED:** 1 / 0 / 1956

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2828.0 **LOG TYPE:** Electric Log

SOURCE: LUCAS, W. O., DUFFY HANNAH 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-233.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-277.0	CARBONDALE	SURVANT	COAL	1.2	659.0	
-338.0	CARBONDALE	COLCHESTER	COAL	0.0	720.0	
-404.0	CARBONDALE	DEKOVEN	COAL	4.0	786.0	
-404.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	786.0	
-426.0	CARBONDALE	DAVIS	COAL	4.0	808.0	
-458.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	840.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-478.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	860.0	
-512.0	TRADEWATER	MT. RORAH	COAL	1.6	894.0	

MAPID: 05902044000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157372 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.799296 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1715.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1347.0	BASE OF PENN.		UNCLASSIFIED	-	1715.0	

MAPID: 05902044000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157372 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.799296 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
17.5	CARBONDALE	DANVILLE	COAL	3.5	350.5	
14.0	CARBONDALE		SILTY SHALE	10.0	354.0	
4.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	5.0	364.0	
-1.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	23.0	369.0	
-24.0	CARBONDALE	BRERETON	CALCAREOUS SHALE	3.0	392.0	
-27.0	CARBONDALE	HERRIN	COAL	5.0	395.0	

MAPID: 05902044000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157372 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799296 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2920.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, DOHERTY ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-220.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-257.0	CARBONDALE	SURVANT	COAL	1.8	625.0	
-324.0	CARBONDALE	COLCHESTER	COAL	0.5	692.0	
-387.0	CARBONDALE	DEKOVEN	COAL	3.8	755.0	
-387.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	755.0	
-411.0	CARBONDALE	DAVIS	COAL	4.0	779.0	
-447.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	815.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-470.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	838.0	
-497.0	TRADEWATER	MT. RORAH	COAL	1.4	865.0	

MAPID: 05903313000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173582 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804788 **DATE COLLECTED:** 8 / 0 / 1967

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 3200.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., DUFFY M J ET A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-218.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-323.0	CARBONDALE	COLCHESTER	COAL	0.5	695.0	
-370.0	CARBONDALE	DEKOVEN	COAL	3.0	742.0	
-370.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	742.0	
-394.0	CARBONDALE	DAVIS	COAL	4.0	766.0	
-427.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	799.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-446.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	818.0	
-473.0	TRADEWATER	MT. RORAH	COAL	1.8	845.0	

MAPID: 05923858000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156939 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.79153 **DATE COLLECTED:** 1 / 15 / 1969

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 488.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 62-G **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION Q-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	121.0	0.0	
239.0			SHALE	63.4	121.0	
175.6	MODESTO	PIASA	LIMESTONE	5.4	184.4	
170.2	MODESTO		SHALE	116.2	189.8	
54.0	CARBONDALE	DANVILLE	COAL	1.0	306.0	
53.0	CARBONDALE		SHALE	10.2	307.0	
42.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	317.2	
37.4	CARBONDALE		SHALE	32.8	322.6	
4.6	CARBONDALE	BRERETON	LIMESTONE	1.0	355.4	
3.6	CARBONDALE	ANNA	SHALE	7.1	356.4	
-3.5	CARBONDALE	HERRIN	COAL	4.5	363.5	
-8.0	CARBONDALE		UNDERCLAY	2.0	368.0	
-10.0	CARBONDALE		SHALE	9.3	370.0	
-19.3	CARBONDALE		SANDSTONE	6.7	379.3	
-26.0	CARBONDALE		SHALE	29.5	386.0	
-55.5	CARBONDALE	BRIAR HILL	COAL	1.0	415.5	
-56.5	CARBONDALE		SHALE	9.0	416.5	
-65.5	CARBONDALE		SANDSTONE	3.8	425.5	
-69.3	CARBONDALE		SHALE	1.0	429.3	
-70.3	CARBONDALE		SANDSTONE	6.7	430.3	
-77.0	CARBONDALE		SHALE	38.4	437.0	
-115.4	CARBONDALE		SHALE	4.7	475.4	
-120.1	CARBONDALE	SPRINGFIELD	COAL	5.1	480.1	
-125.2	CARBONDALE		UNDERCLAY	2.8	485.2	

MAPID: 05923933000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165554 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.791103 **DATE COLLECTED:** 1 / 11 / 1973

SURFACE ELEVATION (FT.): 359.4 **LOGGED (FT.):** 469.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 114-G-C **WELL TYPE:** Coal Test

COMMENT: PEBODY LOCATION I-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.4	PLEISTOCENE		UNCONSOLIDATED	124.0	0.0	
235.4			SHALE	37.0	124.0	
198.4			SANDSTONE	8.0	161.0	
190.4			SHALE	12.0	169.0	
178.4			BLACK SHALE	1.0	181.0	
177.4			SHALE	7.0	182.0	
170.4			LIMESTONE	1.3	189.0	
169.1			SHALE	1.0	190.3	
168.1			LIMESTONE	4.7	191.3	
163.4			SHALE	117.0	196.0	
46.4	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	313.0	
43.9	CARBONDALE		SHALE	5.0	315.5	
38.9	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	320.5	
26.9	CARBONDALE		SHALE	11.5	332.5	
15.4	CARBONDALE	ANNA	BLACK SHALE	4.8	344.0	
10.6	CARBONDALE	HERRIN	COAL	3.3	348.8	
7.3	CARBONDALE		UNDERCLAY	2.9	352.1	
4.4	CARBONDALE		LIMESTONE	1.5	355.0	
2.9	CARBONDALE		SHALE	11.5	356.5	
-8.6	CARBONDALE		SANDSTONE	11.0	368.0	
-19.6	CARBONDALE		SHALE	15.0	379.0	
-34.6	CARBONDALE	BRIAR HILL	COAL	1.5	394.0	
-36.1	CARBONDALE		SHALE	8.0	395.5	
-44.1	CARBONDALE		SANDSTONE	12.0	403.5	
-56.1	CARBONDALE		SHALE	43.2	415.5	
-99.3	CARBONDALE	ST. DAVID	LIMESTONE	0.4	458.7	
-99.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	459.1	
-102.9	CARBONDALE	SPRINGFIELD	COAL	5.0	462.3	
-107.9	CARBONDALE		UNDERCLAY	1.0	467.3	
-108.9	CARBONDALE		LIMESTONE	1.6	468.3	

MAPID: 05923937000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156306 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.794714 **DATE COLLECTED:** 1 / 26 / 1969

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 492.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 71GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION Q-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	143.5	0.0	
238.5			SHALE	60.0	143.5	
178.5			COAL WITH SHALE	2.0	203.5	COAL WITH BLACK SHALE
176.5			SHALE	10.5	205.5	
166.0			SANDSTONE	4.5	216.0	
161.5			LIMESTONE	2.5	220.5	
159.0			SANDY SHALE	106.0	223.0	
53.0	CARBONDALE	DANVILLE	COAL	2.3	329.0	
50.7	CARBONDALE		SHALE	10.7	331.3	
40.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	342.0	
33.2	CARBONDALE		SHALE	20.7	348.8	
12.5	CARBONDALE	BRERETON	LIMESTONE	0.5	369.5	
12.0	CARBONDALE	ANNA	BLACK SHALE	5.7	370.0	
6.3	CARBONDALE	HERRIN	COAL	1.8	375.7	
4.5	CARBONDALE	HERRIN	LIMESTONE	1.0	377.5	
3.5	CARBONDALE	HERRIN	COAL	1.5	378.5	
2.0	CARBONDALE		UNDERCLAY	5.5	380.0	
-3.5	CARBONDALE		SANDSTONE	22.5	385.5	
-26.0	CARBONDALE		SHALE	23.3	408.0	
-49.3	CARBONDALE	BRIAR HILL	COAL	1.8	431.3	
-51.1	CARBONDALE		SHALE	46.7	433.1	
-97.8	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	1.0	479.8	
-98.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	480.8	
-102.0	CARBONDALE	SPRINGFIELD	COAL	4.9	484.0	
-106.9	CARBONDALE		UNDERCLAY	3.6	488.9	

MAPID: 05900770000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.180325 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.802945 **DATE COLLECTED:** 3 / 0 / 1948

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 2968.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT & WILLIS, INC., BOWLING AGNES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-189.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	562.0	
-211.0	CARBONDALE	SURVANT	COAL	1.3	584.0	
-363.0	CARBONDALE	DEKOVEN	COAL	3.0	736.0	
-363.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	736.0	
-387.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-419.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	792.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-439.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	812.0	

MAPID: 05900786000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.18037 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799312 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2953.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., ABELL MARTIN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.0	
-240.0	CARBONDALE	SURVANT	COAL	2.8	605.0	
-357.0	CARBONDALE	DEKOVEN	COAL	3.0	722.0	
-357.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	722.0	
-380.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-410.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	775.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-435.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	800.0	

MAPID: 05901080000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.18722 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.79385 **DATE COLLECTED:** 7 / 0 / 1952

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 1722.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-279.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	665.0	
-374.0	SPOON	DAVIS	UNCLASSIFIED	-	760.0	
-1336.0	BASE OF PENN.		UNCLASSIFIED	-	1722.0	

MAPID: 05901203000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.189452 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.79567 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2966.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, N. V., EST. OF, DRONE ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-201.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	585.0	
-238.0	CARBONDALE	SURVANT	COAL	0.5	622.0	
-364.0	CARBONDALE	DEKOVEN	COAL	3.8	748.0	
-364.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	748.0	
-389.0	CARBONDALE	DAVIS	COAL	3.5	773.0	
-420.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	804.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-438.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	822.0	
-476.0	TRADEWATER	MT. RORAH	COAL	2.0	860.0	

MAPID: 05901206000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.17812 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.79568 **DATE COLLECTED:** 3 / 0 / 1952

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1625.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD, HUBERT E., MALONEY ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.0	
-294.0	CARBONDALE	COLCHESTER	COAL	3.0	659.0	
-355.0	CARBONDALE	DEKOVEN	COAL	3.0	720.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	720.0	
-380.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-410.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	775.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-435.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	800.0	

MAPID: 05901242000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191349 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.802895 **DATE COLLECTED:** 9 / 0 / 1952

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 2856.0 **LOG TYPE:** Electric Log

SOURCE: SIPOHA PLUMBING, ABELL EDW **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-210.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-231.0	CARBONDALE	SURVANT	COAL	1.1	609.0	
-302.0	CARBONDALE	COLCHESTER	COAL	0.0	680.0	
-374.0	CARBONDALE	DEKOVEN	COAL	3.0	752.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	752.0	
-400.0	CARBONDALE	DAVIS	COAL	3.0	778.0	
-430.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	808.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-450.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	828.0	
-472.0	TRADEWATER	MT. RORAH	COAL	1.2	850.0	

MAPID: 05902118000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.187034 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799292 **DATE COLLECTED:** 6 / 0 / 1957

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2805.0 **LOG TYPE:** Electric Log

SOURCE: HOWARD & HOWELL, ABELL MARTIN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-210.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	591.0	
-237.0	CARBONDALE	SURVANT	COAL	1.4	618.0	
-309.0	CARBONDALE	COLCHESTER	COAL	0.0	690.0	
-375.0	CARBONDALE	DEKOVEN	COAL	4.0	756.0	
-375.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	756.0	
-402.0	CARBONDALE	DAVIS	COAL	4.0	783.0	
-434.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	815.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-454.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	835.0	
-486.0	TRADEWATER	MT. RORAH	COAL	3.0	867.0	

MAPID: 05902486000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.182779 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.799274 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 392.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
28.5	CARBONDALE	DANVILLE	COAL	3.0	346.5	
25.5	CARBONDALE		SHALE & SANDSTONE	10.0	349.5	
15.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	359.5	
10.5	CARBONDALE	LAWSON	SILTY SHALE	18.0	364.5	
-7.5	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.5	382.5	
-11.0	CARBONDALE	ANNA	BLACK SHALE	3.0	386.0	
-14.0	CARBONDALE	HERRIN	COAL	3.5	389.0	

MAPID: 05903297000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 700' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.190588 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.791141 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 393.8 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
27.7	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	358.3	
24.2	CARBONDALE	LAWSON	GRAY SHALE	0.1	361.8	
24.1	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	0.9	361.9	
23.2	CARBONDALE	LAWSON	SILTY SHALE	23.0	362.8	
0.2	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	1.0	385.8	
-0.8	CARBONDALE	ANNA	BLACK SHALE	3.2	386.8	
-4.0	CARBONDALE	HERRIN	COAL	3.8	390.0	

MAPID: 05923817000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 230' S line, 1980' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186106 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.791775 **DATE COLLECTED:** 12 / 18 / 1974

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 521.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 231-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION G-16

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	156.5	0.0	
219.5			SANDSTONE	5.0	156.5	
214.5			SHALE	37.0	161.5	
177.5			SANDSTONE	16.5	198.5	
161.0			SHALE	9.0	215.0	
152.0			BLACK SHALE	1.0	224.0	
151.0			UNDERCLAY	7.0	225.0	
144.0			LIMESTONE & SHALE	7.0	232.0	
137.0			LIMESTONE	2.5	239.0	
134.5			SHALE & CONGLOMERATE	8.5	241.5	
126.0			SHALE	92.8	250.0	
33.2	CARBONDALE	DANVILLE	COAL	2.0	342.8	
31.2	CARBONDALE		UNDERCLAY	4.2	344.8	
27.0	CARBONDALE		SHALE	12.5	349.0	
14.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	361.5	
8.0	CARBONDALE		SHALE	1.0	368.0	
7.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	369.0	
-2.0	CARBONDALE		SHALE	13.3	378.0	
-15.3	CARBONDALE	BRERETON	LIMESTONE	1.2	391.3	
-16.5	CARBONDALE	ANNA	BLACK SHALE	4.5	392.5	
-21.0	CARBONDALE	HERRIN	COAL	2.5	397.0	
-23.5	CARBONDALE		SHALE	5.5	399.5	
-29.0	CARBONDALE		SANDSTONE	23.0	405.0	
-52.0	CARBONDALE		SHALE	15.5	428.0	
-67.5	CARBONDALE	BRIAR HILL	COAL	1.5	443.5	
-69.0	CARBONDALE		SANDSTONE/SHALE	21.0	445.0	
-90.0	CARBONDALE		SHALE	37.5	466.0	
-127.5	CARBONDALE	ST. DAVID	LIMESTONE	0.6	503.5	
-128.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	504.1	
-130.5	CARBONDALE	SPRINGFIELD	COAL	5.0	506.5	
-135.5	CARBONDALE		SHALE	3.0	511.5	
-138.5	CARBONDALE		SANDSTONE	7.0	514.5	

MAPID: 05900774000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.196231 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793812 **DATE COLLECTED:** 5 / 0 / 1951

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2816.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DOWNEN FIELDS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-216.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	598.0	
-261.0	CARBONDALE	SURVANT	COAL	3.0	643.0	
-308.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-372.0	CARBONDALE	DEKOVEN	COAL	4.0	754.0	
-372.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	754.0	
-396.0	CARBONDALE	DAVIS	COAL	4.0	778.0	
-430.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	812.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-451.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	833.0	

MAPID: 05900775000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198385 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799209 **DATE COLLECTED:** 2 / 0 / 1951

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:** Electric Log

SOURCE: MILLER J M, DRONE L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-219.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-239.0	CARBONDALE	SURVANT	COAL	0.5	616.0	
-317.0	CARBONDALE	COLCHESTER	COAL	0.5	694.0	
-387.0	CARBONDALE	DEKOVEN	COAL	4.0	764.0	
-387.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	764.0	
-409.0	CARBONDALE	DAVIS	COAL	4.0	786.0	
-441.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	818.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-461.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	838.0	
-495.0	TRADEWATER	MT. RORAH	COAL	3.0	872.0	

MAPID: 05900783000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.203006 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793751 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2824.0 **LOG TYPE:** Electric Log

SOURCE: HEATH B M ETAL, RIDER JOSEPHINE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-226.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	605.0	
-319.0	CARBONDALE	COLCHESTER	COAL	0.5	698.0	
-381.0	CARBONDALE	DEKOVEN	COAL	3.0	760.0	
-381.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	760.0	
-405.0	CARBONDALE	DAVIS	COAL	4.0	784.0	
-437.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	816.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-458.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	837.0	

MAPID: 05901213000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207534 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799098 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2961.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., HENDERSON J B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-228.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	604.0	
-254.0	CARBONDALE	SURVANT	COAL	1.3	630.0	
-326.0	CARBONDALE	COLCHESTER	COAL	0.5	702.0	
-397.0	CARBONDALE	DEKOVEN	COAL	4.0	773.0	
-397.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	773.0	
-419.0	CARBONDALE	DAVIS	COAL	3.5	795.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	830.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-474.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	850.0	
-504.0	TRADEWATER	MT. RORAH	COAL	2.0	880.0	

MAPID: 05901826000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193813 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.79919 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1330.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 05901826000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193813 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.79919 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 417.0 **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
12.5	CARBONDALE	DANVILLE	COAL	2.5	367.5	
10.0	CARBONDALE		SHALE & SANDSTONE	15.0	370.0	
-5.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	385.0	
-10.0	CARBONDALE	LAWSON	SILTY SHALE	18.0	390.0	
-28.0	CARBONDALE	BRERETON	CALCAREOUS SHALE	2.0	408.0	
-30.0	CARBONDALE	ANNA	BLACK SHALE	3.0	410.0	
-33.0	CARBONDALE	HERRIN	COAL	4.0	413.0	

MAPID: 05901826000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2310' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193813 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.79919 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2850.0 **LOG TYPE:**

SOURCE: VALTER ARNOLD, DRONE 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-220.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	600.0	
-240.0	CARBONDALE	SURVANT	COAL	1.3	620.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-390.0	CARBONDALE	DEKOVEN	COAL	4.0	770.0	
-390.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-410.0	CARBONDALE	DAVIS	COAL	4.5	790.0	
-444.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	824.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-462.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	842.0	
-495.0	TRADEWATER	MT. RORAH	COAL	3.0	875.0	

MAPID: 05902126000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198243 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804572 **DATE COLLECTED:** 7 / 0 / 1957

SURFACE ELEVATION (FT.): 374.0 **LOGGED (FT.):** 2546.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, DRONE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-226.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-246.0	CARBONDALE	SURVANT	COAL	0.5	620.0	
-329.0	CARBONDALE	COLCHESTER	COAL	0.5	703.0	
-398.0	CARBONDALE	DEKOVEN	COAL	4.0	772.0	
-398.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	772.0	
-421.0	CARBONDALE	DAVIS	COAL	4.0	795.0	
-456.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	830.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-475.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	849.0	
-501.0	TRADEWATER	MT. RORAH	COAL	0.8	875.0	

MAPID: 05923939000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 0' S line, 660' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.20844 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.791052 **DATE COLLECTED:** 11 / 26 / 1974

SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 521.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 226GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION C-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.2	PLEISTOCENE		UNCONSOLIDATED	140.0	0.0	
234.2			SANDSTONE	9.0	140.0	
225.2			SANDSTONE	33.0	149.0	
192.2			SHALE	51.0	182.0	
141.2			BLACK SHALE	3.0	233.0	
138.2			COAL	1.4	236.0	
136.8			UNDERCLAY	3.6	237.4	
133.2			SANDY SHALE	14.0	241.0	
119.2			SANDSTONE	10.0	255.0	
109.2			SANDY SHALE	22.0	265.0	
87.2	MODESTO	PIASA	LIMESTONE	4.5	287.0	
82.7	MODESTO		SHALE	53.0	291.5	
29.7	CARBONDALE	DANVILLE	COAL	2.0	344.5	
27.7	CARBONDALE		SANDY SHALE	6.0	346.5	
21.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	352.5	
17.2	CARBONDALE		SANDY SHALE	25.5	357.0	
-8.3	CARBONDALE	BRERETON	LIMESTONE	1.5	382.5	
-9.8	CARBONDALE	ANNA	BLACK SHALE	1.5	384.0	
-11.3	CARBONDALE	HERRIN	COAL	3.7	385.5	
-15.0	CARBONDALE		UNDERCLAY	4.8	389.2	
-19.8	CARBONDALE		SANDSTONE	32.0	394.0	
-51.8	CARBONDALE		SANDY SHALE	15.0	426.0	
-66.8	CARBONDALE	BRIAR HILL	COAL	1.7	441.0	
-68.5	CARBONDALE		SANDY SHALE	9.3	442.7	
-77.8	CARBONDALE		SANDSTONE	15.0	452.0	
-92.8	CARBONDALE		SHALE	34.5	467.0	
-127.3	CARBONDALE	ST. DAVID	LIMESTONE	1.4	501.5	
-128.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	502.9	
-131.8	CARBONDALE	SPRINGFIELD	COAL	5.6	506.0	
-137.4	CARBONDALE		DARK SHALE	3.5	511.6	
-140.9	CARBONDALE		CLAYSTONE & SHALE	3.5	515.1	
-144.4	CARBONDALE		SANDSTONE	3.0	518.6	

MAPID: 05900015000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 600' N line, 900' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.225966 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.804114 **DATE COLLECTED:** 0 / 0 / 1910
SURFACE ELEVATION (FT.): 362.2 **LOGGED (FT.):** 3622.0 **LOG TYPE:** Drillers Log
SOURCE: RIGGS E R, MINER A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-114.8	CARBONDALE	HERRIN	COAL	4.0	477.0	

MAPID: 05900015000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 600' N line, 900' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.225966 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.804114 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 481.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-76.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	438.0	
-83.0	CARBONDALE	LAWSON	SANDSTONE	10.0	445.0	
-93.0	CARBONDALE	LAWSON	GRAY SHALE	14.0	455.0	
-107.0	CARBONDALE	BRERETON	LIMESTONE	8.0	469.0	
-115.0	CARBONDALE	HERRIN	COAL	4.0	477.0	

MAPID: 05900187000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.22122 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.804709 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: DELTA DRC, MINER LEO 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-89.0	CARBONDALE	HERRIN	COAL	3.0	464.0	
-205.0	CARBONDALE	SPRINGFIELD	COAL	4.0	580.0	

MAPID: 05900188000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.212193 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.802623 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:**
SOURCE: MRTN&TDWTR, MINER LEO 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.0	CARBONDALE	HERRIN	COAL	3.0	418.0	
-155.0	CARBONDALE	SPRINGFIELD	COAL	4.0	530.0	

MAPID: 05901216000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218942 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.802859 **DATE COLLECTED:** 8 / 0 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3003.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC., MINER LEO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-270.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	650.0	
-359.0	CARBONDALE	COLCHESTER	COAL	0.5	739.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.0	780.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	780.0	
-428.0	CARBONDALE	DAVIS	COAL	4.0	808.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	843.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-480.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	860.0	
-508.0	TRADEWATER	MT. RORAH	COAL	1.8	888.0	

MAPID: 05901216000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.218942 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.802859 **DATE COLLECTED:** 8 / 0 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 1654.0 **LOG TYPE:** Electric Log
SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1274.0	BASE OF PENN.		UNCLASSIFIED	-	1654.0	

MAPID: 05901243000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.214343 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.797327 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., SCHLEY F B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-243.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	618.0	
-325.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-395.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-395.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-418.0	CARBONDALE	DAVIS	COAL	3.0	793.0	
-450.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	825.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-470.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	845.0	
-493.0	TRADEWATER	MT. RORAH	COAL	1.0	868.0	

MAPID: 05923813000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 2640' N line, 660' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.213231 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.798033 **DATE COLLECTED:** 5 / 7 / 1975

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 559.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 241GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 9-0

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	139.0	0.0	
236.0			SHALE	11.0	139.0	
225.0			BLACK SHALE	1.0	150.0	
224.0			COAL	0.5	151.0	
223.5			UNDERCLAY	1.0	151.5	
222.5			SHALE	67.5	152.5	
155.0			SANDSTONE	13.0	220.0	
142.0			SHALE	35.0	233.0	
107.0			SHALE & CONGLOMERATE	60.0	268.0	
47.0			SHALE	49.0	328.0	
-2.0			BLACK SHALE	2.0	377.0	
-4.0	CARBONDALE	DANVILLE	COAL	1.5	379.0	
-5.5	CARBONDALE		SHALE	10.5	380.5	
-16.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	391.0	
-20.5	CARBONDALE		SHALE	5.0	395.5	
-25.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	400.5	
-31.5	CARBONDALE		SHALE	13.5	406.5	
-45.0	CARBONDALE	BRERETON	LIMESTONE	4.0	420.0	
-49.0	CARBONDALE	ANNA	BLACK SHALE	2.0	424.0	
-51.0	CARBONDALE	HERRIN	COAL	3.8	426.0	
-54.8	CARBONDALE		UNDERCLAY	1.0	429.8	
-55.8	CARBONDALE		SANDSTONE	30.0	430.8	
-85.8	CARBONDALE		SHALE	16.2	460.8	
-102.0	CARBONDALE	BRIAR HILL	COAL	1.5	477.0	
-103.5	CARBONDALE		SHALE	9.0	478.5	
-112.5	CARBONDALE		SANDSTONE	10.0	487.5	
-122.5	CARBONDALE		SHALE	41.8	497.5	
-164.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	539.3	
-165.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	540.1	
-168.3	CARBONDALE	TURNER MINE	SHALE	0.8	543.3	
-169.1	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	544.1	
-169.4	CARBONDALE	SPRINGFIELD	COAL	5.4	544.4	
-174.8	CARBONDALE		BLACK SHALE	1.5	549.8	
-176.3	CARBONDALE		SHALE	8.5	551.3	

MAPID: 05923843000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' N line, 660' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.226768 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.805801 **DATE COLLECTED:** 4 / 14 / 1975

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 612.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 240-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION C-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
251.0			SHALE	75.5	130.0	
175.5			COAL	1.0	205.5	
174.5			SHALE	12.5	206.5	
162.0			LIMESTONE	1.5	219.0	
160.5			SANDSTONE	5.0	220.5	
155.5			SHALE	27.5	225.5	
128.0			LIMESTONE	3.5	253.0	
124.5			SANDSTONE	20.0	256.5	
104.5			SHALE	10.0	276.5	
94.5			BLACK SHALE	2.0	286.5	
92.5			SHALE	14.5	288.5	
78.0			LIMESTONE	0.8	303.0	
77.2			SHALE	8.2	303.8	
69.0			LIMESTONE	0.5	312.0	
68.5			SHALE	115.5	312.5	
-47.0			BLACK SHALE	2.0	428.0	
-49.0	CARBONDALE	DANVILLE	COAL	1.5	430.0	
-50.5	CARBONDALE		SHALE	14.0	431.5	
-64.5	CARBONDALE		SANDSTONE	5.0	445.5	
-69.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	450.5	
-73.5	CARBONDALE		SHALE	5.5	454.5	
-79.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	460.0	
-86.5	CARBONDALE		SHALE	10.0	467.5	
-96.5	CARBONDALE	BRERETON	LIMESTONE	6.0	477.5	
-102.5	CARBONDALE	ANNA	BLACK SHALE	2.2	483.5	
-104.7	CARBONDALE	HERRIN	COAL	3.5	485.7	
-108.2	CARBONDALE		SHALE	3.0	489.2	
-111.2	CARBONDALE		SANDSTONE	22.0	492.2	
-133.2	CARBONDALE		SHALE	21.8	514.2	
-155.0	CARBONDALE	BRIAR HILL	COAL	1.5	536.0	
-156.5	CARBONDALE		SANDY SHALE	6.0	537.5	
-162.5	CARBONDALE		SANDSTONE	32.0	543.5	
-194.5	CARBONDALE		SHALE & SANDSTONE	18.0	575.5	
-212.5	CARBONDALE		SHALE	2.4	593.5	
-214.9	CARBONDALE	ST. DAVID	LIMESTONE	0.7	595.9	
-215.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	596.6	
-218.0	CARBONDALE	SPRINGFIELD	COAL	5.4	599.0	
-223.4	CARBONDALE		SHALE	8.5	604.4	

MAPID: 05990024000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** 50' S line, 25' E line of NE SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.220167 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.80033 **DATE COLLECTED:** 1 / 3 / 1975

SURFACE ELEVATION (FT.): 379.1 **LOGGED (FT.):** 588.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 232GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.1	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
372.1	PLEISTOCENE		SAND	134.0	7.0	
238.1	MODESTO		GRAY SHALE	53.0	141.0	
185.1	MODESTO		BLACK SHALE	1.0	194.0	
184.1	MODESTO		CARBONACEOUS SHALE	4.5	195.0	
179.6	MODESTO		CLAYSTONE	5.5	199.5	
174.1	MODESTO		SANDY SHALE	6.0	205.0	
168.1	MODESTO		GRAY SHALE	46.5	211.0	
121.6	MODESTO		SANDY SHALE	3.0	257.5	
118.6	MODESTO		SANDSTONE	11.5	260.5	
107.1	MODESTO		GRAY SHALE	8.0	272.0	
99.1	MODESTO		BLACK SHALE	1.0	280.0	
98.1	MODESTO		SHALE & CONGLOMERATE	21.0	281.0	
77.1	MODESTO		GRAY SHALE	9.0	302.0	
68.1	MODESTO		SHALY SANDSTONE	4.0	311.0	
64.1	MODESTO		GRAY SHALE	11.0	315.0	
53.1	MODESTO	CHAPEL	COAL	1.0	326.0	
52.1	MODESTO		GRAY SHALE	79.0	327.0	
-26.9	CARBONDALE	DANVILLE	COAL	1.0	406.0	
-27.9	CARBONDALE		SHALE	6.0	407.0	
-33.9	CARBONDALE		SHALY SANDSTONE	8.5	413.0	
-42.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	421.5	LIGHT
-48.4	CARBONDALE		SHALE	3.0	427.5	
-51.4	CARBONDALE		SHALY SANDSTONE	10.0	430.5	
-61.4	CARBONDALE		GRAY SHALE	8.5	440.5	
-69.9	CARBONDALE	BRERETON	LIMESTONE	5.5	449.0	DARK
-75.4	CARBONDALE	ANNA	BLACK SHALE	0.5	454.5	
-75.9	CARBONDALE	HERRIN	COAL	4.0	455.0	
-79.9	CARBONDALE		UNDERCLAY	4.0	459.0	
-83.9	CARBONDALE	HIGGINSVILLE	LIMESTONE	6.0	463.0	
-89.9	CARBONDALE		SHALY SANDSTONE	21.0	469.0	
-110.9	CARBONDALE		GRAY SHALE	14.5	490.0	
-125.4	CARBONDALE	BRIAR HILL	COAL	2.0	504.5	
-127.4	CARBONDALE		SHALY SANDSTONE	26.5	506.5	
-153.9	CARBONDALE		SANDY SHALE	25.0	533.0	
-178.9	CARBONDALE		GRAY SHALE	12.0	558.0	
-190.9	CARBONDALE	ST. DAVID	LIMESTONE	1.6	570.0	
-192.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	571.6	
-195.5	CARBONDALE	SPRINGFIELD	COAL	5.3	574.6	

-200.8	CARBONDALE	SHALE	1.6	579.9
-202.4	CARBONDALE	SANDSTONE	6.8	581.5

MAPID: 05900016000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 700' N line, 250' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.22997 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.803973 **DATE COLLECTED:** 0 / 0 / 1910

SURFACE ELEVATION (FT.): 363.4 **LOGGED (FT.):** 3634.0 **LOG TYPE:** Drillers Log

SOURCE: RIGGS E R, SMITH L 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-120.6	CARBONDALE	HERRIN	COAL	4.0	484.0	

MAPID: 05900016000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 700' N line, 250' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.22997 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.803973 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 488.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-88.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	451.0	
-92.0	CARBONDALE	LAWSON	SANDSTONE	19.0	455.0	
-111.0	CARBONDALE	LAWSON	SHALE	3.0	474.0	
-114.0	CARBONDALE	BRERETON	LIMESTONE	7.0	477.0	
-121.0	CARBONDALE	HERRIN	COAL	4.0	484.0	

MAPID: 05900189000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230389 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.797774 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-55.0	CARBONDALE	DANVILLE	COAL	-	432.0	
-59.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SILTSTONE	6.0	436.0	
-85.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	462.0	
-93.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	9.0	470.0	
-122.0	CARBONDALE	HERRIN	COAL	3.0	499.0	
-134.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	10.0	511.0	
-175.0	CARBONDALE	BRIAR HILL	COAL	-	552.0	
-183.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	27.0	560.0	
-243.0	CARBONDALE	SPRINGFIELD	COAL	5.0	620.0	BLACK SHALE ROOF
-281.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	34.0	658.0	
-319.0	CARBONDALE	HOUCHIN CREEK	COAL	-	696.0	

MAPID: 05900189000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230389 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.797774 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:**

SOURCE: RBNSN PUCK, SMITH P 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-117.0	CARBONDALE	HERRIN	COAL	4.0	494.0	
-243.0	CARBONDALE	SPRINGFIELD	COAL	4.0	620.0	

MAPID: 05900189000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230389 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.797774 **DATE COLLECTED:** 5 / 0 / 1943

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1680.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-427.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	804.0	
-485.0	SPOON	DAVIS	UNCLASSIFIED	-	862.0	
-1303.0	BASE OF PENN.		UNCLASSIFIED	-	1680.0	

MAPID: 05900189000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230389 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.797774 **DATE COLLECTED:** 5 / 0 / 1943

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3050.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-320.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	697.0	
-367.0	CARBONDALE	SURVANT	COAL	0.8	744.0	
-430.0	CARBONDALE	COLCHESTER	COAL	0.5	807.0	
-461.0	CARBONDALE	DEKOVEN	COAL	4.0	838.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	838.0	
-483.0	CARBONDALE	DAVIS	COAL	4.0	860.0	
-513.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	890.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-531.0	TRADEWATER	STONEFORT	LIMESTONE	2.8	908.0	
-553.0	TRADEWATER	MT. RORAH	COAL	1.3	930.0	

MAPID: 05923774000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 660' S line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.238498 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.793441 **DATE COLLECTED:** 9 / 13 / 1972

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 648.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 102-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		UNCONSOLIDATED	127.0	0.0	
263.0			SHALE	3.0	127.0	
260.0			UNDERCLAY	4.0	130.0	
256.0			SHALE	15.5	134.0	
240.5			SANDSTONE	5.0	149.5	
235.5			SHALE	16.5	154.5	
219.0			LIMESTONE	1.0	171.0	
218.0			SHALE	93.0	172.0	
125.0			COAL WITH SHALE	2.0	265.0	
123.0			UNDERCLAY	3.5	267.0	
119.5			SANDSTONE	5.0	270.5	
114.5			SHALE	8.5	275.5	
106.0			LIMESTONE	6.5	284.0	
99.5			SANDSTONE	25.5	290.5	
74.0			SHALE	19.0	316.0	
55.0			SANDSTONE	13.0	335.0	
42.0			SHALE	20.5	348.0	
21.5			BLACK SHALE	2.5	368.5	
19.0			COAL	0.5	371.0	
18.5			UNDERCLAY	2.5	371.5	
16.0			SHALE	99.0	374.0	
-83.0	CARBONDALE	DANVILLE	COAL	2.0	473.0	
-85.0	CARBONDALE		SHALE	15.5	475.0	
-100.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	490.5	
-104.2	CARBONDALE	ANVIL ROCK	SANDSTONE	15.8	494.2	
-120.0	CARBONDALE		SHALE	11.0	510.0	
-131.0	CARBONDALE	BRERETON	LIMESTONE	6.0	521.0	
-137.0	CARBONDALE	ANNA	BLACK SHALE	0.3	527.0	
-137.3	CARBONDALE	HERRIN	COAL	4.0	527.3	
-141.3	CARBONDALE		UNDERCLAY	4.0	531.3	
-145.3	CARBONDALE		SANDSTONE	14.7	535.3	
-160.0	CARBONDALE		SHALE	27.0	550.0	
-187.0	CARBONDALE	BRIAR HILL	COAL	1.7	577.0	
-188.7	CARBONDALE		SANDSTONE	8.3	578.7	
-197.0	CARBONDALE		SHALE	50.7	587.0	
-247.7	CARBONDALE	ST. DAVID	LIMESTONE	0.9	637.7	
-248.6	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	638.6	
-250.5	CARBONDALE	SPRINGFIELD	COAL	4.8	640.5	
-255.3	CARBONDALE		SHALE	1.5	645.3	

-256.8	CARBONDALE	SANDSTONE	1.5	646.8

MAPID: 05923799000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 10' S line, 300' E line of SE SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.230395 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.791471 **DATE COLLECTED:** 2 / 19 / 1975

SURFACE ELEVATION (FT.): 372.6 **LOGGED (FT.):** 609.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 236-GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.6	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
357.6	PLEISTOCENE		CLAY	119.5	15.0	
238.1	MODESTO		GRAY SHALE	78.5	134.5	
159.6	MODESTO		BLACK SHALE & COAL	2.0	213.0	
157.6	MODESTO		GRAY SHALE	6.0	215.0	
151.6	MODESTO		SANDSTONE	3.0	221.0	
148.6	MODESTO		GRAY SHALE	5.0	224.0	
143.6	MODESTO		SHALY SANDSTONE	10.0	229.0	
133.6	MODESTO		LIMESTONE	3.0	239.0	
130.6	MODESTO		SANDY SHALE	50.5	242.0	
80.1	MODESTO		LIMESTONE	2.0	292.5	
78.1	MODESTO		SHALY SANDSTONE	21.5	294.5	
56.6	MODESTO		GRAY SHALE	4.5	316.0	
52.1	MODESTO		BLACK SHALE	3.0	320.5	
49.1	MODESTO		CLAYSTONE	3.5	323.5	
45.6	MODESTO		SANDY SHALE	22.0	327.0	
23.6	MODESTO		GRAY SHALE	8.0	349.0	
15.6	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	357.0	
11.6	MODESTO		GRAY SHALE	53.0	361.0	
-41.4	CARBONDALE	DANVILLE	COAL	1.5	414.0	
-42.9	CARBONDALE		SANDY SHALE	17.5	415.5	
-60.4	CARBONDALE		BLACK SHALE & COAL	1.0	433.0	
-61.4	CARBONDALE		CLAYSTONE & SILTSTONE	2.5	434.0	
-63.9	CARBONDALE		GRAY SHALE	3.5	436.5	
-67.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	440.0	LIGHT
-73.2	CARBONDALE		SANDSTONE	18.2	445.8	
-91.4	CARBONDALE		GRAY SHALE	10.0	464.0	
-101.4	CARBONDALE	BRERETON	LIMESTONE	3.5	474.0	DARK
-104.9	CARBONDALE	ANNA	BLACK SHALE	0.5	477.5	
-105.4	CARBONDALE	HERRIN	COAL	3.8	478.0	
-109.2	CARBONDALE		UNDERCLAY	4.2	481.8	
-113.4	CARBONDALE		SANDSTONE	24.0	486.0	
-137.4	CARBONDALE		SANDY SHALE	19.5	510.0	
-156.9	CARBONDALE	BRIAR HILL	COAL	1.5	529.5	
-158.4	CARBONDALE		SHALE	2.0	531.0	
-160.4	CARBONDALE		SANDSTONE	20.0	533.0	
-180.4	CARBONDALE		SANDY SHALE	21.3	553.0	
-201.7	CARBONDALE		GRAY SHALE	14.5	574.3	
-216.2	CARBONDALE	ST. DAVID	LIMESTONE	0.8	588.8	

-217.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	589.6
-220.1	CARBONDALE	DYKERSBURG	SHALE	1.6	592.7
-221.7	CARBONDALE	SPRINGFIELD	COAL	5.0	594.3
-226.7	CARBONDALE		SANDY SHALE	1.0	599.3
-227.7	CARBONDALE		SANDSTONE	8.7	600.3

MAPID: 05923906000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** 50' N line, 50' W line of NE NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.236123 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.79143 **DATE COLLECTED:** 2 / 6 / 1975

SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 631.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 235-GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.2	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0	
353.2	PLEISTOCENE		CLAY	101.0	21.0	WITH SAND AND GRAVEL BLUE
252.2	MODESTO		SANDSTONE	7.0	122.0	
245.2	MODESTO		SANDY SHALE	10.0	129.0	
235.2	MODESTO		GRAY SHALE	100.0	139.0	
135.2	MODESTO		BLACK SHALE	1.0	239.0	
134.2	MODESTO		CLAYSTONE	3.5	240.0	
130.7	MODESTO		GRAY SHALE	13.0	243.5	
117.7	MODESTO	MACOUPIN	LIMESTONE	5.0	256.5	
112.7	MODESTO		SANDSTONE	17.5	261.5	
95.2	MODESTO		SANDY SHALE	30.0	279.0	
65.2	MODESTO		SANDSTONE	23.5	309.0	
41.7	MODESTO		GRAY SHALE	6.5	332.5	
35.2	MODESTO		BLACK SHALE	2.0	339.0	
33.2	MODESTO		GRAY SHALE	15.0	341.0	
18.2	MODESTO		SHALE	2.5	356.0	SH STREAKS
15.7	MODESTO	WEST FRANKLIN	LIMESTONE & SHALE	4.0	358.5	
11.7	MODESTO	WEST FRANKLIN	GRAY SHALE	6.5	362.5	
5.2	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	369.0	
3.2	MODESTO		SANDY SHALE	75.0	371.0	
-71.8	CARBONDALE	DANVILLE	COAL	1.5	446.0	
-73.3	CARBONDALE		SANDY SHALE	17.5	447.5	
-90.8	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	465.0	
-93.3	CARBONDALE		SANDSTONE	20.5	467.5	
-113.8	CARBONDALE		SANDY SHALE	10.4	488.0	
-124.2	CARBONDALE	BRERETON	LIMESTONE	5.7	498.4	DARK
-129.9	CARBONDALE	ANNA	BLACK SHALE	0.8	504.1	
-130.7	CARBONDALE	HERRIN	COAL	4.0	504.9	
-134.7	CARBONDALE		UNDERCLAY	4.1	508.9	
-138.8	CARBONDALE		LIMESTONE	4.0	513.0	
-142.8	CARBONDALE		SANDSTONE	25.0	517.0	
-167.8	CARBONDALE		SANDY SHALE	12.0	542.0	
-179.8	CARBONDALE	BRIAR HILL	COAL	1.5	554.0	
-181.3	CARBONDALE		SANDY SHALE	50.0	555.5	
-231.3	CARBONDALE		GRAY SHALE	7.5	605.5	
-238.8	CARBONDALE	ST. DAVID	LIMESTONE	1.3	613.0	
-240.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	614.3	
-242.5	CARBONDALE	SPRINGFIELD	COAL	4.6	616.7	
-247.1	CARBONDALE		SANDSTONE	10.0	621.3	

MAPID: 05990015000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** 50' S line, 100' E line of SE SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239273 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.784562 **DATE COLLECTED:** 11 / 2 / 1983

SURFACE ELEVATION (FT.): 368.1 **LOGGED (FT.):** 607.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 299GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.1	PLEISTOCENE		CLAY	7.9	0.0	DARK BROWN
360.2	PLEISTOCENE		CLAY	1.5	7.9	BROWN
358.7	PLEISTOCENE		SAND	9.3	9.4	BROWN
349.4	PLEISTOCENE		CLAY	45.0	18.7	GRAY
304.4	PLEISTOCENE		SAND & GRAVEL	23.3	63.7	
281.1	PLEISTOCENE		CLAY	16.0	87.0	BLUE
265.1	PLEISTOCENE		SAND	19.0	103.0	
246.1	MODESTO		GRAY SHALE	4.0	122.0	
242.1	MODESTO		LIMESTONE	0.4	126.0	
241.7	MODESTO		GRAY SHALE	85.4	126.4	
156.3	MODESTO		DARK SHALE	1.8	211.8	
154.5	MODESTO		COAL	0.4	213.6	
154.1	MODESTO		UNDERCLAY	1.5	214.0	
152.6	MODESTO		GRAY SHALE	3.4	215.5	
149.2	MODESTO		SANDY SHALE	4.4	218.9	
144.8	MODESTO		GRAY SHALE	11.0	223.3	
133.8	MODESTO		SANDY SHALE	3.2	234.3	
130.6	MODESTO		SANDSTONE	7.8	237.5	GRAY
122.8	MODESTO		SANDY SHALE	4.0	245.3	
118.8	MODESTO		SANDSTONE	5.0	249.3	GRAY
113.8	MODESTO		SANDY SHALE	12.0	254.3	
101.8	MODESTO		GRAY SHALE	20.0	266.3	
81.8	MODESTO		SANDSTONE	17.0	286.3	GRAY
64.8	MODESTO		SANDY SHALE	14.0	303.3	
50.8	MODESTO		GRAY SHALE	9.1	317.3	
41.7	MODESTO		DARK SHALE	0.9	326.4	
40.8	MODESTO		GRAY SHALE	3.9	327.3	
36.9	MODESTO		SANDY SHALE	11.3	331.2	
25.6	MODESTO		LIMESTONE	1.5	342.5	
24.1	MODESTO		SHALE	2.4	344.0	BROWN
21.6	MODESTO		CALCAREOUS SHALE	6.9	346.5	
14.8	MODESTO		GRAY SHALE	3.7	353.3	
11.1	MODESTO	WEST FRANKLIN	LIMESTONE	1.1	357.0	BROWN
10.0	MODESTO		GRAY SHALE	69.6	358.1	
-59.6	MODESTO		DARK SHALE	2.3	427.7	
-61.9	CARBONDALE		CLAYSTONE	2.1	430.0	
-64.0	CARBONDALE		SANDY SHALE	5.5	432.1	
-69.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	437.6	
-73.8	CARBONDALE		SANDY SHALE	4.4	441.9	

-78.2	CARBONDALE		SANDSTONE	16.0	446.3	
-94.2	CARBONDALE		SANDY SHALE	9.3	462.3	
-103.5	CARBONDALE	BRERETON	LIMESTONE	4.1	471.6	
-107.6	CARBONDALE		DARK SHALE	1.0	475.7	
-108.6	CARBONDALE	HERRIN	COAL	4.5	476.7	
-113.1	CARBONDALE		UNDERCLAY	2.7	481.2	
-115.8	CARBONDALE		GRAY SHALE	0.8	483.9	
-116.6	CARBONDALE		SANDY SHALE	6.6	484.7	
-123.2	CARBONDALE		SANDSTONE	9.0	491.3	
-132.2	CARBONDALE		SANDY SHALE	17.4	500.3	
-149.6	CARBONDALE		GRAY SHALE	9.6	517.7	
-159.2	CARBONDALE	BRIAR HILL	COAL	1.4	527.3	
-160.6	CARBONDALE		SHALE	0.3	528.7	
-160.9	CARBONDALE		SANDSTONE	2.3	529.0	GRAY
-163.2	CARBONDALE		SANDY SHALE	4.3	531.3	
-167.5	CARBONDALE		LIMESTONE	0.4	535.6	
-167.9	CARBONDALE		SANDY SHALE	3.1	536.0	
-171.0	CARBONDALE		SANDSTONE	0.2	539.1	
-171.2	CARBONDALE		SANDY SHALE	3.7	539.3	
-174.8	CARBONDALE		SANDSTONE	1.1	542.9	GRAY
-175.9	CARBONDALE		SANDY SHALE	13.3	544.0	
-189.2	CARBONDALE		SANDY SHALE	11.6	557.3	
-200.8	CARBONDALE		GRAY SHALE	10.1	568.9	
-210.9	CARBONDALE		SANDY SHALE	4.7	579.0	
-215.6	CARBONDALE		GRAY SHALE	6.0	583.7	
-221.6	CARBONDALE		SHALE WITH LIMESTONE	1.6	589.7	
-223.2	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	0.6	591.3	
-223.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	591.9	
-226.3	CARBONDALE	SPRINGFIELD	COAL	5.4	594.4	
-231.7	CARBONDALE		UNDERCLAY	3.9	599.8	
-235.6	CARBONDALE		LIMESTONE	3.3	603.7	

MAPID: 05902599000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221673 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.783268 **DATE COLLECTED:** 11 / 0 / 1961

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1672.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1295.0	BASE OF PENN.		UNCLASSIFIED	-	1672.0	

MAPID: 05902805000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216921 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.785023 **DATE COLLECTED:** 7 / 0 / 1962

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1600.0 **LOG TYPE:** Electric Log

SOURCE: DAVOUST R C CO, RABEN L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-181.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-228.0	CARBONDALE	SURVANT	COAL	2.0	605.0	
-283.0	CARBONDALE	COLCHESTER	COAL	1.2	660.0	
-329.0	CARBONDALE	DEKOVEN	COAL	4.0	706.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	706.0	
-353.0	CARBONDALE	DAVIS	COAL	4.0	730.0	
-388.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	765.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-408.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	785.0	
-439.0	TRADEWATER	MT. RORAH	COAL	3.0	816.0	

MAPID: 05902808000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 990' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.22196 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.77984 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 375.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
42.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	334.0	
36.0	CARBONDALE	LAWSON	GRAY SHALE	25.0	340.0	
11.0	CARBONDALE	BRERETON	LIMESTONE	5.0	365.0	
6.0	CARBONDALE	HERRIN	COAL	5.0	370.0	

MAPID: 05902813000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221773 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.781555 **DATE COLLECTED:** 7 / 0 / 1962

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1590.0 **LOG TYPE:** Electric Log

SOURCE: DAVOUST R C CO, DRONE 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-180.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-231.0	CARBONDALE	SURVANT	COAL	2.0	609.0	
-285.0	CARBONDALE	COLCHESTER	COAL	0.5	663.0	
-339.0	CARBONDALE	DEKOVEN	COAL	3.0	717.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	717.0	
-364.0	CARBONDALE	DAVIS	COAL	3.5	742.0	
-395.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	773.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-415.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	793.0	
-450.0	TRADEWATER	MT. RORAH	COAL	2.0	828.0	

MAPID: 05903521000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.217253 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.779679 **DATE COLLECTED:** 11 / 0 / 1971

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 1575.0 **LOG TYPE:** Electric Log

SOURCE: TAMARACK PETROLEUM CO., HISH F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	543.0	
-212.0	CARBONDALE	SURVANT	COAL	2.0	590.0	
-262.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-325.0	CARBONDALE	DEKOVEN	COAL	3.0	703.0	
-325.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	703.0	
-349.0	CARBONDALE	DAVIS	COAL	4.0	727.0	
-382.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	760.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-402.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	780.0	
-435.0	TRADEWATER	MT. RORAH	COAL	2.0	813.0	

MAPID: 05923818000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NW NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.228797 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.790962 **DATE COLLECTED:** 6 / 8 / 1973

SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 582.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 159-G-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.4	PLEISTOCENE		UNCONSOLIDATED	137.5	0.0	
236.9			SHALE	61.5	137.5	
175.4			COAL	1.0	199.0	
174.4			UNDERCLAY	2.5	200.0	
171.9			SANDSTONE	5.5	202.5	
166.4			SHALE	17.0	208.0	
149.4			SANDSTONE	19.0	225.0	
130.4			SHALE	23.5	244.0	
106.9			SANDSTONE	24.5	267.5	
82.4			SHALE	7.0	292.0	
75.4			BLACK SHALE	2.0	299.0	
73.4			SANDSTONE/SHALE	22.5	301.0	
50.9			SHALE	8.5	323.5	
42.4			CONGLOMERATE	5.0	332.0	SHALE ROCK AND SANDSTONE
37.4			SHALE	58.5	337.0	
-21.1			COAL	1.0	395.5	
-22.1			UNDERCLAY	4.0	396.5	
-26.1			SANDSTONE	4.5	400.5	
-30.6			SHALE	9.0	405.0	
-39.6			COAL WITH SHALE	1.0	414.0	
-40.6			SHALE	6.0	415.0	
-46.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	421.0	
-52.3	CARBONDALE		SHALE	0.8	426.7	
-53.1	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	427.5	
-71.1	CARBONDALE		SHALE	5.5	445.5	
-76.6	CARBONDALE	BRERETON	LIMESTONE	6.0	451.0	
-82.6	CARBONDALE	ANNA	BLACK SHALE	0.8	457.0	
-83.4	CARBONDALE	HERRIN	COAL	3.7	457.8	
-87.1	CARBONDALE		UNDERCLAY	4.0	461.5	
-91.1	CARBONDALE		SANDSTONE	11.5	465.5	
-102.6	CARBONDALE		SHALE	30.5	477.0	
-133.1	CARBONDALE	BRIAR HILL	COAL	1.8	507.5	
-134.9	CARBONDALE		SHALE	10.7	509.3	
-145.6	CARBONDALE		SANDSTONE	10.0	520.0	
-155.6	CARBONDALE		SHALE	37.3	530.0	
-192.9	CARBONDALE	ST. DAVID	LIMESTONE	1.2	567.3	
-194.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	568.5	
-196.6	CARBONDALE	SPRINGFIELD	COAL	4.8	571.0	
-201.4	CARBONDALE		SHALE	2.8	575.8	

-204.2	CARBONDALE	SANDSTONE	4.0	578.6

MAPID: 05923819000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 0' N line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.215324 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.791132 **DATE COLLECTED:** 9 / 11 / 1973

SURFACE ELEVATION (FT.): 374.2 **LOGGED (FT.):** 537.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 184-GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.2	PLEISTOCENE		UNCONSOLIDATED	141.0	0.0	
233.2			SHALE	21.0	141.0	
212.2			SANDSTONE	5.5	162.0	
206.7			LIMESTONE	1.5	167.5	
205.2			SANDSTONE/SHALE	31.0	169.0	
174.2			SHALE	15.5	200.0	
158.7			SANDSTONE	23.5	215.5	WITH SHALE STREAKS
135.2			SHALE	9.5	239.0	
125.7			BLACK SHALE	2.5	248.5	
123.2			SHALE	8.0	251.0	
115.2			SANDSTONE	7.0	259.0	
108.2			SHALE	18.3	266.0	
89.9			LIMESTONE	2.2	284.3	
87.7			SHALE	55.5	286.5	
32.2	CARBONDALE	DANVILLE	COAL	2.0	342.0	
30.2	CARBONDALE		SHALE	5.0	344.0	
25.2	CARBONDALE		SANDSTONE	12.0	349.0	
13.2	CARBONDALE		BLACK SHALE	1.0	361.0	
12.2	CARBONDALE		SHALE	5.6	362.0	
6.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	367.6	
1.4	CARBONDALE		SHALE	11.2	372.8	
-9.8	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	384.0	
-19.8	CARBONDALE		SHALE	4.0	394.0	
-23.8	CARBONDALE	BRERETON	LIMESTONE	5.0	398.0	
-28.8	CARBONDALE	ANNA	BLACK SHALE	0.8	403.0	
-29.6	CARBONDALE	HERRIN	COAL	3.7	403.8	
-33.3	CARBONDALE		UNDERCLAY	4.5	407.5	
-37.8	CARBONDALE		SANDSTONE	12.0	412.0	
-49.8	CARBONDALE		SHALE	32.5	424.0	
-82.3	CARBONDALE	BRIAR HILL	COAL	2.0	456.5	
-84.3	CARBONDALE		SHALE	7.0	458.5	
-91.3	CARBONDALE		SANDSTONE	14.5	465.5	
-105.8	CARBONDALE		SHALE	36.5	480.0	
-142.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	516.5	
-143.1	CARBONDALE	TURNER MINE	BLACK SHALE	1.2	517.3	
-144.3	CARBONDALE	TURNER MINE	LIMESTONE	0.5	518.5	
-144.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	519.0	
-146.5	CARBONDALE	TURNER MINE	SHALE	1.1	520.7	
-147.6	CARBONDALE	SPRINGFIELD	COAL	5.5	521.8	

-153.1	CARBONDALE	SHALE	9.0	527.3
-162.1	CARBONDALE	SANDSTONE	1.0	536.3

MAPID: 05990010000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 50' S line, 100' E line of SE NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211301 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.787677 **DATE COLLECTED:** 2 / 19 / 1974

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 503.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 204GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	142.0	0.0	
234.0	MODESTO		GRAY SHALE	29.5	142.0	
204.5	MODESTO		SHALY SANDSTONE	23.5	171.5	
181.0	MODESTO		GRAY SHALE	6.0	195.0	
175.0	MODESTO		BLACK SHALE	2.0	201.0	
173.0	MODESTO		CLAYSTONE	4.0	203.0	
169.0	MODESTO		CONGLOMERATE	12.0	207.0	
157.0	MODESTO		SANDSTONE	12.5	219.0	
144.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	231.5	
141.0	MODESTO		GRAY SHALE	69.5	235.0	
71.5	CARBONDALE	DANVILLE	COAL	2.0	304.5	
69.5	CARBONDALE		UNDERCLAY	1.5	306.5	
68.0	CARBONDALE		SANDY SHALE	23.5	308.0	
44.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	331.5	LIGHT
40.0	CARBONDALE		GRAY SHALE	4.0	336.0	
36.0	CARBONDALE		SANDSTONE	15.0	340.0	
21.0	CARBONDALE		SHALE	8.0	355.0	
13.0	CARBONDALE	BRERETON	LIMESTONE	4.0	363.0	DARK
9.0	CARBONDALE	ANNA	BLACK SHALE	2.0	367.0	
7.0	CARBONDALE	HERRIN	COAL	3.5	369.0	
3.5	CARBONDALE		UNDERCLAY	4.0	372.5	
-0.5	CARBONDALE		SANDSTONE	23.5	376.5	
-24.0	CARBONDALE		GRAY SHALE	24.0	400.0	
-48.0	CARBONDALE	BRIAR HILL	COAL	2.0	424.0	
-50.0	CARBONDALE		SANDY SHALE	7.0	426.0	
-57.0	CARBONDALE		SANDSTONE	10.0	433.0	
-67.0	CARBONDALE		SANDY SHALE	26.5	443.0	
-93.5	CARBONDALE		GRAY SHALE	14.8	469.5	
-108.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	484.3	
-109.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	485.3	
-112.0	CARBONDALE	SPRINGFIELD	COAL	5.0	488.0	
-117.0	CARBONDALE		SHALE	3.0	493.0	
-120.0	CARBONDALE		SANDSTONE	7.4	496.0	

MAPID: 05990012000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 75' S line, 50' E line of SE SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211349 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.784237 **DATE COLLECTED:** 12 / 15 / 1972

SURFACE ELEVATION (FT.): 378.1 **LOGGED (FT.):** 471.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 112GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.1	PLEISTOCENE		UNCONSOLIDATED	144.1	0.0	
234.0	PLEISTOCENE		GRAY SHALE	14.0	144.1	
220.0	PLEISTOCENE		SANDSTONE	20.0	158.1	
200.0	PLEISTOCENE		GRAY SHALE	9.0	178.1	
191.0	PLEISTOCENE		BLACK SHALE	2.0	187.1	
189.0	PLEISTOCENE		CLAYSTONE	2.5	189.1	
186.5	MODESTO		SANDY SHALE	11.0	191.6	
175.5	MODESTO		SHALE & CONGLOMERATE	7.0	202.6	
168.5	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	209.6	
167.5	MODESTO	WEST FRANKLIN	SHALE	13.0	210.6	
154.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	223.6	
151.5	MODESTO		SHALE	74.7	226.6	
76.8	CARBONDALE	DANVILLE	COAL	2.0	301.3	
74.8	CARBONDALE		UNDERCLAY	1.0	303.3	
73.8	CARBONDALE		SANDY SHALE	5.3	304.3	
68.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	309.6	
65.0	CARBONDALE		SANDSTONE	13.5	313.1	
51.5	CARBONDALE		SANDY SHALE	13.5	326.6	
38.0	CARBONDALE	BRERETON	LIMESTONE	2.5	340.1	DARK
35.5	CARBONDALE	ANNA	BLACK SHALE	2.3	342.6	
33.2	CARBONDALE	HERRIN	COAL	3.4	344.9	
29.8	CARBONDALE		UNDERCLAY	3.8	348.3	
26.0	CARBONDALE		SANDSTONE	29.5	352.1	
-3.5	CARBONDALE		GRAY SHALE	18.5	381.6	
-22.0	CARBONDALE	BRIAR HILL	COAL	1.7	400.1	
-23.7	CARBONDALE		SHALE	8.0	401.8	
-31.7	CARBONDALE		SANDSTONE	13.0	409.8	
-44.7	CARBONDALE		SANDY SHALE	20.3	422.8	
-65.0	CARBONDALE		GRAY SHALE	16.0	443.1	
-81.0	CARBONDALE		BLACK SHALE	2.7	459.1	
-83.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	461.8	
-84.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	462.8	
-85.2	CARBONDALE	SPRINGFIELD	COAL	5.3	463.3	
-90.5	CARBONDALE		SHALE	3.0	468.6	

MAPID: 05990014000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 320' N line, 320' W line of NW NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.219408 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.783265 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.9 **LOGGED (FT.):** 481.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 55GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.9	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
370.9	PLEISTOCENE		SAND	10.0	3.0	
360.9	PLEISTOCENE		CLAY	60.8	13.0	
300.1	PLEISTOCENE		SAND & GRAVEL	34.2	73.8	
265.9	PLEISTOCENE		CLAY	32.0	108.0	
233.9	MODESTO		SHALE	3.0	140.0	
230.9	MODESTO		SANDY SHALE	12.0	143.0	
218.9	MODESTO		GRAY SHALE	16.0	155.0	
202.9	MODESTO		SANDSTONE	20.0	171.0	GRAY
182.9	MODESTO		GRAY SHALE	7.0	191.0	
175.9	MODESTO	CHAPEL	COAL W/ BLACK SHALE	3.5	198.0	
172.4	MODESTO		UNDERCLAY	2.0	201.5	
170.4	MODESTO		SANDSTONE	4.0	203.5	
166.4	MODESTO		GRAY SHALE	11.8	207.5	
154.6	MODESTO	WEST FRANKLIN	LIMESTONE	2.2	219.3	WHITE
152.4	MODESTO	WEST FRANKLIN	SANDSTONE	13.0	221.5	
139.4	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	234.5	WHITE
137.4	MODESTO		SANDY SHALE	60.0	236.5	
77.4	CARBONDALE	DANVILLE	COAL	1.5	296.5	
75.9	CARBONDALE		SANDSTONE	22.0	298.0	
53.9	CARBONDALE		SHALE	6.0	320.0	
47.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	326.0	WHITE
42.1	CARBONDALE		SANDSTONE	11.7	331.8	
30.4	CARBONDALE		SHALE	12.0	343.5	
18.4	CARBONDALE	BRERETON	LIMESTONE	4.0	355.5	
14.4	CARBONDALE	ANNA	BLACK SHALE	1.4	359.5	
13.0	CARBONDALE	HERRIN	COAL	4.3	360.9	
8.7	CARBONDALE		UNDERCLAY	2.8	365.2	
5.9	CARBONDALE		SANDSTONE	31.5	368.0	
-25.6	CARBONDALE		SHALE	12.0	399.5	
-37.6	CARBONDALE	BRIAR HILL	COAL	1.8	411.5	
-39.4	CARBONDALE		SHALE	7.7	413.3	
-47.1	CARBONDALE		SANDY SHALE	25.0	421.0	
-72.1	CARBONDALE		SHALE	25.1	446.0	
-97.2	CARBONDALE	ST. DAVID	LIMESTONE	0.6	471.1	
-97.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	471.6	
-100.1	CARBONDALE	SPRINGFIELD	COAL	4.9	474.0	
-105.0	CARBONDALE		UNDERCLAY	1.3	478.9	
-106.2	CARBONDALE		SANDSTONE	1.3	480.1	

MAPID: 05990025000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 100' N line, 25' E line of NE NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.210839 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.790764 **DATE COLLECTED:** 1 / 3 / 1969

SURFACE ELEVATION (FT.): 373.5 **LOGGED (FT.):** 521.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 60GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34 EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.5	PLEISTOCENE		UNCONSOLIDATED	141.0	0.0	
232.5	MODESTO		SHALE	6.0	141.0	
226.5	MODESTO		SANDY SHALE	60.5	147.0	
166.0	MODESTO		SANDSTONE	17.0	207.5	
149.0	MODESTO		LIMESTONE	3.0	224.5	WHITE
146.0	MODESTO		SANDY SHALE	6.5	227.5	
139.5	MODESTO		DARK SHALE	5.0	234.0	
134.5	MODESTO		BLACK SHALE	2.8	239.0	
131.7	MODESTO	CHAPEL	COAL	1.0	241.8	
130.7	MODESTO		UNDERCLAY	2.0	242.8	
128.7	MODESTO		SANDSTONE	2.7	244.8	
126.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	247.5	WHITE
123.0	MODESTO		SANDSTONE	21.0	250.5	
102.0	MODESTO		SANDY SHALE	48.5	271.5	
53.5	MODESTO		SHALE	15.5	320.0	
38.0	CARBONDALE	DANVILLE	COAL	2.0	335.5	APPROX. THICKNESS
36.0	CARBONDALE		UNDERCLAY	2.5	337.5	
33.5	CARBONDALE		SANDY SHALE	9.5	340.0	
24.0	CARBONDALE		BLACK SHALE	1.0	349.5	
23.0	CARBONDALE		SANDY SHALE	7.0	350.5	
16.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	357.5	WHITE
11.5	CARBONDALE		SANDSTONE	15.0	362.0	
-3.5	CARBONDALE		SANDY SHALE	7.5	377.0	
-11.0	CARBONDALE		SHALE	2.0	384.5	
-13.0	CARBONDALE	BRERETON	LIMESTONE	3.9	386.5	
-16.9	CARBONDALE	ANNA	BLACK SHALE	1.5	390.4	
-18.4	CARBONDALE	HERRIN	COAL	4.0	391.9	
-22.4	CARBONDALE		UNDERCLAY	6.1	395.9	
-28.5	CARBONDALE		SANDSTONE	28.0	402.0	
-56.5	CARBONDALE		SHALE	16.5	430.0	
-73.0	CARBONDALE	BRIAR HILL	COAL	1.8	446.5	
-74.8	CARBONDALE		SHALE	7.2	448.3	
-82.0	CARBONDALE		SANDY SHALE	25.5	455.5	
-107.5	CARBONDALE		SHALE	28.5	481.0	
-136.0	CARBONDALE	ST. DAVID	LIMESTONE	1.6	509.5	
-137.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	511.0	
-140.5	CARBONDALE	SPRINGFIELD	COAL	5.8	514.0	
-146.3	CARBONDALE		GRAY SHALE	1.7	519.8	

MAPID: 05901217000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205687 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.781415 **DATE COLLECTED:** 5 / 0 / 1952

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 1582.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, INGLETON 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-131.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	514.0	
-172.0	CARBONDALE	SURVANT	COAL	0.8	555.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-294.0	CARBONDALE	DEKOVEN	COAL	3.0	677.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	677.0	
-317.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	735.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-374.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	757.0	
-399.0	TRADEWATER	MT. RORAH	COAL	2.0	782.0	

MAPID: 05901218000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.196644 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.781387 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 2954.0 **LOG TYPE:** Electric Log

SOURCE: KIDD, BARRON, ETAL, RIDER JOSEPHINE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-205.0	CARBONDALE	SURVANT	COAL	2.8	585.0	
-258.0	CARBONDALE	COLCHESTER	COAL	0.5	638.0	
-330.0	CARBONDALE	DEKOVEN	COAL	4.0	710.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	710.0	
-355.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-390.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	770.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-410.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	790.0	
-443.0	TRADEWATER	MT. RORAH	COAL	1.2	823.0	

MAPID: 05901219000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.200852 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.788365 **DATE COLLECTED:** 9 / 0 / 1952

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 3010.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., MCCORMICK 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-196.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	579.0	
-240.0	CARBONDALE	SURVANT	COAL	1.6	623.0	
-292.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-356.0	CARBONDALE	DEKOVEN	COAL	3.0	739.0	
-356.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	739.0	
-377.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	795.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-436.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	819.0	
-466.0	TRADEWATER	MT. RORAH	COAL	3.0	849.0	

MAPID: 05901220000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198635 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.790198 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:** Electric Log

SOURCE: NATION OIL CO., MCCORMICK 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-207.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	589.0	
-293.0	CARBONDALE	COLCHESTER	COAL	0.5	675.0	
-356.0	CARBONDALE	DEKOVEN	COAL	3.0	738.0	
-356.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	738.0	
-381.0	CARBONDALE	DAVIS	COAL	4.0	763.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	795.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-433.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	815.0	
-466.0	TRADEWATER	MT. RORAH	COAL	3.0	848.0	

MAPID: 05901221000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.194195 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.790225 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1634.0 **LOG TYPE:** Electric Log

SOURCE: KIDD, BARRON, ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1250.0	BASE OF PENN.		UNCLASSIFIED	-	1634.0	

MAPID: 05901261000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207904 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.781551 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
109.0	CARBONDALE	DANVILLE	COAL	2.5	274.0	
106.5	CARBONDALE		SHALE	15.0	276.5	
91.5	CARBONDALE	ALLENBY	COAL	1.0	291.5	
90.5	CARBONDALE		CLAYSTONE & SHALE	6.0	292.5	
84.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	298.5	
81.5	CARBONDALE	LAWSON	SHALE	3.0	301.5	
78.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	9.0	304.5	
69.5	CARBONDALE	LAWSON	GRAY SHALE	12.0	313.5	
57.5	CARBONDALE	BRERETON	LIMESTONE	4.0	325.5	
53.5	CARBONDALE	ANNA	BLACK SHALE	1.5	329.5	
52.0	CARBONDALE	HERRIN	COAL	3.0	331.0	

MAPID: 05901830000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198816 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.784938 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2798.0 **LOG TYPE:** Electric Log

SOURCE: LAUDERDALE OIL PROP, MCCORMICK J W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-169.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-207.0	CARBONDALE	SURVANT	COAL	2.0	588.0	
-259.0	CARBONDALE	COLCHESTER	COAL	0.5	640.0	
-327.0	CARBONDALE	DEKOVEN	COAL	3.0	708.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	708.0	
-353.0	CARBONDALE	DAVIS	COAL	4.0	734.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	765.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-404.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	785.0	
-436.0	TRADEWATER	MT. RORAH	COAL	3.0	817.0	

MAPID: 05923820000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.197883 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.780579 **DATE COLLECTED:** 5 / 30 / 1973

SURFACE ELEVATION (FT.): 390.1 **LOGGED (FT.):** 493.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 158GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.1	PLEISTOCENE		UNCONSOLIDATED	157.0	0.0	
233.1			SHALE	40.5	157.0	
192.6			SANDSTONE	15.0	197.5	
177.6			SHALE	14.5	212.5	
163.1			BLACK SHALE	4.0	227.0	
159.1			SHALE	5.5	231.0	
153.6			COAL	1.0	236.5	
152.6			UNDERCLAY	3.5	237.5	
149.1			SHALE	21.5	241.0	
127.6	MODESTO		LIMESTONE	1.0	262.5	
126.6	MODESTO		SHALE	41.5	263.5	
85.1	CARBONDALE	DANVILLE	COAL	1.5	305.0	
83.6	CARBONDALE		UNDERCLAY	1.5	306.5	
82.1	CARBONDALE		SANDSTONE	10.5	308.0	
71.6	CARBONDALE		BLACK SHALE	1.0	318.5	
70.6	CARBONDALE		SHALE	5.5	319.5	
65.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	325.0	
59.4	CARBONDALE	ANVIL ROCK	SANDSTONE	10.3	330.7	
49.1	CARBONDALE		SHALE	13.0	341.0	
36.1	CARBONDALE	BRERETON	LIMESTONE	2.6	354.0	
33.5	CARBONDALE	ANNA	BLACK SHALE	3.4	356.6	
30.1	CARBONDALE	HERRIN	COAL	3.5	360.0	
26.6	CARBONDALE		UNDERCLAY	3.5	363.5	
23.1	CARBONDALE		SANDSTONE	13.0	367.0	
10.1	CARBONDALE		SHALE	33.5	380.0	
-23.4	CARBONDALE	BRIAR HILL	COAL	2.0	413.5	
-25.4	CARBONDALE		SHALE	8.5	415.5	
-33.9	CARBONDALE		SANDSTONE	2.0	424.0	
-35.9	CARBONDALE		SHALE	52.5	426.0	
-88.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	478.5	
-89.4	CARBONDALE	TURNER MINE	BLACK SHALE	4.3	479.5	
-93.7	CARBONDALE		SHALE	0.7	483.8	
-94.4	CARBONDALE	SPRINGFIELD	COAL	6.1	484.5	
-100.5	CARBONDALE		SHALE	2.1	490.6	
-102.6	CARBONDALE		SANDSTONE	1.1	492.7	

MAPID: 05923821000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' S line, 2640' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202223 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.780603 **DATE COLLECTED:** 5 / 21 / 1973

SURFACE ELEVATION (FT.): 383.4 **LOGGED (FT.):** 466.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 157GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
383.4	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
233.4			SHALE	23.5	150.0	
209.9			SANDSTONE	9.0	173.5	
200.9			SHALE	13.5	182.5	
187.4			BLACK SHALE	4.5	196.0	
182.9			COAL	1.0	200.5	
181.9			UNDERCLAY	6.0	201.5	
175.9			SHALE	73.0	207.5	
102.9			COAL	2.0	280.5	
100.9	CARBONDALE		UNDERCLAY	1.5	282.5	
99.4	CARBONDALE		SANDSTONE	12.0	284.0	
87.4	CARBONDALE		BLACK SHALE	1.0	296.0	
86.4	CARBONDALE		SHALE	3.5	297.0	
82.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	300.5	
76.9	CARBONDALE		SHALE	1.5	306.5	
75.4	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	308.0	
65.4	CARBONDALE		SHALE	13.0	318.0	
52.4	CARBONDALE	BRERETON	LIMESTONE	2.7	331.0	
49.7	CARBONDALE	ANNA	BLACK SHALE	3.0	333.7	
46.7	CARBONDALE	HERRIN	COAL	3.6	336.7	
43.1	CARBONDALE		UNDERCLAY	3.2	340.3	
39.9	CARBONDALE		SANDSTONE	16.5	343.5	
23.4	CARBONDALE		SHALE	30.7	360.0	
-7.3	CARBONDALE	BRIAR HILL	COAL	1.8	390.7	
-9.1	CARBONDALE		SHALE	14.5	392.5	
-23.6	CARBONDALE		SANDSTONE	2.0	407.0	
-25.6	CARBONDALE		SHALE	37.4	409.0	
-63.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	446.4	
-64.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	447.7	
-67.3	CARBONDALE	SPRINGFIELD	COAL	5.3	450.7	
-72.6	CARBONDALE		SHALE	7.4	456.0	
-80.0	CARBONDALE		SANDSTONE	3.3	463.4	

MAPID: 05923822000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 0' S line, 2640' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.202459 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.776962 **DATE COLLECTED:** 12 / 7 / 1972

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 433.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 111-GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.0	PLEISTOCENE		UNCONSOLIDATED	147.5	0.0	
233.5			SANDSTONE	8.5	147.5	
225.0			SHALE	10.0	156.0	
215.0			BLACK SHALE	2.5	166.0	
212.5			COAL	1.0	168.5	
211.5			UNDERCLAY	5.5	169.5	
206.0			SHALE	4.0	175.0	
202.0			LIMESTONE	1.0	179.0	
201.0			SANDSTONE/SHALE	11.0	180.0	
190.0	MODESTO		SHALE	4.0	191.0	
186.0	MODESTO		LIMESTONE	1.5	195.0	
184.5	MODESTO		SHALE	57.0	196.5	
127.5	CARBONDALE	DANVILLE	COAL	1.0	253.5	
126.5	CARBONDALE		UNDERCLAY	6.5	254.5	
120.0	CARBONDALE		SANDSTONE	4.0	261.0	
116.0	CARBONDALE		SHALE	16.0	265.0	
100.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	281.0	
93.5	CARBONDALE		SHALE	2.5	287.5	
91.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	290.0	
85.0	CARBONDALE		SHALE	14.0	296.0	
71.0	CARBONDALE	BRERETON	LIMESTONE	2.7	310.0	
68.3	CARBONDALE	ANNA	BLACK SHALE	3.4	312.7	
64.9	CARBONDALE	HERRIN	COAL	3.2	316.1	
61.7	CARBONDALE		UNDERCLAY	3.2	319.3	
58.5	CARBONDALE		SANDSTONE	15.5	322.5	
43.0	CARBONDALE		SHALE	26.5	338.0	
16.5	CARBONDALE	BRIAR HILL	COAL	2.0	364.5	
14.5	CARBONDALE		SANDY SHALE	6.5	366.5	
8.0	CARBONDALE		SANDSTONE	3.0	373.0	
5.0	CARBONDALE		SHALE	46.1	376.0	
-41.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	422.1	
-42.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	423.1	
-44.5	CARBONDALE	SPRINGFIELD	COAL	5.1	425.5	
-49.6	CARBONDALE		SHALE	0.3	430.6	
-49.9	CARBONDALE		UNDERCLAY	2.5	430.9	

MAPID: 05923823000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.206137 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.791064 **DATE COLLECTED:** 9 / 18 / 1973

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 528.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 187GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	144.0	0.0	
233.0			SHALE	7.0	144.0	
226.0			LIMESTONE	2.0	151.0	
224.0			SANDSTONE	13.0	153.0	
211.0			SHALE	42.5	166.0	
168.5			SANDSTONE/SHALE	13.5	208.5	
155.0			SHALE	13.0	222.0	
142.0			BLACK SHALE	2.5	235.0	
139.5			UNDERCLAY	4.5	237.5	
135.0	MODESTO		SHALE	94.0	242.0	
41.0	CARBONDALE	DANVILLE	COAL	2.0	336.0	
39.0	CARBONDALE		SHALE	11.8	338.0	
27.2	CARBONDALE		BLACK SHALE	0.7	349.8	
26.5	CARBONDALE		UNDERCLAY	1.0	350.5	
25.5	CARBONDALE		SANDSTONE	3.0	351.5	
22.5	CARBONDALE		SHALE	3.0	354.5	
19.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	357.5	
13.0	CARBONDALE		SHALE	10.0	364.0	
3.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	374.0	
-6.0	CARBONDALE		SHALE	4.0	383.0	
-10.0	CARBONDALE	BRERETON	LIMESTONE	1.2	387.0	
-11.2	CARBONDALE	ANNA	BLACK SHALE	2.1	388.2	
-13.3	CARBONDALE	HERRIN	COAL	3.6	390.3	
-16.9	CARBONDALE		UNDERCLAY	4.0	393.9	
-20.9	CARBONDALE		SANDSTONE	22.1	397.9	
-43.0	CARBONDALE		SHALE	24.5	420.0	
-67.5	CARBONDALE	BRIAR HILL	COAL	2.0	444.5	
-69.5	CARBONDALE		SANDSTONE	13.5	446.5	
-83.0	CARBONDALE		SHALE	48.5	460.0	
-131.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	508.5	
-132.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	509.5	
-135.8	CARBONDALE	SPRINGFIELD	COAL	5.6	512.8	
-141.3	CARBONDALE		SHALE	6.5	518.3	
-147.8	CARBONDALE		SANDSTONE	3.5	524.8	

MAPID: 05923844000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 330' S line, 0' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211583 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.777929 **DATE COLLECTED:** 9 / 18 / 1973

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 468.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 186GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-16

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	146.0	0.0	
229.0			SANDSTONE	20.0	146.0	
209.0			SHALE	15.0	166.0	
194.0			BLACK SHALE	1.5	181.0	
192.5			COAL	0.5	182.5	
192.0			UNDERCLAY	4.0	183.0	
188.0			SHALE	6.0	187.0	
182.0			LIMESTONE	3.0	193.0	
179.0			SANDSTONE	12.0	196.0	
167.0	MODESTO		LIMESTONE	1.0	208.0	
166.0	MODESTO		SHALE	53.0	209.0	
113.0	CARBONDALE	DANVILLE	COAL	1.5	262.0	
111.5	CARBONDALE		SHALE	33.0	263.5	
78.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	296.5	
73.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.5	301.5	
61.0	CARBONDALE		SHALE	11.5	314.0	
49.5	CARBONDALE	BRERETON	LIMESTONE	3.2	325.5	
46.3	CARBONDALE	ANNA	BLACK SHALE	3.0	328.7	
43.3	CARBONDALE	HERRIN	COAL	3.5	331.7	
39.8	CARBONDALE		UNDERCLAY	3.8	335.2	
36.0	CARBONDALE		SANDSTONE	24.0	339.0	
12.0	CARBONDALE		SHALE	21.0	363.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	1.5	384.0	
-10.5	CARBONDALE		SHALE	42.5	385.5	
-53.0	CARBONDALE		SHALE	21.3	428.0	WITH LIMESTONE BANDS
-74.3	CARBONDALE		BLACK SHALE	1.6	449.3	
-75.9	CARBONDALE	ST. DAVID	LIMESTONE	0.6	450.9	
-76.5	CARBONDALE	TURNER MINE	DARK SHALE	1.2	451.5	
-77.6	CARBONDALE	SPRINGFIELD	COAL	5.5	452.6	
-83.1	CARBONDALE		CLAYSTONE	10.0	458.1	

MAPID: 05923845000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 1320' N line, 0' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193117 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.787498 **DATE COLLECTED:** 5 / 19 / 1975

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 506.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 243=GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 5-Q

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
235.0			SANDSTONE	6.0	150.0	
229.0			SHALE	44.0	156.0	
185.0			SANDSTONE	15.0	200.0	
170.0			SHALE	13.0	215.0	
157.0			BLACK SHALE	4.0	228.0	
153.0			SHALE	1.0	232.0	
152.0			COAL	0.9	233.0	
151.1			SHALE	10.0	233.9	
141.1	MODESTO		LIMESTONE	0.8	243.9	
140.3	MODESTO		SHALE	73.0	244.7	
67.3	CARBONDALE	DANVILLE	COAL	1.5	317.7	
65.8	CARBONDALE		SHALE	11.0	319.2	
54.8	CARBONDALE		BLACK SHALE	1.0	330.2	
53.8	CARBONDALE		SHALE	5.8	331.2	
48.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	337.0	
44.5	CARBONDALE		SHALE	4.0	340.5	
40.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	344.5	
34.0	CARBONDALE		SHALE	13.0	351.0	
21.0	CARBONDALE	BRERETON	LIMESTONE	3.0	364.0	
18.0	CARBONDALE	ANNA	BLACK SHALE	4.0	367.0	
14.0	CARBONDALE	HERRIN	COAL	3.4	371.0	
10.6	CARBONDALE		SHALE	3.0	374.4	
7.6	CARBONDALE		SANDSTONE	5.6	377.4	
2.0	CARBONDALE		SANDY SHALE	3.0	383.0	
-1.0	CARBONDALE		SANDSTONE	24.0	386.0	
-25.0	CARBONDALE		SHALE	33.0	410.0	
-58.0	CARBONDALE	BRIAR HILL	COAL	1.5	443.0	
-59.5	CARBONDALE		SHALE	41.0	444.5	
-100.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	485.5	WITH SHALE
-101.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	486.5	
-104.2	CARBONDALE	SPRINGFIELD	COAL	5.0	489.2	
-109.2	CARBONDALE	SPRINGFIELD	COAL	0.5	494.2	
-109.7	CARBONDALE		SHALE	4.0	494.7	
-113.7	CARBONDALE		SANDSTONE	7.5	498.7	

MAPID: 05990007000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 25' S line, 25' E line of SE SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193468 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776975 **DATE COLLECTED:** 1 / 7 / 1969

SURFACE ELEVATION (FT.): 382.7 **LOGGED (FT.):** 441.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 58GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.7	PLEISTOCENE		UNCONSOLIDATED	151.0	0.0	
231.7			SHALE	140.6	151.0	
91.1	CARBONDALE	BANKSTON FORK	LIMESTONE	26.2	291.6	
65.0	CARBONDALE	BRERETON	LIMESTONE	3.1	317.7	DARK
61.9	CARBONDALE	ANNA	BLACK SHALE	4.6	320.8	
57.4	CARBONDALE	HERRIN	COAL	3.3	325.3	
54.1	CARBONDALE		UNDERCLAY	1.2	328.6	
52.9	CARBONDALE		SHALE	41.0	329.8	
11.9	CARBONDALE	BRIAR HILL	COAL	2.1	370.8	
9.8	CARBONDALE		SHALE	57.8	372.9	
-47.9	CARBONDALE		SHALE	0.4	430.6	
-48.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.2	431.0	
-52.5	CARBONDALE	SPRINGFIELD	COAL	5.3	435.2	
-57.8	CARBONDALE		GRAY SHALE	1.3	440.5	

MAPID: 05990013000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 100' N line, 100' E line of NE SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.193468 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.787306 **DATE COLLECTED:** 5 / 19 / 1975

SURFACE ELEVATION (FT.): 381.4 **LOGGED (FT.):** 506.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 243GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.4	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
377.4	PLEISTOCENE		SAND	29.0	4.0	BROWN
348.4	PLEISTOCENE		CLAY	41.0	33.0	BLUE
307.4	PLEISTOCENE		SAND & GRAVEL	20.0	74.0	
287.4	PLEISTOCENE		CLAY	6.0	94.0	BLUE
281.4	PLEISTOCENE		SAND & GRAVEL	50.0	100.0	
231.4	MODESTO		SANDSTONE	6.0	150.0	GRAY
225.4	MODESTO		SANDY SHALE	10.0	156.0	
215.4	MODESTO		GRAY SHALE	34.0	166.0	
181.4	MODESTO		SANDSTONE	15.0	200.0	GRAY
166.4	MODESTO		SANDY SHALE	13.0	215.0	
153.4	MODESTO		BLACK SHALE	4.0	228.0	
149.4	MODESTO		GRAY SHALE	1.0	232.0	
148.4	MODESTO	CHAPEL	COAL	0.9	233.0	
147.5	MODESTO		GRAY SHALE	10.0	233.9	
137.5	MODESTO	WEST FRANKLIN	LIMESTONE	0.8	243.9	
136.7	MODESTO		GRAY SHALE	30.0	244.7	
106.7	MODESTO		GRAY SHALE	43.0	274.7	
63.7	CARBONDALE	DANVILLE	COAL	1.5	317.7	
62.2	CARBONDALE		SHALE	11.0	319.2	
51.2	CARBONDALE		BLACK SHALE	1.0	330.2	
50.2	CARBONDALE		GRAY SHALE	5.8	331.2	
44.4	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	337.0	
40.9	CARBONDALE		GRAY SHALE	4.0	340.5	
36.9	CARBONDALE		SANDSTONE	6.5	344.5	GRAY
30.4	CARBONDALE		GRAY SHALE	13.0	351.0	
17.4	CARBONDALE	BRERETON	LIMESTONE	3.0	364.0	GRAY
14.4	CARBONDALE	ANNA	BLACK SHALE	4.0	367.0	
10.4	CARBONDALE	HERRIN	COAL	3.4	371.0	
7.0	CARBONDALE		GRAY SHALE	3.0	374.4	
4.0	CARBONDALE		SANDSTONE	5.6	377.4	GRAY
-1.6	CARBONDALE		SANDY SHALE	3.0	383.0	
-4.6	CARBONDALE		SANDSTONE	24.0	386.0	GRAY
-28.6	CARBONDALE		SANDY SHALE	33.0	410.0	
-61.6	CARBONDALE	BRIAR HILL	COAL	1.5	443.0	
-63.1	CARBONDALE		SANDY SHALE	4.5	444.5	
-67.6	CARBONDALE		SANDY SHALE	36.5	449.0	
-104.1	CARBONDALE	ST. DAVID	LIMESTONE	0.0	485.5	
-104.1	CARBONDALE		CALCAREOUS SHALE	1.0	485.5	

-105.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	486.5	
-107.8	CARBONDALE	SPRINGFIELD	COAL	5.0	489.2	
-112.8	CARBONDALE		BLACK SHALE	0.5	494.2	
-113.3	CARBONDALE		SANDY SHALE	4.0	494.7	
-117.3	CARBONDALE		SANDSTONE	7.5	498.7	GRAY

MAPID: 05992382000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 100' S line, 100' E line of SE NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.198161 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.780756 **DATE COLLECTED:** 5 / 30 / 1973

SURFACE ELEVATION (FT.): 390.1 **LOGGED (FT.):** 493.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 158-GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.1	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
380.1	PLEISTOCENE		CLAY	147.0	10.0	WITH SAND AND GRAVEL BLUE
233.1	MODESTO		GRAY SHALE	40.5	157.0	
192.6	MODESTO		SANDSTONE	15.0	197.5	
177.6	MODESTO		GRAY SHALE	14.5	212.5	
163.1	MODESTO		BLACK SHALE	4.0	227.0	
159.1	MODESTO		GRAY SHALE	5.5	231.0	
153.6	MODESTO	CHAPEL	COAL	1.0	236.5	
152.6	MODESTO		UNDERCLAY	3.5	237.5	
149.1	MODESTO		SANDY SHALE	21.5	241.0	
127.6	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	262.5	
126.6	MODESTO		GRAY SHALE	41.5	263.5	
85.1	CARBONDALE	DANVILLE	COAL	1.5	305.0	
83.6	CARBONDALE		UNDERCLAY	1.5	306.5	
82.1	CARBONDALE		SANDSTONE	10.5	308.0	
71.6	CARBONDALE		BLACK SHALE	1.0	318.5	
70.6	CARBONDALE		SANDY SHALE	5.5	319.5	
65.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	325.0	LIGHT
59.4	CARBONDALE		SANDSTONE	10.3	330.7	
49.1	CARBONDALE		GRAY SHALE	13.0	341.0	
36.1	CARBONDALE	BRERETON	LIMESTONE	2.6	354.0	DARK
33.5	CARBONDALE	ANNA	BLACK SHALE	3.4	356.6	
30.1	CARBONDALE	HERRIN	COAL	3.5	360.0	
26.6	CARBONDALE		UNDERCLAY	3.5	363.5	
23.1	CARBONDALE		SANDSTONE	13.0	367.0	
10.1	CARBONDALE		SANDY SHALE	20.0	380.0	
-9.9	CARBONDALE		GRAY SHALE	13.5	400.0	
-23.4	CARBONDALE	BRIAR HILL	COAL	2.0	413.5	
-25.4	CARBONDALE		SANDY SHALE	8.5	415.5	
-33.9	CARBONDALE		SANDSTONE	2.0	424.0	
-35.9	CARBONDALE		SANDY SHALE	28.0	426.0	
-63.9	CARBONDALE		GRAY SHALE	24.5	454.0	
-88.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	478.5	
-89.4	CARBONDALE	TURNER MINE	BLACK SHALE	4.3	479.5	
-93.7	CARBONDALE		SHALE	0.7	483.8	
-94.4	CARBONDALE	SPRINGFIELD	COAL	6.1	484.5	
-100.5	CARBONDALE		GRAY SHALE	2.1	490.6	
-102.6	CARBONDALE		SANDSTONE	1.1	492.7	

MAPID: 05900342000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:**

SOURCE: CONTNTL OC, MALONEY A 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-2.0	CARBONDALE	HERRIN	COAL	6.0	372.0	
-112.0	CARBONDALE	SPRINGFIELD	COAL	4.0	482.0	

MAPID: 05900342000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
57.0	CARBONDALE	DANVILLE	COAL	1.0	314.0	
56.0	CARBONDALE		SHALE & SANDSTONE	18.5	315.0	
37.5	CARBONDALE	ALLENBY	BLACK SHALE	0.5	333.5	
37.0	CARBONDALE		CLAYSTONE	1.0	334.0	
36.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	335.0	
29.0	CARBONDALE	LAWSON	SANDSTONE	13.0	342.0	
16.0	CARBONDALE	LAWSON	GRAY SHALE	11.0	355.0	
5.0	CARBONDALE	BRERETON	LIMESTONE W/ SHALE	4.0	366.0	
1.0	CARBONDALE	ANNA	BLACK SHALE	4.0	370.0	
-3.0	CARBONDALE	HERRIN	COAL	6.0	374.0	

MAPID: 05900342000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2972.0 **LOG TYPE:** Electric Log
SOURCE: CONTINENTAL OIL CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1.0	CARBONDALE	HERRIN	COAL	3.0	372.0	
-41.0	CARBONDALE	BRIAR HILL	COAL	-	412.0	
-109.0	CARBONDALE	SPRINGFIELD	COAL	5.0	480.0	BLACK SHALE ROOF
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	-	554.0	

MAPID: 05900342000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:** 12 / 0 / 1944
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2972.0 **LOG TYPE:** Electric Log
SOURCE: CONTINENTAL OIL CO., MALONEY ARTHUR **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-233.0	CARBONDALE	SURVANT	COAL	1.2	604.0	
-279.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-355.0	CARBONDALE	DEKOVEN	COAL	3.0	726.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	726.0	
-377.0	CARBONDALE	DAVIS	COAL	5.0	748.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	784.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-433.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	804.0	

MAPID: 05900342000C **VERSION:** 5 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2972.0 **LOG TYPE:** Survey Sample Study
SOURCE: CONTINENTAL & GULF **WELL TYPE:** Oil and Gas Test
COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900342000C **VERSION:** 6 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185329 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.777705 **DATE COLLECTED:** 12 / 0 / 1944

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1720.0 **LOG TYPE:** Survey Sample Study

SOURCE: CONTINENTAL OIL CO. 1 **WELL TYPE:** Dry Hole

COMMENT: SAMPLE STUDY CONTROL WELL #195

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.0			NO RECORD	177.0	0.0	
194.0			SANDSTONE	18.0	177.0	
176.0			SHALE	5.0	195.0	WITH BLACK SHALE
171.0			LIMESTONE	1.0	200.0	
170.0			BLACK SHALE	9.0	201.0	WITH SILTSTONE AND LIMESTONE
161.0			UNDERCLAY	8.0	210.0	
153.0			LIMESTONE	2.0	218.0	
151.0			SHALE	2.0	220.0	
149.0			LIMESTONE	1.0	222.0	
148.0			CALCAREOUS SHALE	37.0	223.0	WITH SANDSTONE
111.0			SHALE	55.0	260.0	
56.0	CARBONDALE	DANVILLE	COAL	1.0	315.0	THICKNESS ESTIMATED
55.0	CARBONDALE		UNDERCLAY	1.0	316.0	
54.0	CARBONDALE		SHALE	2.0	317.0	WITH BLACK SHALE
52.0	CARBONDALE		SANDSTONE	11.0	319.0	
41.0	CARBONDALE		BLACK SHALE	4.0	330.0	
37.0	CARBONDALE		UNDERCLAY	1.0	334.0	
36.0	CARBONDALE		LIMESTONE	7.0	335.0	
29.0	CARBONDALE		SANDSTONE	13.0	342.0	
16.0	CARBONDALE		SHALE	11.0	355.0	
5.0	CARBONDALE		LIMESTONE	1.0	366.0	
4.0	CARBONDALE		SHALE	3.0	367.0	
1.0	CARBONDALE		BLACK SHALE	4.0	370.0	
-3.0	CARBONDALE	HERRIN	COAL	6.0	374.0	IMPRECISE THICKNESS
-9.0	CARBONDALE		UNDERCLAY	1.0	380.0	
-10.0	CARBONDALE		SANDSTONE	29.0	381.0	
-39.0	CARBONDALE		SHALE	8.0	410.0	
-47.0	CARBONDALE	BRIAR HILL	COAL	2.0	418.0	THICKNESS ESTIMATED
-49.0	CARBONDALE		UNDERCLAY	1.0	420.0	
-50.0	CARBONDALE		SHALE & SANDSTONE	23.0	421.0	
-73.0	CARBONDALE		SHALE	35.0	444.0	
-108.0	CARBONDALE		LIMESTONE	1.0	479.0	
-109.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	480.0	
-111.0	CARBONDALE	SPRINGFIELD	COAL	4.0	482.0	IMPRECISE THICKNESS
-115.0	CARBONDALE		UNDERCLAY	3.0	486.0	
-118.0	CARBONDALE		LIMESTONE	4.0	489.0	
-122.0	CARBONDALE		SHALE	11.0	493.0	
-133.0	CARBONDALE		SANDSTONE/SHALE	11.0	504.0	

-144.0	CARBONDALE		SHALE	5.0	515.0	
-149.0	CARBONDALE		SANDSTONE	34.0	520.0	
-183.0	CARBONDALE		SHALE	4.0	554.0	
-187.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	THICKNESS ESTIMATED
-189.0	CARBONDALE		UNDERCLAY	5.0	560.0	
-194.0			NO RECORD	10.0	565.0	
-204.0			SANDSTONE	5.0	575.0	
-209.0			SHALE & SANDSTONE	6.0	580.0	
-215.0			SHALE	62.0	586.0	
-277.0			CLAYSTONE & SHALE	3.0	648.0	
-280.0			SANDSTONE	59.0	651.0	
-339.0			SANDSTONE/SHALE	5.0	710.0	
-344.0			SHALE	14.0	715.0	
-358.0	SPOON	DEKOVEN	COAL	1.0	729.0	THICKNESS ESTIMATED
-359.0	SPOON		UNDERCLAY	2.0	730.0	
-361.0	SPOON		SHALE	10.0	732.0	
-371.0	SPOON		BLACK SHALE	8.0	742.0	
-379.0	SPOON	DEKOVEN	COAL	4.0	750.0	THICKNESS ESTIMATED
-383.0	SPOON		UNDERCLAY	2.0	754.0	
-385.0	SPOON		SANDSTONE	19.0	756.0	
-404.0	SPOON		SHALE	15.0	775.0	
-419.0	SPOON		BLACK SHALE	5.0	790.0	
-424.0			SHALE	8.0	795.0	
-432.0			LIMESTONE	1.0	803.0	
-433.0			SHALE	6.0	804.0	
-439.0			BLACK SHALE & COAL	3.0	810.0	
-442.0			UNDERCLAY	1.0	813.0	
-443.0			SHALE	6.0	814.0	
-449.0			SHALE & SANDSTONE	10.0	820.0	
-459.0			SANDSTONE	29.0	830.0	
-488.0			LIMESTONE	1.0	859.0	
-489.0			SHALE & SANDSTONE	20.0	860.0	
-509.0			SANDSTONE	10.0	880.0	
-519.0			BLACK SHALE	3.0	890.0	
-522.0			COAL	1.0	893.0	THICKNESS ESTIMATED
-523.0			SANDSTONE	6.0	894.0	
-529.0			SHALE	20.0	900.0	
-549.0			SANDSTONE	10.0	920.0	
-559.0			LIMESTONE	2.0	930.0	
-561.0			SHALE	18.0	932.0	
-579.0			BLACK SHALE & COAL	2.0	950.0	
-581.0			UNDERCLAY	4.0	952.0	
-585.0			BLACK SHALE	4.0	956.0	
-589.0			SHALE	16.0	960.0	
-605.0			BLACK SHALE & COAL	4.0	976.0	WITH UNDERCLAY
-609.0			SHALE	63.0	980.0	
-672.0			LIMESTONE	1.0	1043.0	

-673.0	SHALE	2.0	1044.0	
-675.0	SANDSTONE/SHALE	64.0	1046.0	
-739.0	SANDSTONE	30.0	1110.0	WITH SILTSTONE
-769.0	SHALE	34.0	1140.0	
-803.0	BLACK SHALE	2.0	1174.0	
-805.0	COAL	2.0	1176.0	THICKNESS ESTIMATED
-807.0	UNDERCLAY	2.0	1178.0	
-809.0	LIMESTONE	4.0	1180.0	
-813.0	LIMESTONE	2.0	1184.0	
-815.0	SANDSTONE	144.0	1186.0	
-959.0	BLACK SHALE	15.0	1330.0	
-974.0	SHALE	11.0	1345.0	
-985.0	COAL	1.0	1356.0	THICKNESS ESTIMATED
-986.0	UNDERCLAY	2.0	1357.0	
-988.0	SHALE	26.0	1359.0	
-1014.0	SHALE & SANDSTONE	9.0	1385.0	
-1023.0	SANDSTONE	136.0	1394.0	
-1159.0	SANDSTONE/SHALE	10.0	1530.0	
-1169.0	SANDSTONE	5.0	1540.0	
-1174.0	SHALE	33.0	1545.0	
-1207.0	LIMESTONE	6.0	1578.0	
-1213.0	SHALE	24.0	1584.0	
-1237.0	LIMESTONE	1.0	1608.0	
-1238.0	SHALE	97.0	1609.0	
-1335.0	SHALE & SANDSTONE	4.0	1706.0	
-1339.0	LIMESTONE	10.0	1710.0	

MAPID: 05900792000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.189785 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.78309 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2973.0 **LOG TYPE:** Electric Log

SOURCE: KIDD, BARRON, ETAL, RIDER JOSEPHINE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-211.0	CARBONDALE	SURVANT	COAL	1.6	590.0	
-266.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-331.0	CARBONDALE	DEKOVEN	COAL	3.0	710.0	
-331.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	710.0	
-356.0	CARBONDALE	DAVIS	COAL	4.0	735.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	770.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-415.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	794.0	

MAPID: 05901222000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191899 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.790231 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2500.0 **LOG TYPE:** Electric Log

SOURCE: WELCH S T **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
54.0	CARBONDALE	DANVILLE	COAL	-	330.0	
49.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	335.0	
28.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	356.0	
20.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	364.0	
-6.0	CARBONDALE	HERRIN	COAL	3.0	390.0	
-22.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	8.0	406.0	
-56.0	CARBONDALE	BRIAR HILL	COAL	-	440.0	
-61.0	CARBONDALE	CANTON	SANDSTONE/SILTSTONE	3.0	445.0	
-120.0	CARBONDALE	SPRINGFIELD	COAL	4.0	504.0	BLACK SHALE ROOF
-146.0	CARBONDALE	SS BELOW NO. 5	SANDSTONE/SHALE	45.0	530.0	
-194.0	CARBONDALE	HOUCHIN CREEK	COAL	-	578.0	

MAPID: 05901394000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.175992 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.784808 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2883.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., MALONEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-169.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-209.0	CARBONDALE	SURVANT	COAL	2.0	590.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-339.0	CARBONDALE	DEKOVEN	COAL	4.0	720.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	720.0	
-364.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	780.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-424.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	805.0	
-454.0	TRADEWATER	MT. RORAH	COAL	3.0	835.0	

MAPID: 05901575000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.176086 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777576 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2969.0 **LOG TYPE:** Electric Log

SOURCE: FELMONT CORPORATION, DRONE FANNIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-215.0	CARBONDALE	SURVANT	COAL	1.6	572.0	
-263.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-329.0	CARBONDALE	DEKOVEN	COAL	3.8	686.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	686.0	
-356.0	CARBONDALE	DAVIS	COAL	4.0	713.0	
-388.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	745.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-413.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	770.0	
-442.0	TRADEWATER	MT. RORAH	COAL	1.3	799.0	

MAPID: 05901837000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191991 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.786668 **DATE COLLECTED:** 2 / 0 / 1956

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2509.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., MALONEY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-185.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	572.0	
-224.0	CARBONDALE	SURVANT	COAL	4.0	611.0	
-278.0	CARBONDALE	COLCHESTER	COAL	0.5	665.0	
-338.0	CARBONDALE	DEKOVEN	COAL	4.0	725.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	725.0	
-363.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-386.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	773.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-418.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	805.0	
-445.0	TRADEWATER	MT. RORAH	COAL	2.0	832.0	

MAPID: 05901837000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191991 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.786668 **DATE COLLECTED:** 2 / 0 / 1956

SURFACE ELEVATION (FT.): 387.5 **LOGGED (FT.):** 1632.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1244.5	BASE OF PENN.		UNCLASSIFIED	-	1632.0	

MAPID: 05900794000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 207' S line, 436' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173284 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.788076 **DATE COLLECTED:** 5 / 0 / 1949

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2208.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., MALONEY EDWARD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-180.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	556.0	
-220.0	CARBONDALE	SURVANT	COAL	1.6	596.0	
-282.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-345.0	CARBONDALE	DEKOVEN	COAL	4.0	721.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	721.0	
-368.0	CARBONDALE	DAVIS	COAL	4.0	744.0	
-404.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	780.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-428.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	804.0	
-456.0	TRADEWATER	MT. RORAH	COAL	1.6	832.0	

MAPID: 05901245000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.169204 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777518 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2016.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC., DOHERTY CLARENCE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	482.0	
-176.0	CARBONDALE	SURVANT	COAL	1.5	530.0	
-236.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-306.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-306.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	660.0	
-331.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-364.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	718.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-386.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-410.0	TRADEWATER	MT. RORAH	COAL	1.2	764.0	

MAPID: 05901245000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.169204 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777518 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 1780.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-1426.0	BASE OF PENN.		UNCLASSIFIED	-	1780.0	

MAPID: 05901576000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.171496 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777534 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 312.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
110.5	CARBONDALE	DANVILLE	COAL	1.5	250.5	
109.0	CARBONDALE		SHALE & SANDSTONE	18.0	252.0	
91.0	CARBONDALE	ALLENBY	COAL	1.0	270.0	
90.0	CARBONDALE		CLAYSTONE & SHALE	6.0	271.0	
84.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	277.0	
81.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	280.0	
71.0	CARBONDALE	LAWSON	GRAY SHALE	11.0	290.0	
60.0	CARBONDALE	JAMESTOWN	COAL	1.0	301.0	
59.0	CARBONDALE		CLAYSTONE & SHALE	2.5	302.0	
56.5	CARBONDALE	BRERETON	CALCAREOUS SHALE	2.5	304.5	
54.0	CARBONDALE	ANNA	BLACK SHALE	1.0	307.0	
53.0	CARBONDALE	HERRIN	COAL	4.0	308.0	

MAPID: 05901720000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.166805 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.78476 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2872.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., MALONEY ARTHUR B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-186.0	CARBONDALE	SURVANT	COAL	2.0	546.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	605.0	
-313.0	CARBONDALE	DEKOVEN	COAL	3.0	673.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	673.0	
-337.0	CARBONDALE	DAVIS	COAL	4.0	697.0	
-370.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	730.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-393.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	753.0	
-415.0	TRADEWATER	MT. RORAH	COAL	1.5	775.0	

MAPID: 05902290000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157737 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777434 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log

SOURCE: HUMPHREY SAMUEL W, DOHERTY CLARENCE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-160.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	513.0	
-210.0	CARBONDALE	SURVANT	COAL	1.6	563.0	
-277.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-342.0	CARBONDALE	DEKOVEN	COAL	3.0	695.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	695.0	
-370.0	CARBONDALE	DAVIS	COAL	4.0	723.0	
-402.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	755.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-427.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	780.0	
-452.0	TRADEWATER	MT. RORAH	COAL	1.5	805.0	

MAPID: 05923824000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 75' S line, 125' E line of SE SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157037 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.776724 **DATE COLLECTED:** 1 / 25 / 1971

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 458.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4334-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	89.5	0.0	
290.5	MODESTO		SHALE	6.0	89.5	
284.5	MODESTO		LIMESTONE	1.5	95.5	
283.0	MODESTO		SANDSTONE/SHALE	43.5	97.0	
239.5	MODESTO		LIMESTONE	3.3	140.5	
236.2	MODESTO		SANDY SHALE	40.7	143.8	
195.5	MODESTO		SHALE	6.5	184.5	
189.0	MODESTO		SHALE	1.0	191.0	
188.0	MODESTO		COAL	0.5	192.0	
187.5	MODESTO		UNDERCLAY	3.5	192.5	
184.0	MODESTO		SHALE	3.0	196.0	
181.0	MODESTO		SANDSTONE	52.0	199.0	
129.0	MODESTO		SANDY SHALE	2.5	251.0	
126.5	MODESTO		SANDSTONE	15.8	253.5	
110.7	MODESTO		SHALE	7.7	269.3	
103.0	CARBONDALE	DANVILLE	COAL	1.4	277.0	
101.6	CARBONDALE		SHALE & SANDSTONE	24.6	278.4	
77.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	303.0	
73.5	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	27.9	306.5	
45.6	CARBONDALE	BRERETON	LIMESTONE	0.3	334.4	
45.3	CARBONDALE	ANNA	BLACK SHALE	2.0	334.7	
43.3	CARBONDALE	HERRIN	COAL	3.0	336.7	
40.3	CARBONDALE		SHALE	2.8	339.7	
37.5	CARBONDALE		CALCAREOUS SHALE	12.5	342.5	
25.0	CARBONDALE		SANDSTONE	15.0	355.0	
10.0	CARBONDALE		SANDY SHALE	8.5	370.0	
1.5	CARBONDALE	BRIAR HILL	COAL	1.6	378.5	
-0.1	CARBONDALE		SANDSTONE	29.4	380.1	
-29.5	CARBONDALE		SANDY SHALE	36.1	409.5	
-65.6	CARBONDALE		SHALE	4.2	445.6	
-69.8	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.6	449.8	
-70.4	CARBONDALE	ST. DAVID	LIMESTONE	0.3	450.4	
-70.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	450.7	
-72.8	CARBONDALE	SPRINGFIELD	COAL	4.4	452.8	
-77.2	CARBONDALE		SHALE	1.5	457.2	

MAPID: 05923824000C **VERSION:** 2 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 75' S line, 125' E line of SE SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157037 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776724 **DATE COLLECTED:** 11 / 30 / 1972

SURFACE ELEVATION (FT.): 363.4 **LOGGED (FT.):** 536.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 110-GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.4	PLEISTOCENE		UNCONSOLIDATED	129.5	0.0	
233.9			SHALE	51.5	129.5	
182.4			SHALY SANDSTONE	27.0	181.0	
155.4			SHALE	30.0	208.0	
125.4			SANDSTONE	12.0	238.0	
113.4			SHALE	16.0	250.0	
97.4			COAL WITH SHALE	2.0	266.0	
95.4			UNDERCLAY	3.5	268.0	
91.9	MODESTO		SHALE	16.0	271.5	
75.9	MODESTO		LIMESTONE	1.0	287.5	
74.9	MODESTO		SHALE	0.5	288.5	
74.4	MODESTO		LIMESTONE	1.0	289.0	
73.4	MODESTO		SANDY SHALE	61.1	290.0	
12.3	MODESTO		GRAY SHALE	10.0	351.1	
2.3	CARBONDALE	DANVILLE	COAL	1.5	361.1	
0.8	CARBONDALE		SHALY SANDSTONE	8.5	362.6	
-7.7	CARBONDALE		GRAY SHALE	6.0	371.1	
-13.7	CARBONDALE		BLACK SHALE	1.0	377.1	
-14.7	CARBONDALE		GRAY SHALE	6.0	378.1	
-20.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	384.1	LIGHT
-25.7	CARBONDALE		SANDSTONE	9.0	389.1	
-34.7	CARBONDALE		GRAY SHALE	11.3	398.1	
-46.0	CARBONDALE	BRERETON	LIMESTONE	1.0	409.4	DARK
-47.0	CARBONDALE	ANNA	BLACK SHALE	6.0	410.4	
-53.0	CARBONDALE	ENERGY	GRAY SHALE	1.7	416.4	
-54.7	CARBONDALE	HERRIN	COAL	2.5	418.1	
-57.2	CARBONDALE		UNDERCLAY	3.0	420.6	
-60.2	CARBONDALE		SHALY SANDSTONE	20.0	423.6	
-80.2	CARBONDALE		SANDY SHALE	19.5	443.6	
-99.7	CARBONDALE	BRIAR HILL	COAL	2.0	463.1	
-101.7	CARBONDALE		SANDY SHALE	5.5	465.1	
-107.2	CARBONDALE		SANDSTONE	2.5	470.6	
-109.7	CARBONDALE		SANDY SHALE	27.8	473.1	
-137.5	CARBONDALE		GRAY SHALE	25.0	500.9	
-162.5	CARBONDALE	ST. DAVID	LIMESTONE	0.9	525.9	
-163.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	526.8	
-165.7	CARBONDALE	SPRINGFIELD	COAL	5.3	529.1	
-170.9	CARBONDALE		UNDERCLAY	2.5	534.3	

MAPID: 05924724000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.164456 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.788377 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-198.0	CARBONDALE	SURVANT	COAL	2.0	565.0	
-246.0	CARBONDALE	COLCHESTER	COAL	0.5	613.0	
-317.0	CARBONDALE	DEKOVEN	COAL	4.0	684.0	
-317.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	684.0	
-339.0	CARBONDALE	DAVIS	COAL	4.0	706.0	
-373.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	740.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-397.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	764.0	

MAPID: 05990001000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 20' S line, 75' E line of SW SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.159158 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776586 **DATE COLLECTED:** 2 / 7 / 1977

SURFACE ELEVATION (FT.): 356.3 **LOGGED (FT.):** 446.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 255GB **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.3	PLEISTOCENE		UNCONSOLIDATED	5.5	0.0	
350.8	PLEISTOCENE		SAND	3.5	5.5	GRAY
347.3	PLEISTOCENE		CLAY	58.0	9.0	
289.3	PLEISTOCENE		SAND & GRAVEL	57.0	67.0	
232.3	MODESTO		GRAY SHALE	11.0	124.0	
221.3	MODESTO		SANDY SHALE	27.5	135.0	
193.8	MODESTO		BLACK SHALE	3.5	162.5	
190.3	MODESTO		SANDY SHALE	12.5	166.0	
177.8	MODESTO		SANDSTONE	6.5	178.5	GRAY
171.3	MODESTO		SHALE WITH LIMESTONE	17.0	185.0	
154.3	MODESTO	WEST FRANKLIN	LIMESTONE	1.7	202.0	BROWN
152.6	MODESTO		GRAY SHALE	71.8	203.7	
80.8	CARBONDALE	DANVILLE	COAL	1.5	275.5	
79.3	CARBONDALE		GRAY SHALE	7.0	277.0	
72.3	CARBONDALE		SANDY SHALE	12.0	284.0	
60.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	296.0	BROWN
56.8	CARBONDALE		GRAY SHALE	19.5	299.5	
37.3	CARBONDALE	BRERETON	LIMESTONE	2.0	319.0	
35.3	CARBONDALE		GRAY SHALE	0.5	321.0	
34.8	CARBONDALE	ANNA	BLACK SHALE	5.7	321.5	
29.1	CARBONDALE	ENERGY	GRAY SHALE	1.4	327.2	
27.7	CARBONDALE	HERRIN	COAL	2.8	328.6	
24.9	CARBONDALE		UNDERCLAY	1.6	331.4	
23.3	CARBONDALE		SANDSTONE	14.0	333.0	GRAY
9.3	CARBONDALE		GRAY SHALE	26.9	347.0	
-17.6	CARBONDALE	BRIAR HILL	COAL	1.8	373.9	
-19.4	CARBONDALE		GRAY SHALE	12.3	375.7	
-31.7	CARBONDALE		SANDY SHALE	48.5	388.0	
-80.2	CARBONDALE	ST. DAVID	LIMESTONE	0.0	436.5	
-80.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	436.5	
-82.4	CARBONDALE	SPRINGFIELD	COAL	4.4	438.7	
-86.8	CARBONDALE		GRAY SHALE	2.9	443.1	

MAPID: 05990002000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 15' S line, 1' W line of SE SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.163481 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776607 **DATE COLLECTED:** 3 / 11 / 1977

SURFACE ELEVATION (FT.): 359.3 **LOGGED (FT.):** 427.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 147GB **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.3	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
351.3	PLEISTOCENE		SAND	4.0	8.0	
347.3	PLEISTOCENE		CLAY	55.0	12.0	BLUE
292.3	PLEISTOCENE		SAND & GRAVEL	63.0	67.0	
229.3	MODESTO		SANDSTONE	10.0	130.0	GRAY
219.3	MODESTO		GRAY SHALE	12.0	140.0	
207.3	MODESTO	CHAPEL	COAL W/ BLACK SHALE	2.0	152.0	
205.3	MODESTO		UNDERCLAY	5.0	154.0	
200.3	MODESTO		SANDSTONE	4.0	159.0	GRAY
196.3	MODESTO		GRAY SHALE	10.0	163.0	
186.3	MODESTO		CONGLOMERATE	10.0	173.0	
176.3	MODESTO		SANDSTONE	4.5	183.0	GRAY
171.8	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	187.5	
170.3	MODESTO		SANDSTONE	16.5	189.0	
153.8	MODESTO		GRAY SHALE	57.0	205.5	
96.8	CARBONDALE	DANVILLE	COAL	2.2	262.5	
94.6	CARBONDALE		UNDERCLAY	0.8	264.7	
93.8	CARBONDALE		GRAY SHALE	4.5	265.5	
89.3	CARBONDALE		SANDSTONE	2.0	270.0	
87.3	CARBONDALE	ALLENBY	COAL	1.5	272.0	SOME BLACK SHALE
85.8	CARBONDALE		GRAY SHALE	4.5	273.5	
81.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	278.0	
76.1	CARBONDALE		GRAY SHALE	1.8	283.2	
74.3	CARBONDALE		SANDSTONE	8.0	285.0	
66.3	CARBONDALE		GRAY SHALE	10.8	293.0	
55.5	CARBONDALE	CONANT	LIMESTONE	0.7	303.8	
54.8	CARBONDALE		DARK SHALE	2.0	304.5	
52.8	CARBONDALE	BRERETON	LIMESTONE	0.7	306.5	DARK
52.1	CARBONDALE	ANNA	BLACK SHALE	6.8	307.2	
45.3	CARBONDALE	ENERGY	COAL	2.8	314.0	
42.5	CARBONDALE		UNDERCLAY	2.2	316.8	
40.3	CARBONDALE		SANDSTONE	8.0	319.0	
32.3	CARBONDALE		SANDY SHALE	30.0	327.0	
2.3	CARBONDALE	BRIAR HILL	COAL	1.5	357.0	
0.8	CARBONDALE		UNDERCLAY	0.5	358.5	
0.3	CARBONDALE		SANDY SHALE	9.0	359.0	
-8.7	CARBONDALE		SANDSTONE	6.0	368.0	
-14.7	CARBONDALE		SANDY SHALE	9.0	374.0	
-23.7	CARBONDALE		SANDY SHALE	20.0	383.0	

-43.7	CARBONDALE		GRAY SHALE	14.0	403.0
-57.7	CARBONDALE	ST. DAVID	LIMESTONE	0.5	417.0
-58.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	417.5
-60.7	CARBONDALE	SPRINGFIELD	COAL	5.2	420.0
-65.9	CARBONDALE		UNDERCLAY	2.0	425.2

MAPID: 05990005000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 8S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 25' S line, 50' E line of SE SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16595 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776652 **DATE COLLECTED:** 1 / 5 / 1973

SURFACE ELEVATION (FT.): 361.2 **LOGGED (FT.):** 402.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 113GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.2	PLEISTOCENE		UNCONSOLIDATED	127.5	0.0	
233.7	MODESTO		GRAY SHALE	3.5	127.5	
230.2	MODESTO	CHAPEL	COAL W/ BLACK SHALE	1.5	131.0	
228.7	MODESTO		UNDERCLAY	6.0	132.5	
222.7	MODESTO		GRAY SHALE	3.5	138.5	
219.2	MODESTO		SANDSTONE	3.0	142.0	
216.2	MODESTO		SHALE & CONGLOMERATE	12.0	145.0	
204.2	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	157.0	
202.2	MODESTO	WEST FRANKLIN	SANDY SHALE	10.5	159.0	
191.7	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	169.5	
188.2	MODESTO		GRAY SHALE	73.0	173.0	
115.2	CARBONDALE	DANVILLE	COAL	2.0	246.0	
113.2	CARBONDALE		UNDERCLAY	2.5	248.0	
110.7	CARBONDALE		SANDSTONE	2.0	250.5	
108.7	CARBONDALE		GRAY SHALE	6.5	252.5	
102.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	259.0	LIGHT
98.4	CARBONDALE		SANDSTONE	8.2	262.8	
90.2	CARBONDALE		GRAY SHALE	13.0	271.0	
77.2	CARBONDALE	BRERETON	LIMESTONE	0.5	284.0	DARK
76.7	CARBONDALE		SHALE	1.0	284.5	
75.7	CARBONDALE	ANNA	BLACK SHALE	4.5	285.5	
71.2	CARBONDALE	ENERGY	SHALE	2.0	290.0	
69.2	CARBONDALE	HERRIN	COAL	3.0	292.0	
66.2	CARBONDALE		UNDERCLAY	3.0	295.0	
63.2	CARBONDALE		SHALY SANDSTONE	18.0	298.0	
45.2	CARBONDALE		SHALE	19.0	316.0	
26.2	CARBONDALE	BRIAR HILL	COAL	2.0	335.0	
24.2	CARBONDALE		SHALE	5.5	337.0	
18.7	CARBONDALE		SANDSTONE	6.0	342.5	
12.7	CARBONDALE		SANDY SHALE	23.0	348.5	
-10.3	CARBONDALE		GRAY SHALE	20.0	371.5	
-30.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	391.5	
-31.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	392.3	
-33.8	CARBONDALE	SPRINGFIELD	COAL	5.2	395.0	
-39.0	CARBONDALE		SANDSTONE	2.0	400.2	

MAPID: 05900798000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.07848 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.853625 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 2430.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK BROS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
70.0	CARBONDALE	DANVILLE	COAL	-	272.0	
60.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE	6.0	282.0	
51.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	291.0	
42.0	CARBONDALE	ANVIL ROCK	SILTSTONE	4.0	300.0	
15.0	CARBONDALE	HERRIN	COAL	3.0	327.0	
-32.0	CARBONDALE	BRIAR HILL	COAL	-	374.0	
-82.0	CARBONDALE	SPRINGFIELD	COAL	5.0	424.0	BLACK SHALE ROOF
-154.0	CARBONDALE	HOUCHIN CREEK	COAL	-	496.0	

MAPID: 05901577000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073936 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850132 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2887.0 **LOG TYPE:** Electric Log

SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-166.0	CARBONDALE	SURVANT	COAL	1.0	520.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-313.0	CARBONDALE	DEKOVEN	COAL	3.0	667.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	667.0	
-329.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-364.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	718.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901577000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073936 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.850132 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 1540.0 **LOG TYPE:** Electric Log
SOURCE: NATURAL RESOURCES **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1186.0	BASE OF PENN.		UNCLASSIFIED	-	1540.0	

MAPID: 05901578000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' S line, 990' E line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.068473 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.852046 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2423.0 **LOG TYPE:** Electric Log
SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	498.0	
-182.0	CARBONDALE	SURVANT	COAL	1.3	532.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-312.0	CARBONDALE	DEKOVEN	COAL	3.0	662.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	662.0	
-329.0	CARBONDALE	DAVIS	COAL	4.0	679.0	
-360.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	710.0	

MAPID: 05901578000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' S line, 990' E line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.068473 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.852046 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 343.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
67.0	CARBONDALE	DANVILLE	COAL	2.5	283.0	
64.5	CARBONDALE		SHALE & SANDSTONE	18.0	285.5	
46.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	303.5	
43.5	CARBONDALE	LAWSON	SILTY SHALE	23.0	306.5	
20.5	CARBONDALE	BRERETON	LIMESTONE	5.0	329.5	
15.5	CARBONDALE	ANNA	BLACK SHALE	2.5	334.5	
13.0	CARBONDALE	HERRIN	COAL	6.0	337.0	

MAPID: 05901579000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080751 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.855202 **DATE COLLECTED:** 2 / 0 / 1955

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2435.0 **LOG TYPE:** Electric Log

SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	512.0	
-199.0	CARBONDALE	SURVANT	COAL	1.3	546.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-338.0	CARBONDALE	DEKOVEN	COAL	2.5	685.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	689.0	
-353.0	CARBONDALE	DAVIS	COAL	3.8	700.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	738.0	
-410.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	757.0	
-447.0	TRADEWATER	MT. RORAH	COAL	2.5	794.0	

MAPID: 05901581000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 430' S line, 856' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.06718 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850522 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1336.0 **LOG TYPE:** Electric Log

SOURCE: BROOKS & ALLDREDGE, BLACK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-152.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-189.0	CARBONDALE	SURVANT	COAL	2.0	537.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-337.0	CARBONDALE	DEKOVEN	COAL	2.0	685.0	
-340.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	688.0	
-352.0	CARBONDALE	DAVIS	COAL	3.0	700.0	
-392.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	740.0	
-412.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	760.0	
-441.0	TRADEWATER	MT. RORAH	COAL	1.3	789.0	

MAPID: 05902439000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line of NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078387 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.860836 **DATE COLLECTED:** 4 / 0 / 1959

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2060.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION, BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-159.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-204.0	CARBONDALE	SURVANT	COAL	1.2	555.0	
-264.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-348.0	CARBONDALE	DEKOVEN	COAL	2.5	699.0	
-348.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	699.0	
-356.0	CARBONDALE	DAVIS	COAL	3.0	707.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	
-414.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	765.0	
-451.0	TRADEWATER	MT. RORAH	COAL	2.0	802.0	

MAPID: 05903227000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.06929 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853853 **DATE COLLECTED:** 8 / 0 / 1966

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2763.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION, BLACK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-199.0	CARBONDALE	SURVANT	COAL	1.2	550.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-338.0	CARBONDALE	DEKOVEN	COAL	2.0	689.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	693.0	
-353.0	CARBONDALE	DAVIS	COAL	2.5	704.0	
-398.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	749.0	10% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-419.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	770.0	
-444.0	TRADEWATER	MT. RORAH	COAL	1.2	795.0	

MAPID: 05900821000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094488 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.85361 **DATE COLLECTED:** 10 / 0 / 1948
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2139.0 **LOG TYPE:** Electric Log
SOURCE: SUN PRODUCTION COMPANY, HICK JESSIE B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	517.0	
-203.0	CARBONDALE	SURVANT	COAL	0.8	550.0	
-265.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-343.0	CARBONDALE	DEKOVEN	COAL	2.0	690.0	
-347.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	694.0	
-361.0	CARBONDALE	DAVIS	COAL	5.0	708.0	
-397.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	744.0	
-403.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	750.0	
-441.0	TRADEWATER	MT. RORAH	COAL	1.2	788.0	

MAPID: 05900833000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.089842 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.859009 **DATE COLLECTED:** 12 / 0 / 1948
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2143.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD J L, SOUTH LEASE 5 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-181.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	528.0	
-229.0	CARBONDALE	SURVANT	COAL	0.5	576.0	
-291.0	CARBONDALE	COLCHESTER	COAL	1.2	638.0	
-357.0	CARBONDALE	DEKOVEN	COAL	3.0	704.0	
-361.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	708.0	
-373.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-410.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	757.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-428.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	775.0	
-455.0	TRADEWATER	MT. RORAH	COAL	1.4	802.0	

MAPID: 05900844000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' S line, 330' W line of SE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094414 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.859013 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2127.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., TEB **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	535.0	
-237.0	CARBONDALE	SURVANT	COAL	2.5	582.0	
-304.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-359.0	CARBONDALE	DEKOVEN	COAL	3.0	704.0	
-359.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	704.0	
-371.0	CARBONDALE	DAVIS	COAL	3.5	716.0	
-403.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	748.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-423.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	768.0	

MAPID: 05900853000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 830' N line, 330' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.098964 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.861042 **DATE COLLECTED:** 12 / 0 / 1949

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2134.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., TEB **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-197.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-243.0	CARBONDALE	SURVANT	COAL	3.0	590.0	
-306.0	CARBONDALE	COLCHESTER	COAL	0.5	653.0	
-376.0	CARBONDALE	DEKOVEN	COAL	3.0	723.0	
-380.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	727.0	
-393.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-427.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	774.0	
-446.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	793.0	
-473.0	TRADEWATER	MT. RORAH	COAL	0.8	820.0	

MAPID: 05901582000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083044 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855466 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 1700.0 **LOG TYPE:** Electric Log

SOURCE: NATURAL RESOURCES **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1356.0	BASE OF PENN.		UNCLASSIFIED	-	1700.0	

MAPID: 05901582000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083044 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.855466 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 343.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
55.5	CARBONDALE	DANVILLE	COAL	2.5	288.5	
53.0	CARBONDALE		SHALE & SANDSTONE	17.0	291.0	
36.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	308.0	
33.0	CARBONDALE	LAWSON	SILTY SHALE	21.0	311.0	
12.0	CARBONDALE	BRERETON	LIMESTONE	5.0	332.0	
7.0	CARBONDALE	ANNA	BLACK SHALE	2.0	337.0	
5.0	CARBONDALE	HERRIN	COAL	4.0	339.0	

MAPID: 05901582000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083044 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.855466 **DATE COLLECTED:** 4 / 0 / 1955
SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2457.0 **LOG TYPE:** Electric Log
SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-166.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-201.0	CARBONDALE	SURVANT	COAL	0.8	545.0	
-271.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-338.0	CARBONDALE	DEKOVEN	COAL	3.0	682.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	682.0	
-351.0	CARBONDALE	DAVIS	COAL	3.0	695.0	
-386.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	730.0	
-411.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	755.0	
-431.0	TRADEWATER	MT. RORAH	COAL	1.5	775.0	

MAPID: 05901583000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1065' S line, 330' E line of NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.082986 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.859305 **DATE COLLECTED:** 3 / 0 / 1954
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 1452.0 **LOG TYPE:** Electric Log
SOURCE: BROOKS & ALLDREDGE, BLACK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HOUCHIN CREEK	COAL	2.5	515.0	
-	CARBONDALE	SURVANT	COAL	2.0	560.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-	CARBONDALE	DEKOVEN	COAL	3.0	695.0	
-	CARBONDALE	LOWER DEKOVEN	COAL	2.0	698.0	
-	CARBONDALE	DAVIS	COAL	4.0	708.0	
-	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	748.0	
-	TRADEWATER	STONEFORT	LIMESTONE	2.0	762.0	
-	TRADEWATER	MT. RORAH	COAL	1.3	788.0	

MAPID: 05901941000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 1040' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087493 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850012 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2436.0 **LOG TYPE:** Electric Log

SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-157.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	505.0	
-190.0	CARBONDALE	SURVANT	COAL	0.8	538.0	
-262.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-229.0	CARBONDALE	DEKOVEN	COAL	3.0	577.0	
-229.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	577.0	
-343.0	CARBONDALE	DAVIS	COAL	3.0	691.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	724.0	
-384.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	732.0	
-432.0	TRADEWATER	MT. RORAH	COAL	0.5	780.0	

MAPID: 05901986000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 436' S line, 436' W line of SE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094162 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.850318 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2442.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L, SMITH 10-A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-203.0	CARBONDALE	SURVANT	COAL	0.8	548.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-347.0	CARBONDALE	DEKOVEN	COAL	3.0	692.0	
-352.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	697.0	
-367.0	CARBONDALE	DAVIS	COAL	4.0	712.0	
-403.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	748.0	
-440.0	TRADEWATER	MT. RORAH	COAL	1.3	785.0	

MAPID: 05923893000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 660' S line, 660' W line of NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.088756 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.854537 **DATE COLLECTED:** 2 / 0 / 1977

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2790.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, GEO. N. PROD., BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-201.0	CARBONDALE	SURVANT	COAL	1.6	552.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-332.0	CARBONDALE	DEKOVEN	COAL	3.0	683.0	
-332.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	683.0	
-349.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-388.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	739.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-429.0	TRADEWATER	MT. RORAH	COAL	1.3	780.0	

MAPID: 05900857000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10131 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857145 **DATE COLLECTED:** 11 / 0 / 1949

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2135.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., BUSIEK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-193.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	536.0	
-239.0	CARBONDALE	SURVANT	COAL	2.5	582.0	
-301.0	CARBONDALE	COLCHESTER	COAL	0.5	644.0	
-361.0	CARBONDALE	DEKOVEN	COAL	3.0	704.0	
-366.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	709.0	
-377.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	755.0	
-431.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	774.0	
-459.0	TRADEWATER	MT. RORAH	COAL	1.4	802.0	

MAPID: 05900858000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.114985 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851676 **DATE COLLECTED:** 8 / 0 / 1951

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2550.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, LIGHTNER J C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	549.0	
-249.0	CARBONDALE	SURVANT	COAL	0.5	600.0	
-307.0	CARBONDALE	COLCHESTER	COAL	0.5	658.0	
-376.0	CARBONDALE	DEKOVEN	COAL	3.0	727.0	
-380.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	731.0	
-394.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-429.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	780.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-444.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	795.0	
-481.0	TRADEWATER	MT. RORAH	COAL	2.0	832.0	

MAPID: 05901584000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1650' S line, 2310' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11038 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853592 **DATE COLLECTED:** 5 / 0 / 1954

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2929.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., MURPHY G I **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-208.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.0	
-250.0	CARBONDALE	SURVANT	COAL	1.3	605.0	
-318.0	CARBONDALE	COLCHESTER	COAL	0.5	673.0	
-380.0	CARBONDALE	DEKOVEN	COAL	3.0	735.0	
-380.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	735.0	
-398.0	CARBONDALE	DAVIS	COAL	4.0	753.0	
-433.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	788.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-450.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	805.0	
-493.0	TRADEWATER	MT. RORAH	COAL	1.3	848.0	

MAPID: 05901584000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1650' S line, 2310' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11038 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.853592 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
33.5	CARBONDALE	DANVILLE	COAL	1.5	321.5	
32.0	CARBONDALE		SILTY SHALE	26.0	323.0	
6.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	349.0	
3.0	CARBONDALE	LAWSON	SILTY SHALE	20.0	352.0	
-17.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	372.0	
-20.0	CARBONDALE	ANNA	BLACK SHALE	3.0	375.0	
-23.0	CARBONDALE	HERRIN	COAL	3.0	378.0	

MAPID: 05902027000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.117309 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.85526 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2776.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, MURPHY GEO F **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-220.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	568.0	
-281.0	CARBONDALE	SURVANT	COAL	3.0	629.0	
-332.0	CARBONDALE	COLCHESTER	COAL	1.2	680.0	
-382.0	CARBONDALE	DEKOVEN	COAL	3.0	730.0	
-388.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	736.0	
-402.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-437.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	785.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-452.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	800.0	
-497.0	TRADEWATER	MT. RORAH	COAL	2.0	845.0	

MAPID: 05902029000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.105914 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.851737 **DATE COLLECTED:** 12 / 0 / 1956

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 2481.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, LIGHTNER J C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	511.0	
-215.0	CARBONDALE	SURVANT	COAL	0.8	555.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-353.0	CARBONDALE	DEKOVEN	COAL	3.0	693.0	
-353.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	693.0	
-370.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-403.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	743.0	
-420.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	760.0	
-452.0	TRADEWATER	MT. RORAH	COAL	2.0	792.0	

MAPID: 05903194000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.105891 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.858874 **DATE COLLECTED:** 7 / 0 / 1965

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2881.0 **LOG TYPE:** Electric Log

SOURCE: FARRAR OIL CO., INC., BUSIEK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-207.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-260.0	CARBONDALE	SURVANT	COAL	0.8	608.0	
-320.0	CARBONDALE	COLCHESTER	COAL	0.5	668.0	
-377.0	CARBONDALE	DEKOVEN	COAL	3.0	725.0	
-377.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	725.0	
-392.0	CARBONDALE	DAVIS	COAL	3.0	740.0	
-427.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	775.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-450.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	798.0	
-480.0	TRADEWATER	MT. RORAH	COAL	1.4	828.0	

MAPID: 05903194000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.105891 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.858874 **DATE COLLECTED:** 7 / 0 / 1965
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR OIL CO., INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1232.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05924751000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 990' N line, 660' E line of NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.111648 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.860628 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:**
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-295.0	CARBONDALE	SURVANT	COAL	0.5	642.0	
-351.0	CARBONDALE	COLCHESTER	COAL	1.4	698.0	
-408.0	CARBONDALE	DEKOVEN	COAL	3.0	755.0	
-408.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	755.0	
-425.0	CARBONDALE	DAVIS	COAL	4.0	772.0	
-463.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	810.0	
-475.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	822.0	
-503.0	TRADEWATER	MT. RORAH	COAL	2.5	850.0	

MAPID: 05900190000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13346 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.860885 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: BUELL J G, SUTTON 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.0	CARBONDALE	HERRIN	COAL	2.0	395.0	
-142.0	CARBONDALE	SPRINGFIELD	COAL	3.0	494.0	

MAPID: 05901079000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 2160' N line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.119656 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.857423 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 387.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
21.5	CARBONDALE	DANVILLE	COAL	1.0	329.5	
20.5	CARBONDALE		SILTY SHALE	19.0	330.5	
1.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	349.5	
-1.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	17.0	352.0	
-18.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	369.0	
-28.0	CARBONDALE	BRERETON	LIMESTONE	3.5	379.0	
-31.5	CARBONDALE	ANNA	BLACK SHALE	1.5	382.5	
-33.0	CARBONDALE	HERRIN	COAL	3.0	384.0	

MAPID: 05902518000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.126574 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857133 **DATE COLLECTED:** 2 / 0 / 1961

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, EDWARDS HRS **WELL TYPE:** Producer-Oil

COMMENT: POOR LOG, DEPTHS OFF

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
22.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	325.0	
-1.0	CARBONDALE	SURVANT	COAL	1.6	348.0	
-73.0	CARBONDALE	COLCHESTER	COAL	0.5	420.0	
-108.0	CARBONDALE	DEKOVEN	COAL	3.0	455.0	
-135.0	CARBONDALE	LOWER DEKOVEN	COAL	3.0	482.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-148.0	CARBONDALE	DAVIS	COAL	4.0	495.0	
-178.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	525.0	
-185.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	532.0	
-238.0	TRADEWATER	MT. RORAH	COAL	3.0	585.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05902605000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.133551 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.853536 **DATE COLLECTED:** 12 / 0 / 1961

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2964.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., HUMBLE-DODGE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-235.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	587.0	
-284.0	CARBONDALE	SURVANT	COAL	2.0	636.0	
-328.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-393.0	CARBONDALE	DEKOVEN	COAL	3.5	745.0	
-399.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	751.0	
-413.0	CARBONDALE	DAVIS	COAL	4.0	765.0	
-448.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-460.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	812.0	
-498.0	TRADEWATER	MT. RORAH	COAL	2.0	850.0	

MAPID: 05902605000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.133551 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.853536 **DATE COLLECTED:** 12 / 0 / 1961

SURFACE ELEVATION (FT.): 351.5 **LOGGED (FT.):** 1594.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1242.5	BASE OF PENN.		UNCLASSIFIED	-	1594.0	

MAPID: 05900862000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.14983 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849977 **DATE COLLECTED:** 10 / 0 / 1949

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L, DOWNEN 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-245.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	610.0	
-289.0	CARBONDALE	SURVANT	COAL	1.8	654.0	
-337.0	CARBONDALE	COLCHESTER	COAL	0.5	702.0	
-391.0	CARBONDALE	DEKOVEN	COAL	3.5	756.0	
-398.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	763.0	
-420.0	CARBONDALE	DAVIS	COAL	4.0	785.0	
-444.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	809.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-457.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	822.0	
-490.0	TRADEWATER	MT. RORAH	COAL	1.6	855.0	

MAPID: 05900864000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.149632 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.862921 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 1596.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL & RIPLEY **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1227.0	BASE OF PENN.		UNCLASSIFIED	-	1596.0	

MAPID: 05900868000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.142736 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857276 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 2312.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L, SUTTON 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	604.0	
-281.0	CARBONDALE	SURVANT	COAL	1.2	653.0	
-328.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-378.0	CARBONDALE	DEKOVEN	COAL	3.0	750.0	
-385.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	757.0	
-400.0	CARBONDALE	DAVIS	COAL	4.0	772.0	
-428.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	
-440.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	812.0	

MAPID: 05900874000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 510' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154393 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.855097 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2961.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY, KIDD & BARRON, UNION CENTRAL LIF **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-276.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	640.0	
-319.0	CARBONDALE	SURVANT	COAL	1.6	683.0	
-368.0	CARBONDALE	COLCHESTER	COAL	0.5	732.0	
-419.0	CARBONDALE	DEKOVEN	COAL	3.0	783.0	
-428.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	792.0	30 PERCENT SANDSTONE IN DEKOVEN SPLIT
-447.0	CARBONDALE	DAVIS	COAL	4.0	811.0	
-478.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	842.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-488.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	852.0	
-540.0	TRADEWATER	MT. RORAH	COAL	2.0	904.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900875000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147376 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.857331 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L, WILSON F 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-246.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	613.0	
-293.0	CARBONDALE	SURVANT	COAL	2.0	660.0	
-343.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-391.0	CARBONDALE	DEKOVEN	COAL	4.0	758.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	767.0	50 PERCENT SANDSTONE IN DEKOVEN SPLIT
-416.0	CARBONDALE	DAVIS	COAL	5.0	783.0	
-439.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	806.0	
-447.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	814.0	
-495.0	TRADEWATER	MT. RORAH	COAL	1.5	862.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901246000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.149661 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.861052 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2895.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A., FROMM JOS 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-277.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	645.0	
-327.0	CARBONDALE	SURVANT	COAL	2.0	695.0	
-377.0	CARBONDALE	COLCHESTER	COAL	0.5	745.0	
-423.0	CARBONDALE	DEKOVEN	COAL	3.0	791.0	
-432.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	800.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-450.0	CARBONDALE	DAVIS	COAL	4.0	818.0	
-474.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	842.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-484.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	852.0	
-537.0	TRADEWATER	MT. RORAH	COAL	2.5	905.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901246000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.149661 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.861052 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2895.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-36.0	CARBONDALE	DANVILLE	COAL	-	404.0	
-42.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	5.0	410.0	
-51.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	419.0	
-58.0	CARBONDALE	ANVIL ROCK	SILTSTONE	6.0	426.0	
-81.0	CARBONDALE	HERRIN	COAL	3.0	449.0	
-130.0	CARBONDALE	BRIAR HILL	COAL	-	498.0	
-140.0	CARBONDALE	CANTON	SILTSTONE	7.0	508.0	
-182.0	CARBONDALE	SPRINGFIELD	COAL	3.0	550.0	BLACK SHALE ROOF
-272.0	CARBONDALE	HOUCHIN CREEK	COAL	-	640.0	

MAPID: 05901586000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 165' W line of SW SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145761 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.849915 **DATE COLLECTED:** 10 / 0 / 1953

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2505.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., LIGHTNER JOS C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-237.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	592.0	
-284.0	CARBONDALE	SURVANT	COAL	2.0	639.0	
-333.0	CARBONDALE	COLCHESTER	COAL	0.5	688.0	
-382.0	CARBONDALE	DEKOVEN	COAL	3.0	737.0	
-388.0	CARBONDALE	LOWER DEKOVEN	COAL	1.4	743.0	
-408.0	CARBONDALE	DAVIS	COAL	4.0	763.0	
-442.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	797.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-455.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	810.0	
-487.0	TRADEWATER	MT. RORAH	COAL	2.0	842.0	

MAPID: 05901587000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 2260' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144733 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.86288 **DATE COLLECTED:** 6 / 0 / 1954

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., MOYE LILLIS 1-A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-264.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	635.0	
-309.0	CARBONDALE	SURVANT	COAL	2.0	680.0	
-357.0	CARBONDALE	COLCHESTER	COAL	0.5	728.0	
-408.0	CARBONDALE	DEKOVEN	COAL	3.0	779.0	
-415.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	786.0	
-429.0	CARBONDALE	DAVIS	COAL	4.0	800.0	
-461.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	832.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-471.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	842.0	
-511.0	TRADEWATER	MT. RORAH	COAL	1.3	882.0	

MAPID: 05901587000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 2260' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144733 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.86288 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 442.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-19.0	CARBONDALE	DANVILLE	COAL	2.0	390.0	
-21.0	CARBONDALE		SHALE & SANDSTONE	17.0	392.0	
-38.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.0	409.0	
-40.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	13.0	411.0	
-53.0	CARBONDALE	LAWSON	GRAY SHALE	9.0	424.0	
-62.0	CARBONDALE	BRERETON	LIMESTONE	4.0	433.0	
-66.0	CARBONDALE	ANNA	BLACK SHALE	2.0	437.0	
-68.0	CARBONDALE	HERRIN	COAL	3.0	439.0	

MAPID: 05901589000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154302 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.861101 **DATE COLLECTED:** 9 / 0 / 1954

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 3094.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL & MITCHELL, SHORT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-298.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	663.0	
-345.0	CARBONDALE	SURVANT	COAL	2.0	710.0	
-395.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-441.0	CARBONDALE	DEKOVEN	COAL	3.0	806.0	
-450.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	815.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-470.0	CARBONDALE	DAVIS	COAL	4.0	835.0	
-500.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	865.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-510.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	875.0	
-555.0	TRADEWATER	MT. RORAH	COAL	2.0	920.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05925193000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 70' N line, 524' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.148947 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.863633 **DATE COLLECTED:** 4 / 29 / 1970

SURFACE ELEVATION (FT.): 366.8 **LOGGED (FT.):** 850.3 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE NH-7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.8			UNKNOWN	450.0	0.0	
-83.2	CARBONDALE		SILTY SHALE	8.0	450.0	
-91.2	CARBONDALE		SHALE	1.0	458.0	
-92.2	CARBONDALE		GRAY SHALE	0.4	459.0	FOSSILIFEROUS
-92.6	CARBONDALE	JAMESTOWN	SHALY COAL	0.1	459.4	
-92.7	CARBONDALE		LIMESTONE	0.0	459.5	
-92.7	CARBONDALE	BRERETON	LIMESTONE	3.2	459.5	FOSSILIFEROUS
-95.9	CARBONDALE	ANNA	BLACK SHALE	0.5	462.7	
-96.4	CARBONDALE	ANNA	SLATY SHALE	0.9	463.2	
-97.3	CARBONDALE		UNKNOWN	1.9	464.1	
-99.2	CARBONDALE	HERRIN	COAL	3.7	466.0	
-102.9	CARBONDALE		CLAYSTONE	2.1	469.7	STIGMARIA
-105.0	CARBONDALE		LIMESTONE	1.7	471.8	
-106.7	CARBONDALE		UNKNOWN	78.5	473.5	
-185.2	CARBONDALE		DARK SHALE	5.0	552.0	
-190.2	CARBONDALE		GRAY SHALE	3.0	557.0	
-193.2	CARBONDALE		GRAY SHALE	2.6	560.0	SIDERITE NODULES
-195.8	CARBONDALE	ST. DAVID	LIMESTONE	2.2	562.6	
-198.0	CARBONDALE	TURNER MINE	DARK SHALE	0.8	564.8	
-198.8	CARBONDALE	SPRINGFIELD	COAL	4.2	565.6	
-203.0	CARBONDALE		UNDERCLAY	0.3	569.8	
-203.2	CARBONDALE		UNKNOWN	220.0	570.0	
-423.2	CARBONDALE		SHALE	3.3	790.0	HARD
-426.5	CARBONDALE		SHALE	4.7	793.3	
-431.2	CARBONDALE		SHALE	8.0	798.0	LINGULA
-439.2	CARBONDALE		GRAY SHALE	8.8	806.0	
-448.0	CARBONDALE		DARK SHALE	0.3	814.8	
-448.3	CARBONDALE	DEKOVEN	COAL	2.5	815.1	
-450.8	CARBONDALE		UNCLASSIFIED	1.4	817.6	SEATROCK
-452.2	CARBONDALE		SHALE	2.7	819.0	
-454.9	CARBONDALE		SHALE	1.0	821.7	
-455.9	CARBONDALE	LOWER DEKOVEN	COAL	1.3	822.7	
-457.2	CARBONDALE		CLAYSTONE	0.1	824.0	SOFT
-457.3	CARBONDALE		SANDSTONE	2.5	824.1	
-459.8	CARBONDALE		GRAY SHALE	3.1	826.6	
-462.9	CARBONDALE		GRAY SHALE	1.5	829.7	HARD
-464.4	CARBONDALE		DARK SHALE	4.0	831.2	WITH BRACHIOPODS
-468.4	CARBONDALE		SHALE	2.8	835.2	
-471.2	CARBONDALE		DARK SHALE	2.5	838.0	

-473.7	CARBONDALE	DAVIS	COAL	5.2	840.5	
-478.9	CARBONDALE		CLAYSTONE	0.3	845.7	
-479.2			CLAYSTONE	2.0	846.0	SILTY
-481.2			COAL	0.7	848.0	
-481.9			SHALE	0.1	848.7	
-482.0			DARK SHALE	0.4	848.8	
-482.4			UNCLASSIFIED	1.1	849.2	SEATROCK

MAPID: 05900878000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.142907 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.842609 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DOWNEN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-239.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-279.0	CARBONDALE	SURVANT	COAL	2.5	630.0	
-327.0	CARBONDALE	COLCHESTER	COAL	0.5	678.0	
-394.0	CARBONDALE	DEKOVEN	COAL	4.0	745.0	
-394.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	745.0	
-421.0	CARBONDALE	DAVIS	COAL	5.0	772.0	
-455.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	806.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-451.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	802.0	
-504.0	TRADEWATER	MT. RORAH	COAL	1.3	855.0	

MAPID: 05900880000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154476 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.848229 **DATE COLLECTED:** 12 / 0 / 1949

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2990.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, HALL NETTIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-259.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	624.0	
-300.0	CARBONDALE	SURVANT	COAL	2.0	665.0	
-348.0	CARBONDALE	COLCHESTER	COAL	0.5	713.0	
-399.0	CARBONDALE	DEKOVEN	COAL	3.0	764.0	
-411.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	776.0	
-429.0	CARBONDALE	DAVIS	COAL	5.0	794.0	
-458.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	823.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-475.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	840.0	
-511.0	TRADEWATER	MT. RORAH	COAL	1.2	876.0	

MAPID: 05900882000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154335 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835417 **DATE COLLECTED:** 10 / 0 / 1947

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2935.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., LEACH-FUHRER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-230.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	578.0	
-322.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-376.0	CARBONDALE	DEKOVEN	COAL	3.5	724.0	
-392.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	740.0	
-412.0	CARBONDALE	DAVIS	COAL	4.0	760.0	
-442.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	790.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-462.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	810.0	
-502.0	TRADEWATER	MT. RORAH	COAL	1.2	850.0	

MAPID: 05901593000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147584 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.84812 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 398.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
8.5	CARBONDALE	DANVILLE	COAL	1.5	338.5	
7.0	CARBONDALE		SHALE & SANDSTONE	28.0	340.0	
-21.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.0	368.0	
-23.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	8.0	370.0	
-31.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	378.0	
-43.0	CARBONDALE	BRERETON	LIMESTONE	2.0	390.0	
-45.0	CARBONDALE	ANNA	BLACK SHALE	2.0	392.0	
-47.0	CARBONDALE	HERRIN	COAL	4.0	394.0	

MAPID: 05901594000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 210' S line, 380' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143054 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84591 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2489.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., LIGHTNER JOS C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-236.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	582.0	
-279.0	CARBONDALE	SURVANT	COAL	1.6	625.0	
-334.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-387.0	CARBONDALE	DEKOVEN	COAL	3.0	733.0	
-393.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	739.0	
-412.0	CARBONDALE	DAVIS	COAL	4.0	758.0	
-442.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	788.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-458.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	804.0	

MAPID: 05902477000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152095 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.839057 **DATE COLLECTED:** 9 / 0 / 1959

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2324.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	589.0	
-282.0	CARBONDALE	SURVANT	COAL	1.6	630.0	
-332.0	CARBONDALE	COLCHESTER	COAL	0.5	680.0	
-392.0	CARBONDALE	DEKOVEN	COAL	3.0	740.0	
-402.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	750.0	
-422.0	CARBONDALE	DAVIS	COAL	4.0	770.0	
-452.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-472.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	820.0	

MAPID: 05903375000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154397 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.840912 **DATE COLLECTED:** 9 / 0 / 1968

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1605.0 **LOG TYPE:** Electric Log

SOURCE: SIMPKINS, JOE OIL DEV. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1260.0	BASE OF PENN.		UNCLASSIFIED	-	1605.0	

MAPID: 05901729000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.119699 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844455 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2860.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D, HUGHES C L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-176.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-216.0	CARBONDALE	SURVANT	COAL	2.0	565.0	
-281.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-355.0	CARBONDALE	DEKOVEN	COAL	3.0	704.0	
-355.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	704.0	
-379.0	CARBONDALE	DAVIS	COAL	4.0	728.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	762.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-431.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	780.0	
-471.0	TRADEWATER	MT. RORAH	COAL	2.0	820.0	

MAPID: 05901729000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.119699 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.844455 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 1730.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-283.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	632.0	
-381.0	SPOON	DAVIS	UNCLASSIFIED	-	730.0	
-1381.0	BASE OF PENN.		UNCLASSIFIED	-	1730.0	

MAPID: 05901736000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.122042 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844439 **DATE COLLECTED:** 6 / 0 / 1955

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: SHARP OLEN D, HUGHES C L 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	535.0	
-231.0	CARBONDALE	SURVANT	COAL	1.2	576.0	
-294.0	CARBONDALE	COLCHESTER	COAL	0.5	639.0	
-370.0	CARBONDALE	DEKOVEN	COAL	3.0	715.0	
-375.0	CARBONDALE	LOWER DEKOVEN	COAL	1.2	720.0	
-390.0	CARBONDALE	DAVIS	COAL	3.5	735.0	
-425.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	770.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-441.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	786.0	
-484.0	TRADEWATER	MT. RORAH	COAL	1.3	829.0	

MAPID: 05903545000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1367' N line, 654' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120789 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.845181 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 350.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-9 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
50.7	CARBONDALE		SILTY SHALE	22.0	295.3	
28.7	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	5.0	317.3	
23.7	CARBONDALE	LAWSON	SILTY SHALE	22.0	322.3	
1.7	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.7	344.3	
-1.0	CARBONDALE	HERRIN	COAL	3.0	347.0	

MAPID: 05903545000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1367' N line, 654' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120789 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.845181 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 744.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
52.7	CARBONDALE	DANVILLE	COAL	2.0	293.3	
-372.0	CARBONDALE	DEKOVEN	COAL	2.0	718.0	
-376.0	CARBONDALE	LOWER DEKOVEN	COAL	1.0	722.0	
-394.0	CARBONDALE	DAVIS	COAL	4.0	740.0	

MAPID: 05923768000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.128927 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846178 **DATE COLLECTED:** 10 / 0 / 1974

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2850.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., BICKETT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-212.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	562.0	
-260.0	CARBONDALE	SURVANT	COAL	0.5	610.0	
-310.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-364.0	CARBONDALE	DEKOVEN	COAL	3.0	714.0	
-370.0	CARBONDALE	LOWER DEKOVEN	COAL	1.6	720.0	
-395.0	CARBONDALE	DAVIS	COAL	4.0	745.0	
-428.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	778.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-445.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	795.0	
-480.0	TRADEWATER	MT. RORAH	COAL	2.0	830.0	

MAPID: 05923779000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136086 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83712 **DATE COLLECTED:** 11 / 0 / 1974

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2859.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., SCHENK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-209.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	566.0	
-279.0	CARBONDALE	COLCHESTER	COAL	0.5	636.0	
-365.0	CARBONDALE	DEKOVEN	COAL	3.0	722.0	
-370.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	727.0	
-393.0	CARBONDALE	DAVIS	COAL	4.0	750.0	
-423.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	780.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-443.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	800.0	
-485.0	TRADEWATER	MT. RORAH	COAL	2.0	842.0	

MAPID: 05900887000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10167 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.837144 **DATE COLLECTED:** 12 / 0 / 1948

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2446.0 **LOG TYPE:** Electric Log

SOURCE: OLDFIELD & MATHEWS, SHORT CLAUDE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-126.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	474.0	
-164.0	CARBONDALE	SURVANT	COAL	0.8	512.0	
-295.0	CARBONDALE	DEKOVEN	COAL	3.0	643.0	
-295.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	643.0	
-314.0	CARBONDALE	DAVIS	COAL	4.0	662.0	
-347.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	695.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-352.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	700.0	

MAPID: 05901012000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.108373 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.84267 **DATE COLLECTED:** 1 / 0 / 1952
SURFACE ELEVATION (FT.): 339.0 **LOGGED (FT.):** 2452.0 **LOG TYPE:** Electric Log
SOURCE: BROWN, JAMES G., LIGHTNER J C **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-151.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	490.0	
-256.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-338.0	CARBONDALE	DEKOVEN	COAL	3.0	677.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	677.0	
-356.0	CARBONDALE	DAVIS	COAL	4.0	695.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	730.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-413.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	752.0	
-443.0	TRADEWATER	MT. RORAH	COAL	2.0	782.0	

MAPID: 05901085000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.115152 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844475 **DATE COLLECTED:** 8 / 0 / 1952
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2258.0 **LOG TYPE:** Electric Log
SOURCE: CLARK & CLARK PETROL, HUGHES C L **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-172.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-215.0	CARBONDALE	SURVANT	COAL	1.6	558.0	
-279.0	CARBONDALE	COLCHESTER	COAL	0.5	622.0	
-350.0	CARBONDALE	DEKOVEN	COAL	3.0	693.0	
-350.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	693.0	
-370.0	CARBONDALE	DAVIS	COAL	4.0	713.0	
-402.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	745.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-419.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	762.0	
-452.0	TRADEWATER	MT. RORAH	COAL	2.0	795.0	

MAPID: 05901596000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1650' N line, 1650' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.112802 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.844463 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 338.0 **LOGGED (FT.):** 320.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
79.0	CARBONDALE	DANVILLE	COAL	2.0	259.0	
77.0	CARBONDALE		SILTY SHALE	16.0	261.0	
61.0	CARBONDALE	ALLENBY	COAL	1.0	277.0	
60.0	CARBONDALE		CLAYSTONE & SHALE	7.0	278.0	
53.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	285.0	
51.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	23.0	287.0	
28.0	CARBONDALE	BRERETON	LIMESTONE	4.0	310.0	
24.0	CARBONDALE	ANNA	BLACK SHALE	2.0	314.0	
22.0	CARBONDALE	HERRIN	COAL	4.0	316.0	

MAPID: 05902014000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.113254 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.835435 **DATE COLLECTED:** 7 / 0 / 1956

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 2881.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., EGYPTIAN TIE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	482.0	
-242.0	CARBONDALE	COLCHESTER	COAL	0.0	584.0	
-320.0	CARBONDALE	DEKOVEN	COAL	4.0	662.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	662.0	
-340.0	CARBONDALE	DAVIS	COAL	4.0	682.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	713.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-388.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	730.0	

MAPID: 05902014000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.113254 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.835435 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 1574.0 **LOG TYPE:** Electric Log
SOURCE: EASTERN PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1232.0	BASE OF PENN.		UNCLASSIFIED	-	1574.0	

MAPID: 05923894000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106057 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.844505 **DATE COLLECTED:** 11 / 0 / 1976
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2876.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, GEO. N. PROD., BICKETT **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	503.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-345.0	CARBONDALE	DEKOVEN	COAL	3.0	690.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	690.0	
-364.0	CARBONDALE	DAVIS	COAL	3.5	709.0	
-397.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	742.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-417.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	762.0	

MAPID: 05900191000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087801 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.84072 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: VANDNBRK A, BROWNING J0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
76.0	CARBONDALE	HERRIN	COAL	4.0	270.0	
-19.0	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0	

MAPID: 05900334000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083246 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835081 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 3410.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0014 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	4.0	262.0	
-19.0	CARBONDALE	SPRINGFIELD	COAL	4.0	360.0	

MAPID: 05900358000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.085557 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835107 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M G0025 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.0	CARBONDALE	HERRIN	COAL	4.0	270.0	
-22.0	CARBONDALE	SPRINGFIELD	COAL	4.0	368.0	

MAPID: 05900365000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087865 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835133 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: CARTER OC, BRWNNG J H0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	HERRIN	COAL	3.0	264.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	3.0	359.0	

MAPID: 05900890000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.09245 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.837058 **DATE COLLECTED:** 5 / 0 / 1949

SURFACE ELEVATION (FT.): 333.0 **LOGGED (FT.):** 2400.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, AVERILL-DODGE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	437.0	
-133.0	CARBONDALE	SURVANT	COAL	0.8	466.0	
-207.0	CARBONDALE	COLCHESTER	COAL	0.5	540.0	
-280.0	CARBONDALE	DEKOVEN	COAL	3.0	613.0	
-280.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	613.0	
-299.0	CARBONDALE	DAVIS	COAL	4.0	632.0	
-332.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	665.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-347.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	680.0	

MAPID: 05900910000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094696 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.840788 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2424.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, DODGE H M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	468.0	
-154.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	564.0	
-298.0	CARBONDALE	DEKOVEN	COAL	3.0	644.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	644.0	
-316.0	CARBONDALE	DAVIS	COAL	4.0	662.0	
-349.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	695.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-394.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	

MAPID: 05900912000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097027 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838923 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2428.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, HARDY GEORGE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-120.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	468.0	
-152.0	CARBONDALE	SURVANT	COAL	0.8	500.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	563.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	638.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	638.0	
-307.0	CARBONDALE	DAVIS	COAL	5.0	655.0	
-338.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	686.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901601000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.085523 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838817 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 2389.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, KERWIN M G **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-146.0	CARBONDALE	SURVANT	COAL	1.3	486.0	
-208.0	CARBONDALE	COLCHESTER	COAL	0.5	548.0	
-275.0	CARBONDALE	DEKOVEN	COAL	2.5	615.0	
-275.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-292.0	CARBONDALE	DAVIS	COAL	3.0	632.0	
-325.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	665.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-332.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	672.0	
-384.0	TRADEWATER	MT. RORAH	COAL	3.0	724.0	

MAPID: 05901933000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 1040' W line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087522 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84819 **DATE COLLECTED:** 1 / 0 / 1956

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2433.0 **LOG TYPE:** Electric Log

SOURCE: NATURAL RESOURCES, BIG BARN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	485.0	
-167.0	CARBONDALE	SURVANT	COAL	0.8	518.0	
-239.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-312.0	CARBONDALE	DEKOVEN	COAL	3.0	663.0	
-312.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	663.0	
-329.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-363.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	714.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-417.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	768.0	

MAPID: 05902597000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099173 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.84634 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2754.0 **LOG TYPE:** Electric Log

SOURCE: WEAL DRLG CO, HICKS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-161.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-198.0	CARBONDALE	SURVANT	COAL	1.5	545.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-333.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-338.0	CARBONDALE	LOWER DEKOVEN	COAL	1.8	685.0	
-353.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-381.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	728.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-388.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	735.0	

MAPID: 05902597000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099173 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.84634 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 1563.0 **LOG TYPE:** Electric Log

SOURCE: WEAL DRLG CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1216.0	BASE OF PENN.		UNCLASSIFIED	-	1563.0	

MAPID: 05903554000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100261 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.849131 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 716.7 **LOG TYPE:** Survey Core Study

SOURCE: AMAX-AYRSHIRE NH-10 **WELL TYPE:** Coal Test

COMMENT: COPY INFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0			UNKNOWN	341.0	0.0	
4.0	CARBONDALE		UNDERCLAY	2.8	341.0	
1.2	CARBONDALE		SILTSTONE	3.3	343.8	
-2.0	CARBONDALE		SILTY LIMESTONE	1.0	347.0	
-3.0	CARBONDALE		SILTSTONE	1.0	348.0	
-4.0	CARBONDALE		UNKNOWN	66.0	349.0	
-70.0	CARBONDALE		GRAY SHALE	1.4	415.0	
-71.4	CARBONDALE		BLACK SHALE	0.0	416.4	
-71.5	CARBONDALE		GRAY SHALE	6.5	416.5	
-78.0	CARBONDALE		GRAY SHALE	8.0	423.0	WITH PLANT FRAGMENTS
-86.0	CARBONDALE		SHALE	2.3	431.0	
-88.3	CARBONDALE		SHALE	0.3	433.3	
-88.6	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.5	433.6	
-89.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	434.1	
-92.0	CARBONDALE	SPRINGFIELD	COAL	3.0	437.0	THICKNESS NOT KNOWN
-95.0	CARBONDALE		UNKNOWN	250.0	440.0	
-345.0	CARBONDALE		BLACK SHALE	1.5	690.0	
-346.6	CARBONDALE	HOUCHIN CREEK	COAL	0.5	691.6	BROKEN
-347.0	CARBONDALE		SHALE	2.2	692.0	
-349.2	CARBONDALE		COAL	1.4	694.2	
-350.6	CARBONDALE		CLAYSTONE	0.2	695.6	
-350.8	CARBONDALE		UNCLASSIFIED	2.2	695.8	SEATROCK
-353.0	CARBONDALE		GRAY SHALE	1.7	698.0	
-354.7	CARBONDALE		DARK SHALE	4.0	699.7	
-358.7	CARBONDALE		DARK SHALE	2.3	703.7	
-361.0	CARBONDALE		GRAY SHALE	1.2	706.0	
-362.2			BLACK SHALE	0.3	707.2	
-362.5			UNKNOWN	5.2	707.5	CONTAINS COAL
-367.7			SILTSTONE	4.0	712.7	SEATROCK

MAPID: 05903554000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100261 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.849131 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 341.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-10 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
62.6	CARBONDALE	DANVILLE	COAL WITH SHALE PARTINGS	1.0	282.4	
61.6	CARBONDALE		SILTY SHALE	20.5	283.4	
41.1	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	303.9	
36.6	CARBONDALE	LAWSON	SILTY SHALE	23.0	308.4	
13.6	CARBONDALE	BRERETON	LIMESTONE	3.5	331.4	
10.1	CARBONDALE	ANNA	GRAY SHALE	1.1	334.9	
9.0	CARBONDALE	HERRIN	COAL	5.0	336.0	

MAPID: 05900193000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073977 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.842614 **DATE COLLECTED:** 0 / 0 / 1939

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**

SOURCE: VNDNBRKBRO, BUSIEK 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
44.0	CARBONDALE	HERRIN	COAL	4.0	304.0	
-54.0	CARBONDALE	SPRINGFIELD	COAL	-	402.0	

MAPID: 05900194000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071687 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.83885 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**

SOURCE: CARTER OC, BUSIEK E H001A **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
62.0	CARBONDALE	HERRIN	COAL	4.5	286.0	
-41.0	CARBONDALE	SPRINGFIELD	COAL	4.0	389.0	

MAPID: 05900195000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071681 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840741 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK C870002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
55.0	CARBONDALE	HERRIN	COAL	4.0	294.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	4.0	393.0	

MAPID: 05900196000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071694 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.836956 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK E H0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-163.0	CARBONDALE	HERRIN	COAL	4.0	512.0	
-233.0	CARBONDALE	SPRINGFIELD	COAL	4.0	582.0	

MAPID: 05900197000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071703 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835062 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK E H0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-166.0	CARBONDALE	HERRIN	COAL	4.0	508.0	
-266.0	CARBONDALE	SPRINGFIELD	COAL	3.0	608.0	

MAPID: 05900198000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.069383 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.838857 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK E H0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-191.0	CARBONDALE	HERRIN	COAL	4.0	540.0	
-293.0	CARBONDALE	SPRINGFIELD	COAL	4.0	642.0	

MAPID: 05900199000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.069376 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840756 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK E H0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-90.0	CARBONDALE	HERRIN	COAL	4.0	440.0	
-192.0	CARBONDALE	SPRINGFIELD	COAL	3.0	542.0	

MAPID: 05900200000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073985 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.844668 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 3530.0 **LOG TYPE:**
SOURCE: CARTER OC, CRAWFORD J001A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
42.0	CARBONDALE	HERRIN	COAL	5.0	311.0	
-59.0	CARBONDALE	SPRINGFIELD	COAL	4.0	412.0	

MAPID: 05900200000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073985 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.844668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
100.0	CARBONDALE	DANVILLE	COAL	3.0	253.0	
97.0	CARBONDALE		SHALE & SANDSTONE	15.0	256.0	
82.0	CARBONDALE	ALLENBY	COAL	1.0	271.0	
81.0	CARBONDALE		CLAYSTONE & SHALE	3.0	272.0	
78.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.0	275.0	
76.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	7.0	277.0	
69.0	CARBONDALE	LAWSON	SANDSTONE	10.0	284.0	
59.0	CARBONDALE	LAWSON	GRAY SHALE	5.0	294.0	
54.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	5.0	299.0	
49.0	CARBONDALE	BRERETON	LIMESTONE	4.0	304.0	
45.0	CARBONDALE	ANNA	BLACK SHALE	4.0	308.0	
41.0	CARBONDALE	HERRIN	COAL	3.0	312.0	

MAPID: 05900200000C **VERSION:** 3 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073985 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.844668 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2091.0 **LOG TYPE:** Survey Sample Study
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Oil and Gas Test
COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900201000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071675 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.842635 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: CARTER OC, CRWFRD C870002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
43.0	CARBONDALE	HERRIN	COAL	4.0	308.0	
-57.0	CARBONDALE	SPRINGFIELD	COAL	4.0	408.0	

MAPID: 05900202000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.06937 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.842653 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: CARTER OC, CRWFRD C870003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
39.0	CARBONDALE	HERRIN	COAL	3.0	312.0	
-61.0	CARBONDALE	SPRINGFIELD	COAL	5.0	412.0	

MAPID: 05900203000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073986 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840728 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	HERRIN	COAL	4.0	298.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	5.0	396.0	

MAPID: 05900204000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073986 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840728 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E001A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
51.0	CARBONDALE	HERRIN	COAL	4.0	299.0	
-48.0	CARBONDALE	SPRINGFIELD	COAL	5.0	398.0	

MAPID: 05900205000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073996 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.83884 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
60.0	CARBONDALE	HERRIN	COAL	4.0	290.0	
-40.0	CARBONDALE	SPRINGFIELD	COAL	5.0	390.0	

MAPID: 05900206000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.076301 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.83883 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
61.0	CARBONDALE	HERRIN	COAL	4.0	289.0	
-33.0	CARBONDALE	SPRINGFIELD	COAL	5.0	383.0	

MAPID: 05900207000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.076291 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.840713 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
50.0	CARBONDALE	HERRIN	COAL	5.0	300.0	
-46.0	CARBONDALE	SPRINGFIELD	COAL	4.0	396.0	

MAPID: 05900208000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074002 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.836952 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	HERRIN	COAL	4.0	272.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	4.0	377.0	

MAPID: 05900209000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074011 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835063 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.0	CARBONDALE	HERRIN	COAL	5.0	266.0	
-28.0	CARBONDALE	SPRINGFIELD	COAL	5.0	370.0	

MAPID: 05900210000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.076319 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835067 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0007 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
82.0	CARBONDALE	HERRIN	COAL	3.0	270.0	
-18.0	CARBONDALE	SPRINGFIELD	COAL	4.0	370.0	

MAPID: 05900211000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.07631 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.836947 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0008 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	4.0	267.0	
-23.0	CARBONDALE	SPRINGFIELD	COAL	5.0	369.0	

MAPID: 05900212000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078618 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.836945 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0009 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	4.0	270.0	
-19.0	CARBONDALE	SPRINGFIELD	COAL	5.0	368.0	

MAPID: 05900213000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078631 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835068 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 3440.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0010 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	HERRIN	COAL	4.0	256.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	5.0	356.0	

MAPID: 05900214000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE NW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078609 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.838823 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0011 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
70.0	CARBONDALE	HERRIN	COAL	4.0	282.0	
-28.0	CARBONDALE	SPRINGFIELD	COAL	4.0	380.0	

MAPID: 05900216000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080939 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.835069 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 3450.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0012 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	HERRIN	COAL	3.0	260.0	
-13.0	CARBONDALE	SPRINGFIELD	COAL	4.0	358.0	

MAPID: 05900246000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.067068 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.842674 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CARTER OC, CRWFRD C870004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-224.0	CARBONDALE	HERRIN	COAL	5.0	574.0	
-315.0	CARBONDALE	SPRINGFIELD	COAL	5.0	665.0	

MAPID: 05900335000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080926 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.836941 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0013 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
81.0	CARBONDALE	HERRIN	COAL	-	266.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	-	364.0	

MAPID: 05900336000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.067062 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.844576 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: CARTER OC, CRWFRD C870005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-94.0	CARBONDALE	HERRIN	COAL	2.0	444.0	
-193.0	CARBONDALE	SPRINGFIELD	COAL	4.0	543.0	

MAPID: 05900344000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.06476 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.844603 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: CARTER OC, BUSIEK CRW012A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-211.0	CARBONDALE	HERRIN	COAL	3.0	562.0	
-297.0	CARBONDALE	SPRINGFIELD	COAL	4.0	648.0	

MAPID: 05900345000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.064766 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.840784 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**

SOURCE: CARTER OC, BUSIEK CRW0013 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-210.0	CARBONDALE	HERRIN	COAL	4.0	562.0	
-310.0	CARBONDALE	SPRINGFIELD	COAL	5.0	662.0	

MAPID: 05900936000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080879 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844453 **DATE COLLECTED:** 8 / 0 / 1948

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2404.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, BUSIEK-CRAWFORD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	448.0	
-134.0	CARBONDALE	SURVANT	COAL	0.8	480.0	
-234.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-284.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-284.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	630.0	
-300.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-334.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	680.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-344.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	690.0	

MAPID: 05900937000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080864 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.846275 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2412.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
98.0	CARBONDALE	DANVILLE	COAL	-	248.0	
86.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE	4.0	260.0	
76.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	270.0	
42.0	CARBONDALE	HERRIN	COAL	6.0	304.0	
8.0	CARBONDALE	BRIAR HILL	COAL	-	338.0	
2.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	6.0	344.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	5.0	389.0	BLACK SHALE ROOF
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	-	462.0	

MAPID: 05900940000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071663 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.846384 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2412.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, BUSIEK-CRAWFORD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-145.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-181.0	CARBONDALE	SURVANT	COAL	0.8	531.0	
-252.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-315.0	CARBONDALE	DEKOVEN	COAL	3.0	665.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	665.0	
-333.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-368.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	718.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-378.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	728.0	
-401.0	TRADEWATER	MT. RORAH	COAL	2.0	751.0	

MAPID: 05901821000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 950' N line, 996' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.067075 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.846713 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1530.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-237.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	588.0	
-337.0	SPOON	DAVIS	UNCLASSIFIED	-	688.0	
-1179.0	BASE OF PENN.		UNCLASSIFIED	-	1530.0	

MAPID: 05901832000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 948' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078795 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83504 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2415.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, KERWIN M G **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-90.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	434.0	
-128.0	CARBONDALE	SURVANT	COAL	0.8	472.0	
-191.0	CARBONDALE	COLCHESTER	COAL	0.5	535.0	
-251.0	CARBONDALE	DEKOVEN	COAL	3.0	595.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	595.0	
-270.0	CARBONDALE	DAVIS	COAL	4.0	614.0	
-301.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	645.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-308.0	TRADEWATER	STONEFORT	LIMESTONE	1.6	652.0	
-364.0	TRADEWATER	MT. RORAH	COAL	1.3	708.0	

MAPID: 05901833000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1032' N line, 1691' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078728 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838788 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2416.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, KERWIN M G **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-101.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	452.0	
-139.0	CARBONDALE	SURVANT	COAL	1.5	490.0	
-204.0	CARBONDALE	COLCHESTER	COAL	0.5	555.0	
-269.0	CARBONDALE	DEKOVEN	COAL	2.5	620.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	620.0	
-289.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-319.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	670.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-329.0	TRADEWATER	STONEFORT	LIMESTONE	1.6	680.0	
-377.0	TRADEWATER	MT. RORAH	COAL	1.3	728.0	

MAPID: 05901840000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 385' N line, 996' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.067072 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.848273 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2428.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, BUSIEK-CRAWFORD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-144.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-179.0	CARBONDALE	SURVANT	COAL	0.8	530.0	
-244.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-328.0	CARBONDALE	DEKOVEN	COAL	3.0	679.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	679.0	
-339.0	CARBONDALE	DAVIS	COAL	4.0	690.0	
-377.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	728.0	
-429.0	TRADEWATER	MT. RORAH	COAL	1.3	780.0	

MAPID: 05901919000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1014' N line, 290' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071833 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838888 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2839.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, BUSIEK-CRAWFORD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-113.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-148.0	CARBONDALE	SURVANT	COAL	0.8	495.0	
-213.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-289.0	CARBONDALE	DEKOVEN	COAL	2.0	636.0	
-293.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	640.0	
-308.0	CARBONDALE	DAVIS	COAL	4.0	655.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	690.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-353.0	TRADEWATER	STONEFORT	LIMESTONE	1.5	700.0	

MAPID: 05900215000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.060146 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836963 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2751.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., CRAWFORD ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-353.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	703.0	
-392.0	CARBONDALE	SURVANT	COAL	0.6	742.0	
-451.0	CARBONDALE	COLCHESTER	COAL	0.5	801.0	
-526.0	CARBONDALE	DEKOVEN	COAL	3.0	876.0	
-526.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	876.0	
-542.0	CARBONDALE	DAVIS	COAL	4.0	892.0	
-578.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	928.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900215000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.060146 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.836963 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**

SOURCE: SOHIO PROD, CRWFD WRHT0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-181.0	CARBONDALE	HERRIN	COAL	4.0	531.0	
-282.0	CARBONDALE	SPRINGFIELD	COAL	5.0	632.0	

MAPID: 05900949000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048544 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.836922 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1672.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1326.0	BASE OF PENN.		UNCLASSIFIED	-	1672.0	

MAPID: 05900949000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048544 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.836922 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 497.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	DANVILLE	COAL	2.0	448.0	
-104.0	CARBONDALE		SHALE & SANDSTONE	15.0	450.0	
-119.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	465.0	
-123.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	9.0	469.0	
-132.0	CARBONDALE	LAWSON	GRAY SHALE	13.0	478.0	
-145.0	CARBONDALE	ANNA	BLACK SHALE	2.0	491.0	
-147.0	CARBONDALE	HERRIN	COAL	4.5	493.0	

MAPID: 05900949000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048544 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.836922 **DATE COLLECTED:** 9 / 0 / 1950

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2985.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B., DECKER C G ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-319.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	665.0	
-364.0	CARBONDALE	SURVANT	COAL	1.6	710.0	
-418.0	CARBONDALE	COLCHESTER	COAL	0.5	764.0	
-490.0	CARBONDALE	DEKOVEN	COAL	2.5	836.0	
-495.0	CARBONDALE	LOWER DEKOVEN	COAL	0.8	841.0	
-511.0	CARBONDALE	DAVIS	COAL	3.5	857.0	
-548.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	894.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-572.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	918.0	
-592.0	TRADEWATER	MT. RORAH	COAL	1.2	938.0	

MAPID: 05900951000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1650' N line, 330' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.06246 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.844505 **DATE COLLECTED:** 1 / 0 / 1950

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2065.0 **LOG TYPE:** Electric Log

SOURCE: NATL DRLG CO INC, SARLLS MARY W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-393.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	744.0	
-429.0	CARBONDALE	SURVANT	COAL	1.2	780.0	
-492.0	CARBONDALE	COLCHESTER	COAL	0.5	843.0	
-569.0	CARBONDALE	DEKOVEN	COAL	3.0	920.0	
-569.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	920.0	
-585.0	CARBONDALE	DAVIS	COAL	3.5	936.0	
-621.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	972.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-644.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	995.0	
-667.0	TRADEWATER	MT. RORAH	COAL	0.8	1018.0	

MAPID: 05902912000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 13 **QUARTERS/FOOTAGES:** 990' N line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048591 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.831455 **DATE COLLECTED:** 8 / 0 / 1963

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 1632.0 **LOG TYPE:** Electric Log

SOURCE: MT. CARMEL DRLG. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1290.0	BASE OF PENN.		UNCLASSIFIED	-	1632.0	

MAPID: 05902912000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 13 **QUARTERS/FOOTAGES:** 990' N line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048591 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.831455 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 483.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-85.0	CARBONDALE	DANVILLE	COAL	2.5	427.0	
-87.5	CARBONDALE		SHALE & SANDSTONE	18.0	429.5	
-105.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	447.5	
-108.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	13.0	450.5	
-121.5	CARBONDALE	LAWSON	GRAY SHALE	10.0	463.5	
-131.5	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	473.5	
-133.5	CARBONDALE	ANNA	BLACK SHALE	2.5	475.5	
-136.0	CARBONDALE	HERRIN	COAL	5.0	478.0	

MAPID: 05902912000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 13 **QUARTERS/FOOTAGES:** 990' N line, 990' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.048591 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831455 **DATE COLLECTED:** 8 / 0 / 1963

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 2895.0 **LOG TYPE:** Electric Log

SOURCE: MT. CARMEL DRLG. CO., MEDLIN G H **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-300.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	642.0	
-338.0	CARBONDALE	SURVANT	COAL	1.2	680.0	
-408.0	CARBONDALE	COLCHESTER	COAL	0.5	750.0	
-473.0	CARBONDALE	DEKOVEN	COAL	3.0	815.0	
-473.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	815.0	
-490.0	CARBONDALE	DAVIS	COAL	3.0	832.0	
-527.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	869.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-553.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	895.0	

MAPID: 05900217000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.07174 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.833204 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 338.0 **LOGGED (FT.):** 3380.0 **LOG TYPE:**

SOURCE: CHERRY&KD, KERWIN M E0017 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-138.0	CARBONDALE	HERRIN	COAL	3.0	476.0	
-240.0	CARBONDALE	SPRINGFIELD	COAL	4.0	578.0	

MAPID: 05900218000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074051 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.833211 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**

SOURCE: CHERRY&KD, KERWIN M E0020 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-120.0	CARBONDALE	HERRIN	COAL	3.0	462.0	
-219.0	CARBONDALE	SPRINGFIELD	COAL	5.0	561.0	

MAPID: 05900326000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.076363 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833215 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0022 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
84.0	CARBONDALE	HERRIN	COAL	3.0	252.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	3.0	350.0	

MAPID: 05900327000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080989 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833223 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 335.0 **LOGGED (FT.):** 3350.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0023 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
88.0	CARBONDALE	HERRIN	COAL	4.0	247.0	
-11.0	CARBONDALE	SPRINGFIELD	COAL	4.0	346.0	

MAPID: 05900328000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078674 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833219 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 338.0 **LOGGED (FT.):** 3380.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0024 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
84.0	CARBONDALE	HERRIN	COAL	4.0	254.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	4.0	352.0	

MAPID: 05900337000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074122 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.83139 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 3370.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN M E0021 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-153.0	CARBONDALE	HERRIN	COAL	3.0	490.0	
-251.0	CARBONDALE	SPRINGFIELD	COAL	3.0	588.0	

MAPID: 05900363000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071818 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.831386 **DATE COLLECTED:** 9 / 0 / 1944
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 2423.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY, KIDD & BARRON, KERWIN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-315.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.0	
-360.0	CARBONDALE	SURVANT	COAL	0.5	700.0	
-473.0	CARBONDALE	DEKOVEN	COAL	3.0	813.0	
-473.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	813.0	
-495.0	CARBONDALE	DAVIS	COAL	6.0	835.0	
-525.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	865.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-533.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	873.0	

MAPID: 05900363000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.071818 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831386 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: CHERRY&KD, KERWIN 0019 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-150.0	CARBONDALE	HERRIN	COAL	3.0	490.0	
-248.0	CARBONDALE	SPRINGFIELD	COAL	3.0	588.0	

MAPID: 05900952000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.079879 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.832309 **DATE COLLECTED:** 8 / 0 / 1944
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2835.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY, KIDD & BARRON, KERWIN MARY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	428.0	
-117.0	CARBONDALE	SURVANT	COAL	0.5	460.0	
-250.0	CARBONDALE	DEKOVEN	COAL	4.0	593.0	
-250.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	593.0	
-269.0	CARBONDALE	DAVIS	COAL	4.0	612.0	
-297.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	640.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-305.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	648.0	
-355.0	TRADEWATER	MT. RORAH	COAL	2.0	698.0	

MAPID: 05901775000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 1615' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.076516 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.833214 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 336.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
130.0	CARBONDALE	DANVILLE	COAL	2.0	206.0	
128.0	CARBONDALE		SHALE & SANDSTONE	12.0	208.0	
116.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	220.0	
113.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	25.0	222.5	
88.5	CARBONDALE	ANNA	BLACK SHALE	2.5	247.5	
86.0	CARBONDALE	HERRIN	COAL	5.0	250.0	

MAPID: 05902026000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' N line, 380' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080815 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.833223 **DATE COLLECTED:** 7 / 0 / 1956
SURFACE ELEVATION (FT.): 338.0 **LOGGED (FT.):** 1525.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1187.0	BASE OF PENN.		UNCLASSIFIED	-	1525.0	

MAPID: 05900219000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094925 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.827961 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 3410.0 **LOG TYPE:**
SOURCE: CARTER OC, CURRY J H 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
83.0	CARBONDALE	HERRIN	COAL	3.0	258.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	4.0	358.0	

MAPID: 05900220000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.09489 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829766 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 3370.0 **LOG TYPE:**
SOURCE: CARTER OC, CURRY J H 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	3.0	247.0	
-4.0	CARBONDALE	SPRINGFIELD	COAL	4.0	341.0	

MAPID: 05900221000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094823 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833379 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 3430.0 **LOG TYPE:**
SOURCE: CARTER OC, CURRY J H 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
81.0	CARBONDALE	HERRIN	COAL	3.0	262.0	
-11.0	CARBONDALE	SPRINGFIELD	COAL	4.0	354.0	

MAPID: 05900222000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099534 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.827973 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 333.0 **LOGGED (FT.):** 3330.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	CARBONDALE	HERRIN	COAL	3.0	260.0	
-25.0	CARBONDALE	SPRINGFIELD	COAL	5.0	358.0	

MAPID: 05900223000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099502 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.82979 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	3.0	263.0	
-20.0	CARBONDALE	SPRINGFIELD	COAL	5.0	362.0	

MAPID: 05900224000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099473 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831609 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	-	246.0	
-8.0	CARBONDALE	SPRINGFIELD	COAL	4.0	344.0	

MAPID: 05900225000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099442 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833428 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 3440.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
71.0	CARBONDALE	HERRIN	COAL	4.0	273.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	4.0	371.0	

MAPID: 05900226000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097229 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.827967 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 333.0 **LOGGED (FT.):** 3330.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
83.0	CARBONDALE	HERRIN	COAL	-	250.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	-	350.0	

MAPID: 05900227000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097198 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829778 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
83.0	CARBONDALE	HERRIN	COAL	3.0	259.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	5.0	354.0	

MAPID: 05900228000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097166 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831592 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 3440.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0007 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	4.0	254.0	
-7.0	CARBONDALE	SPRINGFIELD	COAL	4.0	351.0	

MAPID: 05900229000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097131 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833402 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, CURRY J H 0008 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
91.0	CARBONDALE	HERRIN	COAL	-	255.0	
-8.0	CARBONDALE	SPRINGFIELD	COAL	4.0	354.0	

MAPID: 05900231000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097261 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.826154 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**
SOURCE: DUNCAN INC, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
78.0	CARBONDALE	HERRIN	COAL	4.0	258.0	
-21.0	CARBONDALE	SPRINGFIELD	COAL	4.0	357.0	

MAPID: 05900234000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097296 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824343 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 3440.0 **LOG TYPE:**
SOURCE: BUEL&HRNDN, EGYPTN T T00A2 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
81.0	CARBONDALE	HERRIN	COAL	4.0	263.0	
-25.0	CARBONDALE	SPRINGFIELD	COAL	5.0	369.0	

MAPID: 05900235000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099626 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.822519 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**
SOURCE: BUEL&HRNDN, EGYPTN T T003A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	4.0	271.0	
-35.0	CARBONDALE	SPRINGFIELD	COAL	4.0	385.0	

MAPID: 05900236000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099657 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.8207 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 3530.0 **LOG TYPE:**
SOURCE: BUEL&HRNDN, EGYPTN T T004A **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
80.0	CARBONDALE	HERRIN	COAL	5.0	273.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	4.0	380.0	

MAPID: 05900237000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092695 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824353 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**
SOURCE: KINGWOODOC, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
89.0	CARBONDALE	HERRIN	COAL	4.0	259.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0	

MAPID: 05900323000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083279 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833259 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 338.0 **LOGGED (FT.):** 3380.0 **LOG TYPE:**
SOURCE: CHERRY&KD, WRIGHT F J0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
92.0	CARBONDALE	HERRIN	COAL	2.0	246.0	
-4.0	CARBONDALE	SPRINGFIELD	COAL	5.0	342.0	

MAPID: 05900324000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083321 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831482 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 3410.0 **LOG TYPE:**
SOURCE: CHERRY&KD, WRIGHT F J0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
91.0	CARBONDALE	HERRIN	COAL	4.0	250.0	
-5.0	CARBONDALE	SPRINGFIELD	COAL	4.0	346.0	

MAPID: 05900325000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.085628 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831499 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**
SOURCE: CHERRY&KD, WRIGHT F J0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
88.0	CARBONDALE	HERRIN	COAL	3.0	248.0	
-8.0	CARBONDALE	SPRINGFIELD	COAL	4.0	344.0	

MAPID: 05900346000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087894 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833308 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: ASHLND ORC, CURRY J H 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
84.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
-12.0	CARBONDALE	SPRINGFIELD	COAL	4.0	352.0	

MAPID: 05900347000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090246 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831551 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 3450.0 **LOG TYPE:**
SOURCE: ASHLND ORC, CURRY J H 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
89.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
-5.0	CARBONDALE	SPRINGFIELD	COAL	4.0	350.0	

MAPID: 05900348000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087928 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831536 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 3450.0 **LOG TYPE:**
SOURCE: ASHLND ORC, CURRY J H 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
85.0	CARBONDALE	HERRIN	COAL	3.0	260.0	
-11.0	CARBONDALE	SPRINGFIELD	COAL	4.0	356.0	

MAPID: 05900353000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090317 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.827946 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 3410.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, ARENSMAN 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
96.0	CARBONDALE	HERRIN	COAL	4.0	245.0	
-1.0	CARBONDALE	SPRINGFIELD	COAL	4.0	342.0	

MAPID: 05900354000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090278 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829743 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: LECH&HLBRT, ARENSMAN 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	3.0	250.0	
-4.0	CARBONDALE	SPRINGFIELD	COAL	4.0	344.0	

MAPID: 05900355000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090205 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.833331 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 3430.0 **LOG TYPE:**

SOURCE: ASHLND ORC, CURRY J H 0004 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
81.0	CARBONDALE	HERRIN	COAL	3.0	262.0	
-13.0	CARBONDALE	SPRINGFIELD	COAL	4.0	356.0	

MAPID: 05900359000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087974 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829728 **DATE COLLECTED:** 11 / 0 / 1943

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2410.0 **LOG TYPE:** Electric Log

SOURCE: HALBERT & LEACH, ARENSMAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	426.0	
-113.0	CARBONDALE	SURVANT	COAL	0.5	456.0	
-165.0	CARBONDALE	COLCHESTER	COAL	0.5	508.0	
-268.0	CARBONDALE	DEKOVEN	COAL	3.0	611.0	
-268.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	611.0	
-287.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-318.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	661.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-323.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	666.0	

MAPID: 05900359000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.087974 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.829728 **DATE COLLECTED:** 0 / 0 / 1943

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 3430.0 **LOG TYPE:**

SOURCE: LECH&HLBRT, ARENSMAN 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
93.0	CARBONDALE	HERRIN	COAL	4.0	250.0	
-3.0	CARBONDALE	SPRINGFIELD	COAL	3.0	346.0	

MAPID: 05900366000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092551 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831554 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: CARTER OC, CURRY J H 0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
-2.0	CARBONDALE	SPRINGFIELD	COAL	3.0	348.0	

MAPID: 05900367000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092586 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829755 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: CARTER OC, CURRY J H 0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.0	CARBONDALE	HERRIN	COAL	3.0	252.0	
-4.0	CARBONDALE	SPRINGFIELD	COAL	4.0	346.0	

MAPID: 05900368000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.085586 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833285 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: CHERRY&KD, WRIGHT F J0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
86.0	CARBONDALE	HERRIN	COAL	3.0	254.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	3.0	354.0	

MAPID: 05900960000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099534 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828111 **DATE COLLECTED:** 2 / 0 / 1948

SURFACE ELEVATION (FT.): 333.0 **LOGGED (FT.):** 2404.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., CURRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	433.0	
-133.0	CARBONDALE	SURVANT	COAL	2.5	466.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	564.0	
-271.0	CARBONDALE	DEKOVEN	COAL	4.0	604.0	
-271.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	604.0	
-289.0	CARBONDALE	DAVIS	COAL	5.0	622.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	654.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-327.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	660.0	

MAPID: 05900961000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099335 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829788 **DATE COLLECTED:** 6 / 0 / 1948

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1712.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1367.0	BASE OF PENN.		UNCLASSIFIED	-	1712.0	

MAPID: 05900963000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 380' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099275 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833423 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2421.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., CURRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-144.0	CARBONDALE	SURVANT	COAL	0.5	488.0	
-216.0	CARBONDALE	COLCHESTER	COAL	2.0	560.0	
-283.0	CARBONDALE	DEKOVEN	COAL	3.0	627.0	
-283.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	627.0	
-301.0	CARBONDALE	DAVIS	COAL	4.0	645.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	675.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-338.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	682.0	
-386.0	TRADEWATER	MT. RORAH	COAL	1.2	730.0	

MAPID: 05900965000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 380' E line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097368 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829775 **DATE COLLECTED:** 9 / 0 / 1948

SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 2408.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., CURRY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-89.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	430.0	
-122.0	CARBONDALE	SURVANT	COAL	0.5	463.0	
-204.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	608.0	
-267.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	608.0	
-284.0	CARBONDALE	DAVIS	COAL	4.0	625.0	
-315.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	656.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900971000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 380' W line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099423 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824339 **DATE COLLECTED:** 11 / 0 / 1948

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2412.0 **LOG TYPE:** Electric Log

SOURCE: HERNDON DRLG. CO., EGYPT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	458.0	
-200.0	CARBONDALE	COLCHESTER	COAL	0.0	550.0	
-278.0	CARBONDALE	DEKOVEN	COAL	4.0	628.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	628.0	
-298.0	CARBONDALE	DAVIS	COAL	4.0	648.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-336.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	686.0	
-390.0	TRADEWATER	MT. RORAH	COAL	2.0	740.0	

MAPID: 05901822000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 370' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083989 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833246 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 2408.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, WRIGHT F J **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-83.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	420.0	
-118.0	CARBONDALE	SURVANT	COAL	1.6	455.0	
-257.0	CARBONDALE	DEKOVEN	COAL	3.0	594.0	
-257.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	594.0	
-273.0	CARBONDALE	DAVIS	COAL	3.0	610.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	648.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902187000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' N line, 2310' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090834 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833187 **DATE COLLECTED:** 11 / 0 / 1944

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: LEACH B K, RIEF 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-90.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
-135.0	CARBONDALE	SURVANT	COAL	1.2	480.0	
-188.0	CARBONDALE	COLCHESTER	COAL	0.5	533.0	
-261.0	CARBONDALE	DEKOVEN	COAL	4.0	606.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	606.0	
-283.0	CARBONDALE	DAVIS	COAL	4.0	628.0	
-313.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	658.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-319.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	664.0	
-373.0	TRADEWATER	MT. RORAH	COAL	2.5	718.0	

MAPID: 05902187000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 380' N line, 2310' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090834 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.833187 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 266.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
137.0	CARBONDALE	DANVILLE	COAL	2.0	208.0	
135.0	CARBONDALE		SHALE & SANDSTONE	18.0	210.0	
117.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	228.0	
114.5	CARBONDALE	LAWSON	SILTY SHALE	6.0	230.5	
108.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	8.0	236.5	
100.5	CARBONDALE	LAWSON	GRAY SHALE	12.0	244.5	
88.5	CARBONDALE	BRERETON	LIMESTONE & SHALE	1.5	256.5	
87.0	CARBONDALE	ANNA	BLACK SHALE	4.0	258.0	
83.0	CARBONDALE	HERRIN	COAL	4.0	262.0	

MAPID: 05924033000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 960' W line of NE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092803 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.824362 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-258.0	CARBONDALE	DEKOVEN	COAL	4.0	612.0	
-258.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	612.0	
-278.0	CARBONDALE	DAVIS	COAL	6.0	632.0	
-314.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	668.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-356.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	710.0	
-404.0	TRADEWATER	MT. RORAH	COAL	2.0	758.0	

MAPID: 05900238000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106564 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.826193 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**

SOURCE: HERNDN DRC, EGYPTN T T0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
74.0	CARBONDALE	HERRIN	COAL	-	262.0	

MAPID: 05900240000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106656 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.822533 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:**

SOURCE: BUEL&HRNDN, EGYPTN T T0005 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
75.0	CARBONDALE	HERRIN	COAL	4.0	275.0	
-33.0	CARBONDALE	SPRINGFIELD	COAL	4.0	383.0	

MAPID: 05900241000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106702 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.820703 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3550.0 **LOG TYPE:**
SOURCE: BUEL&HRNDN, EGYPTN T T0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	HERRIN	COAL	-	290.0	
-35.0	CARBONDALE	SPRINGFIELD	COAL	4.0	390.0	CORRELATION UNCERTAIN

MAPID: 05900242000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.111242 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.826225 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: DUNCAN N&W, EGYPTN T T001C **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
44.0	CARBONDALE	HERRIN	COAL	3.0	305.0	
-51.0	CARBONDALE	SPRINGFIELD	COAL	4.0	400.0	

MAPID: 05900249000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104265 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824351 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: LECH&FUHRR, EGYPTN T T0005 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
72.0	CARBONDALE	HERRIN	COAL	4.0	279.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	4.0	394.0	

MAPID: 05900250000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101919 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824341 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: LECH&FUHRR, EGYPTN T T0006 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
64.0	CARBONDALE	HERRIN	COAL	3.0	288.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	4.0	396.0	

MAPID: 05900251000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101954 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.822517 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: OIL MANGMT, EGYPTN T T0007 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
63.0	CARBONDALE	HERRIN	COAL	2.5	288.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	4.0	394.0	

MAPID: 05900252000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104303 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.822526 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: OIL MANGMT, EGYPTN T T0008 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
69.0	CARBONDALE	HERRIN	COAL	2.0	280.0	
-41.0	CARBONDALE	SPRINGFIELD	COAL	3.0	390.0	

MAPID: 05900256000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101986 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.820695 **DATE COLLECTED:** 11 / 0 / 1941
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2425.0 **LOG TYPE:** Electric Log
SOURCE: LEACH & FUHRER, EGYPT TIE & TIMB 9 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-142.0	CARBONDALE	SURVANT	COAL	1.4	488.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	545.0	
-269.0	CARBONDALE	DEKOVEN	COAL	3.0	615.0	
-269.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-298.0	CARBONDALE	DAVIS	COAL	4.0	644.0	
-329.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	675.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-362.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	708.0	

MAPID: 05900256000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101986 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.820695 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: LECH&FUHRR, EGYPTN T T0009 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
63.0	CARBONDALE	HERRIN	COAL	2.0	283.0	
-28.0	CARBONDALE	SPRINGFIELD	COAL	3.0	374.0	

MAPID: 05900256000C **VERSION:** 3 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101986 **GEOLOGIST:** J MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.820695 **DATE COLLECTED:** 0 / 0 / 1958
SURFACE ELEVATION (FT.): 408.9 **LOGGED (FT.):** 39.7 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CORP. 513 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
408.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
393.9	CARBONDALE		SANDSTONE	22.0	15.0	
371.9	CARBONDALE		COAL	2.7	37.0	

MAPID: 05900257000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104346 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.820699 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 3430.0 **LOG TYPE:**
SOURCE: LECH&FUHRR, EGYPTN T T0010 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
76.0	CARBONDALE	HERRIN	COAL	4.0	267.0	
-40.0	CARBONDALE	SPRINGFIELD	COAL	4.0	383.0	

MAPID: 05900258000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104187 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.828005 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 336.9 **LOGGED (FT.):** 3369.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
63.9	CARBONDALE	HERRIN	COAL	3.0	273.0	
-43.1	CARBONDALE	SPRINGFIELD	COAL	4.0	380.0	

MAPID: 05900259000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101852 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.827985 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 332.0 **LOGGED (FT.):** 3320.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
57.0	CARBONDALE	HERRIN	COAL	2.5	275.0	
-35.0	CARBONDALE	SPRINGFIELD	COAL	4.0	367.0	

MAPID: 05900260000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10182 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829807 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
68.0	CARBONDALE	HERRIN	COAL	4.0	272.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	5.0	367.0	

MAPID: 05900261000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101788 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831631 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 3370.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0004 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
75.0	CARBONDALE	HERRIN	COAL	4.0	262.0	
-21.0	CARBONDALE	SPRINGFIELD	COAL	4.0	358.0	

MAPID: 05900263000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104145 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.82983 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 3360.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0006 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	HERRIN	COAL	4.0	270.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL	4.0	366.0	

MAPID: 05900265000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104106 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.831657 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0008 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
64.0	CARBONDALE	HERRIN	COAL	3.5	276.0	
-27.0	CARBONDALE	SPRINGFIELD	COAL	4.0	367.0	

MAPID: 05900266000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101752 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.833453 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0009 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	HERRIN	COAL	3.0	292.0	
-39.0	CARBONDALE	SPRINGFIELD	COAL	4.0	390.0	

MAPID: 05900268000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106519 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.828023 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 335.0 **LOGGED (FT.):** 3350.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, LEACH B K 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
59.0	CARBONDALE	HERRIN	COAL	3.0	276.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	4.0	382.0	

MAPID: 05900269000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106473 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.829853 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 334.0 **LOGGED (FT.):** 3340.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, LEACH B K 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
54.0	CARBONDALE	HERRIN	COAL	3.5	280.0	
-41.0	CARBONDALE	SPRINGFIELD	COAL	4.0	375.0	

MAPID: 05900270000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10661 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.824363 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 342.0 **LOGGED (FT.):** 3420.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, LEACH B K 0003 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
61.0	CARBONDALE	HERRIN	COAL	3.0	281.0	
-35.0	CARBONDALE	SPRINGFIELD	COAL	3.0	377.0	

MAPID: 05900319000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106564 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.826193 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: BUEL J ETL, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
68.0	CARBONDALE	HERRIN	COAL	2.5	283.0	
-44.0	CARBONDALE	SPRINGFIELD	COAL	5.0	395.0	

MAPID: 05900333000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10661 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.824363 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**

SOURCE: HERNDN DRC, EGYPTN T T0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
77.0	CARBONDALE	HERRIN	COAL	-	272.0	

MAPID: 05900979000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 380' N line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101748 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833315 **DATE COLLECTED:** 1 / 0 / 1949

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2429.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., EGYPT TIE & TIM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	455.0	
-146.0	CARBONDALE	SURVANT	COAL	0.5	490.0	
-282.0	CARBONDALE	DEKOVEN	COAL	3.0	626.0	
-282.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	626.0	
-302.0	CARBONDALE	DAVIS	COAL	4.0	646.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	680.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-342.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	686.0	

MAPID: 05901853000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1980' N line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.115858 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829094 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2875.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., EGYPT TIE & TIMB **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-124.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	475.0	
-149.0	CARBONDALE	SURVANT	COAL	2.5	500.0	
-229.0	CARBONDALE	COLCHESTER	COAL	2.0	580.0	
-314.0	CARBONDALE	DEKOVEN	COAL	3.5	665.0	
-314.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	665.0	
-339.0	CARBONDALE	DAVIS	COAL	3.0	690.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	720.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-379.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	730.0	

MAPID: 05901853000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1980' N line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.115858 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829094 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 311.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
88.5	CARBONDALE	DANVILLE	COAL	2.0	262.5	
86.5	CARBONDALE		SHALE & SANDSTONE	14.0	264.5	
72.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	278.5	
70.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	6.0	281.0	
64.0	CARBONDALE	LAWSON	GRAY SHALE	14.0	287.0	
50.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	301.0	
48.0	CARBONDALE	ANNA	BLACK SHALE	3.0	303.0	
45.0	CARBONDALE	HERRIN	COAL	5.0	306.0	

MAPID: 05902149000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118279 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.826282 **DATE COLLECTED:** 8 / 0 / 1957

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1585.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-219.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	570.0	COLC. OUT?
-341.0	SPOON	DAVIS	UNCLASSIFIED	-	692.0	
-1234.0	BASE OF PENN.		UNCLASSIFIED	-	1585.0	

MAPID: 05902188000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 380' W line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.103988 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829831 **DATE COLLECTED:** 11 / 0 / 1957

SURFACE ELEVATION (FT.): 337.0 **LOGGED (FT.):** 2420.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, WEST UNIT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	442.0	
-138.0	CARBONDALE	SURVANT	COAL	0.5	475.0	
-208.0	CARBONDALE	COLCHESTER	COAL	1.2	545.0	
-278.0	CARBONDALE	DEKOVEN	COAL	3.5	615.0	
-278.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-299.0	CARBONDALE	DAVIS	COAL	4.0	636.0	
-335.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	672.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902484000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of NW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.107692 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.826206 **DATE COLLECTED:** 10 / 0 / 1959

SURFACE ELEVATION (FT.): 332.0 **LOGGED (FT.):** 2415.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, WEST UNIT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-208.0	CARBONDALE	COLCHESTER	COAL	1.3	540.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	622.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	622.0	
-311.0	CARBONDALE	DAVIS	COAL	4.0	643.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	675.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-367.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	699.0	

MAPID: 05902961000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.109093 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820702 **DATE COLLECTED:** 10 / 0 / 1963

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2433.0 **LOG TYPE:** Electric Log

SOURCE: HUMBLE OIL & REF. CO., WEST UNIT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	465.0	
-151.0	CARBONDALE	SURVANT	COAL	1.2	505.0	
-211.0	CARBONDALE	COLCHESTER	COAL	0.5	565.0	
-281.0	CARBONDALE	DEKOVEN	COAL	3.0	635.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	635.0	
-301.0	CARBONDALE	DAVIS	COAL	4.0	655.0	
-324.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	678.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-344.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	698.0	

MAPID: 05923989000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 470' N line, 330' W line of NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104085 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833101 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-115.0	CARBONDALE	HOUCHIN CREEK	COAL	1.6	455.0	
-152.0	CARBONDALE	SURVANT	COAL	0.5	492.0	
-210.0	CARBONDALE	COLCHESTER	COAL	0.0	550.0	
-287.0	CARBONDALE	DEKOVEN	COAL	3.0	627.0	
-287.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	627.0	
-310.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-350.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	690.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05923990000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 230' S line, 430' W line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.103862 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.827722 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 336.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	448.0	
-167.0	CARBONDALE	SURVANT	COAL	0.2	503.0	
-214.0	CARBONDALE	COLCHESTER	COAL	0.3	550.0	
-284.0	CARBONDALE	DEKOVEN	COAL	3.0	620.0	
-284.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	620.0	
-304.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-341.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.3	677.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900271000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136395 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820795 **DATE COLLECTED:** 8 / 0 / 1941

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2909.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., EGYPT TIE & TIMB **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-178.0	CARBONDALE	HOUCHIN CREEK	COAL	4.0	525.0	
-233.0	CARBONDALE	SURVANT	COAL	0.5	580.0	
-281.0	CARBONDALE	COLCHESTER	COAL	1.2	628.0	
-363.0	CARBONDALE	DEKOVEN	COAL	3.5	710.0	
-363.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	710.0	
-387.0	CARBONDALE	DAVIS	COAL	4.0	734.0	
-418.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	765.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-441.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	788.0	
-473.0	TRADEWATER	MT. RORAH	COAL	2.0	820.0	

MAPID: 05900271000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136395 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.820795 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**

SOURCE: OIL MANGMT, EGYPTN T T00A1 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-9.0	CARBONDALE	HERRIN	COAL	3.0	356.0	
-117.0	CARBONDALE	SPRINGFIELD	COAL	5.0	464.0	

MAPID: 05902114000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120499 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.828109 **DATE COLLECTED:** 6 / 0 / 1975

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2876.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO., GRAY EST **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-150.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-190.0	CARBONDALE	SURVANT	COAL	1.3	540.0	
-250.0	CARBONDALE	COLCHESTER	COAL	1.6	600.0	
-330.0	CARBONDALE	DEKOVEN	COAL	3.8	680.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	680.0	
-354.0	CARBONDALE	DAVIS	COAL	3.0	704.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	703.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-408.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	758.0	
-440.0	TRADEWATER	MT. RORAH	COAL	1.6	790.0	

MAPID: 05902114000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120499 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.828109 **DATE COLLECTED:** 6 / 0 / 1975

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1596.0 **LOG TYPE:** Electric Log

SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1246.0	BASE OF PENN.		UNCLASSIFIED	-	1596.0	

MAPID: 05902136000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120581 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.826183 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 336.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
71.0	CARBONDALE	DANVILLE	COAL	2.0	278.0	
69.0	CARBONDALE		SHALE & SANDSTONE	16.0	280.0	
53.0	CARBONDALE	ALLENBY	COAL	1.0	296.0	
52.0	CARBONDALE		CLAYSTONE & SHALE	6.0	297.0	
46.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	303.0	
43.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	306.0	
33.0	CARBONDALE	LAWSON	GRAY SHALE	10.0	316.0	
23.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	326.0	
21.0	CARBONDALE	ANNA	BLACK SHALE	3.0	328.0	
18.0	CARBONDALE	HERRIN	COAL	5.0	331.0	

MAPID: 05923914000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.129571 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.826261 **DATE COLLECTED:** 9 / 0 / 1977

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2771.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., FUHRER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	525.0	
-207.0	CARBONDALE	SURVANT	COAL	0.5	565.0	
-272.0	CARBONDALE	COLCHESTER	COAL	1.3	630.0	
-347.0	CARBONDALE	DEKOVEN	COAL	2.5	705.0	
-347.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	705.0	
-370.0	CARBONDALE	DAVIS	COAL	3.5	728.0	
-400.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	758.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-422.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	780.0	
-452.0	TRADEWATER	MT. RORAH	COAL	1.6	810.0	

MAPID: 05923918000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.134068 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.826248 **DATE COLLECTED:** 9 / 0 / 1977

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2837.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., FUHRER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	522.0	
-201.0	CARBONDALE	SURVANT	COAL	0.5	550.0	
-351.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-351.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	700.0	
-373.0	CARBONDALE	DAVIS	COAL	4.0	722.0	
-401.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	750.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-413.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	762.0	

MAPID: 05923945000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.127106 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.831758 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-180.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	538.0	
-217.0	CARBONDALE	SURVANT	COAL	0.5	575.0	
-354.0	CARBONDALE	DEKOVEN	COAL	3.0	712.0	
-354.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	712.0	
-382.0	CARBONDALE	DAVIS	COAL	3.0	740.0	
-407.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	765.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-432.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	790.0	
-464.0	TRADEWATER	MT. RORAH	COAL	1.3	822.0	

MAPID: 05900272000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143213 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820843 **DATE COLLECTED:** 1 / 0 / 1941

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2817.0 **LOG TYPE:** Electric Log

SOURCE: SNOWDEN & MCSWEENEY, EGYPT TIE & TIMB **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-199.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	546.0	
-238.0	CARBONDALE	SURVANT	COAL	0.5	585.0	
-371.0	CARBONDALE	DEKOVEN	COAL	4.0	718.0	
-371.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	718.0	
-393.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-423.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	770.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900272000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143213 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.820843 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**

SOURCE: SNWDEN&MCS, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-19.0	CARBONDALE	HERRIN	COAL	3.0	366.0	
-133.0	CARBONDALE	SPRINGFIELD	COAL	5.0	480.0	

MAPID: 05900987000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 990' N line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152085 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.83176 **DATE COLLECTED:** 11 / 0 / 1951

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2875.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., LEACH B K ET A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-242.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	588.0	
-312.0	CARBONDALE	SURVANT	COAL	1.3	658.0	
-324.0	CARBONDALE	COLCHESTER	COAL	3.0	670.0	
-393.0	CARBONDALE	DEKOVEN	COAL	3.0	739.0	
-409.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	755.0	90 PERCENT SANDSTONE IN DEKOVEN SPLIT
-426.0	CARBONDALE	DAVIS	COAL	4.0	772.0	
-454.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	800.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-474.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	820.0	
-514.0	TRADEWATER	MT. RORAH	COAL	1.2	860.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05900987000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 990' N line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152085 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.83176 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 394.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
5.5	CARBONDALE	DANVILLE	COAL	1.0	340.5	
4.5	CARBONDALE		SHALE & SANDSTONE	20.0	341.5	
-15.5	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.5	361.5	
-18.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	22.0	364.0	
-40.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.5	386.0	
-42.5	CARBONDALE	ANNA	BLACK SHALE	2.5	388.5	
-45.0	CARBONDALE	HERRIN	COAL	3.0	391.0	

MAPID: 05902025000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.138504 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.829874 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2929.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., LEACH ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-211.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	562.0	
-242.0	CARBONDALE	SURVANT	COAL	1.3	593.0	
-299.0	CARBONDALE	COLCHESTER	COAL	0.0	650.0	
-381.0	CARBONDALE	DEKOVEN	COAL	3.0	732.0	
-387.0	CARBONDALE	LOWER DEKOVEN	COAL	1.3	738.0	
-397.0	CARBONDALE	DAVIS	COAL	4.0	748.0	
-439.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	790.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-457.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	808.0	

MAPID: 05902025000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.138504 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.829874 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1690.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1339.0	BASE OF PENN.		UNCLASSIFIED	-	1690.0	

MAPID: 05923798000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.155768 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.820031 **DATE COLLECTED:** 1 / 15 / 1975

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 535.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 233GC **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.0	PLEISTOCENE		UNCONSOLIDATED	131.5	0.0	
241.5			SHALE	36.5	131.5	
205.0			SANDSTONE	24.5	168.0	
180.5			SHALE	170.5	192.5	
10.0	CARBONDALE	DANVILLE	COAL	2.0	363.0	
8.0	CARBONDALE		SHALE	9.0	365.0	COAL STREAKS
-1.0	CARBONDALE		SHALE	4.5	374.0	
-5.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	378.5	
-11.0	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	384.0	
-27.0	CARBONDALE		SHALE	10.5	400.0	
-37.5	CARBONDALE	BRERETON	LIMESTONE	2.2	410.5	
-39.7	CARBONDALE	ANNA	BLACK SHALE	3.0	412.7	
-42.7	CARBONDALE	HERRIN	COAL	3.5	415.7	
-46.2	CARBONDALE		UNDERCLAY	3.0	419.2	
-49.2	CARBONDALE		LIMESTONE	4.3	422.2	
-53.5	CARBONDALE		SANDSTONE	15.0	426.5	
-68.5	CARBONDALE		SHALE	16.5	441.5	
-85.0	CARBONDALE	BRIAR HILL	COAL	1.5	458.0	
-86.5	CARBONDALE		SHALE	3.0	459.5	
-89.5	CARBONDALE		SANDSTONE/SHALE	50.0	462.5	
-139.5	CARBONDALE		SHALE	4.7	512.5	
-144.2	CARBONDALE	ST. DAVID	LIMESTONE	1.4	517.2	
-145.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	518.6	
-147.6	CARBONDALE	SPRINGFIELD	COAL	4.6	520.6	
-152.2	CARBONDALE		SANDSTONE	10.0	525.2	

MAPID: 05924591000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154602 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.820931 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-236.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-259.0	CARBONDALE	SURVANT	COAL	0.5	613.0	
-341.0	CARBONDALE	COLCHESTER	COAL	0.5	695.0	
-406.0	CARBONDALE	DEKOVEN	COAL	2.5	760.0	
-409.0	CARBONDALE	LOWER DEKOVEN	COAL	2.5	763.0	
-426.0	CARBONDALE	DAVIS	COAL	4.0	780.0	
-458.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	812.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-478.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	832.0	
-508.0	TRADEWATER	MT. RORAH	COAL	2.0	862.0	

MAPID: 05900275000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.141097 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.813596 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:**

SOURCE: RITCHIE M, FREY 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-2.0	CARBONDALE	HERRIN	COAL	2.0	364.0	
-118.0	CARBONDALE	SPRINGFIELD	COAL	5.0	480.0	

MAPID: 05900276000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147853 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.817268 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 3560.0 **LOG TYPE:**

SOURCE: SNWDEN&MCS, FREY 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-39.0	CARBONDALE	HERRIN	COAL	3.0	395.0	
-150.0	CARBONDALE	SPRINGFIELD	COAL	4.0	506.0	

MAPID: 05900277000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143376 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.81362 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 3600.0 **LOG TYPE:**
SOURCE: GAMMEL D, FRYE 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-15.0	CARBONDALE	HERRIN	COAL	2.0	375.0	
-142.0	CARBONDALE	SPRINGFIELD	COAL	-	502.0	

MAPID: 05900278000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145744 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.810037 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:**
SOURCE: OIL MANGMT, GOEBEL 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-3.0	CARBONDALE	HERRIN	COAL	3.0	365.0	
-125.0	CARBONDALE	SPRINGFIELD	COAL	4.0	487.0	

MAPID: 05900279000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147979 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.811863 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 3610.0 **LOG TYPE:**
SOURCE: MAGNOLIA, MCGUIRE J 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-9.0	CARBONDALE	HERRIN	COAL	4.0	370.0	
-120.0	CARBONDALE	SPRINGFIELD	COAL	-	481.0	

MAPID: 05900280000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.15254 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.811914 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:**

SOURCE: MAGNOLIA, MCGUIRE J 0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-43.0	CARBONDALE	HERRIN	COAL	4.0	420.0	
-143.0	CARBONDALE	SPRINGFIELD	COAL	4.0	520.0	

MAPID: 05901248000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 400' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.147993 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811662 **DATE COLLECTED:** 11 / 0 / 1953

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2846.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A., MCGUIRE HEIRS 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-189.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	550.0	
-227.0	CARBONDALE	SURVANT	COAL	1.6	588.0	
-304.0	CARBONDALE	COLCHESTER	COAL	0.5	665.0	
-364.0	CARBONDALE	DEKOVEN	COAL	4.0	725.0	
-374.0	CARBONDALE	LOWER DEKOVEN	COAL	2.0	735.0	100 PERCENT SANDSTONE IN DEKOVEN SPLIT
-387.0	CARBONDALE	DAVIS	COAL	4.0	748.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	774.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-434.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	795.0	
-464.0	TRADEWATER	MT. RORAH	COAL	1.3	825.0	
-	TRADEWATER	CREAL SPRING	LIMESTONE	-		

MAPID: 05901402000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' S line, 1650' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.150348 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806502 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A., PHILLIPS-MCGUIRE 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-191.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	549.0	
-232.0	CARBONDALE	SURVANT	COAL	1.5	590.0	
-297.0	CARBONDALE	COLCHESTER	COAL	0.5	655.0	
-365.0	CARBONDALE	DEKOVEN	COAL	3.5	723.0	
-365.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	723.0	
-382.0	CARBONDALE	DAVIS	COAL	5.0	740.0	
-417.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	775.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-442.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	800.0	
-465.0	TRADEWATER	MT. RORAH	COAL	1.6	823.0	

MAPID: 05901801000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145608 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.815435 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2827.0 **LOG TYPE:** Electric Log

SOURCE: WILSON, R. O., II, FREY JOHN ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-186.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	550.0	
-221.0	CARBONDALE	SURVANT	COAL	1.4	585.0	
-276.0	CARBONDALE	COLCHESTER	COAL	0.0	640.0	
-366.0	CARBONDALE	DEKOVEN	COAL	3.0	730.0	
-366.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	730.0	
-389.0	CARBONDALE	DAVIS	COAL	4.0	753.0	
-414.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	778.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-436.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	800.0	
-471.0	TRADEWATER	MT. RORAH	COAL	1.4	835.0	

MAPID: 05902061000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152635 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.808307 **DATE COLLECTED:** 10 / 0 / 1956

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2815.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A., PHILIPS-MCGUIRE 3 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-225.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-264.0	CARBONDALE	SURVANT	COAL	1.6	629.0	
-335.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-400.0	CARBONDALE	DEKOVEN	COAL	4.0	765.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	765.0	
-420.0	CARBONDALE	DAVIS	COAL	5.0	785.0	
-453.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	818.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-474.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	839.0	
-497.0	TRADEWATER	MT. RORAH	COAL	1.3	862.0	

MAPID: 05902145000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 70' N line, 956' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143498 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.812525 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2849.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A., GOEBEL A-4 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-183.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-223.0	CARBONDALE	SURVANT	COAL	1.6	585.0	
-298.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-363.0	CARBONDALE	DEKOVEN	COAL	3.5	725.0	
-363.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	725.0	
-381.0	CARBONDALE	DAVIS	COAL	4.0	743.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	775.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-437.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	799.0	
-466.0	TRADEWATER	MT. RORAH	COAL	2.0	828.0	

MAPID: 05902145000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 70' N line, 956' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.143498 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.812525 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1653.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL, T. A. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1291.0	BASE OF PENN.		UNCLASSIFIED	-	1653.0	

MAPID: 05903546000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 416' N line, 2496' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.14624 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818811 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 287.0 **LOGGED (FT.):** 774.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-2 **WELL TYPE:** Coal Test

COMMENT: COPY INFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-86.0	CARBONDALE	LAWSON	MICACEOUS SILTSTONE	6.3	373.0	GRAY
-92.3	CARBONDALE	BRERETON	LIMESTONE	2.3	379.3	FAULTED; FRACTURE WITH CALCITE VEINS
-94.6	CARBONDALE	ANNA	BLACK SHALE	2.0	381.6	FRACTURED WITH CALCITE VEINS
-96.6	CARBONDALE	HERRIN	COAL	3.0	383.6	COAL DISTORTED AND FRACTURED W CALCITE
-99.6	CARBONDALE		CLAYSTONE & SILTSTONE	2.0	386.6	BROKEN & CRUSHED LOOKS FAULTED; GRAY
-101.6	CARBONDALE		SANDY SILTSTONE	13.4	388.6	VERY DISTURBED CALCITE VEINS; FAULTED
-115.0	CARBONDALE		ROCK	63.0	402.0	NOT CURED
-178.0	CARBONDALE		SANDY SILTSTONE	16.0	465.0	GRAY
-194.0	CARBONDALE		SILTY SHALE	10.0	481.0	FOSSILS AT BASE
-204.0	CARBONDALE	ST. DAVID	ARGILLACEOUS LIMESTONE	1.0	491.0	
-205.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	492.0	FISSILE
-207.0	CARBONDALE	SPRINGFIELD	COAL	4.0	494.0	
-211.0	CARBONDALE		CLAYSTONE & SILTSTONE	4.0	498.0	SILT DOWNWARD; GRAY
-215.0	CARBONDALE		ROCK	205.0	502.0	NOT CURED
-420.0	CARBONDALE		MICACEOUS SANDSTONE	4.0	707.0	LIGHT GRAY
-424.0	CARBONDALE		SHALE	12.0	711.0	
-436.0	CARBONDALE		GRAY SHALE	9.0	723.0	SIDERITE NODULES
-445.0	CARBONDALE	DEKOVEN	COAL	4.7	732.0	
-449.7	CARBONDALE		SILTSTONE	1.5	736.7	GRAY AND CLAYEY
-451.2	CARBONDALE		SILTSTONE	2.8	738.2	DARK GRAY
-454.0	CARBONDALE		BLACK SHALE	15.0	741.0	MANY MARINE FOSSILS
-469.0	CARBONDALE	DAVIS	COAL	5.0	756.0	
-474.0			CLAYSTONE	2.0	761.0	
-476.0			SILTSTONE	8.0	763.0	DARK GRAY
-484.0			DARK SHALE	3.0	771.0	SIDERITE BED

MAPID: 05903546000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 416' N line, 2496' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.14624 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.818811 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 387.0 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-2 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
23.4	CARBONDALE	DANVILLE	COAL	3.0	333.6	
20.4	CARBONDALE		SILTY SHALE	15.0	336.6	
5.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	351.6	
0.4	CARBONDALE	LAWSON	SILTY SHALE	22.0	356.6	
-21.6	CARBONDALE	BRERETON	LIMESTONE	3.0	378.6	
-24.6	CARBONDALE	ANNA	GRAY SHALE	2.4	381.6	
-27.0	CARBONDALE	HERRIN	COAL	3.0	384.0	

MAPID: 05900281000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.12078 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813447 **DATE COLLECTED:** 10 / 0 / 1941

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2940.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, N. V., EST. OF, BLAIR OLA B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-141.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	489.0	
-194.0	CARBONDALE	SURVANT	COAL	0.5	542.0	
-254.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.0	652.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	652.0	
-328.0	CARBONDALE	DAVIS	COAL	4.0	676.0	
-360.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	708.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900281000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.12078 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.813447 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**

SOURCE: DUNCAN INC, BLAIR O B 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
34.0	CARBONDALE	HERRIN	COAL	2.0	314.0	
-72.0	CARBONDALE	SPRINGFIELD	COAL	4.0	420.0	

MAPID: 05900989000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13657 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811736 **DATE COLLECTED:** 7 / 0 / 1948

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:** Electric Log

SOURCE: COYLE E J, TATE E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-220.0	CARBONDALE	SURVANT	COAL	0.6	567.0	
-288.0	CARBONDALE	COLCHESTER	COAL	0.5	635.0	
-345.0	CARBONDALE	DEKOVEN	COAL	4.5	692.0	
-345.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	692.0	
-367.0	CARBONDALE	DAVIS	COAL	4.0	714.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	746.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-421.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	768.0	
-453.0	TRADEWATER	MT. RORAH	COAL	2.0	800.0	

MAPID: 05900990000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.127516 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813494 **DATE COLLECTED:** 10 / 0 / 1951

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2867.0 **LOG TYPE:** Electric Log

SOURCE: BREHM, C. E. DRLG.&PROD., WILSON MAX **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	518.0	
-216.0	CARBONDALE	SURVANT	COAL	1.2	570.0	
-271.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-336.0	CARBONDALE	DEKOVEN	COAL	4.0	690.0	
-336.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	690.0	
-360.0	CARBONDALE	DAVIS	COAL	4.0	714.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	745.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-418.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	772.0	
-448.0	TRADEWATER	MT. RORAH	COAL	2.0	802.0	

MAPID: 05901617000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120731 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.806176 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2469.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
47.0	CARBONDALE	HERRIN	COAL	3.0	300.0	
-1.0	CARBONDALE	BRIAR HILL	COAL	-	348.0	
-63.0	CARBONDALE	SPRINGFIELD	COAL	5.0	410.0	BLACK SHALE ROOF
-128.0	CARBONDALE	HOUCHIN CREEK	COAL	-	475.0	

MAPID: 05901617000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120731 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.806176 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 303.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
102.0	CARBONDALE	DANVILLE	COAL	2.0	245.0	
100.0	CARBONDALE		SHALE & SANDSTONE	19.0	247.0	
81.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	266.0	
78.0	CARBONDALE	LAWSON	SILTY SHALE	25.0	269.0	
53.0	CARBONDALE	ANNA	BLACK SHALE	3.0	294.0	
50.0	CARBONDALE	HERRIN	COAL	6.0	297.0	

MAPID: 05901617000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120731 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.806176 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 1643.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1296.0	BASE OF PENN.		UNCLASSIFIED	-	1643.0	

MAPID: 05901617000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120731 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806176 **DATE COLLECTED:** 12 / 0 / 1953

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2469.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	479.0	
-175.0	CARBONDALE	SURVANT	COAL	1.3	522.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	592.0	
-313.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	660.0	
-338.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	718.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-381.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	728.0	

MAPID: 05903408000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.129864 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.806259 **DATE COLLECTED:** 8 / 0 / 1969

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3007.0 **LOG TYPE:** Electric Log

SOURCE: HERLEY, DAVID F., TATE LAURA **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-155.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-205.0	CARBONDALE	SURVANT	COAL	1.2	560.0	
-265.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-342.0	CARBONDALE	DEKOVEN	COAL	3.0	697.0	
-342.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	697.0	
-365.0	CARBONDALE	DAVIS	COAL	3.5	720.0	
-395.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	750.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-419.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	774.0	
-444.0	TRADEWATER	MT. RORAH	COAL	1.2	799.0	

MAPID: 05923952000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.134237 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818967 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	1.2	515.0	
-209.0	CARBONDALE	SURVANT	COAL	0.5	560.0	
-291.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-349.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-349.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	700.0	
-369.0	CARBONDALE	DAVIS	COAL	4.0	720.0	
-401.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	752.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-428.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	779.0	
-454.0	TRADEWATER	MT. RORAH	COAL	1.2	805.0	

MAPID: 05923999000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818897 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-131.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-183.0	CARBONDALE	SURVANT	COAL	0.5	530.0	
-243.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-313.0	CARBONDALE	DEKOVEN	COAL	3.0	660.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	660.0	
-338.0	CARBONDALE	DAVIS	COAL	4.0	685.0	
-368.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	715.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900282000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11146 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.818883 **DATE COLLECTED:** 10 / 0 / 1942

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log

SOURCE: PHILLIPS PETROLEUM CO., EGYPT TIE & TIM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-150.0	CARBONDALE	SURVANT	COAL	2.0	500.0	
-218.0	CARBONDALE	COLCHESTER	COAL	0.5	568.0	
-276.0	CARBONDALE	DEKOVEN	COAL	4.0	626.0	
-276.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	626.0	
-300.0	CARBONDALE	DAVIS	COAL	5.0	650.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	680.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-355.0	TRADEWATER	STONEFORT	LIMESTONE	0.0	705.0	
-389.0	TRADEWATER	MT. RORAH	COAL	0.8	739.0	

MAPID: 05900282000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11146 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.818883 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 3590.0 **LOG TYPE:**
SOURCE: PHILLIPS, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
75.0	CARBONDALE	HERRIN	COAL	2.0	284.0	
-39.0	CARBONDALE	SPRINGFIELD	COAL	5.0	398.0	

MAPID: 05900283000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106832 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.815241 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**
SOURCE: SKELLY OC, EGYPTN T T0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
78.0	CARBONDALE	HERRIN	COAL	2.0	269.0	
-30.0	CARBONDALE	SPRINGFIELD	COAL	-	377.0	

MAPID: 05900284000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106748 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.818878 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: SKELLY OC, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	HERRIN	COAL	2.0	292.0	
-35.0	CARBONDALE	SPRINGFIELD	COAL	-	384.0	

MAPID: 05900285000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102035 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818873 **DATE COLLECTED:** 6 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2421.0 **LOG TYPE:** Electric Log
SOURCE: CARTER OIL COMPANY, JORDAN CARRIE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	446.0	
-141.0	CARBONDALE	SURVANT	COAL	0.5	490.0	
-197.0	CARBONDALE	COLCHESTER	COAL	0.5	546.0	
-273.0	CARBONDALE	DEKOVEN	COAL	4.0	622.0	
-273.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	622.0	
-295.0	CARBONDALE	DAVIS	COAL	4.0	644.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	680.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900285000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102035 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.818873 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: CARTER OC, JORDAN C L0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
69.0	CARBONDALE	HERRIN	COAL	2.0	280.0	
-31.0	CARBONDALE	SPRINGFIELD	COAL	-	380.0	

MAPID: 05900286000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102165 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.815236 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 3470.0 **LOG TYPE:**
SOURCE: CARTER OC, JORDAN C L0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
77.0	CARBONDALE	HERRIN	COAL	2.0	270.0	
-31.0	CARBONDALE	SPRINGFIELD	COAL	-	378.0	

MAPID: 05900287000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104391 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.818877 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**

SOURCE: CARTER OC, JORDAN C L0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
71.0	CARBONDALE	HERRIN	COAL	2.0	278.0	
-31.0	CARBONDALE	SPRINGFIELD	COAL	5.0	380.0	

MAPID: 05901249000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2310' N line, 1650' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.113911 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813419 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 1605.0 **LOG TYPE:** Electric Log

SOURCE: INLAND OIL CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1258.0	BASE OF PENN.		UNCLASSIFIED	-	1605.0	

MAPID: 05901249000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2310' N line, 1650' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.113911 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.813419 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 352.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
58.0	CARBONDALE	DANVILLE	COAL	2.0	289.0	
56.0	CARBONDALE		SHALE	13.0	291.0	
43.0	CARBONDALE	ALLENBY	COAL	1.0	304.0	
42.0	CARBONDALE		CLAYSTONE & SHALE	4.0	305.0	
38.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	309.0	
34.0	CARBONDALE	LAWSON	SILTY SHALE	3.0	313.0	
31.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	316.0	
21.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	326.0	
9.0	CARBONDALE	CONANT	LIMESTONE & SHALE	1.0	338.0	
8.0	CARBONDALE	JAMESTOWN	COAL	1.0	339.0	
7.0	CARBONDALE		CLAYSTONE & SHALE	4.0	340.0	
3.0	CARBONDALE	BRERETON	BLACK SHALE	1.5	344.0	
1.5	CARBONDALE	ANNA	BLACK SHALE	1.5	345.5	
0.0	CARBONDALE	HERRIN	COAL	5.0	347.0	

MAPID: 05901249000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 2310' N line, 1650' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.113911 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813419 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2480.0 **LOG TYPE:** Electric Log

SOURCE: INLAND OIL CO, EGYPT TIE & TIMB 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	472.0	
-169.0	CARBONDALE	SURVANT	COAL	1.3	516.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-301.0	CARBONDALE	DEKOVEN	COAL	3.0	648.0	
-301.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	648.0	
-325.0	CARBONDALE	DAVIS	COAL	4.0	672.0	
-358.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	705.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	730.0	
-413.0	TRADEWATER	MT. RORAH	COAL	1.2	760.0	

MAPID: 05901250000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 990' N line, 330' E line of NW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106765 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.817056 **DATE COLLECTED:** 8 / 0 / 1953

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2432.0 **LOG TYPE:** Electric Log

SOURCE: SKELLY OIL CO, EGYPT TIE & TIMB 4 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-106.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-151.0	CARBONDALE	SURVANT	COAL	0.5	500.0	
-206.0	CARBONDALE	COLCHESTER	COAL	0.5	555.0	
-281.0	CARBONDALE	DEKOVEN	COAL	3.0	630.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	630.0	
-306.0	CARBONDALE	DAVIS	COAL	3.5	655.0	
-336.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	685.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902824000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102288 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.811596 **DATE COLLECTED:** 8 / 0 / 1962

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2019.0 **LOG TYPE:** Electric Log

SOURCE: HUMBLE OIL & REF. CO., SOUTH INMAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-150.0	CARBONDALE	SURVANT	COAL	1.2	495.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-283.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-283.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	628.0	
-305.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	689.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-375.0	TRADEWATER	STONEFORT	LIMESTONE	0.0	720.0	
-395.0	TRADEWATER	MT. RORAH	COAL	1.6	740.0	

MAPID: 05902837000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102498 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.806143 **DATE COLLECTED:** 11 / 0 / 1962
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2018.0 **LOG TYPE:** Electric Log
SOURCE: HUMBLE OIL & REF. CO., SOUTH INMAN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-141.0	CARBONDALE	SURVANT	COAL	0.8	492.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	566.0	
-277.0	CARBONDALE	DEKOVEN	COAL	4.0	628.0	
-277.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	628.0	
-303.0	CARBONDALE	DAVIS	COAL	3.5	654.0	
-339.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	690.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900288000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.095182 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.817094 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**
SOURCE: BUFORD W C, EGYPTN T T0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
91.0	CARBONDALE	HERRIN	COAL	3.5	257.0	
-14.0	CARBONDALE	SPRINGFIELD	COAL	4.0	362.0	

MAPID: 05900349000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE NE SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.093079 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.811627 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: CARTER OC, JOHNSON C 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
97.0	CARBONDALE	HERRIN	COAL	3.0	255.0	
-22.0	CARBONDALE	SPRINGFIELD	COAL	4.0	374.0	

MAPID: 05900350000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092881 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.81711 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 3490.0 **LOG TYPE:**
SOURCE: OIL MANGMT, LEACH B K 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
93.0	CARBONDALE	HERRIN	COAL	3.0	256.0	
-9.0	CARBONDALE	SPRINGFIELD	COAL	4.0	358.0	

MAPID: 05900362000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.090839 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.809805 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**
SOURCE: CARTER OC, JOHNSON C 0002 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-274.0	CARBONDALE	HERRIN	COAL	4.0	626.0	FAULT IN #6-5 INTERVAL (CHENOWETH)
-316.0	CARBONDALE	BRIAR HILL	COAL	-	668.0	
-350.0	CARBONDALE	SPRINGFIELD	COAL	4.0	702.0	
-430.0	CARBONDALE	HOUCHIN CREEK	COAL	-	782.0	

MAPID: 05901005000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.099707 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.818881 **DATE COLLECTED:** 6 / 0 / 1944
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1989.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON & ASHLAND, EGYPT TIE & TIMB **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-99.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	444.0	
-155.0	CARBONDALE	SURVANT	COAL	2.0	500.0	
-199.0	CARBONDALE	COLCHESTER	COAL	0.5	544.0	
-273.0	CARBONDALE	DEKOVEN	COAL	4.0	618.0	
-273.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	618.0	
-295.0	CARBONDALE	DAVIS	COAL	4.0	640.0	
-328.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	673.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901007000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.09327 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.80614 **DATE COLLECTED:** 6 / 0 / 1951

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2866.0 **LOG TYPE:** Electric Log

SOURCE: BUCHMAN, JOHN B., JOHNSON CHARLES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-503.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	856.0	
-552.0	CARBONDALE	SURVANT	COAL	0.8	905.0	
-611.0	CARBONDALE	COLCHESTER	COAL	0.5	964.0	
-677.0	CARBONDALE	DEKOVEN	COAL	3.0	1030.0	
-677.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1030.0	
-699.0	CARBONDALE	DAVIS	COAL	3.5	1052.0	
-731.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1084.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-741.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	1094.0	

MAPID: 05901619000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 280' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092901 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.81163 **DATE COLLECTED:** 7 / 0 / 1954

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 1667.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1318.0	BASE OF PENN.		UNCLASSIFIED	-	1667.0	

MAPID: 05901694000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.088481 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.81165 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2125.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., JOHNSON HARLISS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-393.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	740.0	
-433.0	CARBONDALE	SURVANT	COAL	0.8	780.0	
-511.0	CARBONDALE	COLCHESTER	COAL	0.5	858.0	
-573.0	CARBONDALE	DEKOVEN	COAL	3.5	920.0	
-573.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	920.0	
-596.0	CARBONDALE	DAVIS	COAL	3.8	943.0	
-628.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	975.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-663.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	1010.0	
-683.0	TRADEWATER	MT. RORAH	COAL	1.6	1030.0	

MAPID: 05901695000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.093012 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.813451 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2125.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., LEACH B K **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-92.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	440.0	
-142.0	CARBONDALE	SURVANT	COAL	1.6	490.0	
-206.0	CARBONDALE	COLCHESTER	COAL	0.5	554.0	
-267.0	CARBONDALE	DEKOVEN	COAL	4.0	615.0	
-267.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-290.0	CARBONDALE	DAVIS	COAL	4.0	638.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	670.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-362.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	710.0	
-387.0	TRADEWATER	MT. RORAH	COAL	1.3	735.0	

MAPID: 05902823000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 380' S line, 330' W line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100055 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.80992 **DATE COLLECTED:** 8 / 0 / 1962

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2023.0 **LOG TYPE:** Electric Log

SOURCE: HUMBLE OIL & REF. CO., S INMAN UNIT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-102.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	454.0	
-148.0	CARBONDALE	SURVANT	COAL	1.6	500.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	569.0	
-283.0	CARBONDALE	DEKOVEN	COAL	4.0	635.0	
-283.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	635.0	
-310.0	CARBONDALE	DAVIS	COAL	4.0	662.0	
-352.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	704.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-388.0	TRADEWATER	STONEFORT	LIMESTONE	1.8	740.0	

MAPID: 05903585000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SW SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100791 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.805686 **DATE COLLECTED:** 11 / 9 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 422.1 **LOG TYPE:** Multiple log types

SOURCE: PEABODY COAL CO. P-1060-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	124.0	0.0	
-			SHALE	113.0	124.0	
-	CARBONDALE	DANVILLE	COAL	0.8	237.0	
-	CARBONDALE		SHALE	8.2	237.8	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	246.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	252.5	
-	CARBONDALE		BLACK SHALE	10.0	277.5	
-	CARBONDALE	HERRIN	COAL	2.3	287.5	
-	CARBONDALE		UNDERCLAY	1.3	289.8	
-	CARBONDALE		LIMESTONE	1.1	291.1	
-	CARBONDALE		SHALE	45.3	292.2	
-	CARBONDALE	BRIAR HILL	COAL	1.8	337.5	ORIGINAL LOG ILLEGIBLE
-	CARBONDALE		SHALE	4.7	339.3	THICK & DEPTHS MAYBE WRONG
-	CARBONDALE		SANDSTONE	12.0	344.0	THICK & DEPTHS MAYBE WRONG
-	CARBONDALE		SHALE	-	356.0	THICK & DEPTHS MAYBE WRONG
-	CARBONDALE		UNKNOWN	-		THICK & DEPTHS MAYBE WRONG
-	CARBONDALE	ST. DAVID	LIMESTONE	0.8	408.1	START OF CORE STUDY
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	408.9	
-	CARBONDALE		SHALE	1.5	411.2	
-	CARBONDALE	SPRINGFIELD	COAL	6.1	412.6	
-	CARBONDALE		UNDERCLAY	3.4	418.7	

MAPID: 05903734000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2640' N line, 1980' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094209 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.812552 **DATE COLLECTED:** 7 / 28 / 1970

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 375.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1007-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION G-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	114.8	0.0	
-	MODESTO		SHALE	88.7	114.8	
-	CARBONDALE	DANVILLE	COAL	2.0	203.5	
-	CARBONDALE		SHALE	8.0	205.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	213.5	
-	CARBONDALE		SHALE	3.2	219.1	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	10.7	222.3	
-	CARBONDALE		SHALE	10.6	233.0	
-	CARBONDALE	BRERETON	LIMESTONE	0.5	243.6	
-	CARBONDALE	ANNA	DARK SHALE	7.6	244.1	
-	CARBONDALE	HERRIN	COAL	2.4	251.7	
-	CARBONDALE		SHALE	4.8	254.1	
-	CARBONDALE		LIMESTONE	1.5	258.9	
-	CARBONDALE		SHALE	42.3	260.4	
-	CARBONDALE	BRIAR HILL	COAL	1.8	302.7	
-	CARBONDALE		SHALE	18.0	304.5	
-	CARBONDALE		LIMESTONE	0.6	322.5	
-	CARBONDALE		SANDSTONE	2.9	323.1	
-	CARBONDALE		SHALE	39.2	326.0	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.5	365.2	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	365.6	
-	CARBONDALE	SPRINGFIELD	COAL	5.6	368.0	
-	CARBONDALE		SHALE	1.5	373.6	

MAPID: 05903734000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2640' N line, 1980' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.094209 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.812552 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 254.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. P-1007-C **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
150.2	CARBONDALE	DANVILLE	COAL	2.0	203.8	
148.2	CARBONDALE		SILTY SHALE	8.0	205.8	
140.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	213.8	
134.6	CARBONDALE	LAWSON	GRAY SHALE	3.2	219.4	
131.4	CARBONDALE	LAWSON	SANDSTONE	10.7	222.6	
120.7	CARBONDALE	LAWSON	GRAY SHALE	10.6	233.3	
110.1	CARBONDALE	BRERETON	LIMESTONE	0.5	243.9	
109.6	CARBONDALE	ANNA	BLACK SHALE	7.6	244.4	
102.0	CARBONDALE	HERRIN	COAL	2.4	252.0	

MAPID: 05902930000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' S line, 330' W line of SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.054388 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.79686 **DATE COLLECTED:** 1 / 0 / 1964
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2925.0 **LOG TYPE:** Electric Log
SOURCE: NOVAK, ELMER M., STINSON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-232.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	578.0	
-274.0	CARBONDALE	SURVANT	COAL	0.8	620.0	
-336.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-399.0	CARBONDALE	DEKOVEN	COAL	5.0	745.0	
-399.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	745.0	
-423.0	CARBONDALE	DAVIS	COAL	3.0	769.0	
-459.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	805.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902930000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2310' S line, 330' W line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.054388 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.79686 **DATE COLLECTED:** 1 / 0 / 1964

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1697.0 **LOG TYPE:** Electric Log

SOURCE: NOVAK, ELMER M. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1351.0	BASE OF PENN.		UNCLASSIFIED	-	1697.0	

MAPID: 05903524000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2640' N line, 660' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.062453 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.793756 **DATE COLLECTED:** 6 / 29 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 543.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1040-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION C-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	123.5	0.0	
-			SHALE	3.5	123.5	
-			LIMESTONE	2.0	127.0	
-			SANDSTONE	11.0	129.0	
-			SHALE	26.2	140.0	
-			LIMESTONE	2.0	166.2	
-			CLAYSTONE & SHALE	1.3	168.2	UNDERCLAY
-			SANDSTONE	30.0	169.5	
-	MODESTO		SANDSTONE/SHALE	55.5	199.5	
-			SHALE	124.0	255.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	379.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	386.0	
-	CARBONDALE	ANVIL ROCK	SHALE	14.0	393.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	2.8	407.0	
-	CARBONDALE	BRERETON	LIMESTONE	2.7	409.8	
-	CARBONDALE	ANNA	BLACK SHALE	3.0	412.5	
-	CARBONDALE	HERRIN	COAL	4.2	415.5	
-	CARBONDALE		UNDERCLAY	1.8	419.7	
-	CARBONDALE		CALCAREOUS SANDSTONE	12.0	421.5	
-	CARBONDALE		SHALE	4.0	433.5	
-	CARBONDALE		SANDSTONE	10.0	437.5	
-	CARBONDALE		SHALE	23.5	447.5	
-	CARBONDALE	BRIAR HILL	COAL	2.0	471.0	
-	CARBONDALE		SANDSTONE	31.2	473.0	
-	CARBONDALE		SANDSTONE/SHALE	11.0	504.2	
-	CARBONDALE		SHALE	8.3	515.2	
-	CARBONDALE		SHALE	11.2	523.5	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.3	534.7	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	534.9	
-	CARBONDALE	SPRINGFIELD	COAL	4.8	536.2	
-	CARBONDALE		CLAYSTONE & SHALE	2.4	541.0	FROM CORE STUDY

MAPID: 05903524000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2640' N line, 660' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.062453 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.793756 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 420.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1040-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
31.5	CARBONDALE		GRAY SHALE	71.0	308.5	
-39.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	379.5	
-46.5	CARBONDALE	LAWSON	SANDSTONE	7.0	386.5	
-53.5	CARBONDALE	LAWSON	GRAY SHALE	14.0	393.5	
-67.5	CARBONDALE	LAWSON	SANDSTONE	2.8	407.5	
-70.3	CARBONDALE	BRERETON	LIMESTONE	2.7	410.3	
-73.0	CARBONDALE	ANNA	BLACK SHALE	3.0	413.0	
-76.0	CARBONDALE	HERRIN	COAL	4.2	416.0	

MAPID: 05900289000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.081968 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791418 **DATE COLLECTED:** 8 / 0 / 1941

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3047.0 **LOG TYPE:** Electric Log

SOURCE: MARTIN R B-ILL OIL, AGNEW W **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-316.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	662.0	
-364.0	CARBONDALE	SURVANT	COAL	1.3	710.0	
-414.0	CARBONDALE	COLCHESTER	COAL	0.5	760.0	
-474.0	CARBONDALE	DEKOVEN	COAL	5.0	820.0	
-474.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	820.0	
-499.0	CARBONDALE	DAVIS	COAL	4.0	845.0	
-534.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	880.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-542.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	888.0	

MAPID: 05900289000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.081968 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.791418 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 3430.0 **LOG TYPE:**
SOURCE: MARTIN R B, AGNEW W 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-129.0	CARBONDALE	HERRIN	COAL	3.0	472.0	
-246.0	CARBONDALE	SPRINGFIELD	COAL	4.0	589.0	

MAPID: 05902908000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.07271 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.796874 **DATE COLLECTED:** 6 / 0 / 1963
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 3031.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG., AGNEW W W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-307.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	652.0	
-300.0	CARBONDALE	SURVANT	COAL	1.3	645.0	
-414.0	CARBONDALE	COLCHESTER	COAL	0.5	759.0	
-480.0	CARBONDALE	DEKOVEN	COAL	4.0	825.0	
-480.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	825.0	
-505.0	CARBONDALE	DAVIS	COAL	3.5	850.0	
-537.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	882.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-565.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	910.0	

MAPID: 05902908000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.07271 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.796874 **DATE COLLECTED:** 6 / 0 / 1963
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1805.0 **LOG TYPE:** Electric Log
SOURCE: LOHMANN-JOHNSON DRLG. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-411.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	756.0	
-505.0	SPOON	DAVIS	UNCLASSIFIED	-	850.0	
-1460.0	BASE OF PENN.		UNCLASSIFIED	-	1805.0	

MAPID: 05903515000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 660' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080831 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.790495 **DATE COLLECTED:** 7 / 26 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 527.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1044-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	105.0	0.0	
-			SHALE	13.0	105.0	
-			SANDSTONE	7.0	118.0	
-			LIMESTONE	1.5	125.0	
-			SHALE	31.5	126.5	
-			SANDSTONE	2.5	158.0	
-			SHALE	72.0	160.5	
-			SANDSTONE	2.5	232.5	
-			SHALE & SANDSTONE	86.0	235.0	
-	MODESTO		SHALE	34.0	321.0	
-	CARBONDALE	DANVILLE	COAL	2.0	355.0	
-	CARBONDALE		UNDERCLAY	1.5	357.0	
-	CARBONDALE		SHALE	16.5	358.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	375.0	
-	CARBONDALE		SHALE	5.5	382.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	387.5	
-	CARBONDALE	BRERETON	LIMESTONE	2.7	399.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.8	401.7	
-	CARBONDALE	HERRIN	COAL	4.4	404.5	
-	CARBONDALE		UNDERCLAY	2.0	408.9	
-	CARBONDALE		LIMESTONE	1.8	410.9	
-	CARBONDALE		SANDSTONE	35.3	412.7	
-	CARBONDALE		SHALE	9.0	448.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	457.0	
-	CARBONDALE		SANDSTONE	20.0	459.0	
-	CARBONDALE		SHALE	38.1	479.0	
-	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.4	517.1	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	518.5	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	520.8	
-	CARBONDALE		UNDERCLAY	2.6	525.3	

MAPID: 05903515000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 660' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.080831 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.790495 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 410.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P1044C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-8.5	CARBONDALE	DANVILLE	COAL	2.0	356.5	
-10.5	CARBONDALE		SHALE & SANDSTONE	18.0	358.5	
-28.5	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	376.5	
-35.5	CARBONDALE	LAWSON	SILTY SHALE	5.5	383.5	
-41.0	CARBONDALE	LAWSON	SANDSTONE	11.5	389.0	
-52.5	CARBONDALE	BRERETON	LIMESTONE	2.7	400.5	
-55.2	CARBONDALE	ANNA	BLACK SHALE	2.8	403.2	
-58.0	CARBONDALE	HERRIN	COAL	4.4	406.0	

MAPID: 05903525000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 26 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083124 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.790504 **DATE COLLECTED:** 6 / 21 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 609.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1038-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	140.0	0.0	
-			SHALE	88.8	140.0	
-			LIMESTONE	1.0	228.8	
-			SANDSTONE	14.7	229.8	
-			SHALE	76.3	244.5	
-			LIMESTONE	2.7	320.8	
-			BLACK SHALE	3.0	323.5	
-			UNDERCLAY	1.5	326.5	
-			SANDSTONE	32.0	328.0	
-	MODESTO		SHALE	71.0	360.0	
-	CARBONDALE	DANVILLE	COAL	1.8	431.0	
-	CARBONDALE		UNDERCLAY	3.0	432.8	
-	CARBONDALE		SANDSTONE	10.7	435.8	
-	CARBONDALE		SHALE	3.5	446.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	450.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	454.0	
-	CARBONDALE		SHALE	6.5	470.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	476.5	
-	CARBONDALE	ANNA	BLACK SHALE	3.0	480.5	
-	CARBONDALE	HERRIN	COAL	3.0	483.5	
-	CARBONDALE		UNDERCLAY	4.5	486.5	
-	CARBONDALE		LIMESTONE	6.0	491.0	
-	CARBONDALE		SANDSTONE	18.0	497.0	
-	CARBONDALE		SHALE	20.5	515.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	535.5	
-	CARBONDALE		SHALE	5.0	537.5	
-	CARBONDALE		SANDSTONE	20.0	542.5	
-	CARBONDALE		SHALE	19.8	562.5	
-	CARBONDALE		SHALE	15.0	582.3	
-	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.3	597.3	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.4	598.6	
-	CARBONDALE	TURNER MINE	SHALE	0.6	602.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.3	602.6	
-	CARBONDALE		SHALE	2.0	607.8	

MAPID: 05901852000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 990' N line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097955 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.802498 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2064.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., LEWIS MABEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-518.0	CARBONDALE	SURVANT	COAL	1.3	868.0	
-620.0	CARBONDALE	COLCHESTER	COAL	0.5	970.0	
-748.0	CARBONDALE	DEKOVEN	COAL	3.0	1098.0	
-748.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1098.0	
-760.0	CARBONDALE	DAVIS	COAL	3.0	1110.0	
-793.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1143.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-812.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1162.0	

MAPID: 05901980000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100251 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.802482 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2075.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., LEWIS MABEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-158.0	CARBONDALE	SURVANT	COAL	1.3	508.0	
-212.0	CARBONDALE	COLCHESTER	COAL	0.5	562.0	
-273.0	CARBONDALE	DEKOVEN	COAL	3.5	623.0	
-273.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	623.0	
-300.0	CARBONDALE	DAVIS	COAL	4.0	650.0	
-343.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	693.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901981000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.095629 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.80432 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 2042.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO., LEWIS MABEL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-525.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	878.0	
-577.0	CARBONDALE	SURVANT	COAL	2.0	930.0	
-626.0	CARBONDALE	COLCHESTER	COAL	0.5	979.0	
-672.0	CARBONDALE	DEKOVEN	COAL	3.5	1025.0	
-672.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1025.0	
-695.0	CARBONDALE	DAVIS	COAL	3.8	1048.0	
-725.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	1078.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-742.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	1095.0	

MAPID: 05901981000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.095629 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.80432 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 1680.0 **LOG TYPE:** Electric Log

SOURCE: EASTERN PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1327.0	BASE OF PENN.		UNCLASSIFIED	-	1680.0	

MAPID: 05903516000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092208 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.797944 **DATE COLLECTED:** 6 / 14 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 756.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1033-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	117.5	0.0	
-			SHALE	6.5	117.5	
-			COAL	1.0	124.0	
-			CLAYSTONE	12.5	125.0	
-			SANDSTONE	17.5	137.5	
-			SHALE	204.5	155.0	THICKNESS ADJUSTED TO DEPTHS
-			SANDSTONE	19.0	359.5	
-			LIMESTONE	2.5	378.5	
-			SANDSTONE	7.5	381.0	
-			SHALE	85.2	388.5	
-			CALCAREOUS SANDSTONE	36.3	473.7	
-	MODESTO		SHALE	73.5	510.0	
-	CARBONDALE	DANVILLE	COAL	1.0	583.5	
-	CARBONDALE		UNDERCLAY	2.0	584.5	
-	CARBONDALE		SANDSTONE	3.5	586.5	
-	CARBONDALE		SHALE	7.7	590.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	597.7	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	18.3	601.7	
-	CARBONDALE		SHALE	4.7	620.0	
-	CARBONDALE		LIMESTONE	1.0	624.7	
-	CARBONDALE		BLACK SHALE	2.0	625.7	
-	CARBONDALE	BRERETON	LIMESTONE	1.0	627.7	
-	CARBONDALE	ANNA	BLACK SHALE	3.3	628.7	
-	CARBONDALE	HERRIN	COAL	3.2	632.0	
-	CARBONDALE		UNDERCLAY	4.8	635.2	
-	CARBONDALE		CALCAREOUS SANDSTONE	5.0	640.0	
-	CARBONDALE		SANDSTONE	20.0	645.0	
-	CARBONDALE		SHALE	18.0	665.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	683.0	
-	CARBONDALE		SHALE	5.0	684.5	
-	CARBONDALE		SANDSTONE	20.5	689.5	
-	CARBONDALE		SHALE	34.0	710.0	
-	CARBONDALE		CALCAREOUS SHALE	0.3	744.0	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.9	744.3	
-	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.3	745.2	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	745.5	
-	CARBONDALE	SPRINGFIELD	COAL	5.4	747.4	
-	CARBONDALE		SHALE	4.0	752.8	

MAPID: 05903516000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092208 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.797944 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 635.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P1033C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-233.5	CARBONDALE	DANVILLE	COAL	1.0	583.5	
-234.5	CARBONDALE		SHALE & SANDSTONE	13.2	584.5	
-247.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	597.7	
-251.7	CARBONDALE	LAWSON	SANDSTONE	18.3	601.7	
-270.0	CARBONDALE	LAWSON	GRAY SHALE	4.7	620.0	
-274.7	CARBONDALE	BRERETON	LIMESTONE	1.0	624.7	
-275.7	CARBONDALE	ANNA	BLACK SHALE	6.3	625.7	
-282.0	CARBONDALE	HERRIN	COAL	3.2	632.0	

MAPID: 05903526000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 0' S line, 2640' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092272 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.790551 **DATE COLLECTED:** 5 / 27 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 711.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1030-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	133.0	0.0	
-			SHALE	20.0	133.0	
-			BLACK SHALE	1.5	153.0	
-			SHALE	145.5	154.5	
-			LIMESTONE	1.0	300.0	
-			SANDSTONE	33.5	301.0	
-			SHALE	108.5	334.5	
-			SANDSTONE	4.0	443.0	
-			SHALE	56.0	447.0	
-	CARBONDALE	DANVILLE	COAL	1.0	503.0	
-	CARBONDALE		UNDERCLAY	1.0	504.0	
-	CARBONDALE		SANDSTONE	13.8	505.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	518.8	
-	CARBONDALE		SANDY SHALE	18.0	523.0	
-	CARBONDALE		SHALE	10.0	541.0	
-	CARBONDALE	ANNA	BLACK SHALE	3.5	551.0	
-	CARBONDALE	HERRIN	COAL	2.5	554.5	
-	CARBONDALE		UNDERCLAY	3.0	557.0	
-	CARBONDALE		CALCAREOUS SANDSTONE	5.0	560.0	
-	CARBONDALE		SHALE	36.5	565.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	601.5	
-	CARBONDALE		SHALE	8.0	603.0	
-	CARBONDALE		SANDSTONE	20.0	611.0	
-	CARBONDALE		SHALE	36.0	631.0	
-	CARBONDALE		CALCAREOUS SHALE	0.9	667.0	
-	CARBONDALE		BLACK SHALE	1.6	667.9	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.4	669.5	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	670.9	
-	CARBONDALE	SPRINGFIELD	BONE COAL	0.2	672.3	
-	CARBONDALE	SPRINGFIELD	COAL	5.1	672.5	
-	CARBONDALE		CALCAREOUS SHALE	4.0	677.6	
-	CARBONDALE		SANDSTONE	29.5	681.5	FISH TAILED

MAPID: 05903527000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 2640' N line, 660' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.085319 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.797942 **DATE COLLECTED:** 6 / 7 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 668.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1031-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	113.0	0.0	
-			SHALE	10.0	113.0	
-			BLACK SHALE	1.0	123.0	
-			SHALE	118.0	124.0	
-			BLACK SHALE	2.0	242.0	
-			COAL	0.8	244.0	
-			UNDERCLAY	2.2	244.8	
-			SANDSTONE	3.0	247.0	
-			SHALE	22.0	250.0	
-			SANDSTONE	12.0	272.0	
-			SHALE	47.5	284.0	
-			SANDSTONE	12.7	331.5	
-			ROCK	1.5	344.2	EXTRA HARD
-			SHALE	22.8	345.7	
-			SANDSTONE/SHALE	68.5	368.5	
-	MODESTO		SHALE	55.8	437.0	
-	CARBONDALE	DANVILLE	COAL	1.0	492.8	
-	CARBONDALE		UNDERCLAY	2.7	493.8	
-	CARBONDALE		SANDSTONE	2.0	496.5	
-	CARBONDALE		SHALE	6.5	498.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	505.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	18.2	509.8	
-	CARBONDALE		SHALE	5.3	528.0	
-	CARBONDALE	BRERETON	LIMESTONE	0.7	533.3	
-	CARBONDALE		SHALE	1.5	534.0	
-	CARBONDALE	ANNA	BLACK SHALE	6.8	535.5	
-	CARBONDALE	HERRIN	COAL	3.0	542.3	
-	CARBONDALE		UNDERCLAY	3.0	545.3	
-	CARBONDALE		LIMESTONE	3.0	548.3	
-	CARBONDALE		CALCAREOUS SANDSTONE	6.7	551.3	
-	CARBONDALE		SANDSTONE	17.0	558.0	
-	CARBONDALE		SHALE	20.0	575.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	595.0	
-	CARBONDALE		SHALE	5.0	596.5	
-	CARBONDALE		SANDSTONE	20.0	601.5	
-	CARBONDALE		SHALE	34.0	621.5	
-	CARBONDALE		BLACK SHALE	1.8	655.5	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.3	657.3	

-	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	657.6
-	CARBONDALE		SHALE	1.1	658.9
-	CARBONDALE	SPRINGFIELD	COAL	5.1	660.0
-	CARBONDALE		SHALE	1.5	665.1
-	CARBONDALE		UNDERCLAY	0.5	666.6
-	CARBONDALE		SHALE	0.5	667.1
-	CARBONDALE		UNDERCLAY	0.1	667.6
-	CARBONDALE		SHALE	0.6	667.7

MAPID: 05903735000C **VERSION:** 1 **PROJECT:** ISGS97

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 27 **QUARTERS/FOOTAGES:** 0' N line, 2640' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092202 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.80523 **DATE COLLECTED:** 6 / 31 / 1970

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 797.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1009-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	117.8	0.0	
-			LIMESTONE	2.0	117.8	
-			SHALE	37.7	119.8	
-			COAL WITH SHALE	1.0	157.5	
-			SHALE	5.0	158.5	
-			SANDSTONE	15.0	163.5	
-			SHALE	67.0	178.5	
-			BLACK SHALE	1.0	245.5	
-			SHALE	10.0	246.5	
-			SANDSTONE/SHALE	33.5	256.5	
-			SHALE	75.0	290.0	
-			COAL	1.0	365.0	
-			SHALE	15.5	366.0	
-			CALCAREOUS SANDSTONE	28.5	381.5	
-			SHALE	34.5	410.0	
-			LIMESTONE	2.0	444.5	
-			SHALE	6.0	446.5	
-			SANDSTONE	2.0	452.5	
-			SHALE	161.7	454.5	
-	CARBONDALE	DANVILLE	COAL	1.4	616.2	
-	CARBONDALE		SANDSTONE	7.4	617.6	
-	CARBONDALE		SHALE	3.0	625.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	628.0	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	633.5	
-	CARBONDALE		SHALE	6.7	650.0	
-	CARBONDALE	BRERETON	LIMESTONE	1.3	656.7	
-	CARBONDALE		SHALE	0.5	658.0	
-	CARBONDALE	ANNA	BLACK SHALE	7.0	658.5	
-	CARBONDALE	HERRIN	COAL	3.7	665.5	
-	CARBONDALE		UNDERCLAY	4.1	669.2	
-	CARBONDALE		LIMESTONE	4.2	673.3	
-	CARBONDALE		SANDSTONE	22.5	677.5	
-	CARBONDALE		SANDY SHALE	19.3	700.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	719.3	
-	CARBONDALE		SANDSTONE	8.7	721.3	
-	CARBONDALE		SANDSTONE/SHALE	42.5	730.0	
-	CARBONDALE		SHALE	12.7	772.5	
-	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.1	785.2	

-	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	786.3	
-	CARBONDALE	SPRINGFIELD	BONE COAL	0.2	789.3	
-	CARBONDALE	SPRINGFIELD	COAL	3.8	789.5	
-	CARBONDALE	SPRINGFIELD	COAL	1.6	793.3	LOST
-	CARBONDALE		UNDERCLAY	3.0	794.9	

MAPID: 05900290000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.111671 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.800667 **DATE COLLECTED:** 7 / 0 / 1942

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2784.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PRODUCING, NATURAL RESOURCES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	453.0	
-162.0	CARBONDALE	SURVANT	COAL	0.8	510.0	
-224.0	CARBONDALE	COLCHESTER	COAL	0.5	572.0	
-282.0	CARBONDALE	DEKOVEN	COAL	5.0	630.0	
-282.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	630.0	
-309.0	CARBONDALE	DAVIS	COAL	4.0	657.0	
-342.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	690.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-368.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	716.0	
-394.0	TRADEWATER	MT. RORAH	COAL	1.2	742.0	

MAPID: 05900290000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.111671 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.800667 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:**

SOURCE: SOHIO PROD, NATRL RES 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
72.0	CARBONDALE	HERRIN	COAL	4.0	276.0	
-42.0	CARBONDALE	SPRINGFIELD	COAL	5.0	390.0	

MAPID: 05901014000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118674 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.7915 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2941.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., NATURAL RESOURCES **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-82.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	434.0	
-130.0	CARBONDALE	SURVANT	COAL	2.5	482.0	
-190.0	CARBONDALE	COLCHESTER	COAL	0.5	542.0	
-251.0	CARBONDALE	DEKOVEN	COAL	3.8	603.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	603.0	
-280.0	CARBONDALE	DAVIS	COAL	5.0	632.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	663.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-333.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	685.0	
-358.0	TRADEWATER	MT. RORAH	COAL	1.3	710.0	

MAPID: 05901622000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.109468 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793343 **DATE COLLECTED:** 9 / 0 / 1952

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2859.0 **LOG TYPE:** Electric Log

SOURCE: MCGUIRE & VANDENBARK, KURTZ ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-75.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	435.0	
-132.0	CARBONDALE	SURVANT	COAL	1.4	492.0	
-195.0	CARBONDALE	COLCHESTER	COAL	0.5	555.0	
-255.0	CARBONDALE	DEKOVEN	COAL	4.0	615.0	
-255.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-278.0	CARBONDALE	DAVIS	COAL	5.0	638.0	
-316.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	676.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-342.0	TRADEWATER	STONEFORT	LIMESTONE	1.6	702.0	
-366.0	TRADEWATER	MT. RORAH	COAL	2.0	726.0	

MAPID: 05901623000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104835 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.798825 **DATE COLLECTED:** 7 / 0 / 1952

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log

SOURCE: INLAND PRODUCERS CO, PIELEMIER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-89.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	441.0	
-146.0	CARBONDALE	SURVANT	COAL	1.6	498.0	
-203.0	CARBONDALE	COLCHESTER	COAL	0.5	555.0	
-263.0	CARBONDALE	DEKOVEN	COAL	5.0	615.0	
-263.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	615.0	
-290.0	CARBONDALE	DAVIS	COAL	4.0	642.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	674.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901624000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 990' N line, 330' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.102548 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.802499 **DATE COLLECTED:** 11 / 0 / 1952

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2009.0 **LOG TYPE:** Electric Log

SOURCE: INLAND PRODUCERS CO, PIELEMIER **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-150.0	CARBONDALE	SURVANT	COAL	1.3	499.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	558.0	
-272.0	CARBONDALE	DEKOVEN	COAL	3.8	621.0	
-272.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	621.0	
-293.0	CARBONDALE	DAVIS	COAL	3.0	642.0	
-330.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	679.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-336.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	685.0	
-389.0	TRADEWATER	MT. RORAH	COAL	1.2	738.0	

MAPID: 05902024000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.107088 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.804327 **DATE COLLECTED:** 8 / 0 / 1956
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2902.0 **LOG TYPE:** Electric Log
SOURCE: SKILES OIL CORP, PIELEMEIER ET AL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	438.0	
-139.0	CARBONDALE	SURVANT	COAL	1.6	484.0	
-205.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-265.0	CARBONDALE	DEKOVEN	COAL	4.0	610.0	
-265.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	610.0	
-290.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-323.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	668.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902162000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1650' S line, 330' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118607 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.795143 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: DUNCAN, WALTER **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1319.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 05902162000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1650' S line, 330' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118607 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.795143 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
131.0	CARBONDALE	DANVILLE	COAL	2.0	210.0	
129.0	CARBONDALE		SILTY SHALE	10.0	212.0	
119.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	222.0	
115.0	CARBONDALE	LAWSON	SHALE	20.0	226.0	
95.0	CARBONDALE	ANNA	BLACK SHALE	2.0	246.0	
93.0	CARBONDALE	HERRIN	COAL	5.0	248.0	

MAPID: 05902162000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 1650' S line, 330' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118607 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.795143 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 341.0 **LOGGED (FT.):** 2009.0 **LOG TYPE:** Electric Log

SOURCE: DUNCAN, WALTER, NATURAL RESOURCES 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-89.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	430.0	
-144.0	CARBONDALE	SURVANT	COAL	0.8	485.0	
-202.0	CARBONDALE	COLCHESTER	COAL	0.5	543.0	
-261.0	CARBONDALE	DEKOVEN	COAL	4.0	602.0	
-261.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	602.0	
-289.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	662.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-347.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	688.0	
-361.0	TRADEWATER	MT. RORAH	COAL	1.3	702.0	

MAPID: 05902825000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11619 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804341 **DATE COLLECTED:** 10 / 0 / 1962

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2453.0 **LOG TYPE:** Electric Log

SOURCE: HOLSAPPLE & PURSLEY, KIRKPATRICK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-94.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	438.0	
-141.0	CARBONDALE	SURVANT	COAL	2.0	485.0	
-215.0	CARBONDALE	COLCHESTER	COAL	0.5	559.0	
-284.0	CARBONDALE	DEKOVEN	COAL	3.0	628.0	
-284.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	628.0	
-308.0	CARBONDALE	DAVIS	COAL	3.5	652.0	
-341.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	685.0	40% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-366.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	710.0	

MAPID: 05900291000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120829 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.798853 **DATE COLLECTED:** 8 / 0 / 1946

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2933.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-114.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-154.0	CARBONDALE	SURVANT	COAL	1.2	500.0	
-229.0	CARBONDALE	COLCHESTER	COAL	0.5	575.0	
-294.0	CARBONDALE	DEKOVEN	COAL	5.0	640.0	
-294.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	640.0	
-316.0	CARBONDALE	DAVIS	COAL	5.5	662.0	
-354.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	700.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-374.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	720.0	
-404.0	TRADEWATER	MT. RORAH	COAL	1.6	750.0	

MAPID: 05900291000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120829 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.798853 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**

SOURCE: HALBERT R, OSBORNE L 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
71.0	CARBONDALE	HERRIN	COAL	1.5	275.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	5.0	393.0	

MAPID: 05902018000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.127856 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791646 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 2930.0 **LOG TYPE:** Electric Log

SOURCE: LESTER JOHN L, OSBORNE L E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-101.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-161.0	CARBONDALE	SURVANT	COAL	1.6	510.0	
-217.0	CARBONDALE	COLCHESTER	COAL	0.5	566.0	
-270.0	CARBONDALE	DEKOVEN	COAL	3.0	619.0	
-270.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	619.0	
-294.0	CARBONDALE	DAVIS	COAL	4.0	643.0	
-326.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	675.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-349.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	698.0	
-373.0	TRADEWATER	MT. RORAH	COAL	1.4	722.0	

MAPID: 05902018000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.127856 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.791646 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 271.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
133.0	CARBONDALE	DANVILLE	COAL	2.0	216.0	
131.0	CARBONDALE		SILTY SHALE	11.0	218.0	
120.0	CARBONDALE	ALLENBY	COAL	1.0	229.0	
119.0	CARBONDALE		CLAYSTONE & SHALE	5.0	230.0	
114.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	235.0	
109.0	CARBONDALE	LAWSON	SILTY SHALE	24.0	240.0	
85.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	264.0	
82.0	CARBONDALE	ANNA	BLACK SHALE	1.0	267.0	
81.0	CARBONDALE	HERRIN	COAL	3.0	268.0	

MAPID: 05902070000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.130012 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.79533 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2061.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., TUCKER ETHEL A1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	480.0	
-186.0	CARBONDALE	SURVANT	COAL	1.2	530.0	
-246.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-310.0	CARBONDALE	DEKOVEN	COAL	4.0	654.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	654.0	
-332.0	CARBONDALE	DAVIS	COAL	4.0	676.0	
-366.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	710.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-389.0	TRADEWATER	STONEFORT	LIMESTONE	1.4	733.0	
-420.0	TRADEWATER	MT. RORAH	COAL	1.3	764.0	

MAPID: 05902829000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1015' S line, 330' W line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136848 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793703 **DATE COLLECTED:** 11 / 0 / 1962

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2067.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., CONN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-147.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-212.0	CARBONDALE	SURVANT	COAL	1.3	560.0	
-254.0	CARBONDALE	COLCHESTER	COAL	0.5	602.0	
-322.0	CARBONDALE	DEKOVEN	COAL	3.0	670.0	
-322.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	670.0	
-346.0	CARBONDALE	DAVIS	COAL	4.0	694.0	
-378.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	726.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-403.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	751.0	
-430.0	TRADEWATER	MT. RORAH	COAL	1.3	778.0	

MAPID: 05902829000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1015' S line, 330' W line of SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136848 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.793703 **DATE COLLECTED:** 11 / 0 / 1962
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-254.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	602.0	
-348.0	SPOON	DAVIS	UNCLASSIFIED	-	696.0	
-1312.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 05900292000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.139081 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.799088 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 3460.0 **LOG TYPE:**
SOURCE: RYAN OC ET, TATE L C 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
6.0	CARBONDALE	HERRIN	COAL	3.0	340.0	
-114.0	CARBONDALE	SPRINGFIELD	COAL	5.0	460.0	

MAPID: 05900292000C **VERSION:** 2 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.139081 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.799088 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2944.0 **LOG TYPE:** Survey Sample Study
SOURCE: RYAN OIL CO., ETAL **WELL TYPE:** Oil and Gas Test
COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			NO RECORD	0.0	0.0	

MAPID: 05900292000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.139081 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.799088 **DATE COLLECTED:** 7 / 0 / 1943

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 819.0 **LOG TYPE:** Drillers Log

SOURCE: RYAN OIL CO. 1 **WELL TYPE:** Coal Test

COMMENT: COAL DIVISION CONTROL WELL #155

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
346.0			NO RECORD	160.0	0.0	
186.0			SILTSTONE	132.0	160.0	WITH SHALE
54.0			BLACK SHALE & COAL	3.0	292.0	
51.0	CARBONDALE		UNDERCLAY	2.0	295.0	
49.0	CARBONDALE		SHALE	10.0	297.0	
39.0	CARBONDALE		LIMESTONE	5.0	307.0	
34.0	CARBONDALE		SHALE	1.0	312.0	BLACK, WITH COAL
33.0	CARBONDALE		UNDERCLAY	2.0	313.0	
31.0	CARBONDALE		SANDSTONE	7.0	315.0	
24.0			SHALE	14.0	322.0	
10.0			BLACK SHALE	13.0	336.0	
-3.0			COAL	1.0	349.0	THICKNESS ESTIMATED
-4.0			UNDERCLAY	4.0	350.0	
-8.0			SILTSTONE	12.0	354.0	
-20.0			SILTSTONE	11.0	366.0	WITH SHALE, LIMESTONE, SANDSTONE
-31.0			SHALE	15.0	377.0	
-46.0			BLACK SHALE & COAL	2.0	392.0	
-48.0			SHALE	5.0	394.0	
-53.0			SHALE & SANDSTONE	15.0	399.0	
-68.0			SHALE	47.0	414.0	
-115.0			BLACK SHALE	1.0	461.0	
-116.0			COAL	3.0	462.0	THICKNESS ESTIMATED
-119.0			SHALE	4.0	465.0	
-123.0			LIMESTONE	3.0	469.0	
-126.0			SANDSTONE	8.0	472.0	
-134.0			SANDSTONE/SHALE	34.0	480.0	
-168.0			SHALE	12.0	514.0	
-180.0			BLACK SHALE	4.0	526.0	
-184.0			SHALE	2.0	530.0	
-186.0			BLACK SHALE & COAL	1.0	532.0	
-187.0			COAL	2.0	533.0	THICKNESS ESTIMATED
-189.0			UNDERCLAY	1.0	535.0	
-190.0			SANDSTONE	24.0	536.0	SILTY
-214.0			SILTSTONE	6.0	560.0	
-220.0			SHALE	14.0	566.0	
-234.0			COAL	1.0	580.0	THICKNESS ESTIMATED
-235.0			UNDERCLAY	1.0	581.0	
-236.0			SHALE	5.0	582.0	
-241.0			SHALE & SANDSTONE	4.0	587.0	

-245.0	SHALE	2.0	591.0	
-247.0	COAL	1.0	593.0	THICKNESS ESTIMATED
-248.0	SHALE	2.0	594.0	
-250.0	SANDSTONE	20.0	596.0	
-270.0	SANDSTONE/SHALE	30.0	616.0	
-300.0	BLACK SHALE	1.0	646.0	
-301.0	CLAYSTONE & SHALE	3.0	647.0	UNDERCLAY
-304.0	SANDSTONE	16.0	650.0	
-320.0	GRAY & BLACK SHALE	3.0	666.0	
-323.0	SANDSTONE	15.0	669.0	
-338.0	SHALE	31.0	684.0	
-369.0	BLACK SHALE	1.0	715.0	
-370.0	COAL	2.0	716.0	THICKNESS ESTIMATED
-372.0	UNDERCLAY	1.0	718.0	
-373.0	SANDSTONE	4.0	719.0	
-377.0	SHALE	14.0	723.0	
-391.0	BLACK SHALE	2.0	737.0	
-393.0	COAL	3.0	739.0	THICKNESS ESTIMATED
-396.0	UNDERCLAY	2.0	742.0	
-398.0	SHALE	3.0	744.0	
-401.0	SANDSTONE	9.0	747.0	
-410.0	SHALE	10.0	756.0	
-420.0	BLACK SHALE	10.0	766.0	
-430.0	SHALE	17.0	776.0	
-447.0	LIMESTONE	2.0	793.0	
-449.0	SHALE	2.0	795.0	
-451.0	BLACK SHALE	6.0	797.0	
-457.0	SHALE	2.0	803.0	
-459.0	COAL	2.0	805.0	THICKNESS ESTIMATED
-461.0	UNDERCLAY	2.0	807.0	
-463.0	SILTSTONE	10.0	809.0	NO COAL RECORDED DEEPER

MAPID: 05901251000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152879 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.793776 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2945.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
74.0	CARBONDALE	DANVILLE	COAL	-	282.0	
61.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	295.0	
51.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	7.0	305.0	
26.0	CARBONDALE	HERRIN	COAL	3.0	330.0	
16.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	14.0	340.0	
-20.0	CARBONDALE	BRIAR HILL	COAL	-	376.0	
-31.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	21.0	387.0	
-85.0	CARBONDALE	SPRINGFIELD	COAL	5.0	441.0	BLACK SHALE ROOF
-160.0	CARBONDALE	HOUCHIN CREEK	COAL	-	516.0	

MAPID: 05901251000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152879 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.793776 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
74.0	CARBONDALE	DANVILLE	COAL	3.0	282.0	
71.0	CARBONDALE		SHALE & SANDSTONE	10.0	285.0	
61.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	3.0	295.0	
58.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	13.0	298.0	
45.0	CARBONDALE	LAWSON	SILTY SHALE	14.0	311.0	
31.0	CARBONDALE	BRERETON	CALCAREOUS SHALE	3.0	325.0	
28.0	CARBONDALE	ANNA	BLACK SHALE	1.0	328.0	
27.0	CARBONDALE	HERRIN	COAL	3.0	329.0	

MAPID: 05901251000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 990' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.152879 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.793776 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2945.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, ABELL MARY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-209.0	CARBONDALE	SURVANT	COAL	1.3	565.0	
-274.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-324.0	CARBONDALE	DEKOVEN	COAL	4.0	680.0	
-324.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	680.0	
-350.0	CARBONDALE	DAVIS	COAL	4.0	706.0	
-392.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	748.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-444.0	TRADEWATER	MT. RORAH	COAL	2.0	800.0	

MAPID: 05901628000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.150505 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.799221 **DATE COLLECTED:** 6 / 0 / 1951

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2837.0 **LOG TYPE:** Electric Log

SOURCE: FERRALL & RIPLEY, MALONEY ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	532.0	
-214.0	CARBONDALE	SURVANT	COAL	1.3	576.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-340.0	CARBONDALE	DEKOVEN	COAL	3.0	702.0	
-340.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	702.0	
-362.0	CARBONDALE	DAVIS	COAL	4.0	724.0	
-393.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	755.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901696000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804618 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2861.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-186.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	545.0	
-237.0	CARBONDALE	SURVANT	COAL	2.5	596.0	
-290.0	CARBONDALE	COLCHESTER	COAL	0.5	649.0	
-361.0	CARBONDALE	DEKOVEN	COAL	4.0	720.0	
-361.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	720.0	
-381.0	CARBONDALE	DAVIS	COAL	4.0	740.0	
-413.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	772.0	
-451.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	810.0	
-471.0	TRADEWATER	MT. RORAH	COAL	1.3	830.0	

MAPID: 05901696000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145853 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.804618 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1710.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1351.0	BASE OF PENN.		UNCLASSIFIED	-	1710.0	

MAPID: 05901803000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.154977 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.804745 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2834.0 **LOG TYPE:** Electric Log

SOURCE: CARTER OIL COMPANY, DOLAN J L COMM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-230.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	600.0	
-270.0	CARBONDALE	SURVANT	COAL	1.0	640.0	
-340.0	CARBONDALE	COLCHESTER	COAL	0.5	710.0	
-400.0	CARBONDALE	DEKOVEN	COAL	3.0	770.0	
-400.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	770.0	
-427.0	CARBONDALE	DAVIS	COAL	4.0	797.0	
-460.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	830.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-475.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	845.0	
-512.0	TRADEWATER	MT. RORAH	COAL	2.0	882.0	

MAPID: 05902020000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.148335 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791917 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2771.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., DRONE CLAUDE 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-167.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	528.0	
-214.0	CARBONDALE	SURVANT	COAL	1.6	575.0	
-271.0	CARBONDALE	COLCHESTER	COAL	0.5	632.0	
-329.0	CARBONDALE	DEKOVEN	COAL	4.0	690.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	690.0	
-354.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	745.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-411.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	772.0	
-431.0	TRADEWATER	MT. RORAH	COAL	2.0	792.0	

MAPID: 05902073000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 430' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.141107 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.791856 **DATE COLLECTED:** 12 / 0 / 1956

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2050.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., TUCKER ETHEL 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	515.0	
-218.0	CARBONDALE	SURVANT	COAL	1.6	575.0	
-267.0	CARBONDALE	COLCHESTER	COAL	0.5	624.0	
-333.0	CARBONDALE	DEKOVEN	COAL	4.0	690.0	
-333.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	690.0	
-359.0	CARBONDALE	DAVIS	COAL	4.0	716.0	
-391.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	748.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-413.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	770.0	
-438.0	TRADEWATER	MT. RORAH	COAL	2.0	795.0	

MAPID: 05902481000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.148281 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.795555 **DATE COLLECTED:** 9 / 0 / 1959

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2049.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., DRONE KATHERINE 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-162.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	528.0	
-204.0	CARBONDALE	SURVANT	COAL	1.6	570.0	
-269.0	CARBONDALE	COLCHESTER	COAL	0.5	635.0	
-339.0	CARBONDALE	DEKOVEN	COAL	3.0	705.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	705.0	
-364.0	CARBONDALE	DAVIS	COAL	4.0	730.0	
-396.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	762.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-424.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	790.0	
-447.0	TRADEWATER	MT. RORAH	COAL	1.6	813.0	

MAPID: 05901017000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.146176 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.782764 **DATE COLLECTED:** 11 / 0 / 1950

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2867.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK ET AL, BRUGGER ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-140.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-195.0	CARBONDALE	SURVANT	COAL	3.0	555.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	617.0	
-327.0	CARBONDALE	DEKOVEN	COAL	4.0	687.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	687.0	
-352.0	CARBONDALE	DAVIS	COAL	3.0	712.0	
-382.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	742.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-406.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	766.0	
-428.0	TRADEWATER	MT. RORAH	COAL	2.0	788.0	

MAPID: 05901629000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.155442 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777407 **DATE COLLECTED:** 12 / 0 / 1954

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2761.0 **LOG TYPE:** Electric Log

SOURCE: WHITTINGTON TOM K, BRUGGER ARTHUR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	590.0	
-281.0	CARBONDALE	SURVANT	COAL	2.0	640.0	
-346.0	CARBONDALE	COLCHESTER	COAL	0.5	705.0	
-406.0	CARBONDALE	DEKOVEN	COAL	3.0	765.0	
-406.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	765.0	
-431.0	CARBONDALE	DAVIS	COAL	4.0	790.0	
-464.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	823.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-486.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	845.0	
-511.0	TRADEWATER	MT. RORAH	COAL	2.0	870.0	

MAPID: 05902037000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.153059 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.78284 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1595.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1228.0	BASE OF PENN.		UNCLASSIFIED	-	1595.0	

MAPID: 05902037000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.153059 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.78284 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
30.0	CARBONDALE	DANVILLE	COAL	3.0	337.0	
27.0	CARBONDALE		SHALE & SANDSTONE	10.0	340.0	
17.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	350.0	
14.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	26.0	353.0	
-12.0	CARBONDALE	BRERETON	CALCAREOUS SHALE	3.0	379.0	
-15.0	CARBONDALE	HERRIN	COAL	3.0	382.0	

MAPID: 05902037000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.153059 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.78284 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2805.0 **LOG TYPE:** Electric Log

SOURCE: COY OIL, INC., BRUGGER ARTHUR 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-203.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	570.0	
-253.0	CARBONDALE	SURVANT	COAL	2.0	620.0	
-315.0	CARBONDALE	COLCHESTER	COAL	0.5	682.0	
-381.0	CARBONDALE	DEKOVEN	COAL	4.0	748.0	
-381.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	748.0	
-406.0	CARBONDALE	DAVIS	COAL	4.0	773.0	
-435.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	802.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-460.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	827.0	
-485.0	TRADEWATER	MT. RORAH	COAL	2.0	852.0	

MAPID: 05902510000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 390' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.139189 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.789854 **DATE COLLECTED:** 7 / 0 / 1960

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2083.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., GOLDEN ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-193.0	CARBONDALE	SURVANT	COAL	1.6	552.0	
-246.0	CARBONDALE	COLCHESTER	COAL	0.5	605.0	
-313.0	CARBONDALE	DEKOVEN	COAL	3.0	672.0	
-313.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	672.0	
-341.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-373.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	732.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-396.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	755.0	
-421.0	TRADEWATER	MT. RORAH	COAL	1.6	780.0	

MAPID: 05924372000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' S line, 33' E line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.151944 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.788299 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Nuclear Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	522.0	
-204.0	CARBONDALE	SURVANT	COAL	2.0	570.0	
-264.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-320.0	CARBONDALE	DEKOVEN	COAL	4.0	686.0	
-320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	686.0	
-349.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-390.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	756.0	24% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-411.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	777.0	
-434.0	TRADEWATER	MT. RORAH	COAL	2.0	800.0	

MAPID: 05900293000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.134741 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.782617 **DATE COLLECTED:** 11 / 0 / 1942

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2959.0 **LOG TYPE:** Electric Log

SOURCE: KINGWOOD OIL CO, DODGE HENRY P **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-186.0	CARBONDALE	SURVANT	COAL	0.5	545.0	
-256.0	CARBONDALE	COLCHESTER	COAL	0.5	615.0	
-319.0	CARBONDALE	DEKOVEN	COAL	4.0	678.0	
-319.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	678.0	
-343.0	CARBONDALE	DAVIS	COAL	4.0	702.0	
-376.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	735.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-397.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	756.0	
-431.0	TRADEWATER	MT. RORAH	COAL	2.0	790.0	

MAPID: 05900293000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.134741 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.782617 **DATE COLLECTED:** 0 / 0 / 1942

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 3590.0 **LOG TYPE:**

SOURCE: KINGWOODOC, DODGE H P 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
54.0	CARBONDALE	HERRIN	COAL	-	305.0	
-61.0	CARBONDALE	SPRINGFIELD	COAL	6.0	420.0	

MAPID: 05901019000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.12564 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.784311 **DATE COLLECTED:** 3 / 0 / 1948

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2749.0 **LOG TYPE:** Electric Log

SOURCE: SOHIO PETROLEUM CO., GOETZMAN COMM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-105.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	460.0	
-168.0	CARBONDALE	SURVANT	COAL	1.6	523.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	576.0	
-283.0	CARBONDALE	DEKOVEN	COAL	4.0	638.0	
-283.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	638.0	
-313.0	CARBONDALE	DAVIS	COAL	5.0	668.0	
-345.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	700.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-371.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	726.0	
-403.0	TRADEWATER	MT. RORAH	COAL	1.3	758.0	

MAPID: 05901631000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.123407 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.780637 **DATE COLLECTED:** 1 / 0 / 1955

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2866.0 **LOG TYPE:** Electric Log

SOURCE: VANDERBACK, ETAL, DODGE-AVERILL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-147.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-203.0	CARBONDALE	SURVANT	COAL	2.5	564.0	
-257.0	CARBONDALE	COLCHESTER	COAL	2.0	618.0	
-314.0	CARBONDALE	DEKOVEN	COAL	4.0	675.0	
-314.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	675.0	
-344.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-379.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	740.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-404.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	765.0	
-429.0	TRADEWATER	MT. RORAH	COAL	2.0	790.0	

MAPID: 05902144000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.130196 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.777069 **DATE COLLECTED:** 9 / 0 / 1959

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2955.0 **LOG TYPE:** Electric Log

SOURCE: CLARK & CLARK PETROL, UNION CENT LIFE IN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-133.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-193.0	CARBONDALE	SURVANT	COAL	2.5	555.0	
-263.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-318.0	CARBONDALE	DEKOVEN	COAL	3.0	680.0	
-318.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	680.0	
-347.0	CARBONDALE	DAVIS	COAL	4.0	709.0	
-398.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	760.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-423.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	785.0	
-446.0	TRADEWATER	MT. RORAH	COAL	1.2	808.0	

MAPID: 05902144000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.130196 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.777069 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
105.5	CARBONDALE	DANVILLE	COAL	2.5	256.5	
103.0	CARBONDALE		SHALE & SANDSTONE	14.0	259.0	
89.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.0	273.0	
85.0	CARBONDALE	LAWSON	SILTY SHALE	25.0	277.0	
60.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	3.0	302.0	
57.0	CARBONDALE	ANNA	BLACK SHALE	1.0	305.0	
56.0	CARBONDALE	HERRIN	COAL	4.0	306.0	

MAPID: 05902402000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.123282 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.787919 **DATE COLLECTED:** 1 / 0 / 1959

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2872.0 **LOG TYPE:** Electric Log

SOURCE: KAPP, LOUIS H., JR., LYNCH LUCY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-96.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	450.0	
-156.0	CARBONDALE	SURVANT	COAL	2.0	510.0	
-209.0	CARBONDALE	COLCHESTER	COAL	0.5	563.0	
-274.0	CARBONDALE	DEKOVEN	COAL	4.0	628.0	
-274.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	628.0	
-300.0	CARBONDALE	DAVIS	COAL	4.0	654.0	
-331.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	685.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-356.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	710.0	
-384.0	TRADEWATER	MT. RORAH	COAL	1.3	738.0	

MAPID: 05902587000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 430' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136913 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.788419 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2058.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., GOLDEN COMM C- **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	493.0	
-194.0	CARBONDALE	SURVANT	COAL	2.0	552.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	603.0	
-315.0	CARBONDALE	DEKOVEN	COAL	3.0	673.0	
-324.0	CARBONDALE	LOWER DEKOVEN	COAL	1.5	682.0	
-340.0	CARBONDALE	DAVIS	COAL	4.0	698.0	
-372.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	730.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-395.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	753.0	
-427.0	TRADEWATER	MT. RORAH	COAL	2.0	785.0	

MAPID: 05902587000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** 430' S line, 330' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.136913 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.788419 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1635.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1277.0	BASE OF PENN.		UNCLASSIFIED	-	1635.0	

MAPID: 05901633000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.118803 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.784226 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2108.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK ET AL, HEATH L A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-90.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	455.0	
-147.0	CARBONDALE	SURVANT	COAL	2.5	512.0	
-204.0	CARBONDALE	COLCHESTER	COAL	0.5	569.0	
-262.0	CARBONDALE	DEKOVEN	COAL	4.0	627.0	
-262.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	627.0	
-289.0	CARBONDALE	DAVIS	COAL	4.0	654.0	
-323.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	688.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-352.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	717.0	

MAPID: 05902193000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.116437 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.787861 **DATE COLLECTED:** 1 / 0 / 1958
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1615.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1256.0	BASE OF PENN.		UNCLASSIFIED	-	1615.0	

MAPID: 05902193000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.116437 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.787861 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log
SOURCE: KNIGHT, PAUL S. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
103.0	CARBONDALE	HERRIN	COAL	2.0	256.0	
52.0	CARBONDALE	BRIAR HILL	COAL	-	307.0	
-19.0	CARBONDALE	SPRINGFIELD	COAL	4.0	378.0	BLACK SHALE & LIMESTONE ROOF
-80.0	CARBONDALE	HOUCHIN CREEK	COAL	-	439.0	

MAPID: 05902193000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.116437 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.787861 **DATE COLLECTED:** 1 / 0 / 1958

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., LYNCH **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-84.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	443.0	
-136.0	CARBONDALE	SURVANT	COAL	1.6	495.0	
-193.0	CARBONDALE	COLCHESTER	COAL	0.5	552.0	
-257.0	CARBONDALE	DEKOVEN	COAL	3.0	616.0	
-257.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	616.0	
-285.0	CARBONDALE	DAVIS	COAL	4.0	644.0	
-321.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	680.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-341.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	700.0	
-366.0	TRADEWATER	MT. RORAH	COAL	1.3	725.0	

MAPID: 05903555000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2490' S line, 2280' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.112045 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.782885 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 790.9 **LOG TYPE:** Survey Core Study

SOURCE: AMAX-AYRSHIRE NH-8 **WELL TYPE:** Coal Test

COMMENT: COPY INFO FROM HEADERS FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.0			UNKNOWN	407.0	0.0	
-58.0	CARBONDALE		CLAYSTONE	2.8	407.0	
-60.8	CARBONDALE		CLAYSTONE	1.2	409.8	LIGHT GRAY
-61.9	CARBONDALE		UNKNOWN	73.1	410.9	
-135.0	CARBONDALE		SILTY SHALE	8.0	484.0	
-143.0	CARBONDALE		SHALE	4.3	492.0	
-147.3	CARBONDALE		SHALE	1.5	496.3	
-148.8	CARBONDALE		BLACK SHALE	1.1	497.8	
-149.9	CARBONDALE		UNKNOWN	0.7	498.9	CORE REMOVED-COAL #5
-150.6	CARBONDALE		UNKNOWN	4.4	499.6	CORE REMOVED INCLUDES COAL #5
-155.0	CARBONDALE		CLAYSTONE	2.3	504.0	
-157.3	CARBONDALE		SANDSTONE	0.9	506.3	
-158.3	CARBONDALE		GRAY SANDSTONE	0.8	507.3	
-159.0	CARBONDALE		UNKNOWN	241.0	508.0	
-400.0	CARBONDALE		DARK SHALE	8.0	749.0	
-408.0	CARBONDALE		SHALE	2.0	757.0	
-410.0	CARBONDALE		BLACK SHALE	0.9	759.0	CANNALOIE
-410.9	CARBONDALE		BLACK SHALE	1.8	759.9	SLATY
-412.7	CARBONDALE		GRAY SHALE	1.9	761.7	
-414.6	CARBONDALE	DEKOVEN	COAL	1.3	763.6	
-415.9	CARBONDALE	DEKOVEN	COAL	0.3	764.9	
-416.3	CARBONDALE		CLAYSTONE	2.3	765.3	
-418.6	CARBONDALE		GRAY SHALE	7.4	767.6	
-426.0	CARBONDALE		DARK SHALE	4.8	775.0	
-430.8	CARBONDALE	DAVIS	COAL	0.8	779.8	
-431.6	TRADEWATER		CLAYSTONE	0.4	780.6	
-432.0	CARBONDALE		GRAY SANDSTONE	0.5	781.0	
-432.5	CARBONDALE		SILTSTONE	2.8	781.5	
-435.3	CARBONDALE		LIMESTONE	0.6	784.3	POSSIBLY DOLOMITIC
-435.8	CARBONDALE		CLAYSTONE	4.4	784.8	
-440.3	CARBONDALE		GRAY SANDSTONE	1.7	789.3	

MAPID: 05903555000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 2490' S line, 2280' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.112045 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.782885 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 406.7 **LOG TYPE:** Survey Core Study

SOURCE: AYRSHIRE COAL CO. NH-8 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-3.9	CARBONDALE	DANVILLE	COAL	2.0	352.9	
-5.9	CARBONDALE		SILTY SHALE	19.0	354.9	
-24.9	CARBONDALE	BANKSTON FORK	LIMESTONE	0.4	373.9	
-25.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	18.7	374.3	
-44.0	CARBONDALE	LAWSON	GRAY SHALE	1.3	393.0	
-45.3	CARBONDALE	CONANT	LIMESTONE/UNDERCLAY	0.8	394.3	
-46.0	CARBONDALE		GRAY SHALE	3.2	395.0	
-49.2	CARBONDALE	BRERETON	LIMESTONE	3.8	398.2	
-53.0	CARBONDALE	ANNA	GRAY SHALE	1.0	402.0	
-54.0	CARBONDALE	HERRIN	COAL	3.7	403.0	

MAPID: 05903736000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.110694 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.78695 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 723.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1004-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-301.4	CARBONDALE	DANVILLE	COAL	1.5	661.4	
-302.9	CARBONDALE		SHALE & SANDSTONE	24.0	662.9	
-326.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	686.9	
-331.2	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	6.2	691.2	
-337.4	CARBONDALE	LAWSON	SANDSTONE	17.0	697.4	
-354.4	CARBONDALE	BRERETON	LIMESTONE	1.5	714.4	
-355.9	CARBONDALE	ANNA	BLACK SHALE	5.1	715.9	
-361.0	CARBONDALE	HERRIN	COAL	2.2	721.0	

MAPID: 05902480000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 36 **QUARTERS/FOOTAGES:** 2310' S line, 300' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.04777 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.782184 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 449.0 **LOG TYPE:** Survey Sample Study

SOURCE: OMAR W. MINTON JR 1 **WELL TYPE:** Dry Hole

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		UNCONSOLIDATED	81.0	0.0	
264.0			LIMESTONE	4.5	81.0	
259.5			SHALE	200.5	85.5	
59.0	CARBONDALE	DANVILLE	COAL	1.0	286.0	
58.0	CARBONDALE		SHALE	11.0	287.0	COAL BANDS
47.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	298.0	
42.0	CARBONDALE		SHALE	23.0	303.0	
19.0	CARBONDALE	BRERETON	LIMESTONE	7.0	326.0	SMALL COAL PARTINGS
12.0	CARBONDALE		SHALE	1.0	333.0	
11.0	CARBONDALE	HERRIN	COAL	6.0	334.0	
5.0	CARBONDALE		SHALE	7.0	340.0	
-2.0	CARBONDALE		CALCAREOUS SHALE	43.5	347.0	
-45.5	CARBONDALE	BRIAR HILL	COAL	2.0	390.5	
-47.5	CARBONDALE		SANDSTONE/SHALE	18.0	392.5	
-65.5	CARBONDALE		SHALE	38.5	410.5	

MAPID: 05903528000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 10E **SECTION:** 36 **QUARTERS/FOOTAGES:** 0' S line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.065229 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775894 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 358.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1041-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
109.3	MODESTO	PIASA	LIMESTONE	3.0	237.7	
106.3	MODESTO		SILTY SHALE	57.0	240.7	
49.3	CARBONDALE	DANVILLE	COAL	2.1	297.7	
47.2	CARBONDALE		SHALE & SANDSTONE	22.9	299.8	
24.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	322.7	
20.3	CARBONDALE	LAWSON	SILTY SHALE	8.0	326.7	
12.3	CARBONDALE	LAWSON	SANDSTONE	12.0	334.7	
0.3	CARBONDALE	BRERETON	LIMESTONE	2.0	346.7	
-1.7	CARBONDALE	ANNA	BLACK SHALE	6.3	348.7	
-8.0	CARBONDALE	HERRIN	COAL	3.6	355.0	

MAPID: 05901731000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.041729 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.838757 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 1672.0 **LOG TYPE:** Electric Log

SOURCE: NOAL PETROLEUM **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1325.0	BASE OF PENN.		UNCLASSIFIED	-	1672.0	

MAPID: 05901731000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.041729 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.838757 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 484.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-83.5	CARBONDALE	DANVILLE	COAL	2.5	430.5	
-86.0	CARBONDALE		SILTY SHALE	14.0	433.0	
-100.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	447.0	
-103.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	4.0	450.0	
-107.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	9.0	454.0	
-116.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	463.0	
-128.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	475.0	
-130.0	CARBONDALE	ANNA	BLACK SHALE	2.0	477.0	
-132.0	CARBONDALE	HERRIN	COAL	5.0	479.0	

MAPID: 05901731000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1650' S line, 990' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.041729 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.838757 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2891.0 **LOG TYPE:** Electric Log

SOURCE: NOAL PETROLEUM, DECKER C G 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-298.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	645.0	
-357.0	CARBONDALE	SURVANT	COAL	4.0	704.0	
-393.0	CARBONDALE	COLCHESTER	COAL	0.5	740.0	
-458.0	CARBONDALE	DEKOVEN	COAL	2.0	805.0	
-458.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	805.0	
-476.0	CARBONDALE	DAVIS	COAL	4.0	823.0	
-513.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	860.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-535.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	882.0	
-553.0	TRADEWATER	MT. RORAH	COAL	1.3	900.0	

MAPID: 05901021000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.034902 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.833275 **DATE COLLECTED:** 11 / 0 / 1949

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2915.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., DECKER & GRANT **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-250.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	596.0	
-288.0	CARBONDALE	SURVANT	COAL	2.0	634.0	
-348.0	CARBONDALE	COLCHESTER	COAL	1.6	694.0	
-417.0	CARBONDALE	DEKOVEN	COAL	2.0	763.0	
-417.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	763.0	
-434.0	CARBONDALE	DAVIS	COAL	4.0	780.0	
-471.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	817.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-496.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	842.0	

MAPID: 05901021000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.034902 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.833275 **DATE COLLECTED:** 11 / 0 / 1949

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1620.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1274.0	BASE OF PENN.		UNCLASSIFIED	-	1620.0	

MAPID: 05902589000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 18 **QUARTERS/FOOTAGES:** 2310' N line, 1650' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.034299 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.827806 **DATE COLLECTED:** 10 / 0 / 1961

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2873.0 **LOG TYPE:** Electric Log

SOURCE: HOFFMAN, GEORGE A., DECKER C G **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-211.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	563.0	
-258.0	CARBONDALE	SURVANT	COAL	1.3	610.0	
-318.0	CARBONDALE	COLCHESTER	COAL	0.5	670.0	
-386.0	CARBONDALE	DEKOVEN	COAL	2.0	738.0	
-386.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	738.0	
-408.0	CARBONDALE	DAVIS	COAL	3.0	760.0	
-448.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-468.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	820.0	
-480.0	TRADEWATER	MT. RORAH	COAL	1.2	832.0	

MAPID: 05902589000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 18 **QUARTERS/FOOTAGES:** 2310' N line, 1650' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.034299 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.827806 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 392.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
13.0	CARBONDALE	DANVILLE	COAL	3.0	340.0	
10.0	CARBONDALE		SILTY SHALE	11.0	343.0	
-1.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	354.0	
-4.0	CARBONDALE	LAWSON	SHALE	1.0	357.0	
-5.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	358.0	
-15.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	368.0	
-27.0	CARBONDALE	BRERETON	LIMESTONE	6.0	380.0	
-33.0	CARBONDALE	ANNA	BLACK SHALE	2.0	386.0	
-35.0	CARBONDALE	HERRIN	COAL	4.0	388.0	

MAPID: 05901023000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.042995 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.795059 **DATE COLLECTED:** 10 / 0 / 1948

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:** Electric Log

SOURCE: MITCHELL, Q. B., STINSON ET AL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	544.0	
-239.0	CARBONDALE	SURVANT	COAL	1.2	585.0	
-296.0	CARBONDALE	COLCHESTER	COAL	0.5	642.0	
-354.0	CARBONDALE	DEKOVEN	COAL	3.0	700.0	
-354.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	700.0	
-376.0	CARBONDALE	DAVIS	COAL	3.0	722.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	758.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901023000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.042995 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.795059 **DATE COLLECTED:** 10 / 0 / 1948
SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1656.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, Q. B. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1310.0	BASE OF PENN.		UNCLASSIFIED	-	1656.0	

MAPID: 05901024000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.045655 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.778571 **DATE COLLECTED:** 8 / 0 / 1948
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, Q. B., BANK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-205.0	CARBONDALE	SURVANT	COAL	1.3	550.0	
-267.0	CARBONDALE	COLCHESTER	COAL	0.5	612.0	
-328.0	CARBONDALE	DEKOVEN	COAL	5.0	673.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	673.0	
-349.0	CARBONDALE	DAVIS	COAL	5.0	694.0	
-389.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	734.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901024000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 31 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.045655 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.778571 **DATE COLLECTED:** 8 / 0 / 1948
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1592.0 **LOG TYPE:** Electric Log
SOURCE: MITCHELL, Q. B. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1247.0	BASE OF PENN.		UNCLASSIFIED	-	1592.0	

MAPID: 05903529000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 8S 11E **SECTION:** 31 **QUARTERS/FOOTAGES:** 2640' N line, 1320' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.042115 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.783195 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 322.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P1046C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.4	CARBONDALE	DANVILLE	COAL	2.0	263.6	
74.4	CARBONDALE		SILTY SHALE	12.4	265.6	
62.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	278.0	
56.0	CARBONDALE	LAWSON	SANDSTONE	12.0	284.0	
44.0	CARBONDALE	LAWSON	SILTY SHALE	2.0	296.0	
42.0	CARBONDALE	CONANT	LIMESTONE	1.6	298.0	
40.4	CARBONDALE		SILTY SHALE	14.0	299.6	
26.4	CARBONDALE	BRERETON	LIMESTONE	2.9	313.6	
23.5	CARBONDALE	ANNA	BLACK SHALE	1.5	316.5	
22.0	CARBONDALE	HERRIN	COAL	4.2	318.0	

MAPID: 05900023000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274927 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.77585 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 516.2 **LOG TYPE:** Drillers Log

SOURCE: DEVOUS **WELL TYPE:** Unsuccessful or Unknown Results

COMMENT: CHECKED ON STRIP LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
342.0	MODESTO		SANDSTONE	20.2	8.0	
321.8	MODESTO		SHALE	6.5	28.2	
315.3	MODESTO		COAL	0.3	34.7	
315.0	MODESTO		SHALE	29.2	35.0	
285.8	MODESTO		BLACK SHALE	0.4	64.2	
285.4	CARBONDALE	DANVILLE	COAL	2.4	64.6	
283.0	CARBONDALE		BLACK SHALE	2.2	67.0	
280.8	CARBONDALE		SANDSTONE	49.2	69.2	
231.7	CARBONDALE		SANDSTONE/SHALE	11.9	118.3	WITH BLACK SHALE
219.7	CARBONDALE		LIMESTONE	0.8	130.3	
219.0	CARBONDALE		BLACK SHALE	0.9	131.0	
218.1	CARBONDALE	BRERETON	LIMESTONE	4.2	131.9	
213.9	CARBONDALE	HERRIN	COAL	3.9	136.1	
210.0	CARBONDALE		BLACK SHALE	3.0	140.0	
207.0	CARBONDALE		ROCK	12.3	143.0	
194.7	CARBONDALE		SANDY SHALE	12.7	155.3	
182.0	CARBONDALE		DARK SHALE	20.4	168.0	WITH COAL
161.6	CARBONDALE		DARK SHALE	3.9	188.4	
157.7	CARBONDALE	BRIAR HILL	COAL	1.7	192.3	
156.0	CARBONDALE		DARK SHALE	6.4	194.0	
149.6	CARBONDALE		SHALE	48.4	200.4	
101.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	248.8	
98.9	CARBONDALE	SPRINGFIELD	COAL	3.9	251.1	
95.0	CARBONDALE		SHALE	64.7	255.0	
30.3	CARBONDALE		SANDSTONE	3.7	319.7	
26.7	CARBONDALE	EXCELLO	BLACK SHALE	5.0	323.3	
21.7	CARBONDALE	HOUCHIN CREEK	COAL	1.7	328.3	
20.0	CARBONDALE		SHALE	36.1	330.0	
-16.1	CARBONDALE	COLCHESTER	COAL	1.9	366.1	
-18.0	CARBONDALE		SHALE	39.0	368.0	
-57.0	CARBONDALE		BLACK SHALE	12.0	407.0	INTERBEDDED WITH HARD ROCK IN 4-6" LAYER
-69.0	CARBONDALE		SHALE	4.0	419.0	
-73.0	CARBONDALE	COLCHESTER	COAL	0.3	423.0	
-73.3	SPOON		SHALE & SANDSTONE	7.7	423.3	
-81.0	SPOON		SANDSTONE	37.0	431.0	
-118.0	SPOON		SANDSTONE & BLACK SHALE	7.1	468.0	
-125.1	SPOON	DAVIS	COAL	3.4	475.1	

-128.5	SPOON	SHALE	3.1	478.5
-131.6	SPOON	SANDSTONE	24.3	481.6
-155.9	SPOON	BLACK SHALE	5.0	505.9
-160.9	SPOON	SHALE	5.3	510.9

MAPID: 05900023000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274927 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.77585 **DATE COLLECTED:** 0 / 0 / 1907

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:** Drillers Log

SOURCE: DEVOUS 0001, WHITE R **WELL TYPE:** Oil and Gas Test

COMMENT: COAL THICKNESS CONFIDENTIAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
208.0	CARBONDALE	HERRIN	COAL	-	140.0	
93.0	CARBONDALE	SPRINGFIELD	COAL	-	255.0	

MAPID: 05900024000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274973 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 190.1 **LOG TYPE:** Drillers Log

SOURCE: DEVOUS 2 **WELL TYPE:** Unsuccessful or Unknown Results

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	50.3	0.0	
326.7			ROCK	13.8	50.3	
313.0			SANDY SHALE	13.3	64.0	WITH BLACK SHALE
299.7			SANDY SHALE	70.8	77.3	
229.0	CARBONDALE	ALLENBY	COAL	0.3	148.0	
228.7	CARBONDALE		SANDY SHALE	4.4	148.3	
224.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.6	152.8	
219.7	CARBONDALE	ANVIL ROCK	SANDSTONE	24.5	157.3	
195.2	CARBONDALE		ROCK	4.0	181.8	
191.2	CARBONDALE	HERRIN	COAL	4.1	185.8	
187.1	CARBONDALE		ROCK	0.2	189.9	

MAPID: 05900024000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.274973 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:** 0 / 0 / 1907
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:** Drillers Log
SOURCE: DEVOUS 2, DRONE LOU **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
191.0	CARBONDALE	HERRIN	COAL	4.2	186.0	

MAPID: 05900093000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.272652 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.769956 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:**
SOURCE: DRONE L **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
189.0	CARBONDALE	HERRIN	COAL	10.0	188.0	

MAPID: 05900095000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.265574 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.772031 **DATE COLLECTED:** 0 / 0 / 1906
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 3650.0 **LOG TYPE:** Drillers Log
SOURCE: DEVOUS J, DRONE L **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-15.0	CARBONDALE	HERRIN	COAL	-	380.0	
-119.0	CARBONDALE	SPRINGFIELD	COAL	-	484.0	DEPTH UNCERTAIN

MAPID: 05901028000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.270451 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.761968 **DATE COLLECTED:** 2 / 0 / 1951

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2448.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., MCGUIRE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
20.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	356.0	
-29.0	CARBONDALE	SURVANT	COAL	1.8	405.0	
-77.0	CARBONDALE	COLCHESTER	COAL	0.5	453.0	
-141.0	CARBONDALE	DEKOVEN	COAL	2.8	517.0	
-141.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	517.0	
-169.0	CARBONDALE	DAVIS	COAL	3.8	545.0	
-209.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	585.0	64% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901131000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 198' S line, 198' W line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.280247 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.761581 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 287.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0	PLEISTOCENE		UNCONSOLIDATED	40.5	0.0	
340.5	MODESTO		SANDY SHALE	7.0	40.5	
333.5	MODESTO		DARK SHALE	13.3	47.5	
320.2	MODESTO		SHALE	29.4	60.8	
290.8	CARBONDALE	DANVILLE	COAL	2.0	90.2	
288.8	CARBONDALE		BLUE SHALE	11.3	92.2	
277.6	CARBONDALE		SANDSTONE	2.3	103.4	
275.2	CARBONDALE		DARK SHALE	6.5	105.8	
268.7	CARBONDALE	ANVIL ROCK	SANDSTONE	8.3	112.3	
260.4	CARBONDALE		SHALE	33.6	120.6	
226.8	CARBONDALE		DARK SHALE	10.0	154.2	
216.8	CARBONDALE	HERRIN	COAL	0.4	164.2	
216.4	CARBONDALE	HERRIN	BLACK SHALE	0.1	164.6	
216.3	CARBONDALE	HERRIN	COAL	1.7	164.7	
214.6	CARBONDALE	HERRIN	BONE COAL	0.0	166.4	
214.6	CARBONDALE	HERRIN	COAL	0.7	166.4	
213.9	CARBONDALE	HERRIN	BLACK SHALE	0.3	167.1	
213.7	CARBONDALE	HERRIN	COAL	0.4	167.3	
213.3	CARBONDALE	HERRIN	BLACK SHALE	0.0	167.7	
213.2	CARBONDALE	HERRIN	COAL	0.4	167.8	
212.8	CARBONDALE		SHALE	4.3	168.2	
208.6	CARBONDALE		SANDY SHALE	16.3	172.4	
192.2	CARBONDALE		DARK SHALE	30.3	188.8	
162.0	CARBONDALE	BRIAR HILL	COAL	2.0	219.0	
160.0	CARBONDALE		SANDY SHALE	14.7	221.0	
145.3	CARBONDALE		SANDY SHALE	40.1	235.7	
105.2	CARBONDALE		DARK SHALE	5.3	275.8	
100.0	CARBONDALE	SPRINGFIELD	COAL	4.4	281.0	
95.6	CARBONDALE		BLUE SHALE	1.6	285.4	

MAPID: 05901131000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 198' S line, 198' W line of SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.280247 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.761581 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 287.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
291.0	CARBONDALE	DANVILLE	COAL	2.0	90.0	
278.0	CARBONDALE	SS BELOW NO. 7		2.3	103.0	
269.0	CARBONDALE	ANVIL ROCK		8.3	112.0	
217.0	CARBONDALE	HERRIN	COAL	4.0	164.0	
162.0	CARBONDALE	BRIAR HILL	COAL	2.0	219.0	
100.0	CARBONDALE	SPRINGFIELD	COAL	4.4	281.0	BLACK SHALE ROOF

MAPID: 05902229000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.270117 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.770553 **DATE COLLECTED:** 4 / 0 / 1958
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1540.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK JAMES H **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1178.0	BASE OF PENN.		UNCLASSIFIED	-	1540.0	

MAPID: 05902229000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.270117 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.770553 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 202.0 **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
212.5	CARBONDALE	DANVILLE	COAL	2.0	149.5	
210.5	CARBONDALE		SHALE	22.0	151.5	
188.5	CARBONDALE	LAWSON	SHALE	20.0	173.5	
168.5	CARBONDALE	BRERETON	LIMESTONE	5.0	193.5	
163.5	CARBONDALE	ANNA	BLACK SHALE	0.5	198.5	
163.0	CARBONDALE	HERRIN	COAL	3.0	199.0	

MAPID: 05902229000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.270117 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.770553 **DATE COLLECTED:** 4 / 0 / 1958

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2451.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK JAMES H, DRONE P C **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-26.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	388.0	
-68.0	CARBONDALE	SURVANT	COAL	1.8	430.0	
-131.0	CARBONDALE	COLCHESTER	COAL	0.5	493.0	
-166.0	CARBONDALE	DEKOVEN	COAL	4.0	528.0	
-166.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	528.0	
-193.0	CARBONDALE	DAVIS	COAL	3.5	555.0	
-238.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	600.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-257.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	619.0	

MAPID: 05923930000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.26229 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.761076 **DATE COLLECTED:** 7 / 20 / 1972

SURFACE ELEVATION (FT.): 371.8 **LOGGED (FT.):** 390.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 99GC **WELL TYPE:** Coal Test

COMMENT: EAGLE U.G. #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.8	PLEISTOCENE		UNCONSOLIDATED	137.0	0.0	
234.8	MODESTO		SANDSTONE	55.0	137.0	
179.8	MODESTO		GRAY SHALE	22.5	192.0	
157.3	CARBONDALE	DANVILLE	COAL	1.5	214.5	
155.8	CARBONDALE		UNDERCLAY	2.0	216.0	
153.8	CARBONDALE		SANDSTONE	13.0	218.0	
140.8	CARBONDALE		GRAY SHALE	3.5	231.0	
137.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	234.5	
132.6	CARBONDALE	ANVIL ROCK	SANDSTONE	14.8	239.2	
117.8	CARBONDALE		GRAY SHALE	10.4	254.0	
107.4	CARBONDALE	BRERETON	LIMESTONE	4.6	264.4	
102.8	CARBONDALE	ANNA	BLACK SHALE	0.5	269.0	
102.3	CARBONDALE	HERRIN	COAL	4.6	269.5	
97.7	CARBONDALE		UNDERCLAY	3.0	274.1	
94.7	CARBONDALE		SANDSTONE	7.2	277.1	
87.5	CARBONDALE		GRAY SHALE	12.7	284.3	
74.8	CARBONDALE		SANDSTONE	10.0	297.0	
64.8	CARBONDALE		GRAY SHALE	14.0	307.0	
50.8	CARBONDALE	BRIAR HILL	COAL	2.0	321.0	
48.8	CARBONDALE		GRAY SHALE	4.0	323.0	
44.8	CARBONDALE		SANDSTONE	17.0	327.0	
27.8	CARBONDALE		SANDY SHALE	34.0	344.0	
-6.2	CARBONDALE		GRAY SHALE	2.1	378.0	
-8.3	CARBONDALE	ST. DAVID	LIMESTONE	0.7	380.1	
-9.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	380.8	
-11.1	CARBONDALE	SPRINGFIELD	COAL	4.7	382.9	
-15.8	CARBONDALE		GRAY SHALE	2.3	387.6	
-18.1	CARBONDALE		SANDSTONE	1.0	389.9	

MAPID: 05900025000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.291073 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:** 0 / 0 / 1907

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 3480.0 **LOG TYPE:** Drillers Log

SOURCE: DEVOUS C 3, LANE JOE **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
250.0	CARBONDALE	HERRIN	COAL	4.3	98.0	

MAPID: 05900025000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.291073 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 103.2 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
312.0	CARBONDALE	DANVILLE	COAL	3.1	36.0	
308.9	CARBONDALE		SHALE & SANDSTONE	35.4	39.1	
273.5	CARBONDALE	LAWSON	SANDSTONE	15.0	74.5	
258.5	CARBONDALE	LAWSON	LIMESTONE W/ SHALE	5.8	89.5	
252.7	CARBONDALE	BRERETON	LIMESTONE	2.7	95.3	
250.1	CARBONDALE	ANNA	BLACK SHALE	1.1	97.9	
249.0	CARBONDALE	HERRIN	COAL	4.2	99.0	

MAPID: 05900025000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1650' N line, 2310' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.291073 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.771903 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 102.5 **LOG TYPE:** Drillers Log
SOURCE: DEVOUS 3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.0	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
335.0	MODESTO		SHALE	12.5	13.0	
322.5	MODESTO		BLACK SHALE	6.5	25.5	
316.0	CARBONDALE	DANVILLE	COAL	3.1	32.0	
312.9	CARBONDALE		SHALE	38.9	35.1	
274.0	CARBONDALE		SANDSTONE	20.8	74.0	
253.2	CARBONDALE	BRERETON	BLACK LIMESTONE	2.7	94.8	
250.6	CARBONDALE	ANNA	BLACK SHALE	1.1	97.4	
249.5	CARBONDALE	HERRIN	COAL	4.2	98.5	

MAPID: 05900107000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.288855 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.769767 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:** Measured section
SOURCE: **WELL TYPE:** Outcrop
COMMENT:

MAPID: 05902503000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.288923 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.761999 **DATE COLLECTED:** 7 / 0 / 1960
SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2739.0 **LOG TYPE:** Electric Log
SOURCE: CRAWFORD PRODUCTION, DRONE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
66.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	330.0	
23.0	CARBONDALE	SURVANT	COAL	2.0	373.0	
-36.0	CARBONDALE	COLCHESTER	COAL	1.3	432.0	
-80.0	CARBONDALE	DEKOVEN	COAL	3.0	476.0	
-80.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	476.0	
-104.0	CARBONDALE	DAVIS	COAL	3.0	500.0	
-146.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	542.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-172.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	568.0	

MAPID: 05902503000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.288923 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.761999 **DATE COLLECTED:** 7 / 0 / 1960

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 1462.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD PRODUCTION **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1066.0	BASE OF PENN.		UNCLASSIFIED	-	1462.0	

MAPID: 05903506000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** 664' N line, 510' E line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.291796 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766941 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 366.7 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER 315H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0	
319.0	MODESTO		SANDSTONE	9.8	41.0	
309.2	MODESTO		SANDY SHALE	10.4	50.8	
298.7	MODESTO		SANDSTONE	3.8	61.3	
294.9	CARBONDALE	DANVILLE	COAL	1.9	65.1	
293.0	CARBONDALE		GRAY SHALE	0.7	67.0	
292.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	67.7	
280.3	CARBONDALE	ANVIL ROCK	SANDSTONE	52.0	79.7	
228.3	CARBONDALE	HERRIN	COAL	3.8	131.7	
224.5	CARBONDALE		UNDERCLAY	1.0	135.5	
223.5	CARBONDALE		LIMESTONE	1.9	136.5	
221.7	CARBONDALE		SANDY SHALE	7.2	138.3	
214.5	CARBONDALE		SANDSTONE	6.5	145.5	
208.0	CARBONDALE		GRAY SHALE	12.8	152.0	
195.2	CARBONDALE		SANDY SHALE	23.8	164.8	
171.3	CARBONDALE	BRIAR HILL	COAL	1.3	188.7	
170.0	CARBONDALE		GRAY SHALE & SANDSTONE	17.5	190.0	
152.5	CARBONDALE		SANDSTONE	1.5	207.5	
151.0	CARBONDALE		SANDY SHALE	16.9	209.0	
134.1	CARBONDALE		SANDSTONE	3.2	225.9	
130.9	CARBONDALE		SANDY SHALE	12.2	229.1	
118.7	CARBONDALE		GRAY SHALE & LIMESTONE	2.5	241.3	
116.2	CARBONDALE	ST. DAVID	LIMESTONE	0.3	243.8	
115.9	CARBONDALE	TURNER MINE	DARK SHALE	2.5	244.1	
113.4	CARBONDALE	SPRINGFIELD	COAL	4.6	246.6	
108.8	CARBONDALE		GRAY SHALE	0.6	251.2	
108.2	CARBONDALE		GRAY SHALE	1.8	251.8	
106.4	CARBONDALE		LIMESTONE	0.6	253.6	
105.8	CARBONDALE		SANDY LIMESTONE	3.3	254.2	
102.5	CARBONDALE		SANDSTONE	2.5	257.5	
100.0	CARBONDALE		GRAY SHALE & SANDSTONE	12.7	260.0	
87.3	CARBONDALE		SANDY SHALE	41.8	272.7	
45.5	CARBONDALE	HANOVER	LIMESTONE	2.1	314.5	
43.4	CARBONDALE	EXCELLO	BLACK SHALE	3.1	316.6	
40.3	CARBONDALE	HOUCHIN CREEK	COAL	0.7	319.7	
39.7	CARBONDALE		SANDY SHALE	5.7	320.3	
34.0	CARBONDALE		GRAY SHALE	15.5	326.0	

18.5	CARBONDALE		SANDY SHALE	17.0	341.5
1.5	CARBONDALE		DARK SHALE	1.8	358.5
-0.3	CARBONDALE	SURVANT	COAL	0.4	360.3
-0.7	CARBONDALE		SANDY SHALE	4.7	360.7
-5.4	CARBONDALE		SANDSTONE	1.3	365.4

MAPID: 05900052000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300365 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.76591 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 4000.0 **LOG TYPE:** Drillers Log
SOURCE: LUCKETT JOE **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
250.0	CARBONDALE	HERRIN	COAL	4.5	150.0	

MAPID: 05900106000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300365 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.76591 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:** Measured section
SOURCE: **WELL TYPE:** Outcrop
COMMENT:

MAPID: 05901120000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 1386' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.304036 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.761377 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	44.0	33.0	
305.0	CARBONDALE	HERRIN	COAL	2.9	77.0	
299.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	19.0	83.0	
247.0	CARBONDALE	BRIAR HILL	COAL	1.9	135.0	
245.0	CARBONDALE	CANTON	SANDSTONE/SHALE	0.8	137.0	
190.0	CARBONDALE	SPRINGFIELD	COAL	4.7	192.0	BLACK SHALE ROOF

MAPID: 05901120000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 1386' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.304036 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.761377 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 768.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON (F. TAYLOR) **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			ROCK	6.0	20.0	
364.0			COAL	0.5	26.0	
363.5			ROCK	52.5	26.5	
311.0			COAL	2.6	79.0	BROKEN, SHALEY
308.4			ROCK	28.4	81.6	
280.0			COAL	3.3	110.0	
276.7			ROCK	46.0	113.3	
230.7			COAL	0.5	159.3	
230.2			ROCK	28.5	159.8	
201.7			COAL	0.9	188.3	
200.8			ROCK	74.1	189.2	
126.7			COAL	0.7	263.3	SHALEY
126.0			ROCK	91.7	264.0	
34.4			COAL	1.7	355.6	SHALEY
32.7			ROCK	85.0	357.3	
-52.3			COAL	0.2	442.3	
-52.5			ROCK	17.5	442.5	
-70.0			COAL	1.0	460.0	
-71.0			ROCK	205.0	461.0	
-276.0			COAL	0.3	666.0	
-276.2			ROCK	72.7	666.2	
-348.9			COAL	1.6	738.9	
-350.5			ROCK	17.8	740.5	
-368.2			COAL	0.7	758.2	SHALEY
-368.9			ROCK	9.9	758.9	

MAPID: 05901120000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 1386' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.304036 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.761377 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 198.1 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. #2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	
349.0	CARBONDALE		SHALE	10.4	33.0	BROWN GRAY
338.6	CARBONDALE	ANVIL ROCK	SHALE	26.8	43.4	SANDY SOFT STREAKS
311.8	CARBONDALE	ANVIL ROCK	SANDSTONE	7.3	70.2	COAL STREAKS NOTED; GRAY
304.6	CARBONDALE	HERRIN	COAL	1.8	77.4	
302.7	CARBONDALE	HERRIN	CLAYSTONE	0.1	79.3	SULFUR; GRAY
302.7	CARBONDALE	HERRIN	COAL	0.8	79.3	
301.9	CARBONDALE	HERRIN	BLACK SHALE	0.1	80.1	SULFUR
301.8	CARBONDALE	HERRIN	COAL	0.2	80.2	
301.7	CARBONDALE		SHALE	2.3	80.3	
299.4	CARBONDALE		SANDY SHALE	3.4	82.6	
296.0	CARBONDALE		BLUE SHALE	3.7	86.0	
292.3	CARBONDALE		SANDY SHALE	24.3	89.7	
268.0	CARBONDALE		SHALE	5.1	114.0	
262.9	CARBONDALE		SHALE & SANDSTONE	10.7	119.1	
252.2	CARBONDALE		BLUE SHALE	5.5	129.8	
246.7	CARBONDALE	BRIAR HILL	COAL	1.8	135.3	
244.9	CARBONDALE		GRAY SANDSTONE	3.4	137.1	
241.5	CARBONDALE		SANDY SHALE	48.6	140.5	
192.9	CARBONDALE		DARK SHALE	2.4	189.1	
190.5	CARBONDALE	SPRINGFIELD	COAL	4.7	191.5	
185.8	CARBONDALE		SHALE	1.9	196.2	

MAPID: 05901236000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317166 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.773558 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 226.4 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
366.0			NO RECORD	34.0	0.0	
332.0	CARBONDALE		BROWN SANDSTONE	5.0	34.0	
327.0	CARBONDALE		DARK SHALE	31.0	39.0	
296.0	CARBONDALE		GRAY SANDSTONE	5.3	70.0	
290.7	CARBONDALE		SANDY SHALE	2.3	75.3	
288.4	CARBONDALE		GRAY SANDSTONE	1.0	77.6	
287.4	CARBONDALE		SANDY SHALE	3.6	78.6	
283.8	CARBONDALE		SHALY SANDSTONE	4.2	82.2	GRAY
279.7	CARBONDALE		DARK SHALE	1.1	86.3	
278.6	CARBONDALE		GRAY SANDSTONE	35.9	87.4	
242.7	CARBONDALE		SANDSTONE	8.5	123.3	CARBONACEOUS; HERRIN COAL ERODED
234.2	CARBONDALE		SHALY SANDSTONE	8.0	131.8	
226.2	CARBONDALE		DARK SHALE	21.8	139.8	
204.3	CARBONDALE	BRIAR HILL	COAL	1.9	161.7	
202.4	CARBONDALE		DARK SHALE	21.3	163.6	
181.2	CARBONDALE		GRAY SANDSTONE	5.5	184.8	
175.7	CARBONDALE		DARK SHALE	25.8	190.3	
149.9	CARBONDALE	TURNER MINE	SHALE	2.7	216.1	
147.2	CARBONDALE	SPRINGFIELD	COAL	4.7	218.8	
142.6	CARBONDALE		SHALE	3.0	223.4	

MAPID: 05901236000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317166 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.773558 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
332.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SILTSTONE	98.0	34.0	
234.0	CARBONDALE	VERMILIONVILLE		8.0	132.0	
206.0	CARBONDALE	BRIAR HILL	COAL	1.8	160.0	
201.0	CARBONDALE	CANTON	SANDSTONE & BLACK SHALE	27.0	165.0	
148.0	CARBONDALE	SPRINGFIELD	COAL	4.7	218.0	BLACK SHALE & LIMESTONE ROOF

MAPID: 05901325000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 50' S line, 15' E line of SW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313534 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.761942 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 111 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
370.0			SHALE	12.0	8.0	"SOFT PAN"
358.0			SHALE	8.0	20.0	YELLOW
350.0			SHALE	7.5	28.0	YELLOW GRAY
342.5			SHALE	16.8	35.5	
325.7			LIMESTONE	1.3	52.3	
324.5			SHALE	2.7	53.5	
321.8			LIMESTONE	2.3	56.2	
319.5			SHALE	2.5	58.5	
317.0			SANDSTONE	16.5	61.0	
300.5			SHALE	6.5	77.5	
294.0			SHALE	4.0	84.0	
290.0			DARK SHALE	12.0	88.0	

MAPID: 05901326000C **VERSION:** 1 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 10' N line, 15' W line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313471 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.76899 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 56.8 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 128 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
370.0	CARBONDALE		SANDY SHALE	8.0	7.0	
362.0	CARBONDALE		SHALE	33.0	15.0	DARK, SANDY
329.0	CARBONDALE	HERRIN	COAL	1.8	48.0	
327.2	CARBONDALE	HERRIN	COAL	1.8	49.8	
325.3	CARBONDALE	HERRIN	ROCK	0.2	51.7	
325.2	CARBONDALE	HERRIN	COAL	0.4	51.8	
324.7	CARBONDALE	HERRIN	PYRITE	0.1	52.3	
324.7	CARBONDALE	HERRIN	COAL	0.3	52.3	
324.4	CARBONDALE		UNDERCLAY	3.5	52.6	
320.9	CARBONDALE		LIMESTONE	0.8	56.1	

MAPID: 05901326000C **VERSION:** 2 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 10' N line, 15' W line of NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313471 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.76899 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 70.3 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 128 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
-	CARBONDALE		SANDY SHALE	8.0	7.0	
-	CARBONDALE		SANDY SHALE	33.0	15.0	
-	CARBONDALE		SANDSTONE	19.5	48.0	PARTIALLY ERODED
-	CARBONDALE	HERRIN	COAL	2.8	67.5	

MAPID: 05901327000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 200' N line, 10' W line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.318277 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.76857 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 127 **WELL TYPE:** Coal Test

COMMENT: 75'0" NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	29.5	8.0	
-			SANDSTONE	4.5	37.5	
-			SANDY SHALE	6.0	42.0	
-			SANDSTONE	7.0	48.0	
-			SANDY SHALE	8.0	55.0	
-			SANDSTONE	12.5	63.0	

MAPID: 05901328000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 660' S line, 660' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31596 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.763734 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 110 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	36.3	0.0	
343.7			SMUT	0.8	36.3	
343.0	CARBONDALE	ALLENBY	COAL	0.3	37.0	
342.7	CARBONDALE		UNDERCLAY	1.8	37.3	
340.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	39.1	
334.2	CARBONDALE		SHALE	4.2	45.8	
330.0	CARBONDALE		SHALE	20.6	50.0	DARK, SANDY
309.4	CARBONDALE	BRERETON	LIMESTONE	3.9	70.6	
305.5	CARBONDALE	ANNA	BLACK SHALE	2.1	74.5	
303.4	CARBONDALE	HERRIN	COAL	3.1	76.6	
300.3	CARBONDALE	HERRIN	ROCK	0.2	79.7	
300.2	CARBONDALE	HERRIN	COAL	0.5	79.8	BONEY
299.7	CARBONDALE	HERRIN	PYRITE	0.1	80.3	
299.6	CARBONDALE	HERRIN	COAL	0.6	80.4	BONEY
299.0	CARBONDALE		UNDERCLAY	1.0	81.0	

MAPID: 05901328000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 660' S line, 660' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31596 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763734 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 80.4 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.6	CARBONDALE	ALLENBY	COAL	0.4	36.4	
358.2	CARBONDALE		CLAYSTONE	1.8	36.8	
356.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.8	38.5	
349.7	CARBONDALE	LAWSON	GRAY SHALE	4.2	45.3	
345.6	CARBONDALE	LAWSON	SILTY SHALE	20.6	49.4	
325.0	CARBONDALE	BRERETON	LIMESTONE	3.9	70.0	
321.1	CARBONDALE	ANNA	BLACK SHALE	2.1	73.9	
319.0	CARBONDALE	HERRIN	COAL	4.4	76.0	

MAPID: 05901712000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300219 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.775331 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 2864.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., GREENE IVAN B **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
77.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	305.0	
30.0	CARBONDALE	SURVANT	COAL	2.0	352.0	
-33.0	CARBONDALE	COLCHESTER	COAL	0.5	415.0	
-73.0	CARBONDALE	DEKOVEN	COAL	4.0	455.0	
-73.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	455.0	
-101.0	CARBONDALE	DAVIS	COAL	4.0	483.0	
-143.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	525.0	50% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-171.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	553.0	

MAPID: 05901712000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.300219 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775331 **DATE COLLECTED:** 4 / 0 / 1955

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 1520.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1138.0	BASE OF PENN.		UNCLASSIFIED	-	1520.0	

MAPID: 05901807000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317098 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.762873 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 2868.0 **LOG TYPE:** Electric Log
SOURCE: O'NEAL, C. E. & CO., HAMILTON T B **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
128.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	260.0	
83.0	CARBONDALE	SURVANT	COAL	2.0	305.0	
23.0	CARBONDALE	COLCHESTER	COAL	0.5	365.0	
-22.0	CARBONDALE	DEKOVEN	COAL	0.0	410.0	
-22.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	410.0	
-44.0	CARBONDALE	DAVIS	COAL	3.0	432.0	
-96.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	484.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-110.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	498.0	

MAPID: 05900053000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324164 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.762897 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:** Drillers Log
SOURCE: WALTHAM C **WELL TYPE:** Oil and Gas Test
COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
322.0	CARBONDALE	HERRIN	COAL	4.2	28.0	

MAPID: 05900054000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.335997 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.764658 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 4050.0 **LOG TYPE:**
SOURCE: WALTON C **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	CARBONDALE	HERRIN	COAL	4.5	60.0	

MAPID: 05900059000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331279 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.769985 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 3450.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
295.0	CARBONDALE	HERRIN	COAL	4.7	50.0	

MAPID: 05900108000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324164 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.762897 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 326.9 **LOGGED (FT.):** 3269.0 **LOG TYPE:** Measured section
SOURCE: NO 6 COAL **WELL TYPE:** Outcrop
COMMENT:

MAPID: 05900294000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331276 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.768209 **DATE COLLECTED:** 5 / 0 / 1941
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1420.0 **LOG TYPE:** Electric Log
SOURCE: ARROW DRILLING CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
5.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	345.0	
-90.0	SPOON	DAVIS	UNCLASSIFIED	-	440.0	
-1070.0	BASE OF PENN.		UNCLASSIFIED	-	1420.0	

MAPID: 05900294000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.331276 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.768209 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 3560.0 **LOG TYPE:**
SOURCE: ARROW DRC, HANCOCK IC0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
292.0	CARBONDALE	HERRIN	COAL	-	64.0	
174.0	CARBONDALE	SPRINGFIELD	COAL	4.0	182.0	

MAPID: 05900026000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338344 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.773538 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 355.5 **LOGGED (FT.):** 3555.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTS 003 **WELL TYPE:** Oil and Gas Test

COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
288.5	CARBONDALE	HERRIN	COAL	4.5	67.0	
168.5	CARBONDALE	SPRINGFIELD	COAL	4.4	187.0	UNIT ERODED OR ABSENT

MAPID: 05900026000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338344 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.773538 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 70.3 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
330.6	CARBONDALE		SHALE	4.0	25.4	
326.6	CARBONDALE	ALLENBY	COAL	0.2	29.4	
326.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	29.6	
321.6	CARBONDALE	LAWSON	SHALE	10.0	34.4	
311.6	CARBONDALE	LAWSON	SILTY SHALE	3.0	44.4	
308.6	CARBONDALE	LAWSON	GRAY SHALE	16.0	47.4	
292.6	CARBONDALE	ANNA	BLACK SHALE	2.6	63.4	
290.0	CARBONDALE	HERRIN	COAL	4.3	66.0	

MAPID: 05900026000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338344 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.773538 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 355.5 **LOGGED (FT.):** 194.0 **LOG TYPE:** Drillers Log

SOURCE: 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.5	PLEISTOCENE		CLAY	15.0	0.0	
340.5	CARBONDALE		SHALE	11.0	15.0	"SOFT PAN"
329.5	CARBONDALE		SHALE	4.0	26.0	
325.5	CARBONDALE	ALLENBY	COAL	0.2	30.0	
325.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	30.2	
320.5	CARBONDALE		SHALE	10.0	35.0	
310.5	CARBONDALE		SANDY SHALE	3.0	45.0	
307.5	CARBONDALE		SHALE	16.0	48.0	
291.5	CARBONDALE		DARK SHALE	2.6	64.0	
288.9	CARBONDALE	HERRIN	COAL	4.3	66.6	
284.7	CARBONDALE		SHALE	4.2	70.8	
280.5	CARBONDALE		SANDSTONE	27.0	75.0	
253.5	CARBONDALE		SHALE	21.0	102.0	
232.5	CARBONDALE	BRIAR HILL	COAL	0.7	123.0	
231.8	CARBONDALE	BRIAR HILL	PYRITE	0.2	123.7	PARTING
231.7	CARBONDALE	BRIAR HILL	COAL	1.2	123.8	
230.5	CARBONDALE		SANDSTONE	22.0	125.0	
208.5	CARBONDALE		SANDY SHALE	28.0	147.0	
180.5	CARBONDALE		DARK SHALE	5.0	175.0	
175.5	CARBONDALE		SANDY SHALE	2.0	180.0	
173.5	CARBONDALE	ST. DAVID	SHALE WITH LIMESTONE	2.0	182.0	
171.5	CARBONDALE	TURNER MINE	SHALE	3.1	184.0	
168.4	CARBONDALE	SPRINGFIELD	COAL	4.4	187.1	
164.0	CARBONDALE		SHALE	1.5	191.5	
162.5	CARBONDALE		LIMESTONE	1.0	193.0	

MAPID: 05900027000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.352664 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.770215 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log
SOURCE: TRUAX-TRAER COAL CO. 3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	15.0	0.0	YELLOW
355.0	PLEISTOCENE		CLAY	13.0	15.0	BLUE
342.0			GRAY LIMESTONE	4.0	28.0	
338.0			SANDY SHALE	4.0	32.0	
334.0			LIMESTONE	6.0	36.0	
328.0			VARRIGATED SHALE	13.0	42.0	

MAPID: 05900027000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.352664 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.770215 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Drillers Log
SOURCE: TRUAX-TRAER 3 **WELL TYPE:** Oil and Gas Test
COMMENT:

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

MAPID: 05900061000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338348 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.771763 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 3600.0 **LOG TYPE:** Drillers Log
SOURCE: MCLAIN DAN0 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
290.0	CARBONDALE	HERRIN	COAL	4.5	70.0	

MAPID: 05900063000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.355126 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.762979 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

MAPID: 05901235000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 178' S line, 264' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338081 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.769587 **DATE COLLECTED:** 0 / 0 / 1952

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 12 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0	PLEISTOCENE		UNCLASSIFIED	38.5	0.0	
318.5	CARBONDALE		LIMESTONE	4.1	38.5	
314.4	CARBONDALE		SHALE	3.2	42.6	
311.2	CARBONDALE	ANVIL ROCK	SANDSTONE	6.9	45.8	
304.3	CARBONDALE		SHALE	18.6	52.7	
285.7	CARBONDALE	HERRIN	COAL	4.5	71.3	
281.3	CARBONDALE		SHALE	2.3	75.7	
279.0	CARBONDALE		SANDSTONE	25.3	78.0	
253.7	CARBONDALE		SANDY SHALE	19.3	103.3	
234.5	CARBONDALE		SHALE	4.5	122.5	
230.0	CARBONDALE	BRIAR HILL	COAL	1.7	127.0	
228.3	CARBONDALE		SANDSTONE	18.5	128.7	SHALE STREAKS
209.8	CARBONDALE		SANDY SHALE	38.6	147.2	
171.2	CARBONDALE		SHALE	3.0	185.8	
168.2	CARBONDALE	TURNER MINE	SHALE	2.8	188.8	
165.4	CARBONDALE	SPRINGFIELD	COAL	4.4	191.6	
161.0	CARBONDALE		SHALE	2.0	196.0	

MAPID: 05901235000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 178' S line, 264' E line of NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.338081 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.769587 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
319.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.1	38.0	
311.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.9	46.0	
286.0	CARBONDALE	HERRIN	COAL	4.4	71.0	
279.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	25.0	78.0	
230.0	CARBONDALE	BRIAR HILL	COAL	1.7	127.0	
228.0	CARBONDALE	CANTON	SANDSTONE/SHALE	18.5	129.0	
165.0	CARBONDALE	SPRINGFIELD	COAL	4.3	192.0	BLACK SHALE ROOF

MAPID: 05901329000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 3' S line, 115' W line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.355853 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.769363 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 85 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
370.0	PLEISTOCENE		UNCONSOLIDATED	60.0	5.0	
310.0	CARBONDALE		SANDY SHALE	7.8	65.0	
302.2	CARBONDALE	ALLENBY	COAL	0.7	72.8	
301.5	CARBONDALE		SANDY SHALE	4.5	73.5	

MAPID: 05924939000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.34671 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.769095 **DATE COLLECTED:** 6 / 21 / 1960

SURFACE ELEVATION (FT.): 357.7 **LOGGED (FT.):** 23.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 1750QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.7	PLEISTOCENE		CLAY	11.1	0.0	
346.6	CARBONDALE	BRERETON	LIMESTONE	5.0	11.1	BLACK
341.6	CARBONDALE	ANNA	BLACK SHALE	1.5	16.1	BLACKSHALE?
340.1	CARBONDALE	HERRIN	COAL	2.9	17.6	
337.2	CARBONDALE	HERRIN	SHALE	0.1	20.5	BLUE BAND
337.1	CARBONDALE	HERRIN	COAL	1.0	20.6	
336.1	CARBONDALE		UNDERCLAY	1.4	21.6	

MAPID: 05900028000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3709 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.769899 **DATE COLLECTED:** 0 / 0 / 1929

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 35.0 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER COAL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	17.0	0.0	YELLOW
348.0			SANDY SHALE	10.0	17.0	
338.0			VARRIGATED SHALE	4.0	27.0	
334.0	CARBONDALE	HERRIN	COAL	2.0	31.0	CORRELATION UNCERTAIN
332.0			UNDERCLAY	2.0	33.0	

MAPID: 05900028000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3709 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.769899 **DATE COLLECTED:** 0 / 0 / 1929

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 3650.0 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER 2, MOORE **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
334.0	CARBONDALE	HERRIN	COAL	2.0	31.0	

MAPID: 05900055000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SE NE SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.357416 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.766604 **DATE COLLECTED:** 0 / 0 / 1929

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	CARBONDALE	HERRIN	COAL	-	30.0	

MAPID: 05901090000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.371718 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.774294 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
288.0	CARBONDALE	DANVILLE	COAL	1.9	78.0	
266.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.4	100.0	
253.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	113.0	
227.0	CARBONDALE	HERRIN	COAL	4.1	139.0	
210.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	21.0	156.0	
166.0	CARBONDALE	BRIAR HILL	COAL	1.6	200.0	
154.0	CARBONDALE	CANTON	SANDSTONE/SILTSTONE	3.0	212.0	
110.0	CARBONDALE	SPRINGFIELD	COAL	4.3	256.0	BLACK SHALE & LIMESTONE ROOF

MAPID: 05901090000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.371718 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.774294 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 143.1 **LOG TYPE:** Survey Core Study
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
280.0	CARBONDALE	DANVILLE	COAL	1.8	86.0	
278.2	CARBONDALE		CLAYSTONE & SHALE	12.0	87.8	
266.2	CARBONDALE	ALLENBY	COAL	0.3	99.8	
265.9	CARBONDALE		CLAYSTONE & SHALE	1.9	100.1	
264.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	7.4	102.0	
256.5	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.8	109.5	
255.7	CARBONDALE	LAWSON	SILTY SHALE	3.9	110.3	
251.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	6.4	114.2	
245.4	CARBONDALE	LAWSON	GRAY SHALE	10.8	120.6	
234.6	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.7	131.4	
234.0	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	4.8	132.0	
229.2	CARBONDALE	ANNA	BLACK SHALE	2.2	136.8	
227.0	CARBONDALE	HERRIN	COAL	4.1	139.0	

MAPID: 05901090000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.371718 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.774294 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 365.9 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 27 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.9	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0	
328.9	MODESTO		SHALE WITH LIMESTONE	9.5	37.0	
319.4	MODESTO		DARK SHALE	4.0	46.5	
315.4	MODESTO		LIMESTONE	0.7	50.5	
314.7	MODESTO		DARK SHALE	1.3	51.2	
313.4	MODESTO		SHALE	25.8	52.5	LIMESTONE STREAKS NOTED
287.6	CARBONDALE	DANVILLE	COAL	1.8	78.3	
285.9	CARBONDALE		SHALE	18.3	80.0	
267.6	CARBONDALE	ALLENBY	COAL	0.5	98.3	
267.1	CARBONDALE		DARK SHALE	1.4	98.8	
265.7	CARBONDALE	BANKSTON FORK	LIMESTONE	8.7	100.2	
257.1	CARBONDALE		SANDY SHALE	4.1	108.8	
253.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.6	112.9	
248.4	CARBONDALE		SANDY SHALE	12.3	117.5	
236.1	CARBONDALE	BRERETON	LIMESTONE	5.4	129.8	
230.6	CARBONDALE	ANNA	SHALE	3.5	135.3	
227.1	CARBONDALE	HERRIN	COAL	4.3	138.8	
222.8	CARBONDALE		SHALE	3.4	143.1	
219.4	CARBONDALE		SANDY SHALE	30.8	146.5	
188.6	CARBONDALE		DARK SHALE	23.2	177.3	
165.4	CARBONDALE	BRIAR HILL	COAL	1.7	200.5	
163.7	CARBONDALE		SANDY SHALE	8.8	202.2	
155.0	CARBONDALE		SANDSTONE	12.8	210.9	
142.2	CARBONDALE		DARK SHALE	16.1	223.7	
126.1	CARBONDALE		SANDY SHALE	12.3	239.8	
113.9	CARBONDALE		SHALE	4.3	252.0	
109.6	CARBONDALE	SPRINGFIELD	COAL	4.3	256.3	
105.2	CARBONDALE		SHALE	2.3	260.7	

MAPID: 05901330000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 20' S line, 1320' E line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.365364 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.769196 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 81 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
362.0	PLEISTOCENE		UNCONSOLIDATED	47.5	10.0	
314.5	CARBONDALE		SANDY SHALE	14.6	57.5	
299.9	CARBONDALE	ALLENBY	COAL	0.8	72.1	SOFT
299.1	CARBONDALE		SHALE	2.3	72.9	
296.7	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	75.3	
289.7	CARBONDALE		SANDY SHALE	7.8	82.3	

MAPID: 05901331000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 660' N line, 1320' E line of NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.365401 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.767316 **DATE COLLECTED:** 3 / 0 / 1950

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 82 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
362.0	PLEISTOCENE		UNCONSOLIDATED	54.0	10.0	
308.0	CARBONDALE		SHALE	2.7	64.0	
305.3	CARBONDALE		DARK SHALE	0.3	66.7	
305.0	CARBONDALE	ALLENBY	COAL	0.5	67.0	
304.5	CARBONDALE		SHALE	2.1	67.5	
302.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	69.6	
297.4	CARBONDALE		SANDY SHALE	25.4	74.6	

MAPID: 05901332000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 10' S line, 1320' W line of NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369248 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.769002 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO. 83 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
365.0	PLEISTOCENE		UNCONSOLIDATED	34.7	5.0	
330.3	CARBONDALE		BLACK SHALE	1.8	39.7	
328.5	CARBONDALE	ALLENBY	COAL	2.2	41.5	
326.3	CARBONDALE		CLAYSTONE	3.3	43.7	

MAPID: 05901333000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 10' N line, 150' W line of SE SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369433 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.765424 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO. 84 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
360.0	PLEISTOCENE		UNCONSOLIDATED	30.0	10.0	

MAPID: 05901334000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 3' N line, 50' E line of SW SE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.361021 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.765613 **DATE COLLECTED:** 3 / 0 / 1950
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO. 86 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
365.0	PLEISTOCENE		UNCONSOLIDATED	48.0	5.0	
317.0	CARBONDALE		SHALE	10.0	53.0	"SOFT PAN"
307.0	CARBONDALE		SHALE	1.0	63.0	
306.0	CARBONDALE	ALLENBY	COAL	2.4	64.0	
303.6	CARBONDALE		CLAYSTONE	1.0	66.4	DARK
302.6	CARBONDALE		CLAYSTONE	2.0	67.4	LIGHT
300.6	CARBONDALE		LIMESTONE	0.6	69.4	

MAPID: 05901335000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 115' S line, 10' E line of SE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.365536 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.76224 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 87 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
349.0	PLEISTOCENE		UNCONSOLIDATED	26.0	6.0	
323.0	CARBONDALE	ALLENBY	SMUT	1.1	32.0	
321.9	CARBONDALE	ALLENBY	COAL	0.4	33.1	
321.5	CARBONDALE		CLAYSTONE	1.2	33.5	
320.3	CARBONDALE	BANKSTON FORK	SHALE WITH LIMESTONE	4.8	34.7	
315.5	CARBONDALE		SHALE	6.5	39.5	
309.0	CARBONDALE		DARK SHALE	2.0	46.0	
307.0	CARBONDALE	BRERETON	LIMESTONE	5.4	48.0	
301.6	CARBONDALE	ANNA	BLACK SHALE	1.5	53.4	
300.1	CARBONDALE	HERRIN	COAL	3.2	54.9	
296.9	CARBONDALE	HERRIN	ROCK	0.2	58.1	BAND NOTED
296.7	CARBONDALE	HERRIN	COAL	0.6	58.3	
296.2	CARBONDALE	HERRIN	COAL	1.1	58.8	RASH
295.1	CARBONDALE		CLAYSTONE	1.1	59.9	

MAPID: 05901336000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 20' S line, 2' W line of NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373766 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.765414 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO. 88 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.0	PLEISTOCENE		UNCONSOLIDATED	2.0	0.0	
366.0	PLEISTOCENE		UNCONSOLIDATED	28.0	2.0	
338.0	CARBONDALE		SHALE	3.0	30.0	"SOFT PAN"
335.0	CARBONDALE	ALLENBY	SMUT	1.0	33.0	
334.0	CARBONDALE		CLAYSTONE	2.5	34.0	
331.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	36.5	
325.5	CARBONDALE		SANDY SHALE	6.5	42.5	
319.0	CARBONDALE		SANDY SHALE	16.5	49.0	
302.5	CARBONDALE	BRERETON	LIMESTONE	8.5	65.5	
294.0	CARBONDALE	ANNA	BLACK SHALE	1.0	74.0	
293.0	CARBONDALE	HERRIN	COAL	3.0	75.0	
290.0	CARBONDALE	HERRIN	ROCK	0.2	78.0	BAND NOTED
289.8	CARBONDALE	HERRIN	COAL	0.8	78.2	
289.0	CARBONDALE	HERRIN	RASH	0.3	79.0	
288.7	CARBONDALE		CLAYSTONE	1.8	79.3	

MAPID: 05901337000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 20' N line, 20' W line of SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369596 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.77257 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 73.0 **LOG TYPE:** Drillers Log
SOURCE: PYRAMID COAL CO. 89 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
364.0	PLEISTOCENE		UNCONSOLIDATED	38.0	4.0	
326.0	CARBONDALE		SHALE	19.5	42.0	
306.5	CARBONDALE	HERRIN	SHALY COAL	1.0	61.5	
305.5	CARBONDALE	HERRIN	ROCK	0.1	62.5	BAND NOTED, SANDY
305.4	CARBONDALE	HERRIN	COAL	0.6	62.6	
304.8	CARBONDALE		SANDY SHALE	9.8	63.2	

MAPID: 05901338000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2640' S line, 1320' W line of SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.360695 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.769288 **DATE COLLECTED:** 4 / 0 / 1950

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 90 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
355.0	PLEISTOCENE		UNCONSOLIDATED	30.0	5.0	
325.0	CARBONDALE		SHALE	5.0	35.0	YELLOW
320.0	CARBONDALE		SANDY SHALE	14.0	40.0	
306.0	CARBONDALE		SHALE WITH LIMESTONE	2.0	54.0	
304.0	CARBONDALE	BRERETON	LIMESTONE	3.5	56.0	
300.5	CARBONDALE	ANNA	BLACK SHALE	1.3	59.5	
299.2	CARBONDALE	HERRIN	COAL	0.3	60.8	
298.9	CARBONDALE	HERRIN	COAL	2.8	61.1	
296.1	CARBONDALE	HERRIN	ROCK	0.2	63.9	BAND NOTED
295.9	CARBONDALE	HERRIN	COAL	1.2	64.1	
294.7	CARBONDALE		CLAYSTONE	1.8	65.3	

MAPID: 05925172000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369661 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776093 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 366.5 **LOGGED (FT.):** 270.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-443 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	6.0		
360.5	PLEISTOCENE		CLAY	19.0	6.0	
341.5	SHELBURN		BROWN SHALE	8.0	25.0	
333.5	SHELBURN		COAL	0.9	33.0	
332.6	SHELBURN		UNDERCLAY	2.1	33.9	
330.5	SHELBURN		SANDY SHALE	1.0	36.0	
329.5	SHELBURN		LIMESTONE	2.0	37.0	
327.5	SHELBURN		SANDY SHALE	9.0	39.0	
318.5	SHELBURN		BLACK SHALE	4.0	48.0	
314.5	SHELBURN		SANDY SHALE	23.0	52.0	
291.5	SHELBURN		DARK SHALE	2.0	75.0	
289.5	SHELBURN	DANVILLE	COAL	1.8	77.0	
287.7	SHELBURN		SANDY SHALE	17.2	78.8	
270.5	SHELBURN	ALLENBY	COAL	0.7	96.0	
269.8	SHELBURN		SANDY SHALE	4.3	96.7	
265.5	SHELBURN	BANKSTON FORK	LIMESTONE	8.0	101.0	
257.5	SHELBURN		SANDY SHALE	22.0	109.0	
235.5	SHELBURN	BRERETON	LIMESTONE	4.0	131.0	
231.5	CARBONDALE	ANNA	BLACK SHALE	3.0	135.0	
228.5	CARBONDALE	HERRIN	COAL	4.6	138.0	
223.9	CARBONDALE		UNDERCLAY	4.4	142.6	
219.5	CARBONDALE		SANDY SHALE	11.0	147.0	
208.5	CARBONDALE		GRAY SANDSTONE	7.0	158.0	
201.5	CARBONDALE		SANDY SHALE	33.0	165.0	
168.5	CARBONDALE	BRIAR HILL	COAL	1.7	198.0	
166.8	CARBONDALE		SANDY SHALE	38.3	199.7	
128.5	CARBONDALE		GRAY SHALE	2.0	238.0	WITH SS STREAKS
126.5	CARBONDALE		GRAY SANDSTONE	1.6	240.0	WITH SHALE STREAKS
124.9	CARBONDALE		GRAY SHALE	8.8	241.6	WITH SS STREAKS
116.1	CARBONDALE		SHALE	0.6	250.4	FOSSILS
115.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	251.0	
112.9	CARBONDALE		BLACK SHALE & COAL	0.4	253.6	
112.5	CARBONDALE		DARK SHALE	2.3	254.0	
110.2	CARBONDALE	SPRINGFIELD	COAL	4.5	256.3	
105.7	CARBONDALE		UNDERCLAY	1.7	260.8	
104.0	CARBONDALE		SHALY LIMESTONE	2.3	262.5	WITH CALCITE
101.7	CARBONDALE		SANDY SHALE	2.4	264.8	
99.3	CARBONDALE		GRAY SANDSTONE	2.8	267.2	

MAPID: 05925173000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.373734 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776109 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.6 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-444 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.6	PLEISTOCENE		SANDY CLAY	13.0	0.0	
357.6	PLEISTOCENE		CLAY	10.0	13.0	
347.6	SHELBURN		BROWN SHALE	7.0	23.0	
340.6	SHELBURN		SANDY SHALE	26.0	30.0	
314.6	SHELBURN		BLACK SHALE	6.0	56.0	
308.6	SHELBURN		SANDY SHALE	20.0	62.0	
288.6	SHELBURN		DARK SHALE	2.0	82.0	
286.6	SHELBURN	DANVILLE	COAL	1.9	84.0	
284.7	SHELBURN		SANDY SHALE	16.1	85.9	
268.6	SHELBURN	ALLENBY	COAL	0.7	102.0	
267.9	SHELBURN		SANDY SHALE	7.3	102.7	
260.6	SHELBURN	BANKSTON FORK	LIMESTONE	3.0	110.0	
257.6	SHELBURN		SANDY SHALE	4.0	113.0	
253.6	SHELBURN		GRAY SANDSTONE	7.0	117.0	
246.6	SHELBURN		SANDY SHALE	14.0	124.0	
232.6	SHELBURN	BRERETON	LIMESTONE	1.0	138.0	
231.6	CARBONDALE	ANNA	BLACK SHALE	5.0	139.0	
226.6	CARBONDALE	HERRIN	COAL	4.7	144.0	
221.9	CARBONDALE		SANDY SHALE	1.3	148.7	
220.6	CARBONDALE		GRAY SANDSTONE	13.0	150.0	
207.6	CARBONDALE		SANDY SHALE	42.0	163.0	
165.6	CARBONDALE	BRIAR HILL	COAL	1.8	205.0	
163.8	CARBONDALE		SANDY SHALE	42.6	206.8	
121.2	CARBONDALE		GRAY SHALE	7.5	249.4	W/ SS STREAKS
113.7	CARBONDALE		SHALE	0.5	256.9	FOSSILS
113.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	257.4	
112.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	257.9	
110.4	CARBONDALE	TURNER MINE	PYRITE	0.4	260.2	
110.0	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	260.6	
109.7	CARBONDALE	SPRINGFIELD	COAL	4.4	260.9	
105.3	CARBONDALE		UNDERCLAY	4.7	265.3	W/ LS NODULES
100.6	CARBONDALE		SANDY SHALE	2.0	270.0	
98.6	CARBONDALE		GRAY SHALE	4.0	272.0	W/ SS STREAKS

MAPID: 05925410000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 73' N, 1943' E, SW/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366988 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.7621 **DATE COLLECTED:** 7 / 26 / 2000

SURFACE ELEVATION (FT.): 358.6 **LOGGED (FT.):** 68.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 7G1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.6			UNCONSOLIDATED	27.0	0.0	SILT
331.6	SHELBURN	ANVIL ROCK	BROWN SANDSTONE	11.0	27.0	
320.6	SHELBURN	ANVIL ROCK	SANDSTONE	9.0	38.0	
311.6	SHELBURN		SANDY SHALE	8.0	47.0	
303.6	SHELBURN		DARK SHALE	1.0	55.0	
302.6	SHELBURN	BRERETON	LIMESTONE	2.0	56.0	
300.6	CARBONDALE	ANNA	BLACK SHALE	2.5	58.0	
298.1	CARBONDALE	HERRIN	COAL	2.6	60.5	
295.5	CARBONDALE	HERRIN	GREEN SHALE	0.2	63.1	
295.3	CARBONDALE	HERRIN	COAL	1.9	63.3	
293.4	CARBONDALE		CLAYSTONE	2.8	65.2	

MAPID: 05925411000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 5' N, 1143' W, SE/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.360282 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.762024 **DATE COLLECTED:** 7 / 26 / 2000

SURFACE ELEVATION (FT.): 357.8 **LOGGED (FT.):** 69.4 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 347QB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.8			UNCONSOLIDATED	35.2	0.0	
322.6			SHALE	18.7	35.2	
303.9			SHALE	2.1	53.9	
301.8	SHELBURN	BRERETON	LIMESTONE	4.5	56.0	
297.3	CARBONDALE	ANNA	BLACK SHALE	1.4	60.5	
296.0	CARBONDALE	HERRIN	COAL	4.6	61.8	
291.4	CARBONDALE		CLAYSTONE	3.0	66.4	

MAPID: 05925412000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1594' N, 766' E, SW/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.371135 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.76621 **DATE COLLECTED:** 5 / 20 / 1999

SURFACE ELEVATION (FT.): 359.3 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 6C14N **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.3			UNCONSOLIDATED	33.0	0.0	
326.3			RED SHALE	3.0	33.0	RED-BROWN
323.3	SHELBURN	ALLENBY	COAL	1.0	36.0	
322.3	SHELBURN		SANDY CLAYSTONE	3.0	37.0	
319.3	SHELBURN		SANDSTONE	4.0	40.0	
315.3	SHELBURN	BANKSTON FORK	LIMESTONE	2.0	44.0	
313.3	SHELBURN		SANDY SHALE	13.0	46.0	
300.3	SHELBURN	ANVIL ROCK	SANDSTONE	14.0	59.0	
286.3	SHELBURN		DARK SHALE	2.0	73.0	MASSIVE
284.3	SHELBURN	BRERETON	LIMESTONE	1.0	75.0	
283.3	CARBONDALE	ANNA	BLACK SHALE	2.0	76.0	
281.3	CARBONDALE	HERRIN	COAL	3.3	78.0	
278.0	CARBONDALE	HERRIN	GREEN SHALE	0.2	81.3	
277.8	CARBONDALE	HERRIN	COAL	1.1	81.5	
276.7	CARBONDALE		UNDERCLAY	2.4	82.6	

MAPID: 05900065000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366101 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.753478 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3950.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
226.0	CARBONDALE	SPRINGFIELD	COAL	5.3	169.0	

MAPID: 05900104000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.37258 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.753454 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3900.0 **LOG TYPE:** Drillers Log
SOURCE: SWADER H **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
368.0	CARBONDALE	HERRIN	COAL	3.0	22.0	

MAPID: 05900295000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** SW NW SW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.37257 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.751598 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:**
SOURCE: WALL J H, MOSSMAN C 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.0	CARBONDALE	SPRINGFIELD	COAL	7.0	90.0	DEPTH UNCERTAIN

MAPID: 05901089000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366225 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.755351 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
399.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	2.2	10.0	
391.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.4	18.0	
375.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	1.0	34.0	
355.0	CARBONDALE	HERRIN	COAL	4.1	54.0	
349.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	29.0	60.0	
290.0	CARBONDALE	BRIAR HILL	COAL	1.8	119.0	
270.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	14.0	139.0	
228.0	CARBONDALE	SPRINGFIELD	COAL	4.8	181.0	BLACK SHALE & LIMESTONE ROOF

MAPID: 05901089000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366225 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.755351 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 58.1 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.4	CARBONDALE		CLAYSTONE & SHALE	7.9	9.6	
391.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.4	17.5	
390.1	CARBONDALE	LAWSON	GRAY SHALE	12.0	18.9	
378.1	CARBONDALE	LAWSON	SANDSTONE	1.0	30.9	
377.1	CARBONDALE	LAWSON	CARBONACEOUS SHALE	15.0	31.9	
362.1	CARBONDALE	BRERETON	LIMESTONE	6.1	46.9	
356.0	CARBONDALE	ANNA	BLACK SHALE	1.0	53.0	
355.0	CARBONDALE	HERRIN	COAL	4.1	54.0	

MAPID: 05901089000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366225 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.755351 **DATE COLLECTED:** 10 / 23 / 1952

SURFACE ELEVATION (FT.): 409.3 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
409.3			NO RECORD	10.0	0.0	
399.3	CARBONDALE		BROWN SANDSTONE	2.5	10.0	
396.8	CARBONDALE		BROWN SHALE	6.0	12.5	
390.8	CARBONDALE	BANKSTON FORK	BROWN LIMESTONE	2.1	18.5	
388.7	CARBONDALE		BROWN SHALE	12.9	20.6	
375.8	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	1.0	33.5	
374.8	CARBONDALE		DARK SHALE	15.1	34.5	
359.7	CARBONDALE	BRERETON	LIMESTONE	3.5	49.6	DARK
356.2	CARBONDALE	ANNA	SHALE	1.0	53.1	
355.2	CARBONDALE	HERRIN	COAL	0.5	54.1	
354.7	CARBONDALE	HERRIN	SHALE	0.1	54.6	
354.6	CARBONDALE	HERRIN	COAL	2.3	54.7	
352.3	CARBONDALE	HERRIN	SHALE	0.2	57.0	
352.1	CARBONDALE	HERRIN	COAL	1.0	57.2	
351.1	CARBONDALE		BLUE SHALE	1.5	58.2	
349.6	CARBONDALE		SANDY SHALE	8.2	59.7	
341.5	CARBONDALE		GRAY SANDSTONE	21.4	67.8	
320.0	CARBONDALE		DARK SHALE	30.1	89.3	
290.0	CARBONDALE	BRIAR HILL	COAL	2.0	119.3	
288.0	CARBONDALE		SHALE	1.0	121.3	
287.0	CARBONDALE		SANDY SHALE	55.1	122.3	
231.9	CARBONDALE	TURNER MINE	SHALE	3.8	177.4	
228.1	CARBONDALE	SPRINGFIELD	COAL	4.8	181.2	
223.4	CARBONDALE		BLUE SHALE	3.1	185.9	

MAPID: 05902152000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.356553 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.747784 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 1360.0 **LOG TYPE:** Drillers Log

SOURCE: V S & S DRLG CO, INC **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-964.0	BASE OF PENN.		UNCLASSIFIED	-	1360.0	

MAPID: 05902152000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.356553 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.747784 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 2750.0 **LOG TYPE:** Drillers Log

SOURCE: V.S.&S. DRILLING CO. **WELL TYPE:** Oil and Gas Test

COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.0			UNCONSOLIDATED	40.0	0.0	
356.0			ROCK	93.0	40.0	
263.0			COAL	7.0	133.0	
256.0			ROCK	2610.0	140.0	

MAPID: 05903510000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 29' S line, 827' W line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.366736 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.754489 **DATE COLLECTED:** 3 / 18 / 1969

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 530.0 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER 335H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.0	PLEISTOCENE		UNCONSOLIDATED	14.7	0.0	
384.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	14.7	
373.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.3	25.2	
364.5	CARBONDALE		GRAY SHALE & LIMESTONE	1.5	34.5	
363.0	CARBONDALE	BRERETON	LIMESTONE	4.8	36.0	
358.2	CARBONDALE	ANNA	DARK SHALE	1.8	40.8	
356.4	CARBONDALE	HERRIN	COAL	4.4	42.6	
352.0	CARBONDALE		GRAY SHALE	3.8	47.0	
348.2	CARBONDALE		SANDY SHALE	2.3	50.8	
346.0	CARBONDALE		SHALY SANDSTONE	41.5	53.0	
304.5	CARBONDALE		SANDY SHALE	12.8	94.5	
291.7	CARBONDALE	BRIAR HILL	COAL	2.0	107.3	
289.7	CARBONDALE		SANDY SHALE	1.7	109.3	
288.0	CARBONDALE		SANDSTONE	2.3	111.0	
285.7	CARBONDALE		SHALY SANDSTONE	6.7	113.3	
279.0	CARBONDALE		SANDY SHALE	43.4	120.0	
235.6	CARBONDALE		SHALE WITH LIMESTONE	0.5	163.4	
235.1	CARBONDALE	ST. DAVID	LIMESTONE	0.8	163.9	
234.4	CARBONDALE	TURNER MINE	DARK SHALE & LIMESTONE	0.4	164.6	
234.0	CARBONDALE	TURNER MINE	DARK SHALE	1.3	165.0	
232.7	CARBONDALE	TURNER MINE	CALCAREOUS SANDSTONE	0.5	166.3	
232.2	CARBONDALE	TURNER MINE	SANDY LIMESTONE	0.8	166.8	
231.4	CARBONDALE	TURNER MINE	DARK SHALE	0.8	167.6	
230.6	CARBONDALE	SPRINGFIELD	COAL	4.5	168.4	
226.0	CARBONDALE		UNDERCLAY	0.1	173.0	
225.9	CARBONDALE		GRAY SHALE	1.2	173.1	
224.7	CARBONDALE		SANDY SHALE	2.6	174.3	
222.2	CARBONDALE		SANDSTONE	16.7	176.8	
205.5	CARBONDALE		SANDY SHALE	42.5	193.5	
163.0	CARBONDALE		DARK SHALE	1.0	236.0	
162.0	CARBONDALE	HANOVER	LIMESTONE	1.7	237.0	
160.3	CARBONDALE	EXCELLO	BLACK SHALE	2.3	238.7	
158.0	CARBONDALE	HOUCHIN CREEK	COAL	0.7	241.0	
157.3	CARBONDALE		SANDSTONE	13.8	241.7	
143.5	CARBONDALE		SANDY SHALE	42.2	255.5	
101.3	CARBONDALE	SURVANT	COAL	0.5	297.7	
100.8	CARBONDALE		SANDY SHALE	20.8	298.2	

80.0	CARBONDALE		SANDSTONE	2.7	319.0
77.3	CARBONDALE		SHALY SANDSTONE	25.2	321.7
52.2	CARBONDALE		SANDY SHALE	7.7	346.8
44.5	CARBONDALE		SHALE WITH LIMESTONE	4.5	354.5
40.0	CARBONDALE	COLCHESTER	COAL	1.5	359.0
38.5	CARBONDALE		SANDY SHALE	10.5	360.5
28.0	CARBONDALE		LIMESTONE	1.8	371.0
26.2	CARBONDALE		SANDY SHALE	18.8	372.8
7.5	CARBONDALE		SANDY DARK SHALE	3.5	391.5
4.0	CARBONDALE	DEKOVEN	COAL	1.8	395.0
2.2	CARBONDALE		SANDY SHALE	5.1	396.8
-2.8	CARBONDALE		SANDSTONE	3.2	401.8
-6.0	CARBONDALE		SANDY SHALE	3.8	405.0
-9.8	CARBONDALE		SANDY DARK SHALE	10.2	408.8
-20.0	CARBONDALE	DAVIS	COAL	1.5	419.0
-21.5	TRADEWATER		SANDY SHALE	5.5	420.5
-27.0	TRADEWATER		SANDSTONE	8.7	426.0
-35.7	TRADEWATER		SANDY SHALE	28.0	434.7
-63.7	TRADEWATER		DARK SHALE	10.3	462.7
-74.0	TRADEWATER	WISE RIDGE	COAL	0.7	473.0
-74.7	TRADEWATER		SANDSTONE	7.4	473.7
-82.1	TRADEWATER		SANDY SHALE	1.5	481.1
-83.6	TRADEWATER		SILTY SHALE	2.2	482.6
-85.8	TRADEWATER		DARK SHALE	1.6	484.8
-87.3	TRADEWATER		LIMESTONE	2.2	486.3
-89.5	TRADEWATER		DARK SHALE & COAL	0.7	488.5
-90.2	TRADEWATER		LIMESTONE	0.7	489.2
-90.8	TRADEWATER		DARK SHALE	2.0	489.8
-92.8	TRADEWATER	MT. RORAH	COAL	0.8	491.8
-93.7	TRADEWATER		GRAY SHALE & LIMESTONE	1.1	492.7
-94.8	TRADEWATER		GRAY SHALE	5.3	493.8
-100.0	TRADEWATER		SANDY SHALE	10.4	499.0
-110.4	TRADEWATER		DARK SHALE	3.8	509.4
-114.3	TRADEWATER		SANDSTONE	3.8	513.3
-118.1	TRADEWATER		SANDY SHALE	3.1	517.1
-121.2	TRADEWATER		LIMESTONE	4.3	520.2
-125.5	TRADEWATER		GRAY SHALE	5.5	524.5

MAPID: 05924940000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364769 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754423 **DATE COLLECTED:** 5 / 11 / 1966

SURFACE ELEVATION (FT.): 396.4 **LOGGED (FT.):** 28.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1603QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.4	PLEISTOCENE		CLAY	8.7	0.0	
387.7	CARBONDALE		SHALE	7.5	8.7	SOFT, LIGHT GRAY
380.2	CARBONDALE	BRERETON	LIMESTONE	4.2	16.2	BLACK
376.0	CARBONDALE	ANNA	BLACK SHALE	2.4	20.4	
373.6	CARBONDALE	HERRIN	COAL	2.8	22.8	
370.8	CARBONDALE	HERRIN	SHALE	0.2	25.6	
370.6	CARBONDALE	HERRIN	COAL	1.2	25.8	
369.4	CARBONDALE		UNDERCLAY	1.5	27.0	

MAPID: 05924941000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2600' N line, 1000' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.359338 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754849 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 48.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1642 **WELL TYPE:** Coal Test

COMMENT: PERMIT 36; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.0	PLEISTOCENE		CLAY	13.4	0.0	
382.6	CARBONDALE		SHALE	4.4	13.4	
378.2	CARBONDALE		SANDSTONE	4.1	17.8	
374.1	CARBONDALE		SHALE	12.9	21.9	
361.2	CARBONDALE	BRERETON	LIMESTONE	5.4	34.8	
355.8	CARBONDALE	ANNA	BLACK SHALE	2.7	40.2	
353.1	CARBONDALE	HERRIN	COAL	4.1	42.9	
349.0	CARBONDALE		UNDERCLAY	1.6	47.0	

MAPID: 05924942000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364769 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754423 **DATE COLLECTED:** 6 / 10 / 1966

SURFACE ELEVATION (FT.): 376.4 **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1719QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.4	PLEISTOCENE		CLAY	14.1	0.0	
362.3	CARBONDALE		SHALE	17.3	14.1	
345.0	CARBONDALE	BRERETON	LIMESTONE	2.2	31.4	
342.8	CARBONDALE	ANNA	BLACK SHALE	1.9	33.6	
340.9	CARBONDALE	HERRIN	COAL	2.9	35.5	
338.0	CARBONDALE	HERRIN	SHALE	0.1	38.4	
337.9	CARBONDALE	HERRIN	COAL	1.0	38.5	
336.9	CARBONDALE		UNDERCLAY	1.5	39.5	

MAPID: 05924943000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364769 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754423 **DATE COLLECTED:** 6 / 11 / 1966

SURFACE ELEVATION (FT.): 407.3 **LOGGED (FT.):** 52.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 1956QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237, EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
407.3	PLEISTOCENE		CLAY	12.0	0.0	
395.3	CARBONDALE	ANVIL ROCK	SANDSTONE	12.9	12.0	BLACK
382.5	CARBONDALE		SHALE	10.4	24.8	WITH SAND; GRAY
372.1	CARBONDALE		GRAY SHALE	3.8	35.2	
368.3	CARBONDALE	BRERETON	LIMESTONE	5.1	39.0	
363.2	CARBONDALE	ANNA	BLACK SHALE	2.1	44.1	
361.1	CARBONDALE	HERRIN	COAL	3.0	46.2	
358.1	CARBONDALE	HERRIN	GRAY SHALE	0.3	49.2	
357.9	CARBONDALE	HERRIN	COAL	1.0	49.4	
356.9	CARBONDALE		UNDERCLAY	2.2	50.4	

MAPID: 05924944000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2080' N line, 480' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.357628 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.756312 **DATE COLLECTED:** 10 / 2 / 1980

SURFACE ELEVATION (FT.): 394.6 **LOGGED (FT.):** 54.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 2387QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 36; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
394.6	PLEISTOCENE		CLAY	17.2	0.0	
377.4	CARBONDALE		SANDSTONE	12.8	17.2	
364.6	CARBONDALE		GRAY SHALE	13.0	30.0	
351.6	CARBONDALE	BRERETON	LIMESTONE	5.6	43.0	
346.0	CARBONDALE	ANNA	BLACK SHALE	1.5	48.6	
344.5	CARBONDALE	HERRIN	COAL	4.5	50.1	
340.0	CARBONDALE		UNDERCLAY	0.2	54.6	

MAPID: 05924945000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364769 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754423 **DATE COLLECTED:** 10 / 2 / 1980

SURFACE ELEVATION (FT.): 360.3 **LOGGED (FT.):** 53.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2369QE **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.3	PLEISTOCENE		SANDY CLAY	17.9	0.0	
342.4	CARBONDALE		SANDSTONE	2.5	17.9	BROWN
340.0	CARBONDALE		SANDSTONE	2.3	20.3	GRAY
337.8	CARBONDALE		SANDY SHALE	6.4	22.5	
331.4	CARBONDALE		GRAY SHALE	6.6	28.9	
324.8	CARBONDALE		LIMESTONE	0.6	35.5	DARK, HARD
324.2	CARBONDALE		BLACK SHALE	0.9	36.1	
323.3	CARBONDALE		GRAY SHALE	3.3	37.0	
320.1	CARBONDALE	HERRIN	COAL	4.4	40.2	
315.7	CARBONDALE		GRAY SHALE	3.4	44.6	
312.3	CARBONDALE		SANDSTONE	3.0	48.0	WITH SHALE BANDS
309.3	CARBONDALE		SANDSTONE	2.7	51.0	GRAY, HARD

MAPID: 05924946000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1200' N line, 1280' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.36056 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.758693 **DATE COLLECTED:** 9 / 30 / 1980

SURFACE ELEVATION (FT.): 368.4 **LOGGED (FT.):** 51.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 2403 **WELL TYPE:** Coal Test

COMMENT: PERMIT 36; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.4	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
362.4	PLEISTOCENE		CLAY	6.0	6.0	
356.4	CARBONDALE		SANDSTONE	18.0	12.0	
338.4	CARBONDALE		SHALE	10.0	30.0	
328.4	CARBONDALE		BLACK SHALE	1.0	40.0	
327.4	CARBONDALE	BRERETON	LIMESTONE	3.5	41.0	
323.9	CARBONDALE	ANNA	BLACK SHALE	2.7	44.5	
321.2	CARBONDALE	HERRIN	COAL	3.4	47.2	
317.8	CARBONDALE	HERRIN	SHALE	0.2	50.6	
317.6	CARBONDALE	HERRIN	COAL	0.7	50.8	
316.9	CARBONDALE		UNDERCLAY	0.1	51.5	

MAPID: 05924947000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364769 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754423 **DATE COLLECTED:** 10 / 10 / 1980

SURFACE ELEVATION (FT.): 351.7 **LOGGED (FT.):** 50.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2414QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
351.7	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
347.7	PLEISTOCENE		CLAY	27.0	4.0	
320.7	CARBONDALE		GRAY SHALE	6.5	31.0	
314.2	CARBONDALE		BLACK SHALE	1.0	37.5	
313.2	CARBONDALE	BRERETON	LIMESTONE	4.0	38.5	
309.2	CARBONDALE	ANNA	BLACK SHALE	1.8	42.5	
307.4	CARBONDALE	HERRIN	COAL	3.2	44.3	
304.2	CARBONDALE	HERRIN	SHALE	0.2	47.5	
304.0	CARBONDALE	HERRIN	COAL	0.9	47.7	
303.1	CARBONDALE		UNDERCLAY	1.6	48.6	

MAPID: 05925174000C **VERSION:** 1 **PROJECT:** NCRDS16

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.369182 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.754495 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 394.4 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: ARCLAR COMPANY AC-435 **WELL TYPE:** Coal Test

COMMENT: BIG RIDGE MINE PERMIT226 REV5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	10.0		
384.4	SHELBURN		SANDSTONE	10.0	10.0	
374.4	SHELBURN	BRERETON	LIMESTONE	4.0	20.0	
370.4	CARBONDALE	ANNA	BLACK SHALE	2.0	24.0	
368.4	CARBONDALE	HERRIN	COAL	4.0	26.0	
364.4	CARBONDALE		SANDY SHALE	7.0	30.0	
357.4	CARBONDALE		GRAY SANDSTONE	30.0	37.0	
327.4	CARBONDALE		SANDY SHALE	30.0	67.0	
297.4	CARBONDALE	BRIAR HILL	COAL	2.0	97.0	
295.4	CARBONDALE		SANDY SHALE	24.0	99.0	
271.4	CARBONDALE		GRAY SANDSTONE	7.0	123.0	W/ SHALE STREAKS
264.4	CARBONDALE		GRAY SHALE	23.3	130.0	W/ SS STREAKS
241.1	CARBONDALE		CALCAREOUS SHALE	1.4	153.3	
239.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	154.7	
236.5	CARBONDALE	SPRINGFIELD	COAL	4.8	157.9	
231.7	CARBONDALE		UNDERCLAY	3.0	162.7	
228.7	CARBONDALE		SHALY LIMESTONE	1.7	165.7	
227.0	CARBONDALE		SANDY CLAYSTONE	5.6	167.4	

MAPID: 05925413000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1397' S, 2455' E, NW/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.36521 **GEOLOGIST:** NCRDS

CONFIDENTIAL: N **LATITUDE:** 37.758093 **DATE COLLECTED:** 5 / 3 / 1999

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 7I5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	20.0	0.0	
353.0			SANDSTONE	3.0	20.0	RED-BROWN
350.0	SHELBURN		SANDY CLAYSTONE	2.0	23.0	
348.0	SHELBURN		SANDY SHALE	14.0	25.0	
334.0	SHELBURN	BRERETON	LIMESTONE	5.0	39.0	
329.0	CARBONDALE	ANNA	BLACK SHALE	2.0	44.0	
327.0	CARBONDALE	HERRIN	COAL	3.0	46.0	
324.0	CARBONDALE	HERRIN	GREEN SHALE	0.1	49.0	
323.9	CARBONDALE	HERRIN	COAL	1.0	49.1	
322.9	CARBONDALE		SANDY CLAYSTONE	2.9	50.1	

MAPID: 05925414000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1861' S, 2385' W, NE/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.364249 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.756835 **DATE COLLECTED:** 4 / 20 / 1999

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 58.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 7I7N **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	16.0	0.0	
374.0			SANDSTONE/SHALE	2.0	16.0	
372.0			SANDY SHALE	7.0	18.0	
365.0			SANDY SHALE	6.0	25.0	GREEN GRAY
359.0			SANDSTONE	7.0	31.0	
352.0			SANDY SHALE	6.0	38.0	GREEN GRAY
346.0			DARK SHALE	1.0	44.0	
345.0	SHELBURN	BRERETON	LIMESTONE	4.0	45.0	
341.0	CARBONDALE	ANNA	BLACK SHALE	2.0	49.0	
339.0	CARBONDALE	HERRIN	COAL	4.1	51.0	
334.9	CARBONDALE		CLAYSTONE	2.9	55.1	

MAPID: 05925415000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2636' S, 2278' W, NE/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363739 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.754717 **DATE COLLECTED:** 4 / 26 / 1999

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 7J9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	21.0	0.0	
389.0	SHELBURN	BANKSTON FORK	LIMESTONE	1.0	21.0	
388.0	SHELBURN	ANVIL ROCK	SANDSTONE	3.0	22.0	
385.0	SHELBURN	ANVIL ROCK	BROWN SANDSTONE	2.0	25.0	
383.0	SHELBURN		SANDY SHALE	11.0	27.0	
372.0	SHELBURN		SANDSTONE	5.0	38.0	
367.0	SHELBURN		SANDY SHALE	8.0	43.0	
359.0	SHELBURN		DARK SHALE	2.4	51.0	
356.6	SHELBURN	BRERETON	LIMESTONE	3.5	53.4	
353.1	CARBONDALE	ANNA	BLACK SHALE	0.3	56.9	
352.8	CARBONDALE	HERRIN	COAL	3.3	57.2	
349.5	CARBONDALE	HERRIN	GREEN SHALE	0.1	60.5	
349.4	CARBONDALE	HERRIN	COAL	1.1	60.6	
348.3	CARBONDALE		CLAYSTONE	1.3	61.7	

MAPID: 05925416000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1647' N, 2269' W, SE/c

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.363488 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.751425 **DATE COLLECTED:** 7 / 26 / 2000

SURFACE ELEVATION (FT.): 405.6 **LOGGED (FT.):** 56.9 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 120QB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.6			UNCONSOLIDATED	18.2	0.0	
387.4			SHALE	25.7	18.2	
361.6	SHELBURN	ANVIL ROCK	SANDSTONE	6.4	44.0	
355.2			SHALE	0.9	50.4	
354.3	CARBONDALE	HERRIN	COAL	3.1	51.3	
351.3	CARBONDALE	HERRIN	SHALE	0.2	54.3	
351.1	CARBONDALE	HERRIN	COAL	1.1	54.5	
350.1	CARBONDALE		CLAYSTONE	1.4	55.5	

MAPID: 05900064000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.3502 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.759202 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 3540.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

MAPID: 05903423000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.33857 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.748279 **DATE COLLECTED:** 4 / 28 / 1970
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 75.0 **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			ROCK	47.0	0.0	
313.0			COAL	2.5	47.0	
310.5			ROCK	27.5	49.5	

MAPID: 05924948000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 10 / 6 / 1954
SURFACE ELEVATION (FT.): 349.9 **LOGGED (FT.):** 40.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL 335QB **WELL TYPE:** Coal Test
COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.9	PLEISTOCENE		UNCONSOLIDATED	29.2	0.0	
320.7	CARBONDALE		LIMESTONE	1.3	29.2	
319.4	CARBONDALE		GRAY SHALE	1.7	30.5	
317.6	CARBONDALE	ANNA	BLACK SHALE	1.9	32.3	
315.8	CARBONDALE	HERRIN	COAL	3.2	34.1	
312.5	CARBONDALE	HERRIN	SHALE	0.2	37.4	
312.3	CARBONDALE	HERRIN	COAL	1.2	37.6	
311.1	CARBONDALE		UNDERCLAY	1.9	38.8	

MAPID: 05924949000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 6 / 22 / 1966

SURFACE ELEVATION (FT.): 353.6 **LOGGED (FT.):** 37.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 1870QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
353.6	PLEISTOCENE		CLAY	19.5	0.0	
334.1	CARBONDALE		GRAY SHALE	5.3	19.5	
328.8	CARBONDALE	BRERETON	LIMESTONE	5.0	24.8	
323.8	CARBONDALE	ANNA	BLACK SHALE	1.7	29.8	
322.1	CARBONDALE	HERRIN	COAL	3.0	31.5	
319.1	CARBONDALE	HERRIN	SHALE	0.2	34.5	
318.9	CARBONDALE	HERRIN	COAL	1.1	34.7	
317.8	CARBONDALE		UNDERCLAY	1.2	35.8	

MAPID: 05924950000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 10 / 2 / 1980

SURFACE ELEVATION (FT.): 393.2 **LOGGED (FT.):** 75.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2383QE **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
393.2	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
389.2	PLEISTOCENE		CLAY	11.6	4.0	WITH SANDSTONE
377.6	CARBONDALE		SANDSTONE	4.0	15.6	WITH CLAY STREAKS
373.6	CARBONDALE		CLAYSTONE	2.0	19.6	
371.6	CARBONDALE		SANDSTONE	0.1	21.6	
371.5	CARBONDALE		LIMESTONE	0.3	21.7	
371.2	CARBONDALE		SANDY SHALE	1.1	22.0	
370.1	CARBONDALE		SANDSTONE	0.7	23.1	
369.4	CARBONDALE		SANDSTONE	1.0	23.8	WITH SHALE STREAKS
368.4	CARBONDALE		SANDSTONE	8.9	24.8	
359.5	CARBONDALE		SHALE	16.7	33.7	
342.7	CARBONDALE	ANNA	BLACK SHALE	0.6	50.5	WITH LIMESTONE
342.2	CARBONDALE	ANNA	BLACK SHALE	4.3	51.0	
337.9	CARBONDALE	HERRIN	COAL	0.9	55.3	
337.1	CARBONDALE	HERRIN	BLACK SHALE	0.1	56.1	
337.0	CARBONDALE	HERRIN	COAL	2.3	56.2	
334.7	CARBONDALE	HERRIN	SHALE	0.2	58.5	
334.5	CARBONDALE	HERRIN	COAL	0.6	58.7	
333.9	CARBONDALE	HERRIN	BLACK SHALE	0.1	59.3	
333.9	CARBONDALE	HERRIN	COAL	0.6	59.3	
333.3	CARBONDALE		UNDERCLAY	1.0	59.9	
332.3	CARBONDALE		SANDY SHALE	4.4	60.9	
327.9	CARBONDALE		SANDSTONE	6.8	65.3	
321.2	CARBONDALE		SANDSTONE	3.2	72.0	WITH SHALE STREAKS

MAPID: 05924951000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 10 / 3 / 1980

SURFACE ELEVATION (FT.): 374.4 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2389QC **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.4	PLEISTOCENE		UNCONSOLIDATED	17.3	0.0	
357.1	PLEISTOCENE		CLAY	14.0	17.3	WITH BROWN SANDSTONE
343.1	CARBONDALE		GRAY SHALE	3.2	31.3	
339.9	CARBONDALE	BRERETON	LIMESTONE	4.3	34.5	
335.6	CARBONDALE	ANNA	BLACK SHALE	1.8	38.8	
333.8	CARBONDALE	HERRIN	COAL	4.3	40.6	PYRITE & CALCAREOUS
329.6	CARBONDALE		UNDERCLAY	1.2	44.8	

MAPID: 05924952000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 10 / 8 / 1980

SURFACE ELEVATION (FT.): 356.5 **LOGGED (FT.):** 46.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2408QB **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.5	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
351.5	PLEISTOCENE		CLAY	27.5	5.0	
324.0	CARBONDALE		GRAY SHALE	2.0	32.5	
322.0	CARBONDALE		BLACK SHALE	1.0	34.5	
321.0	CARBONDALE	BRERETON	LIMESTONE	2.6	35.5	
318.4	CARBONDALE	ANNA	BLACK SHALE	2.4	38.1	
316.0	CARBONDALE	HERRIN	COAL	3.1	40.5	
312.9	CARBONDALE	HERRIN	SHALE	0.2	43.6	
312.7	CARBONDALE	HERRIN	COAL	1.1	43.8	
311.6	CARBONDALE		UNDERCLAY	1.5	44.9	

MAPID: 05924953000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:**

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.346412 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.754449 **DATE COLLECTED:** 10 / 9 / 1980

SURFACE ELEVATION (FT.): 357.2 **LOGGED (FT.):** 48.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL 2420QE **WELL TYPE:** Coal Test

COMMENT: PERMIT 237; EQUALITY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.2	PLEISTOCENE		CLAY	14.0	0.0	
343.2	CARBONDALE		GRAY SHALE	8.6	14.0	WITH SOME PYRITE
334.6	CARBONDALE		GRAY SHALE	0.6	22.6	WITH LIMESTONE
334.0	CARBONDALE		SHALE	0.9	23.2	
333.1	CARBONDALE		SHALE	0.6	24.1	WITH LIMESTONE AND FOSSILS
332.5	CARBONDALE	BRERETON	LIMESTONE	5.5	24.7	DARK HARD
327.1	CARBONDALE	ANNA	BLACK SHALE	1.4	30.1	
325.7	CARBONDALE	HERRIN	COAL	0.6	31.5	
325.1	CARBONDALE	HERRIN	SHALE	0.1	32.1	
325.1	CARBONDALE	HERRIN	COAL	1.1	32.1	
323.9	CARBONDALE	HERRIN	SHALE	0.0	33.3	
323.9	CARBONDALE	HERRIN	COAL	1.3	33.3	
322.7	CARBONDALE	HERRIN	GRAY SHALE	0.1	34.5	
322.6	CARBONDALE	HERRIN	COAL	1.2	34.6	
321.4	CARBONDALE		GRAY SHALE	2.8	35.8	
318.6	CARBONDALE		SANDY SHALE	1.6	38.6	
317.0	CARBONDALE		GRAY SHALE	0.9	40.2	
316.1	CARBONDALE		SANDY SHALE	1.5	41.1	
314.6	CARBONDALE		SANDSTONE	6.0	42.6	

MAPID: 05900056000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.326074 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.751492 **DATE COLLECTED:** 0 / 0 / 1927

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 3650.0 **LOG TYPE:** Drillers Log

SOURCE: WALTHAM C **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
342.0	CARBONDALE	HERRIN	COAL	1.5	23.0	

MAPID: 05900066000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.324114 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.761052 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 3300.0 **LOG TYPE:**
SOURCE: **WELL TYPE:** Strip Mine
COMMENT: SURFACE ELEVATION UNCERTAIN

MAPID: 05900096000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.318638 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.747578 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
262.0	CARBONDALE	SPRINGFIELD	COAL	-	108.0	CORRELATION UNCERTAIN

MAPID: 05901234000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319055 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.755277 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 168.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
353.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	3.3	22.0	
340.0	CARBONDALE	HERRIN	COAL	3.6	35.0	
336.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SILTSTONE	17.0	39.0	
284.0	CARBONDALE	BRIAR HILL	COAL	2.1	91.0	
259.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	12.0	116.0	
213.0	CARBONDALE	SPRINGFIELD	COAL	3.8	162.0	BLACK SHALE ROOF

MAPID: 05901234000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319055 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.755277 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 38.6 **LOG TYPE:** Survey Core Study
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.4	CARBONDALE	LAWSON	SANDSTONE	2.4	23.6	
349.0	CARBONDALE	LAWSON	CONGLOMERATE	0.8	26.0	
348.2	CARBONDALE		BLACK SHALE	0.5	26.8	
347.7	CARBONDALE	BRERETON	LIMESTONE	4.3	27.3	
343.4	CARBONDALE	ANNA	BLACK SHALE	3.4	31.6	
340.0	CARBONDALE	HERRIN	COAL	3.6	35.0	

MAPID: 05901234000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.319055 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.755277 **DATE COLLECTED:** 0 / 0 / 1952
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 168.3 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 10 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			NO RECORD	22.0	0.0	
353.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	22.0	BLUE
349.5	CARBONDALE		SHALE	1.5	25.5	
348.0	CARBONDALE	BRERETON	LIMESTONE	4.3	27.0	
343.7	CARBONDALE	ANNA	SHALE	3.4	31.3	
340.3	CARBONDALE	HERRIN	COAL	3.6	34.7	
336.7	CARBONDALE		DARK SHALE	7.0	38.3	
329.7	CARBONDALE		SHALE	8.6	45.3	
321.2	CARBONDALE		SANDY SHALE	19.3	53.8	
301.9	CARBONDALE		SANDY SHALE	18.2	73.1	
283.7	CARBONDALE	BRIAR HILL	COAL	2.0	91.3	
281.7	CARBONDALE		SANDY SHALE	3.3	93.3	
278.5	CARBONDALE		SANDSTONE	30.2	96.5	
248.3	CARBONDALE		DARK SHALE	32.6	126.7	
215.7	CARBONDALE	TURNER MINE	SHALE	2.3	159.3	
213.5	CARBONDALE	SPRINGFIELD	COAL	3.8	161.5	
209.7	CARBONDALE		BLUE SHALE	3.1	165.3	

MAPID: 05901339000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 50' N line, 250' W line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.32668 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.758047 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 77.1 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 118 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
354.0	CARBONDALE		SHALE	22.5	4.0	"SOFT PAN"
331.5	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	26.5	
317.5	CARBONDALE		SANDY SHALE	3.3	40.5	
314.2	CARBONDALE	HERRIN	SHALY COAL	0.6	43.8	
313.7	CARBONDALE	HERRIN	CLAYSTONE	0.2	44.3	
313.5	CARBONDALE	HERRIN	SANDY SHALE	4.2	44.5	
309.3	CARBONDALE	HERRIN	SHALY COAL	1.3	48.7	
308.1	CARBONDALE		CLAYSTONE	1.1	49.9	
307.0	CARBONDALE		SANDY SHALE	8.0	51.0	
299.0	CARBONDALE		SANDSTONE	18.0	59.0	

MAPID: 05901340000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 15' S line, 20' E line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.322672 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.754381 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 84.1 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 119 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
-	PLEISTOCENE		CLAY & SHALE	16.0	8.0	"SOFT PAN"
-	PLEISTOCENE		UNCONSOLIDATED	41.0	24.0	
-			SANDSTONE	19.0	65.0	

MAPID: 05901341000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 30' N line, 10' W line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.322747 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.758092 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 116 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
354.0	PLEISTOCENE		CLAY	29.0	4.0	"SOFT PAN"
325.0	PLEISTOCENE		UNCONSOLIDATED	21.0	33.0	
304.0	CARBONDALE		SANDY SHALE	16.0	54.0	
288.0	CARBONDALE	HERRIN	RASH	0.3	70.0	
287.7	CARBONDALE	HERRIN	COAL	1.5	70.3	
286.2	CARBONDALE	HERRIN	ROCK	0.1	71.8	BAND NOTED
286.2	CARBONDALE	HERRIN	COAL	0.3	71.8	RASH
285.9	CARBONDALE		CLAYSTONE	0.4	72.1	
285.5	CARBONDALE		SANDY SHALE	27.5	72.5	

MAPID: 05901342000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 6' S line, 5' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317822 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.754323 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 117 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	30.0	10.0	
-	CARBONDALE		SHALE	5.0	40.0	"SOFT PAN"
-	CARBONDALE		SANDY SHALE	2.0	45.0	
-	CARBONDALE		LIGHT SHALE	1.5	47.0	
-	CARBONDALE		LIMESTONE	2.0	48.5	
-	CARBONDALE		SANDSTONE	4.5	50.5	
-	CARBONDALE		SANDY SHALE	8.0	55.0	
-	CARBONDALE		SANDY SHALE	26.5	63.0	
-	CARBONDALE	HERRIN	RASH	0.3	89.5	
-	CARBONDALE	HERRIN	PYRITE	0.2	89.8	
-	CARBONDALE	HERRIN	COAL	1.4	90.0	RASH
-	CARBONDALE		SANDY SHALE	2.6	91.4	

MAPID: 05900029000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31226 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.760797 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 59.2 **LOG TYPE:** Drillers Log
SOURCE: TRUAX-TRAER COAL CO 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	20.0	0.0	RED
362.0	PLEISTOCENE		CLAY	4.0	20.0	BLUE
358.0	CARBONDALE		SHALE	15.0	24.0	
343.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	15.0	39.0	
328.0	CARBONDALE	HERRIN	COAL	3.2	54.0	HARD
324.8	CARBONDALE		UNDERCLAY	2.0	57.2	

MAPID: 05900029000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31226 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.760797 **DATE COLLECTED:** 0 / 0 / 1929
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3820.0 **LOG TYPE:** Drillers Log
SOURCE: TRUAX-TRAER 1,HAMILTON **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
328.0	CARBONDALE	HERRIN	COAL	3.2	54.0	

MAPID: 05900030000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.316899 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.759078 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 3600.0 **LOG TYPE:** Measured section
SOURCE: GORDON DR, GORDON **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
319.0	CARBONDALE	HERRIN	COAL	4.2	41.0	

MAPID: 05900062000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.312068 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.755097 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3850.0 **LOG TYPE:**
SOURCE: GORDON DR **WELL TYPE:** Water Well
COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.0	CARBONDALE	HERRIN	COAL	-	41.0	
219.0	CARBONDALE	SPRINGFIELD	COAL	-	166.0	UNIT ERODED OR ABSENT

MAPID: 05901137000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1320' S line, 198' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.300093 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.750077 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 185.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
254.0	CARBONDALE	BRIAR HILL	COAL	2.1	123.0	
198.0	CARBONDALE	SPRINGFIELD	COAL	4.5	179.0	BLACK SHALE ROOF

MAPID: 05901137000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1320' S line, 198' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.300093 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.750077 **DATE COLLECTED:** 10 / 7 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 185.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	79.8	0.0	
300.2	CARBONDALE		ROCK	43.2	79.8	
257.1	CARBONDALE	BRIAR HILL	COAL	2.1	122.9	
255.0	CARBONDALE		ROCK	54.0	125.0	
201.0	CARBONDALE	SPRINGFIELD	COAL	4.5	179.0	
196.5	CARBONDALE		ROCK	1.5	183.5	

MAPID: 05901137000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1320' S line, 198' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.300093 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.750077 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 185.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	79.8	0.0	
297.2	CARBONDALE		SHALE	40.4	79.8	
256.8	CARBONDALE		SHALE	2.8	120.2	
254.1	CARBONDALE	BRIAR HILL	COAL	2.1	122.9	
252.0	CARBONDALE		SHALE	0.7	125.0	
251.3	CARBONDALE		SHALY SANDSTONE	22.8	125.7	
228.5	CARBONDALE		SHALE	16.2	148.5	
212.3	CARBONDALE		SHALE	10.8	164.7	
201.5	CARBONDALE		DARK SHALE	3.5	175.5	
198.0	CARBONDALE	SPRINGFIELD	COAL	4.5	179.0	
193.5	CARBONDALE		SHALE	1.5	183.5	

MAPID: 05901343000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1300' N line, 1290' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31354 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.758212 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 112 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	
348.0			SHALE	3.5	22.0	
344.5			SANDSTONE	11.4	25.5	
333.1	CARBONDALE		RASH	0.4	36.9	
332.7	CARBONDALE		COAL	1.0	37.3	
331.7	CARBONDALE		UNDERCLAY	5.4	38.3	
326.2	CARBONDALE		LIMESTONE	2.7	43.8	
323.6	CARBONDALE		SHALE	19.3	46.4	
304.3	CARBONDALE		DARK SHALE	17.8	65.7	
286.5	CARBONDALE		COAL	0.8	83.5	
285.7	CARBONDALE		SHALE	5.7	84.3	

MAPID: 05901344000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 10' S line, 6' E line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308594 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.754078 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 114 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
376.0	PLEISTOCENE		UNCONSOLIDATED	17.0	9.0	
359.0	CARBONDALE		SHALE	8.0	26.0	"SOFT PAN"
351.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	34.0	
343.0	CARBONDALE	HERRIN	COAL	2.1	42.0	LOG NOTES "SOFT NG" - NO GOOD?
340.9	CARBONDALE	HERRIN	ROCK	0.2	44.1	BAND NOTED
340.7	CARBONDALE	HERRIN	COAL	0.8	44.3	LOG NOTES "SOFT NG" - NO GOOD?
339.9	CARBONDALE		CLAYSTONE	1.9	45.1	
338.0	CARBONDALE		LIMESTONE	4.0	47.0	
334.0	CARBONDALE		SHALE	4.0	51.0	
330.0	CARBONDALE		SANDSTONE	30.0	55.0	
300.0	CARBONDALE		LIMESTONE	0.5	85.0	
299.5	CARBONDALE		SHALE	4.0	85.5	
295.5	CARBONDALE		DARK SHALE	10.5	89.5	

MAPID: 05901345000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 25' N line, 25' W line of NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308638 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.761513 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 120 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
381.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
374.0	PLEISTOCENE		UNCONSOLIDATED	17.5	7.0	
356.5			SHALE	13.5	24.5	YELLOW
343.0			SHALE	44.3	38.0	
298.7			LIMESTONE	5.5	82.3	
293.2			SHALE	2.2	87.8	

MAPID: 05901346000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 25' N line, 2' W line of NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303964 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.761304 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 121 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
373.0	PLEISTOCENE		UNCONSOLIDATED	16.0	9.0	
357.0	CARBONDALE		SHALE	3.0	25.0	"SOFT PAN"
354.0	CARBONDALE		SHALE	9.0	28.0	YELLOW
345.0	CARBONDALE		SHALE	12.0	37.0	
333.0	CARBONDALE		DARK SHALE	21.0	49.0	
312.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	70.0	
307.0	CARBONDALE		SHALE	1.0	75.0	
306.0	CARBONDALE	HERRIN	COAL	1.9	76.0	
304.1	CARBONDALE	HERRIN	ROCK	0.2	77.9	BAND NOTED
303.9	CARBONDALE	HERRIN	COAL	1.0	78.1	
302.9	CARBONDALE		CLAYSTONE	2.4	79.1	
300.5	CARBONDALE		LIMESTONE	4.5	81.5	
296.0	CARBONDALE		SANDSTONE	8.0	86.0	

MAPID: 05901347000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 5' S line, 20' W line of NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308581 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.757829 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL CO. 122 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
378.0			SHALE	23.5	4.0	"SOFT PAN"
354.5			SHALE	8.5	27.5	YELLOW
346.0			SHALE	7.5	36.0	
338.5			SANDSTONE	8.5	43.5	
330.0			DARK SHALE	15.5	52.0	
314.5			SHALE	6.0	67.5	
308.5			SHALE	26.5	73.5	

MAPID: 05901348000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 3' S line, 5' W line of NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303948 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.757654 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 123 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
370.0	PLEISTOCENE		UNCONSOLIDATED	24.0	8.0	
346.0			SHALE	9.0	32.0	"SOFT PAN"
337.0			SANDSTONE	4.0	41.0	
333.0			SHALE	9.0	45.0	
324.0			DARK SHALE	5.5	54.0	
318.5			SANDSTONE	7.5	59.5	
311.0			DARK SHALE	13.5	67.0	
297.5			SHALE	2.0	80.5	
295.5			LIMESTONE	1.3	82.5	
294.2			SHALY LIMESTONE	3.5	83.8	
290.7			LIMESTONE	1.0	87.3	
289.7			SHALE	5.8	88.3	

MAPID: 05901349000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 3' S line, 30' E line of SE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.299447 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.753805 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 124 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.0	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
366.0	PLEISTOCENE		UNCONSOLIDATED	21.0	11.0	
345.0			SHALE	12.0	32.0	"SOFT PAN"
333.0			SHALE	10.0	44.0	YELLOW
323.0			DARK SHALE	19.5	54.0	
303.5			SHALE	4.0	73.5	
299.5			LIMESTONE	3.6	77.5	
295.9			SHALE	18.9	81.1	

MAPID: 05901350000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 30' S line, 3' E line of SW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303967 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.754005 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 125 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
364.0	PLEISTOCENE		UNCONSOLIDATED	28.0	8.0	
336.0			SHALE	5.0	36.0	YELLOW
331.0			SHALE	7.0	41.0	
324.0			DARK SHALE	19.0	48.0	
305.0			SANDSTONE	7.0	67.0	
298.0			LIMESTONE	2.0	74.0	
296.0			SANDSTONE	5.0	76.0	
291.0			SHALE	3.0	81.0	
288.0			SANDSTONE	6.0	84.0	

MAPID: 05901351000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 20' S line, 30' E line of NE NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.299385 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.757535 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 126 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
368.0	PLEISTOCENE		UNCONSOLIDATED	34.0	10.0	
334.0	CARBONDALE		SHALE	9.0	44.0	"SOFT PAN"
325.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	53.0	YELLOW
319.0	CARBONDALE	ANVIL ROCK	SHALE	14.5	59.0	
304.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.1	73.5	
296.4	CARBONDALE	HERRIN	COAL	1.0	81.6	TOP MAY BE ERODED
295.4	CARBONDALE	HERRIN	ROCK	0.1	82.6	BAND NOTED
295.3	CARBONDALE	HERRIN	COAL	0.6	82.7	
294.7	CARBONDALE	HERRIN	ROCK	0.3	83.3	BAND NOTED
294.4	CARBONDALE	HERRIN	COAL	0.6	83.6	
293.8	CARBONDALE		CLAYSTONE	3.8	84.2	
290.0	CARBONDALE		SANDSTONE	2.0	88.0	

MAPID: 05901352000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 25' S line, 25' E line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313278 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.754251 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 113 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
385.0	CARBONDALE		SHALE	12.0	7.0	"SOFT PAN"
373.0	CARBONDALE		SHALE	7.0	19.0	YELLOW
366.0	CARBONDALE		SANDSTONE	2.0	26.0	
364.0	CARBONDALE		SHALE	6.0	28.0	YELLOW
358.0	CARBONDALE		SHALE	4.0	34.0	
354.0	CARBONDALE		SHALE	2.5	38.0	YELLOW
351.5	CARBONDALE		SHALE	2.5	40.5	
349.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	43.0	
347.0	CARBONDALE	HERRIN	COAL	3.0	45.0	
344.0	CARBONDALE	HERRIN	ROCK	0.2	48.0	BAND NOTED
343.8	CARBONDALE	HERRIN	PYRITE	0.1	48.2	
343.7	CARBONDALE	HERRIN	COAL	1.0	48.3	
342.7	CARBONDALE		CLAYSTONE	3.8	49.3	

MAPID: 05901353000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 10' N line, 50' W line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.317846 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.758127 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log

SOURCE: PYRAMID COAL 115 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
350.0	CARBONDALE		SHALE	30.5	5.0	"SOFT PAN"
319.5	CARBONDALE		SHALE	2.5	35.5	YELLOW
317.0	CARBONDALE		DARK SHALE	2.8	38.0	
314.2	CARBONDALE	HERRIN	COAL	0.5	40.8	
313.7	CARBONDALE	HERRIN	ROCK	0.1	41.3	BAND NOTED
313.7	CARBONDALE	HERRIN	COAL	0.8	41.3	
312.8	CARBONDALE	HERRIN	ROCK	0.1	42.2	BAND NOTED
312.7	CARBONDALE	HERRIN	COAL	1.3	42.3	
311.4	CARBONDALE	HERRIN	ROCK	0.2	43.6	BAND NOTED
311.2	CARBONDALE	HERRIN	COAL	0.9	43.8	
310.3	CARBONDALE		UNDERCLAY	2.3	44.7	

MAPID: 05901634000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.307561 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.760624 **DATE COLLECTED:** 10 / 0 / 1950
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2870.0 **LOG TYPE:** Electric Log
SOURCE: DEDMAN SAM L, HAMILTON THOS B 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	274.0	
81.0	CARBONDALE	SURVANT	COAL	2.5	304.0	
15.0	CARBONDALE	COLCHESTER	COAL	0.5	370.0	
-57.0	CARBONDALE	DEKOVEN	COAL	4.0	442.0	
-57.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	442.0	
-69.0	CARBONDALE	DAVIS	COAL	4.0	454.0	
-121.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	506.0	
-141.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	526.0	

MAPID: 05902923000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.305092 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.747393 **DATE COLLECTED:** 10 / 0 / 1963
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1989.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK, INC., BEATTY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
138.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	243.0	
93.0	CARBONDALE	SURVANT	COAL	2.0	288.0	
31.0	CARBONDALE	COLCHESTER	COAL	0.5	350.0	
-17.0	CARBONDALE	DEKOVEN	COAL	2.5	398.0	
-17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	398.0	
-39.0	CARBONDALE	DAVIS	COAL	3.0	420.0	
-89.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	470.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-108.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	489.0	

MAPID: 05902923000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.305092 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.747393 **DATE COLLECTED:** 10 / 0 / 1963
SURFACE ELEVATION (FT.): 381.5 **LOGGED (FT.):** 1400.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
33.5	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	348.0	
-38.5	SPOON	DAVIS	UNCLASSIFIED	-	420.0	
-1018.5	BASE OF PENN.		UNCLASSIFIED	-	1400.0	

MAPID: 05903230000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.31552 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.755155 **DATE COLLECTED:** 1 / 8 / 1965
SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 42.6 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 1369Q **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.7	PLEISTOCENE		UNCONSOLIDATED	17.4	0.0	
353.3	CARBONDALE	ANVIL ROCK	SANDSTONE	20.3	17.4	
333.0	CARBONDALE	HERRIN	COAL	1.9	37.7	
331.1	CARBONDALE	HERRIN	BLUE BAND	0.2	39.6	
330.9	CARBONDALE	HERRIN	COAL	0.9	39.8	
330.0	CARBONDALE		UNDERCLAY	1.9	40.7	

MAPID: 05903231000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 90' S line, 1' E line of SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308583 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.754298 **DATE COLLECTED:** 1 / 14 / 1965
SURFACE ELEVATION (FT.): 387.7 **LOGGED (FT.):** 49.8 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 1378Q **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
387.7	PLEISTOCENE		UNCONSOLIDATED	28.4	0.0	
359.3	CARBONDALE	ANVIL ROCK	SANDSTONE	16.7	28.4	
342.6	CARBONDALE	HERRIN	COAL	2.7	45.1	
339.9	CARBONDALE	HERRIN	BLUE BAND	0.2	47.8	
339.8	CARBONDALE	HERRIN	COAL	1.1	47.9	
338.8	CARBONDALE		UNDERCLAY	0.8	48.9	

MAPID: 05903232000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of SW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.315561 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.756248 **DATE COLLECTED:** 1 / 8 / 1965

SURFACE ELEVATION (FT.): 381.9 **LOGGED (FT.):** 74.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1368Q **WELL TYPE:** Coal Test

COMMENT: AREA INTRUDED BY IGNEOUS DIKE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.9	PLEISTOCENE		UNCONSOLIDATED	22.1	0.0	
359.8	CARBONDALE	ANVIL ROCK	SANDSTONE	22.1	22.1	
337.7	CARBONDALE	HERRIN	COAL	1.1	44.2	ALTERED BY IGNEOUS DIKE
336.6	CARBONDALE	HERRIN	SANDSTONE	1.5	45.3	ALTERED BY IGNEOUS DIKE
335.1	CARBONDALE	HERRIN	COAL	0.4	46.8	ALTERED BY IGNEOUS DIKE
334.7	CARBONDALE		UNDERCLAY	0.6	47.2	ALTERED BY IGNEOUS DIKE
334.1	CARBONDALE		GRAY SHALE	3.4	47.8	
330.7	CARBONDALE		SANDY SHALE	12.6	51.2	
318.1	CARBONDALE		SANDSTONE	10.6	63.8	

MAPID: 05990293000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313193 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.754175 **DATE COLLECTED:** 5 / 5 / 1949

SURFACE ELEVATION (FT.): 388.6 **LOGGED (FT.):** 67.8 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE C119 **WELL TYPE:** Coal Test

COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.6	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
376.6	PLEISTOCENE		SANDY CLAY	19.0	12.0	
357.6	SHELBURN		SANDSTONE/SHALE	13.5	31.0	
344.0	CARBONDALE	HERRIN	COAL	3.9	44.6	GOOD
340.2	CARBONDALE		UNDERCLAY	3.0	48.4	
337.2	CARBONDALE		SANDSTONE	4.4	51.4	
332.8	CARBONDALE		LIMESTONE	4.0	55.8	HARD
328.8	CARBONDALE		SANDSTONE	8.0	59.8	

MAPID: 05990294000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 0' W line of SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308574 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.75405 **DATE COLLECTED:** 5 / 7 / 1949
SURFACE ELEVATION (FT.): 379.1 **LOGGED (FT.):** 47.1 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C121 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.1	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	
354.1	SHELBURN		SHALE	13.0	25.0	SOFT
341.1	SHELBURN		SANDSTONE	4.7	38.0	
336.4	CARBONDALE	HERRIN	COAL	2.4	42.7	SOFT
334.0	CARBONDALE		UNDERCLAY	2.0	45.1	

MAPID: 05990295000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303962 **GEOLOGIST:** PHILLIPS
CONFIDENTIAL: N **LATITUDE:** 37.753924 **DATE COLLECTED:** 5 / 7 / 1949
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C123 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
361.0	CARBONDALE		SHALE	33.0	15.0	SOFT
328.0	CARBONDALE		SANDY SHALE	10.0	48.0	
318.0	CARBONDALE		SANDSTONE	20.0	58.0	SOFT

MAPID: 05990296000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 680' S line, 660' E line of SE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.310906 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.755993 **DATE COLLECTED:** 5 / 10 / 1949
SURFACE ELEVATION (FT.): 378.4 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C145 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.4	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	
353.4	SHELBURN	ANVIL ROCK	SANDSTONE	15.6	25.0	
337.8	CARBONDALE	HERRIN	COAL	2.2	40.6	FAIR
335.6	CARBONDALE	HERRIN	CLAYSTONE	0.2	42.8	
335.5	CARBONDALE	HERRIN	COAL	0.8	42.9	FAIR
334.6	CARBONDALE		UNDERCLAY	1.3	43.8	

MAPID: 05990297000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313339 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.757987 **DATE COLLECTED:** 5 / 6 / 1949
SURFACE ELEVATION (FT.): 367.5 **LOGGED (FT.):** 40.6 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C169 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
348.5	SHELBURN	ANVIL ROCK	SANDSTONE	14.9	19.0	SOFT
333.6	SHELBURN	BRERETON	LIMESTONE	0.8	33.9	
332.7	CARBONDALE	HERRIN	COAL	2.8	34.8	FAIR
329.9	CARBONDALE		UNDERCLAY	3.0	37.6	

MAPID: 05990298000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.308647 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.757816 **DATE COLLECTED:** 5 / 9 / 1949
SURFACE ELEVATION (FT.): 378.5 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C171 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.5	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
363.5	CARBONDALE		SHALE	15.0	15.0	SOFT
348.5	CARBONDALE		SANDSTONE	8.0	30.0	SOFT
340.5	CARBONDALE		SANDY SHALE	4.0	38.0	
336.5	CARBONDALE		SANDSTONE/SHALE	36.0	42.0	

MAPID: 05990299000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NE
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.303962 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.753924 **DATE COLLECTED:** 5 / 9 / 1949
SURFACE ELEVATION (FT.): 377.1 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE C173 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.1	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
357.1	CARBONDALE		SHALE	15.0	20.0	SOFT
342.1	CARBONDALE		SANDSTONE/SHALE	43.0	35.0	

MAPID: 05990300000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.313485 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.761798 **DATE COLLECTED:** 5 / 6 / 1949

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 54.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE C219 **WELL TYPE:** Coal Test

COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.6	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
355.6	SHELBURN		SHALE	16.0	20.0	SOFT
339.6	SHELBURN	ANVIL ROCK	SANDSTONE	12.8	36.0	
326.8	CARBONDALE	HERRIN	COAL	3.7	48.8	GOOD
323.1	CARBONDALE		UNDERCLAY	1.5	52.5	

MAPID: 05900060000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.298207 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.752862 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT:

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

MAPID: 05901231000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 198' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.298686 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.751884 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 379.2 **LOGGED (FT.):** 104.8 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.2	PLEISTOCENE		UNCONSOLIDATED	38.8	0.0	
340.4	CARBONDALE		BROWN SANDSTONE	2.3	38.8	
338.1	CARBONDALE		SHALE	1.2	41.1	
336.9	CARBONDALE		BROWN SANDSTONE	0.3	42.3	
336.7	CARBONDALE		SHALE	8.7	42.5	
328.0	CARBONDALE		BROWN SANDSTONE	0.3	51.2	
327.7	CARBONDALE		SHALE	2.1	51.5	
325.6	CARBONDALE		DARK SHALE	0.8	53.6	
324.9	CARBONDALE	ALLENBY	COAL	0.3	54.3	
324.5	CARBONDALE		SHALE	3.2	54.7	
321.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	57.8	
315.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	8.6	63.3	
307.4	CARBONDALE		DARK SHALE	11.4	71.8	
295.9	CARBONDALE		SHALE	4.6	83.3	
291.4	CARBONDALE	BRERETON	LIMESTONE	3.5	87.8	
287.9	CARBONDALE	BRERETON	DARK SHALE	0.8	91.3	
287.0	CARBONDALE	BRERETON	SHALY LIMESTONE	0.9	92.2	
286.1	CARBONDALE	HERRIN	COAL	0.6	93.1	
285.6	CARBONDALE	HERRIN	SHALE	0.0	93.6	
285.5	CARBONDALE	HERRIN	COAL	2.4	93.7	
283.1	CARBONDALE	HERRIN	SHALE	0.1	96.1	
283.0	CARBONDALE	HERRIN	COAL	0.9	96.2	
282.2	CARBONDALE		SHALE	2.5	97.0	
279.7	CARBONDALE		SHALE	5.3	99.5	

MAPID: 05901231000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 198' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.298686 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.751884 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 105.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	2.3	39.0	
322.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.4	57.0	
317.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	12.0	62.0	
286.0	CARBONDALE	HERRIN	COAL	4.0	93.0	
279.0	CARBONDALE	VERMILIONVILLE	CALCAREOUS SANDSTONE	5.0	100.0	
236.0	CARBONDALE	BRIAR HILL	COAL	2.1	143.0	
231.0	CARBONDALE	CANTON	SANDSTONE/SHALE	22.0	148.0	
174.0	CARBONDALE	SPRINGFIELD	COAL	4.5	205.0	BLACK SHALE & LIMESTONE ROOF

MAPID: 05902045000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282081 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.752598 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 2929.0 **LOG TYPE:** Electric Log

SOURCE: GEORGE, T. W. TRUST, SANKS MATTIE E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
64.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	320.0	
24.0	CARBONDALE	SURVANT	COAL	2.0	360.0	
-36.0	CARBONDALE	COLCHESTER	COAL	0.5	420.0	
-91.0	CARBONDALE	DEKOVEN	COAL	3.0	475.0	
-91.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	475.0	
-116.0	CARBONDALE	DAVIS	COAL	4.0	500.0	
-166.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	550.0	65% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-194.0	TRADEWATER	STONEFORT	LIMESTONE	1.3	578.0	

MAPID: 05902045000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.282081 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.752598 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 134.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
278.5	CARBONDALE	LAWSON	SHALE & SANDSTONE	20.0	105.5	
258.5	CARBONDALE	BRERETON	LIMESTONE	4.0	125.5	
254.5	CARBONDALE	ANNA	BLACK SHALE	1.5	129.5	
253.0	CARBONDALE	HERRIN	COAL	3.0	131.0	

MAPID: 05902512000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.293536 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.75834 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 2407.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO., HISH **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
88.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	295.0	
45.0	CARBONDALE	SURVANT	COAL	2.0	338.0	
-15.0	CARBONDALE	COLCHESTER	COAL	0.5	398.0	
-70.0	CARBONDALE	DEKOVEN	COAL	4.0	453.0	
-70.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	453.0	
-87.0	CARBONDALE	DAVIS	COAL	3.8	470.0	
-137.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	520.0	
-157.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	540.0	

MAPID: 05902512000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NW
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.293536 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.75834 **DATE COLLECTED:** 10 / 0 / 1960
SURFACE ELEVATION (FT.): 383.5 **LOGGED (FT.):** 1490.0 **LOG TYPE:** Electric Log
SOURCE: HERNDON DRLG. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-10.5	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	394.0	
-88.5	SPOON	DAVIS	UNCLASSIFIED	-	472.0	
-1106.5	BASE OF PENN.		UNCLASSIFIED	-	1490.0	

MAPID: 05903507000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1145' N line, 61' E line of SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.285778 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746803 **DATE COLLECTED:** 2 / 10 / 1969

SURFACE ELEVATION (FT.): 378.6 **LOGGED (FT.):** 450.0 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER 29SH **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.6	PLEISTOCENE		UNCONSOLIDATED	48.7	0.0	
329.9	CARBONDALE		GRAY SHALE	10.3	48.7	
319.6	CARBONDALE		SANDSTONE	5.0	59.0	
314.6	CARBONDALE		GRAY SHALE	4.3	64.0	
310.3	CARBONDALE		SANDSTONE	6.2	68.3	
304.1	CARBONDALE		SANDY SHALE	60.0	74.5	
244.1	CARBONDALE		GRAY SHALE & LIMESTONE	0.3	134.5	
243.8	CARBONDALE		GRAY SHALE	0.1	134.8	
243.7	CARBONDALE	BRIAR HILL	COAL	2.1	134.9	
241.6	CARBONDALE		SANDY SHALE	1.2	137.0	
240.4	CARBONDALE		SANDSTONE	0.8	138.2	
239.6	CARBONDALE		SANDY SHALE	12.3	139.0	
227.3	CARBONDALE		SANDSTONE	13.4	151.3	
213.9	CARBONDALE		SANDY SHALE	26.9	164.7	
187.0	CARBONDALE	TURNER MINE	DARK SHALE & LIMESTONE	4.8	191.6	
182.2	CARBONDALE	SPRINGFIELD	COAL	4.4	196.4	
177.8	CARBONDALE		UNDERCLAY	0.3	200.8	
177.4	CARBONDALE		GRAY SHALE	1.9	201.2	
175.5	CARBONDALE		SANDSTONE	1.6	203.1	
173.9	CARBONDALE		GRAY SHALE	2.3	204.7	
171.7	CARBONDALE		SANDSTONE	48.9	206.9	
122.8	CARBONDALE		DARK SHALE	11.2	255.8	
111.6	CARBONDALE	HANOVER	LIMESTONE	0.4	267.0	
111.2	CARBONDALE	EXCELLO	BLACK SHALE & LIMESTONE	4.0	267.4	
107.2	CARBONDALE	HOUCHIN CREEK	COAL	1.8	271.4	
105.4	CARBONDALE		GRAY SHALE	4.0	273.2	
101.4	CARBONDALE		GRAY SHALE & LIMESTONE	0.8	277.2	
100.6	CARBONDALE		SANDSTONE	2.7	278.0	
97.9	CARBONDALE		SANDY SHALE	30.3	280.7	
67.7	CARBONDALE	SURVANT	COAL	4.2	310.9	
63.5	CARBONDALE		SANDY SHALE	9.7	315.1	
53.8	CARBONDALE		SANDSTONE	36.1	324.8	
17.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	8.0	360.8	
9.8	CARBONDALE	COLCHESTER	COAL	1.5	368.8	
8.3	CARBONDALE		SANDY SHALE	7.7	370.3	
0.6	CARBONDALE		GRAY SHALE	8.2	378.0	

-7.6	CARBONDALE	SANDSTONE	19.8	386.2
-27.4	CARBONDALE	SANDY SHALE	6.7	406.0
-34.1	CARBONDALE	GRAY SHALE & SANDSTONE	10.8	412.7
-44.9	CARBONDALE	COAL	0.5	423.5
-45.4	CARBONDALE	GRAY SHALE & SANDSTONE	8.7	424.0
-54.1	CARBONDALE	SANDSTONE	17.3	432.7

MAPID: 05901232000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269285 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.759183 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
231.0	CARBONDALE	DANVILLE	COAL	1.6	147.0	
220.0	CARBONDALE	SS BELOW NO. 7	SANDSTONE/SHALE	10.0	158.0	
207.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	171.0	
199.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	10.0	179.0	
168.0	CARBONDALE	HERRIN	COAL	3.6	210.0	
163.0	CARBONDALE	VERMILIONVILLE	SANDSTONE/SHALE	30.0	215.0	
114.0	CARBONDALE	BRIAR HILL	COAL	1.5	264.0	
106.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	14.0	272.0	
54.0	CARBONDALE	SPRINGFIELD	COAL	4.4	324.0	BLACK SHALE & LIMESTONE ROOF

MAPID: 05901232000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269285 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.759183 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 213.6 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
288.5	MODESTO	PIASA	LIMESTONE W/ SHALE	6.8	89.5	
281.7	MODESTO		GRAY SHALE	51.2	96.3	
230.5	CARBONDALE	DANVILLE	COAL	1.6	147.5	
228.9	CARBONDALE		SHALE & SANDSTONE	21.5	149.1	
207.4	CARBONDALE	ALLENBY	COAL	0.3	170.6	
207.1	CARBONDALE		CLAYSTONE	1.3	170.9	
205.8	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	1.4	172.2	UPPER BENCH
204.4	CARBONDALE	BANKSTON FORK	CLAYSTONE & SHALE	0.3	173.6	SHALE PARTING
204.1	CARBONDALE	BANKSTON FORK	LIMESTONE	2.6	173.9	LOWER BENCH
201.6	CARBONDALE	LAWSON	CLAYSTONE	0.3	176.4	
201.2	CARBONDALE	LAWSON	GRAY SHALE	3.1	176.8	
198.2	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	9.6	179.8	
188.6	CARBONDALE	LAWSON	SILTY SHALE	14.1	189.4	
174.5	CARBONDALE	JAMESTOWN	BLACK SHALE	0.3	203.5	
174.2	CARBONDALE		CLAYSTONE & SHALE	1.2	203.8	
173.0	CARBONDALE	BRERETON	LIMESTONE	4.3	205.0	
168.7	CARBONDALE	ANNA	BLACK SHALE	0.8	209.3	
168.0	CARBONDALE	HERRIN	COAL	3.6	210.0	

MAPID: 05901232000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.269285 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.759183 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 332.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	83.0	0.0	
295.0	MODESTO	PIASA	SHALY LIMESTONE	14.5	83.0	
280.5	MODESTO		SHALE	3.0	97.5	
277.5	MODESTO		SHALE WITH LIMESTONE	10.3	100.5	
267.2	MODESTO		DARK SHALE	15.7	110.8	
251.5	MODESTO		SHALE	20.2	126.5	LIMESTONE PEBBLES
231.3	CARBONDALE	DANVILLE	COAL	2.0	146.7	
229.3	CARBONDALE		SHALE	12.5	148.7	
216.8	CARBONDALE		SANDSTONE	6.7	161.2	
210.2	CARBONDALE		DARK SHALE	2.0	167.8	
208.2	CARBONDALE	ALLENBY	COAL	0.3	169.8	
207.8	CARBONDALE		BLUE SHALE	1.3	170.2	
206.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	171.4	
202.2	CARBONDALE	ANVIL ROCK	SANDSTONE	13.3	175.8	
189.0	CARBONDALE		SHALE	15.7	189.0	
173.3	CARBONDALE	BRERETON	LIMESTONE	4.3	204.7	
169.1	CARBONDALE		DARK SHALE	0.8	208.9	
168.3	CARBONDALE	HERRIN	COAL	0.5	209.7	
167.8	CARBONDALE	HERRIN	SHALE	0.1	210.2	
167.7	CARBONDALE	HERRIN	COAL	1.9	210.3	
165.8	CARBONDALE	HERRIN	SHALE	0.2	212.2	
165.7	CARBONDALE	HERRIN	COAL	0.9	212.3	
164.7	CARBONDALE		SHALE	1.9	213.3	
162.8	CARBONDALE		GRAY SANDSTONE	30.8	215.2	
132.0	CARBONDALE		DARK SHALE	17.6	246.0	
114.4	CARBONDALE	BRIAR HILL	COAL	1.5	263.6	
112.9	CARBONDALE		DARK SHALE	7.3	265.1	
105.6	CARBONDALE		SANDSTONE	7.8	272.4	
97.7	CARBONDALE		DARK SHALE	42.3	280.3	
55.5	CARBONDALE	TURNER MINE	SHALE	1.9	322.5	
53.6	CARBONDALE	SPRINGFIELD	COAL	4.5	324.4	
49.1	CARBONDALE		SHALE	3.1	328.9	

MAPID: 05900067000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.265796 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.73418 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Measured section
SOURCE: NEW SHAWNE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
275.0	CARBONDALE	SPRINGFIELD	COAL	4.5	95.0	

MAPID: 05900068000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.279832 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.739846 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 4100.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
245.0	CARBONDALE	SPRINGFIELD	COAL	-	165.0	

MAPID: 05900069101M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.265796 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.73418 **DATE COLLECTED:** 11 / 12 / 1937
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 95.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES- CADY,MID CITY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	CARBONDALE		ROCK	35.0	0.0	
335.0	CARBONDALE	BRIAR HILL	COAL	2.5	35.0	
332.5	CARBONDALE		ROCK	57.5	37.5	
275.0	CARBONDALE	SPRINGFIELD	COAL	-	95.0	

MAPID: 05900069102M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1225' S line, 925' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.26549 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.734823 **DATE COLLECTED:** 4 / 29 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SIMON, B & W COAL MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	96.0	0.0	
284.0	CARBONDALE	SPRINGFIELD	COAL	4.5	96.0	

MAPID: 05901029000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.272797 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.739746 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 2085.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC., HALL JOHN EST **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
161.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	220.0	
119.0	CARBONDALE	SURVANT	COAL	3.0	262.0	
58.0	CARBONDALE	COLCHESTER	COAL	0.5	323.0	
3.0	CARBONDALE	DEKOVEN	COAL	3.0	378.0	
3.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	378.0	
-25.0	CARBONDALE	DAVIS	COAL	4.0	406.0	
-73.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	454.0	36% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-99.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	480.0	

MAPID: 05901029000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.272797 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.739746 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 1364.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-983.0	BASE OF PENN.		UNCLASSIFIED	-	1364.0	

MAPID: 05900013501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE SW SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.297734 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.73327 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 27.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES- SANKS MINE **WELL TYPE:** Underground mine
COMMENT: GENERALIZED SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	23.0		
-			COAL	4.3		

MAPID: 05900064801M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.286825 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732685 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 51.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-R S DIETZ, LOGAN HIGHWAY MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	CARBONDALE		ROCK	47.0	0.0	
333.0	CARBONDALE	SPRINGFIELD	COAL	4.5	47.0	

MAPID: 05900064802M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 970' N line, 1220' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.285279 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.736332 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 97.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-DIETZ R S, LOGAN HIGHWAY MINE **WELL TYPE:** Underground mine
COMMENT: PUMP LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	CARBONDALE		ROCK	93.0	0.0	
287.0	CARBONDALE	SPRINGFIELD	COAL	4.5	93.0	

MAPID: 05900069000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.2891 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.736337 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 4250.0 **LOG TYPE:** Drillers Log
SOURCE: H HILL SCH **WELL TYPE:** Oil and Gas Test
COMMENT:

MAPID: 05900070000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.282173 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.738066 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
264.0	CARBONDALE	SPRINGFIELD	COAL	4.5	116.0	

MAPID: 05900071000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.298308 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.738259 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
267.0	CARBONDALE	SPRINGFIELD	COAL	-	103.0	

MAPID: 05900072000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.293693 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.740016 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 4000.0 **LOG TYPE:** Drillers Log
SOURCE: H HILL CC **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
274.0	CARBONDALE	SPRINGFIELD	COAL	-	126.0	

MAPID: 05900074000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.286825 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.732685 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Measured section
SOURCE: LOGAN HWY **WELL TYPE:** Underground mine
COMMENT: SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
333.0	CARBONDALE	SPRINGFIELD	COAL	4.5	47.0	

MAPID: 05900075000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284494 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.736282 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 3950.0 **LOG TYPE:** Drillers Log
SOURCE: LOGAN H MN **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
302.0	CARBONDALE	SPRINGFIELD	COAL	-	93.0	

MAPID: 05900088000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.296014 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.732796 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Measured section
SOURCE: SANKS MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
346.0	CARBONDALE	SPRINGFIELD	COAL	4.3	34.0	

MAPID: 05902046000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.298311 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.732828 **DATE COLLECTED:** 9 / 0 / 1956
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2670.0 **LOG TYPE:** Electric Log
SOURCE: GEORGE, T. W. TRUST, SANKS MATTIE E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
79.0	CARBONDALE	COLCHESTER	COAL	1.3	283.0	
29.0	CARBONDALE	DEKOVEN	COAL	2.5	333.0	
29.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	333.0	
12.0	CARBONDALE	DAVIS	COAL	1.3	350.0	90% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902046000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.298311 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732828 **DATE COLLECTED:** 9 / 0 / 1956

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1280.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-918.0	BASE OF PENN.		UNCLASSIFIED	-	1280.0	

MAPID: 05903508000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 365' N line, 303' E line of NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.286687 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738017 **DATE COLLECTED:** 2 / 11 / 1969

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log

SOURCE: TRUAX-TRAER 30SH **WELL TYPE:** Coal Test

COMMENT: BROKE THROUGH OLD #5 WORKS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
405.0	PLEISTOCENE		UNCONSOLIDATED	38.5	0.0	
366.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.3	38.5	
364.2	CARBONDALE	HERRIN	COAL	1.5	40.8	
362.7	CARBONDALE		GRAY SHALE	2.3	42.3	
360.3	CARBONDALE		SANDSTONE	2.3	44.7	
358.0	CARBONDALE		GRAY SHALE & SANDSTONE	4.0	47.0	
354.0	CARBONDALE		SANDSTONE	10.5	51.0	
343.5	CARBONDALE		SANDY SHALE	15.0	61.5	
328.5	CARBONDALE		SANDY DARK SHALE	12.5	76.5	
316.0	CARBONDALE	BRIAR HILL	COAL	1.8	89.0	
314.2	CARBONDALE		GRAY SHALE	1.2	90.8	
313.0	CARBONDALE		SANDY SHALE	1.0	92.0	
312.0	CARBONDALE		SANDSTONE	2.5	93.0	
309.5	CARBONDALE		GRAY SHALE & SANDSTONE	4.3	95.5	
305.2	CARBONDALE		SHALY SANDSTONE	21.8	99.8	
283.5	CARBONDALE		SANDY SHALE	24.5	121.5	
259.0	CARBONDALE	TURNER MINE	DARK SHALE & LIMESTONE	2.9	146.0	
256.1	CARBONDALE	SPRINGFIELD	MINE OPENING	-	148.9	OLD WORKS

MAPID: 059274A0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.289677 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.73589 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log
SOURCE: FLD NOTES-CADY,HICKORY HILL SCHOOL **WELL TYPE:** Water Well
COMMENT: "WELL 65' TO 4 1/2 FT OF NO 5"

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0	CARBONDALE		ROCK	65.0	0.0	
355.0	CARBONDALE	SPRINGFIELD	COAL	4.5	65.0	AVERAGED THICKNESS

MAPID: 059274A0004F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** NW NE NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.29658 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738691 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 103.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			ROCK	103.0	0.0	
267.0	CARBONDALE	SPRINGFIELD	COAL	-	103.0	

MAPID: 059274A0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.29831 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.736448 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 126.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY,"HICKORY HILL MINE" **WELL TYPE:** Underground mine
COMMENT: OLD AIRSHAFT-FROM MAP.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	126.0	0.0	
254.0	CARBONDALE	SPRINGFIELD	COAL	-	126.0	

MAPID: 05900031000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.308542 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.739332 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 3820.0 **LOG TYPE:** Drillers Log

SOURCE: GORDON MUR, BEATTY **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
264.0	CARBONDALE	SPRINGFIELD	COAL	1.5	118.0	CORRELATION UNCERTAIN

MAPID: 05900031000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.308542 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.739332 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 244.0 **LOG TYPE:** Drillers Log

SOURCE: GALLATIN COAL & COKE **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	7.0	0.0	
373.0			ROCK	111.0	7.0	
262.0			COAL	1.5	118.0	
260.5			ROCK	75.0	119.5	
185.5	SPOON	DEKOVEN	COAL	3.0	194.5	
182.5	SPOON		ROCK	43.0	197.5	
139.5	SPOON	DAVIS	COAL	3.5	240.5	

MAPID: 05900031000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.308542 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.739332 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 244.0 **LOG TYPE:** Drillers Log

SOURCE: GALLATIN COAL AND COKE **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
375.0	PLEISTOCENE		SAND	2.0	7.0	
373.0	PLEISTOCENE		CLAY	20.0	9.0	
353.0	PLEISTOCENE		MUD	38.0	29.0	
315.0	CARBONDALE		SANDSTONE	22.0	67.0	
293.0	CARBONDALE		SHALE	16.0	89.0	
277.0	CARBONDALE		SHALE	10.0	105.0	
267.0	CARBONDALE		SHALE	3.0	115.0	
264.0	CARBONDALE	SURVANT	COAL	1.5	118.0	
262.5	CARBONDALE		UNDERCLAY	1.5	119.5	
261.0	CARBONDALE		SHALE	7.0	121.0	
254.0	CARBONDALE		LIMESTONE	2.0	128.0	
252.0	CARBONDALE		SANDSTONE	26.0	130.0	
226.0	CARBONDALE		SHALE	34.0	156.0	
192.0	CARBONDALE		SHALE	4.0	190.0	
188.0	CARBONDALE	DEKOVEN	COAL	3.0	194.0	
185.0	CARBONDALE		UNDERCLAY	1.0	197.0	
184.0	CARBONDALE		SANDSTONE	18.0	198.0	
166.0	CARBONDALE		SHALE	24.0	216.0	
142.0	CARBONDALE		SHALE	0.5	240.0	
141.5	CARBONDALE	DAVIS	COAL	3.5	240.5	

MAPID: 05901030000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.309736 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.736678 **DATE COLLECTED:** 1 / 0 / 1952
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 2745.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC., MCGUIRE J P 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
225.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	150.0	
180.0	CARBONDALE	SURVANT	COAL	1.3	195.0	
120.0	CARBONDALE	COLCHESTER	COAL	0.5	255.0	
60.0	CARBONDALE	DEKOVEN	COAL	3.0	315.0	
60.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	315.0	
41.0	CARBONDALE	DAVIS	COAL	4.0	334.0	
-5.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	380.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-23.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	398.0	

MAPID: 05901030000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.309736 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.736678 **DATE COLLECTED:** 1 / 0 / 1952
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 1322.0 **LOG TYPE:** Electric Log
SOURCE: TEXACO, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
123.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	252.0	
40.0	SPOON	DAVIS	UNCLASSIFIED	-	335.0	
-947.0	BASE OF PENN.		UNCLASSIFIED	-	1322.0	

MAPID: 05900042600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.334966 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.74364 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 86.2 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PEKIN MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	HERRIN	COAL	1.5		
-	CARBONDALE		ROCK	80.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 05900077000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.333182 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.7368 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 4200.0 **LOG TYPE:** Measured section
SOURCE: EQUALTYOLD **WELL TYPE:** Underground mine
COMMENT:

MAPID: 05900078000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335556 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.733145 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 4500.0 **LOG TYPE:** Measured section
SOURCE: SISKMINE **WELL TYPE:** Underground mine
COMMENT: SURFACE ELEVATION UNCERTAIN

MAPID: 05900079000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.333196 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.733159 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:** Measured section
SOURCE: E SIDE CC **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
322.0	CARBONDALE	SPRINGFIELD	COAL	4.6	40.0	

MAPID: 05900080000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.330742 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.744058 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 3400.0 **LOG TYPE:** Measured section
SOURCE: COAL 5A **WELL TYPE:** Outcrop
COMMENT:

MAPID: 05900081000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335571 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.744102 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 371.9 **LOGGED (FT.):** 3719.0 **LOG TYPE:** Measured section
SOURCE: PEKIN CC **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
231.9	CARBONDALE	SPRINGFIELD	COAL	4.6	140.0	

MAPID: 05900082000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335571 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.744102 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 384.6 **LOGGED (FT.):** 3846.0 **LOG TYPE:** Measured section
SOURCE: NRTHSIDECC **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.6	CARBONDALE	HERRIN	COAL	-	14.0	

MAPID: 05900083000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335573 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.745927 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Measured section
SOURCE: **WELL TYPE:** Underground mine
COMMENT:

MAPID: 05900084000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.33315 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.745899 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 3850.0 **LOG TYPE:** Measured section
SOURCE: **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	CARBONDALE	HERRIN	COAL	-	10.0	

MAPID: 05900087000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335556 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.733145 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:** Measured section
SOURCE: GOLDNUGGET **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
322.0	CARBONDALE	SPRINGFIELD	COAL	-	40.0	

MAPID: 05900225900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.332605 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732709 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 304.6 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CADY, EAST SIDE MINE **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05900226000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.336144 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732684 **DATE COLLECTED:** 0 / 0 / 1916
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DEWOLF SISK, GOLD NUGGET MINE **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05900417400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.335571 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.744102 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PIERSON MINE **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05902913000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.321192 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.742163 **DATE COLLECTED:** 8 / 0 / 1963
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 2037.0 **LOG TYPE:** Electric Log
SOURCE: TURNER, J. D., MCDONALD C A 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
198.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	172.0	
150.0	CARBONDALE	SURVANT	COAL	2.0	220.0	
90.0	CARBONDALE	COLCHESTER	COAL	0.5	280.0	
37.0	CARBONDALE	DEKOVEN	COAL	3.0	333.0	
37.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	333.0	
11.0	CARBONDALE	DAVIS	COAL	3.5	359.0	
-38.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	408.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-58.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	428.0	

MAPID: 05902913000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.321192 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.742163 **DATE COLLECTED:** 8 / 0 / 1963
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 1330.0 **LOG TYPE:** Electric Log
SOURCE: TURNER, J. D. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-960.0	BASE OF PENN.		UNCLASSIFIED	-	1330.0	

MAPID: 05900085000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.34026 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.744114 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Measured section
SOURCE: **WELL TYPE:** Underground mine
COMMENT:

MAPID: 05900090000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.337933 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.742285 **DATE COLLECTED:** 0 / 0 / 1994
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 3750.0 **LOG TYPE:** Measured section
SOURCE: MCLAIN W H **WELL TYPE:** Underground mine
COMMENT:

MAPID: 05900226100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340241 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.738623 **DATE COLLECTED:** 0 / 0 / 1892

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Measured section

SOURCE: FLD. NOTES-NICKLES, PETE BRIGHTENER MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	36.0		
-	CARBONDALE	DANVILLE	COAL	4.0		

MAPID: 05900226200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337938 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.744112 **DATE COLLECTED:** 9 / 19 / 1906

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 11.5 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-DEWOLF,MCLAIN MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	6.4		
-			COAL	0.5		
-			ROCK	-		
-	CARBONDALE	HERRIN	COAL	3.6		
-	CARBONDALE		ROCK	0.1		
-	CARBONDALE	HERRIN	COAL	0.8		

MAPID: 05901635000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.347212 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.745954 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2684.0 **LOG TYPE:** Electric Log
SOURCE: MARSHALL, N. E., BEVERLY DAVID T **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	200.0	
119.0	CARBONDALE	SURVANT	COAL	1.6	252.0	
56.0	CARBONDALE	COLCHESTER	COAL	0.5	315.0	
-8.0	CARBONDALE	DEKOVEN	COAL	3.0	379.0	
-8.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	379.0	
-31.0	CARBONDALE	DAVIS	COAL	5.0	402.0	
-91.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	462.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-107.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	478.0	

MAPID: 05901635000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.347212 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.745954 **DATE COLLECTED:** 11 / 0 / 1954
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1376.0 **LOG TYPE:** Electric Log
SOURCE: MARSHALL, N. E. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1005.0	BASE OF PENN.		UNCLASSIFIED	-	1376.0	

MAPID: 05901636000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340241 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.738623 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 41.5 **LOG TYPE:** Drillers Log
SOURCE: BD. W. F. COM P. 173 **WELL TYPE:** Coal Test
COMMENT: QUESTIONABLE SOURCE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	0.0	
-	CARBONDALE		CLAYSTONE	1.0	30.0	
-	CARBONDALE	BRERETON	LIMESTONE	4.0	31.0	
-	CARBONDALE	ANNA	SHALE	0.5	35.0	
-	CARBONDALE	HERRIN	COAL	4.0	35.5	
-	CARBONDALE		UNDERCLAY	2.0	39.5	

MAPID: 05901636000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340241 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.738623 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 41.0 **LOG TYPE:** Drillers Log
SOURCE: BD. W. FLOOD COM. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	35.5	0.0	
364.5	CARBONDALE	HERRIN	COAL	4.0	35.5	
360.5	CARBONDALE		ROCK	2.0	39.5	

MAPID: 05924151000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NW SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.350125 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.742739 **DATE COLLECTED:** 0 / 0 / 1966
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 116.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN B. RIDER, DRILLER **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	62.0	0.0	
338.0			COAL	2.0	62.0	
336.0			ROCK	52.0	64.0	

MAPID: 059274A0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.34197 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732671 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 41.2 **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			UNCONSOLIDATED	-	0.0	
-	CARBONDALE		ROCK	31.5		
-	CARBONDALE	BRIAR HILL	COAL	2.2		
-	CARBONDALE		ROCK	7.5		

MAPID: 059274A0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.347786 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732661 **DATE COLLECTED:** 8 / 11 / 1938
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 11.7 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	CARBONDALE		ROCK	10.0	0.0	
350.0	CARBONDALE	BRIAR HILL	COAL	1.7	10.0	
348.3	CARBONDALE		ROCK	6.0	11.7	

MAPID: 059274A0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340806 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732673 **DATE COLLECTED:** 0 / 0 / 1892
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 66.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES - J. NICKLES **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	CARBONDALE		ROCK	25.0	0.0	
355.0	CARBONDALE	HERRIN	COAL	1.5	25.0	
353.5	CARBONDALE		ROCK	40.0	26.5	

MAPID: 059274A0009F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 5' S line, 990' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340173 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.732231 **DATE COLLECTED:** 0 / 0 / 1935
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 74.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES- E.T. BENSON **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			ROCK	59.0	0.0	
321.0	CARBONDALE	BRIAR HILL	COAL	2.0	59.0	
319.0	CARBONDALE		ROCK	13.0	61.0	

MAPID: 05900004701M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.355915 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.735407 **DATE COLLECTED:** 0 / 0 / 1918
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 10.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CADY, GALLATIN COAL & COKE C. **WELL TYPE:** Underground mine
COMMENT: NEW MINE. OLD ONE FLOODED OUT (SEE 20)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	3.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.7		
-	CARBONDALE		ROCK	3.0		

MAPID: 05900097000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.356484 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.73679 **DATE COLLECTED:** 0 / 0 / 1914
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 3800.0 **LOG TYPE:** Measured section
SOURCE: GALLATN CC 002 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
286.0	CARBONDALE	SPRINGFIELD	COAL	4.5	94.0	

MAPID: 05900296000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.363306 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.736872 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 3770.0 **LOG TYPE:**
SOURCE: TURNER&CRM, MUENSTRMAN0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
268.0	CARBONDALE	SPRINGFIELD	COAL	2.0	109.0	DEPTH UNCERTAIN

MAPID: 05902008000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.356493 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.738629 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 2721.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S, BEVERLY-HUMM 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
212.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	175.0	
157.0	CARBONDALE	SURVANT	COAL	1.3	230.0	
97.0	CARBONDALE	COLCHESTER	COAL	1.4	290.0	
47.0	CARBONDALE	DEKOVEN	COAL	2.0	340.0	
47.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	340.0	
25.0	CARBONDALE	DAVIS	COAL	4.0	362.0	
-31.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.3	418.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-51.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	438.0	

MAPID: 05902008000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.356493 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.738629 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 1343.0 **LOG TYPE:** Electric Log
SOURCE: LOBREE HAL S **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-956.0	BASE OF PENN.		UNCLASSIFIED	-	1343.0	

MAPID: 05903391000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.369674 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.746487 **DATE COLLECTED:** 3 / 3 / 1969
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Drillers Log
SOURCE: JOHN B. RIDER, DRILLER **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	8.0	0.0	
382.0			ROCK	74.0	8.0	
308.0			COAL	2.0	82.0	
306.0			ROCK	8.0	84.0	

MAPID: 05900226400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.371775 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731967 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 64.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-LONE STAR MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			ROCK	60.0	0.0	
300.0	CARBONDALE	SPRINGFIELD	COAL	4.5	60.0	

MAPID: 05900226300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.371782 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731031 **DATE COLLECTED:** 0 / 0 / 1957
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 34.6 **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		ROCK	30.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.6		

MAPID: 05900004702M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.354763 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731735 **DATE COLLECTED:** 0 / 0 / 1903
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 80.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DEWOLF, GALLATIN COAL & COKE **WELL TYPE:** Underground mine
COMMENT: ORIGINAL MINE FLOODED.REOPENED IN SEC 18

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	CARBONDALE		ROCK	80.0	0.0	
280.0	CARBONDALE	SPRINGFIELD	COAL	-	80.0	

MAPID: 05900086000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.354183 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.731282 **DATE COLLECTED:** 0 / 0 / 1982
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:** Measured section
SOURCE: GALLATNCCC 001 **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
287.0	CARBONDALE	SPRINGFIELD	COAL	4.7	75.0	

MAPID: 05900226500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.354764 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730826 **DATE COLLECTED:** 3 / 17 / 1966
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-MARSHALL EQUIP C,MARYANNE #2 **WELL TYPE:** Strip Mine
COMMENT:

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

MAPID: 05901638000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.3519 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.729461 **DATE COLLECTED:** 12 / 0 / 1951
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 2585.0 **LOG TYPE:** Electric Log
SOURCE: WASSON & CO, TURNS ANNE ET AL 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
228.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	130.0	
178.0	CARBONDALE	SURVANT	COAL	1.3	180.0	
118.0	CARBONDALE	COLCHESTER	COAL	0.5	240.0	
55.0	CARBONDALE	DEKOVEN	COAL	2.5	303.0	
55.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	303.0	
34.0	CARBONDALE	DAVIS	COAL	3.8	324.0	
-22.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.2	380.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-44.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	402.0	
-90.0	TRADEWATER	MT. RORAH	COAL	3.0	448.0	

MAPID: 05901638000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 990' W line of NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.3519 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.729461 **DATE COLLECTED:** 12 / 0 / 1951

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1140.0 **LOG TYPE:** Electric Log

SOURCE: WASSON & CO **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-782.0	BASE OF PENN.		UNCLASSIFIED	-	1140.0	

MAPID: 05902399000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 75' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346354 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.720682 **DATE COLLECTED:** 0 / 0 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Multiple log types

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
260.0	CARBONDALE	COLCHESTER	COAL	0.7	100.0	
204.0	CARBONDALE	DEKOVEN	COAL	3.0	156.0	
204.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	156.0	
179.5	CARBONDALE	DAVIS	COAL	4.4	180.5	
124.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	236.0	
105.0	TRADEWATER	STONEFORT	LIMESTONE	4.5	255.0	
66.0	TRADEWATER	MT. RORAH	COAL	1.7	294.0	

MAPID: 05902399000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 75' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346354 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.720682 **DATE COLLECTED:** 0 / 0 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT: 4,1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	16.0	0.0	
344.0	CARBONDALE		ROCK	40.0	16.0	
304.0	CARBONDALE		ROCK	43.3	56.0	L-CORE BEGINS
260.7	CARBONDALE	COLCHESTER	COAL	1.6	99.3	
259.2	SPOON		ROCK	55.8	100.8	
203.3	SPOON	DEKOVEN	COAL	2.9	156.7	
200.4	SPOON		ROCK	17.3	159.6	
183.2	SPOON	DAVIS	COAL	4.4	176.8	
178.8			ROCK	51.1	181.2	
127.7			COAL	0.8	232.3	
126.9			ROCK	22.5	233.1	
104.3			COAL	0.6	255.7	
103.7			ROCK	34.6	256.3	
69.1			COAL	1.7	290.9	
67.5			ROCK	11.3	292.5	

MAPID: 05902399000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 75' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346354 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.720682 **DATE COLLECTED:** 0 / 0 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 306.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 164 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	16.0	0.0	
344.0	PLEISTOCENE		SAND & GRAVEL	40.0	16.0	
304.0	CARBONDALE		GRAY SANDSTONE	0.2	56.0	
303.8	CARBONDALE		BLUE SHALE	41.1	56.2	
262.7	CARBONDALE	MECCA QUARRY	SHALE	2.5	97.3	
260.2	CARBONDALE	COLCHESTER	COAL	0.7	99.8	
259.6	CARBONDALE		SHALE	13.1	100.4	
246.5	CARBONDALE		SANDSTONE	0.2	113.5	
246.3	CARBONDALE		BLUE SHALE	23.3	113.7	
223.0	CARBONDALE		GRAY SANDSTONE	19.2	137.0	
203.8	CARBONDALE	DEKOVEN	COAL	2.9	156.2	
200.9	CARBONDALE		DARK SHALE	21.4	159.1	
179.5	CARBONDALE	DAVIS	COAL	4.4	180.5	
175.1	TRADEWATER		SHALE	8.4	184.9	
166.7	TRADEWATER		SHALE	16.9	193.3	
149.7	TRADEWATER		GRAY SANDSTONE	18.7	210.3	
131.1	TRADEWATER		SHALE	7.1	228.9	
124.0	TRADEWATER		COAL	0.8	236.0	
123.2	TRADEWATER		SHALE	0.3	236.8	
122.9	TRADEWATER		SHALE	3.1	237.1	
119.8	TRADEWATER		GRAY SANDSTONE	2.6	240.2	
117.2	TRADEWATER		SHALE	16.5	242.8	
100.7	TRADEWATER		COAL	0.5	259.3	
100.2	TRADEWATER		SHALE	34.8	259.8	
65.5	TRADEWATER		COAL	0.5	294.5	
65.0	TRADEWATER		BLUE SHALE	0.3	295.0	
64.7	TRADEWATER		COAL	0.7	295.3	
64.0	TRADEWATER		SHALE	10.0	296.0	

MAPID: 05902399000C **VERSION:** 4 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 75' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346354 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.720682 **DATE COLLECTED:** 0 / 0 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 307.5 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CORP 164 **WELL TYPE:** Coal Test

COMMENT: TYPED BY COAL SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	56.0	0.0	
304.0	CARBONDALE		SANDSTONE	2.8	56.0	
301.2	CARBONDALE		SHALE	3.3	58.8	
297.8	CARBONDALE		SILTSTONE	12.3	62.2	
285.5	CARBONDALE		NO RECORD	1.5	74.5	
284.0	CARBONDALE		SHALE	6.0	76.0	
278.0	CARBONDALE		SANDSTONE	1.5	82.0	BLACK, POSITION OF COAL?
276.5	CARBONDALE		SANDSTONE	1.7	83.5	
274.8	CARBONDALE		SHALE	8.3	85.2	
266.6	CARBONDALE		NO RECORD	2.1	93.4	
264.5	CARBONDALE		SHALE	0.9	95.5	
263.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.8	96.4	
260.7	CARBONDALE	COLCHESTER	COAL	1.6	99.3	
259.2	SPOON		UNDERCLAY	4.1	100.8	
255.1	SPOON		CLAYSTONE & SILTSTONE	0.6	104.9	
254.5	SPOON		CLAYSTONE & SHALE	0.7	105.5	
253.8	SPOON		SILTSTONE	4.6	106.2	
249.2	SPOON		SANDSTONE	26.3	110.8	
223.0	SPOON		SHALE	1.2	137.0	
221.8	SPOON		SANDSTONE	17.6	138.2	FEW THIN COAL SPURS IN BOTTOM 2.25'
204.2	SPOON		NO RECORD	0.4	155.8	
203.8	SPOON	DEKOVEN	COAL	2.9	156.2	
200.9	SPOON		SANDSTONE	1.4	159.1	
199.5	SPOON		CLAYSTONE & SILTSTONE	2.3	160.5	
197.2	SPOON		SILTSTONE	7.7	162.8	
189.6	SPOON		SHALE	5.9	170.4	
183.7	SPOON		NO RECORD	4.2	176.3	
179.5	SPOON	DAVIS	COAL	4.4	180.5	
175.1	SPOON		NO RECORD	2.4	184.9	
172.7	SPOON		CLAYSTONE & SILTSTONE	1.1	187.3	
171.6	SPOON		CLAYSTONE & SHALE	3.1	188.4	
168.5	SPOON		CLAYSTONE & SILTSTONE	3.0	191.5	
165.5	SPOON		SILTSTONE	15.3	194.5	
150.2	SPOON		SANDSTONE	19.1	209.8	
131.1	SPOON		SHALE	3.7	228.9	
127.4	SPOON		BLACK SHALE	3.4	232.6	WITH PYRITE
124.0	SPOON		COAL	0.8	236.0	
123.2	SPOON		UNDERCLAY	1.4	236.8	SILTSTONE
121.8	SPOON		SILTSTONE	2.3	238.2	

119.6	SPOON	SANDSTONE	3.5	240.4	
116.1	SPOON	SILTSTONE	4.1	243.9	
112.0	SPOON	SHALE	2.5	248.0	
109.5	SPOON	SILTSTONE	1.7	250.5	
107.8		SHALE	2.7	252.2	
105.2		LIMESTONE	2.8	254.8	
102.3		BLACK SHALE	1.1	257.7	
101.2		LIMESTONE	0.6	258.8	BOTTOM BONEY AND GRADES INTO COAL
100.7		COAL	0.5	259.3	
100.1		SANDSTONE	6.3	259.9	
93.8		SILTSTONE	6.1	266.2	CORE SPIN AT BASE-POSSIBLE LOSS
87.7		CLAYSTONE & SILTSTONE	2.1	272.3	
85.7		SILTSTONE	2.4	274.3	
83.2		SHALE	5.0	276.8	
78.2		NO RECORD	3.3	281.8	
75.0		SHALE	9.5	285.0	
65.5		COAL	1.7	294.5	
63.8		UNDERCLAY	4.5	296.2	
59.3		SILTSTONE	2.8	300.7	
56.5		SHALE	4.0	303.5	

MAPID: 05900225901M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.332613 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.731798 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 44.6 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-DEWOLF,EAST SIDE MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	40.0	0.0	
360.0	CARBONDALE	SPRINGFIELD	COAL	4.6	40.0	AVERAGE THICKNESS

MAPID: 05900225800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.324363 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.731857 **DATE COLLECTED:** 6 / 25 / 1973

SURFACE ELEVATION (FT.): 360.0 **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	SPRINGFIELD	COAL	-		

MAPID: 05902413000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330977 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.720327 **DATE COLLECTED:** 2 / 5 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 202 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	8.0	0.0	
357.0	PLEISTOCENE		MUD	52.0	8.0	
305.0	PLEISTOCENE		SILT & SAND	64.5	60.0	
240.5	CARBONDALE		SANDSTONE	19.5	124.5	
221.0	CARBONDALE		SHALE	1.9	144.0	
219.1	CARBONDALE	DEKOVEN	COAL	3.0	145.9	
216.1	CARBONDALE		UNDERCLAY	4.1	148.9	
212.0	CARBONDALE		SHALE	2.0	153.0	
210.0	CARBONDALE		SANDSTONE	8.2	155.0	
201.8	CARBONDALE		SHALE	7.8	163.2	
194.0	CARBONDALE		SHALE	3.5	171.0	
190.5	CARBONDALE	DAVIS	COAL	4.0	174.5	
186.5	TRADEWATER		UNDERCLAY	1.5	178.5	

MAPID: 05902413000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330977 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.720327 **DATE COLLECTED:** 2 / 5 / 1959

SURFACE ELEVATION (FT.): 360.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	8.0	0.0	
352.0			ROCK	137.9	8.0	
214.1	SPOON	DEKOVEN	COAL	3.0	145.9	
211.1	SPOON		ROCK	25.6	148.9	
185.5	SPOON	DAVIS	COAL	4.0	174.5	
181.5	SPOON		ROCK	1.5	178.5	

MAPID: 05992413000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330977 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.720327 **DATE COLLECTED:** 2 / 5 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING 202 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	124.5	0.0	
240.5			SANDSTONE	19.5	124.5	
221.0			SHALE	1.9	144.0	
219.1	SPOON	DEKOVEN	COAL	3.0	145.9	
216.1	SPOON		CLAYSTONE & SHALE	4.1	148.9	
212.0	SPOON		SHALE	2.0	153.0	
210.0	SPOON		SANDSTONE	8.2	155.0	
201.8	SPOON		SHALE	7.8	163.2	
194.0	SPOON		BLACK SHALE	3.5	171.0	
190.5	SPOON	DAVIS	COAL	4.0	174.5	
186.5	SPOON		UNDERCLAY	1.5	178.5	

MAPID: 05902432000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 875' S line, 200' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309393 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.727147 **DATE COLLECTED:** 4 / 10 / 1959

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 212 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.0	PLEISTOCENE		MUD	50.0	0.0	
295.0	PLEISTOCENE		SILT & SAND	65.5	50.0	
229.5			SHALE	24.5	115.5	BELOW SPRINGFIELD COAL - CGT
205.0			SHALE	3.2	140.0	
201.8			COAL	0.2	143.2	
201.7			SHALE	9.2	143.3	
192.5			SANDSTONE	51.0	152.5	
141.5			COAL	0.3	203.5	BONE
141.2			SHALE	3.3	203.8	

MAPID: 05902432000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 875' S line, 200' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.309393 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.727147 **DATE COLLECTED:** 4 / 10 / 1959
SURFACE ELEVATION (FT.): 345.0 **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
345.0			UNCONSOLIDATED	115.5	0.0	
229.5			COAL	0.2	115.5	
229.3			ROCK	60.2	115.7	
169.2			COAL	0.3	175.8	
168.9			ROCK	3.3	176.1	

MAPID: 05900013502M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.294295 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.729559 **DATE COLLECTED:** 7 / 16 / 1921
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 124.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-NETZEBAND, B & W COAL MINE **WELL TYPE:** Underground mine
COMMENT: SEVERAL SAMPLES DATED 1921

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	120.0		
-			COAL	4.7		
-			ROCK	-		

MAPID: 05900076400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.293719 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730939 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 33.2 **LOG TYPE:**
SOURCE: MINE NOTES-SIMON&LENNON, WENZEL MINE **WELL TYPE:** Strip Mine
COMMENT: SAMPLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	15.0	0.0	
365.0	CARBONDALE		ROCK	13.4	15.0	
351.6	CARBONDALE	SPRINGFIELD	COAL	4.8	28.4	

MAPID: 05900076503M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.297736 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731447 **DATE COLLECTED:** 8 / 8 / 1956
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 29.5 **LOG TYPE:**
SOURCE: MINE NOTES-NEW OAK HILL MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	CARBONDALE		ROCK	25.0	0.0	
355.0	CARBONDALE	SPRINGFIELD	COAL	4.5	25.0	

MAPID: 05900076501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.282247 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730798 **DATE COLLECTED:** 0 / 0 / 1955
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-OAK HILL C C **WELL TYPE:** Strip Mine
COMMENT: PIT #1

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

MAPID: 05900076502M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.290848 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731364 **DATE COLLECTED:** 7 / 5 / 1956
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 34.6 **LOG TYPE:**
SOURCE: MINE NOTES-NEW OAK HILL MINE **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	15.0	0.0	
365.0	CARBONDALE		ROCK	15.1	15.0	
349.9	CARBONDALE	SPRINGFIELD	COAL	4.5	30.1	

MAPID: 05900076000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.293722 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.729089 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 3900.0 **LOG TYPE:** Measured section
SOURCE: H HILL CC **WELL TYPE:** Underground mine
COMMENT: SURFACE ELEVATION UNCERTAIN

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

MAPID: 05902174000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.291472 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.717956 **DATE COLLECTED:** 10 / 0 / 1957
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1595.0 **LOG TYPE:** Electric Log
SOURCE: FARRAR DRILLING CO, SISK JACK **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
228.0	CARBONDALE	COLCHESTER	COAL	1.8	130.0	
174.0	CARBONDALE	DEKOVEN	COAL	2.5	184.0	
174.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	184.0	
149.0	CARBONDALE	DAVIS	COAL	3.0	209.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902593000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284623 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.717878 **DATE COLLECTED:** 12 / 0 / 1961
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1615.0 **LOG TYPE:** Electric Log
SOURCE: DAVIS ALVA C PETRO, BAYLEY C W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
186.0	CARBONDALE	DEKOVEN	COAL	3.0	175.0	
186.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	175.0	
159.0	CARBONDALE	DAVIS	COAL	3.0	202.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902593000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284623 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.717878 **DATE COLLECTED:** 12 / 0 / 1961
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1100.0 **LOG TYPE:** Electric Log
SOURCE: DAVIS ALVA C PETRO **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-739.0	BASE OF PENN.		UNCLASSIFIED	-	1100.0	

MAPID: 05900034000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263447 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.730488 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3550.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MC0001 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

MAPID: 05900034000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263447 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.730488 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 194.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MNG. CO. **WELL TYPE:** Coal Test
COMMENT: PERHAPS NOT RELIABLE DATA. SEE LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0			UNCONSOLIDATED	20.0	0.0	
335.0			ROCK	48.0	20.0	
287.0	CARBONDALE	HERRIN	COAL	4.5	68.0	
282.5	CARBONDALE		ROCK	116.0	72.5	
166.5	CARBONDALE	SPRINGFIELD	COAL	5.0	188.5	

MAPID: 05900034000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263447 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.730488 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 194.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MINING 1 **WELL TYPE:** Coal Test
COMMENT: GORDON QUESTIONS ACCURACY OF VANDELLRECS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
348.0	PLEISTOCENE		SAND	13.0	7.0	
335.0	PLEISTOCENE		MUD	17.0	20.0	BLUE
318.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	37.0	
308.0	CARBONDALE		SHALE	13.0	47.0	
295.0	CARBONDALE	BRERETON	LIMESTONE	8.0	60.0	
287.0	CARBONDALE		SHALE	0.5	68.0	
286.5	CARBONDALE	HERRIN	COAL	4.5	68.5	
282.0	CARBONDALE		UNDERCLAY	2.0	73.0	
280.0	CARBONDALE		SHALE	6.0	75.0	
274.0	CARBONDALE		SANDSTONE	24.0	81.0	
250.0	CARBONDALE		SHALE	9.0	105.0	
241.0	CARBONDALE		SHALE	20.0	114.0	
221.0	CARBONDALE		SANDSTONE	14.0	134.0	
207.0	CARBONDALE		SHALE	36.0	148.0	
171.0	CARBONDALE		SHALE	4.5	184.0	
166.5	CARBONDALE		SHALE	0.5	188.5	DRAW
166.0	CARBONDALE	SPRINGFIELD	COAL	5.0	189.0	
161.0	CARBONDALE		UNDERCLAY	-	194.0	NO THICKNESS GIVEN

MAPID: 05900035000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263489 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.726825 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3550.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MC0002 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

MAPID: 05900035000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.263489 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.726825 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Drillers Log

SOURCE: VANDELL MNG CO. **WELL TYPE:** Coal Test

COMMENT: PERHAPS NOT RELIABLE DATA-SEE LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	22.0	0.0	
338.0			ROCK	106.5	22.0	
231.5	CARBONDALE	HERRIN	COAL	1.5	128.5	
230.0	CARBONDALE		ROCK	100.0	130.0	
130.0	CARBONDALE	SPRINGFIELD	COAL	0.5	230.0	
129.5	CARBONDALE		ROCK	49.5	230.5	

MAPID: 05900035000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.263489 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.726825 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Drillers Log

SOURCE: VANDELL MINING 2 **WELL TYPE:** Coal Test

COMMENT: GORDON QUESTIONS ACCURACY OF VANDELLRECS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
343.0	PLEISTOCENE		SAND	10.0	12.0	
333.0	PLEISTOCENE		MUD	23.0	22.0	BLUE
310.0	PLEISTOCENE		SAND	10.0	45.0	
300.0	CARBONDALE		SHALE	3.0	55.0	
297.0	CARBONDALE		SANDSTONE	8.0	58.0	
289.0	CARBONDALE		SHALE	18.0	66.0	
271.0	CARBONDALE		SHALE	40.0	84.0	
231.0	CARBONDALE	EXCELLO	SHALE	4.5	124.0	
226.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	128.5	
225.0	CARBONDALE		UNDERCLAY	1.0	130.0	
224.0	CARBONDALE		SANDSTONE	11.0	131.0	
213.0	CARBONDALE		SHALE	8.0	142.0	
205.0	CARBONDALE		SHALE	25.0	150.0	
180.0	CARBONDALE		SHALE	18.0	175.0	
162.0	CARBONDALE		SANDSTONE	6.0	193.0	
156.0	CARBONDALE		SHALE	16.0	199.0	
140.0	CARBONDALE		SHALE	13.0	215.0	
127.0	CARBONDALE	MECCA QUARRY	SHALE	2.0	228.0	
125.0	CARBONDALE	COLCHESTER	COAL	0.5	230.0	
124.5	CARBONDALE		UNDERCLAY	1.5	230.5	
123.0	CARBONDALE		SANDSTONE	48.0	232.0	
75.0	CARBONDALE		SHALE	-	280.0	NO THICKNESS

MAPID: 05900036000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.263527 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.723162 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3550.0 **LOG TYPE:** Drillers Log

SOURCE: VANDELL MC0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

MAPID: 05900036000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.263527 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.723162 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log

SOURCE: VANDELL MNG CO. **WELL TYPE:** Coal Test

COMMENT: PERHAPS NOT RELIABLE DATA-SEE LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	20.0	0.0	
340.0			ROCK	54.0	20.0	
286.0			COAL	1.0	74.0	
285.0			ROCK	42.0	75.0	
243.0			COAL	3.0	117.0	
240.0			ROCK	116.0	120.0	
124.0			COAL	4.0	236.0	

MAPID: 05900036000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263527 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.723162 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL 3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
345.0	PLEISTOCENE		SAND	10.0	10.0	
335.0	PLEISTOCENE		MUD	25.0	20.0	BLUE
310.0	PLEISTOCENE		SAND	17.0	45.0	
293.0	MODESTO		SHALE	8.0	62.0	
285.0	MODESTO		SHALE	4.0	70.0	
281.0	CARBONDALE	DANVILLE	COAL	1.0	74.0	
280.0	CARBONDALE		UNDERCLAY	2.0	75.0	
278.0	CARBONDALE		SANDSTONE	3.0	77.0	
275.0	CARBONDALE		SHALE	37.0	80.0	
238.0	CARBONDALE	HERRIN	COAL	3.0	117.0	
235.0	CARBONDALE		UNDERCLAY	1.0	120.0	
234.0	CARBONDALE		SHALE	6.0	121.0	
228.0	CARBONDALE		SHALE	12.0	127.0	
216.0	CARBONDALE		SANDSTONE	10.0	139.0	
206.0	CARBONDALE		SHALE	5.0	149.0	
201.0	CARBONDALE		SHALE	24.0	154.0	
177.0	CARBONDALE		SHALE	2.0	178.0	
175.0	CARBONDALE		SANDSTONE	47.0	180.0	
128.0	CARBONDALE		SHALE	9.0	227.0	
119.0	CARBONDALE	SPRINGFIELD	COAL	4.0	236.0	

MAPID: 05900074500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263468 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.728658 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DR GORDON, VANDELL MNG CO. **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0			UNKNOWN	0.0	0.0	

MAPID: 05900098000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263489 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.726825 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:** Measured section
SOURCE: VANDELL MC **WELL TYPE:** Underground mine
COMMENT:

MAPID: 05901032000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.268219 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.72138 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2583.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L, JENNINGS-GRATTON 1 **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	DEKOVEN	COAL	3.0	215.0	
-	CARBONDALE	LOWER DEKOVEN	COAL	0.0	215.0	
-	CARBONDALE	DAVIS	COAL	1.3	241.0	70% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901032000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.268219 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.72138 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1138.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-778.0	BASE OF PENN.		UNCLASSIFIED	-	1138.0	

MAPID: 05900037000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263801 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.703299 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 3550.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR COAL CO. 017 **WELL TYPE:** Oil and Gas Test
COMMENT: SURFACE ELEVATION UNCERTAIN

MAPID: 05900037000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263801 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.703299 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 633.0 **LOG TYPE:** Survey Core Study
SOURCE: TAYLOR COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCONSOLIDATED	43.0	0.0	
312.0			ROCK	9.0	43.0	
303.0			COAL	3.3	52.0	
299.7			ROCK	24.8	55.3	
275.0			COAL	3.5	80.0	
271.5			ROCK	43.0	83.5	
228.5			COAL	0.5	126.5	
228.0			ROCK	208.5	127.0	
19.5			COAL	0.8	335.5	
18.7			ROCK	9.8	336.3	
8.9			COAL	1.4	346.1	
7.5			ROCK	281.0	347.5	
-273.5			COAL	0.3	628.5	
-273.8			ROCK	34.7	628.8	

MAPID: 05900037000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.263801 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.703299 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 663.0 **LOG TYPE:** Drillers Log
SOURCE: TAYLOR COAL CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
303.0	CARBONDALE	DEKOVEN	COAL	3.2	52.0	
303.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	52.0	
275.0	CARBONDALE	DAVIS	COAL	3.5	80.0	
229.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	126.0	46% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900037000C **VERSION:** 4 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.263801 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.703299 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 663.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR COAL CO. 17 **WELL TYPE:** Coal Test

COMMENT: G.H.C NOTES #5 AND #6 BOTH OUT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		CLAY	21.0	0.0	
334.0	PLEISTOCENE		CLAY	4.0	21.0	
330.0	PLEISTOCENE		SAND	18.0	25.0	
312.0	CARBONDALE		SHALE	2.0	43.0	
310.0	CARBONDALE		DARK SHALE	7.0	45.0	
303.0	CARBONDALE	DEKOVEN	COAL	3.3	52.0	
299.7	CARBONDALE		UNDERCLAY	3.8	55.3	
296.0	CARBONDALE		SANDSTONE	11.0	59.0	
285.0	CARBONDALE		DARK SHALE	8.0	70.0	
277.0	CARBONDALE		SHALE	2.0	78.0	
275.0	CARBONDALE	DAVIS	COAL	3.5	80.0	
271.5	TRADEWATER		UNDERCLAY	1.5	83.5	
270.0	TRADEWATER		LIMESTONE	4.0	85.0	
266.0	TRADEWATER		SHALE	28.0	89.0	
238.0	TRADEWATER		DARK SHALE	5.0	117.0	
233.0	TRADEWATER		SHALE	4.0	122.0	
229.0	TRADEWATER		COAL	0.5	126.0	
228.5	TRADEWATER		UNDERCLAY	3.5	126.5	
225.0	TRADEWATER		SANDSTONE	12.0	130.0	
213.0	TRADEWATER		SHALE	18.0	142.0	
195.0	TRADEWATER		DARK SHALE	23.0	160.0	
172.0	TRADEWATER		SHALE	7.0	183.0	
165.0	TRADEWATER		SANDSTONE	78.0	190.0	
87.0	TRADEWATER		SANDSTONE	18.0	268.0	
69.0	TRADEWATER		DARK SHALE	2.0	286.0	
67.0	TRADEWATER		SANDSTONE	9.0	288.0	
58.0	TRADEWATER		SHALE	3.0	297.0	
55.0	TRADEWATER		SANDSTONE	33.0	300.0	
22.0	TRADEWATER		SHALY SANDSTONE	2.0	333.0	
20.0	TRADEWATER		COAL	0.8	335.0	
19.2	TRADEWATER		DARK SHALE	9.8	335.8	
9.4	TRADEWATER		COAL	1.4	345.6	
8.0	TRADEWATER		DARK SHALE	3.0	347.0	
5.0	TRADEWATER		SHALE	28.0	350.0	
-23.0	TRADEWATER		DARK SHALE	22.0	378.0	
-45.0	TRADEWATER		SHALE	9.0	400.0	
-54.0	TRADEWATER		SANDSTONE	31.0	409.0	
-85.0	TRADEWATER		SHALE & SANDSTONE	15.0	440.0	
-100.0	TRADEWATER		SHALE	16.0	455.0	

-116.0	TRADEWATER	SANDSTONE	27.0	471.0
-143.0	TRADEWATER	WHITE SANDSTONE	5.0	498.0
-148.0	TRADEWATER	SANDSTONE	43.0	503.0
-191.0	TRADEWATER	SHALE	6.0	546.0
-197.0	TRADEWATER	SANDSTONE	5.0	552.0
-202.0	TRADEWATER	SHALE	2.0	557.0
-204.0	TRADEWATER	SHALY SANDSTONE	15.0	559.0
-219.0	TRADEWATER	SHALY SANDSTONE	4.0	574.0
-223.0	TRADEWATER	SANDSTONE	1.5	578.0
-224.5	TRADEWATER	SHALY SANDSTONE	10.5	579.5
-235.0	TRADEWATER	SHALY SANDSTONE	38.0	590.0
-273.0	TRADEWATER	COAL	0.3	628.0
-273.3	TRADEWATER	DARK SHALE	30.7	628.3
-304.0	TRADEWATER	SHALE	4.0	659.0

MAPID: 05901697000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.270737 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.712294 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2510.0 **LOG TYPE:** Electric Log

SOURCE: MORAN, E. F., INC., PARKER FRANK **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
220.0	CARBONDALE	COLCHESTER	COAL	2.5	140.0	
170.0	CARBONDALE	DEKOVEN	COAL	2.0	190.0	
170.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	190.0	
146.0	CARBONDALE	DAVIS	COAL	3.3	214.0	
84.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	276.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
65.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	295.0	

MAPID: 05901697000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.270737 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.712294 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1120.0 **LOG TYPE:** Electric Log

SOURCE: MORAN, E. F., INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
216.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	144.0	
144.0	SPOON	DAVIS	UNCLASSIFIED	-	216.0	
-760.0	BASE OF PENN.		UNCLASSIFIED	-	1120.0	

MAPID: 05902430000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.278942 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.711423 **DATE COLLECTED:** 4 / 13 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 168 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	122.2	0.0	SAND AND GRAVEL
237.8			SHALE	5.0	122.2	
232.8			GRAY SANDSTONE	21.4	127.2	
211.4			SHALE & SANDSTONE	3.0	148.6	BELOW SPRINGFIELD COAL - CGT
208.4			SHALE	1.0	151.6	
207.4			COAL	0.2	152.6	
207.2			SHALE	1.3	152.8	
205.9			SHALE	5.9	154.1	
200.0			SHALY SANDSTONE	19.3	160.0	
180.7			COAL	0.2	179.3	
180.6			SANDSTONE	42.6	179.4	
138.0			SHALE	6.0	222.0	

MAPID: 05902430000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.278942 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.711423 **DATE COLLECTED:** 4 / 13 / 1959

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 228.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	122.2	0.0	
237.8			ROCK	30.4	122.2	L-CORE BEGINS
207.4			COAL	0.2	152.6	
207.3			ROCK	6.3	152.7	L-CORE ENDS
201.0			ROCK	20.5	159.0	
180.5			COAL	0.2	179.5	
180.3			ROCK	48.6	179.7	

MAPID: 05924337000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.277752 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.710505 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
167.0	CARBONDALE	COLCHESTER	COAL	2.5	185.0	
119.0	CARBONDALE	DEKOVEN	COAL	3.0	233.0	
119.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	233.0	
94.0	CARBONDALE	DAVIS	COAL	3.0	258.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901831000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.291526 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.71429 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2485.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC., SALINE COAL CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
204.0	CARBONDALE	DEKOVEN	COAL	3.0	155.0	
204.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	155.0	
180.0	CARBONDALE	DAVIS	COAL	3.0	179.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901831000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.291526 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.71429 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1063.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-704.0	BASE OF PENN.		UNCLASSIFIED	-	1063.0	

MAPID: 05902405000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.284732 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.710555 **DATE COLLECTED:** 2 / 17 / 1959

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 203 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.0	PLEISTOCENE		CLAY	6.0	0.0	
346.0	PLEISTOCENE		SAND/CLAY	90.3	6.0	
255.7			GRAY SANDSTONE	1.7	96.3	
254.0			SHALE	4.8	98.0	
249.2	CARBONDALE	MECCA QUARRY	SHALE	3.2	102.8	CORRELATION UNCERTAIN
246.0	CARBONDALE	COLCHESTER	COAL	0.7	106.0	CORRELATION UNCERTAIN
245.3			SHALE	17.3	106.7	
228.0			GRAY LIMESTONE	1.6	124.0	
226.4			SHALE	2.7	125.6	
223.7			COAL	1.1	128.3	BONY
222.7			SHALE	4.8	129.3	
217.8			SHALE & SANDSTONE	11.3	134.2	
206.5			GRAY SANDSTONE	64.5	145.5	

MAPID: 05902405000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.284732 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.710555 **DATE COLLECTED:** 2 / 17 / 1959

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT: 4,1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.0			UNCONSOLIDATED	96.4	0.0	
255.6			ROCK	6.7	96.4	
248.9			ROCK	2.3	103.1	L-CORE BEGINS
246.6			COAL	0.6	105.4	
246.0			ROCK	0.3	106.0	
245.6			UNKNOWN	17.7	106.4	NOT CORED
227.9			ROCK	4.3	124.1	
223.7			COAL	1.1	128.3	
222.6			ROCK	80.7	129.4	

MAPID: 05900038000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.323969 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.716556 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 510.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITSBURG **WELL TYPE:** Coal Test

COMMENT: LOCATION IMPRECISE, NEAR FAULT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.4			UNCONSOLIDATED	85.0	0.0	
288.4	MODESTO		SANDSTONE	41.3	85.0	
247.1	MODESTO		BLACK SHALE	3.2	126.3	
244.0	MODESTO		GRAY SHALE	8.6	129.4	
235.4	MODESTO		DARK SHALE	8.0	138.0	
227.4	MODESTO		COAL	4.4	146.0	
223.0	MODESTO		GRAY SHALE	1.6	150.4	
221.4	MODESTO		SANDSTONE	18.0	152.0	
203.4	MODESTO		SHALE	18.0	170.0	
185.4	MODESTO		COAL	0.8	188.0	
184.6	MODESTO		GRAY SHALE	2.2	188.8	
182.4	MODESTO		SHALE	30.0	191.0	
152.4	MODESTO		LIMESTONE	2.0	221.0	
150.4	MODESTO		SHALE	4.0	223.0	
146.4	MODESTO		COAL	1.0	227.0	
145.4	MODESTO		GRAY SHALE	4.0	228.0	
141.4	MODESTO		SANDSTONE	16.0	232.0	
125.4	MODESTO		DARK SHALE	6.0	248.0	
119.4	MODESTO		SHALE	0.7	254.0	
118.7	CARBONDALE	DANVILLE	COAL WITH SHALE PARTINGS	1.6	254.7	UNCERTAIN CORRELATION
117.1	CARBONDALE		SHALE	4.8	256.3	
112.4	CARBONDALE		LIMESTONE	6.0	261.0	
106.4	CARBONDALE		SHALE	4.0	267.0	
102.4	CARBONDALE		SANDSTONE	10.0	271.0	
92.4	CARBONDALE		SHALE	8.0	281.0	
84.4	CARBONDALE		LIMESTONE	10.0	289.0	
74.4	CARBONDALE		SHALE	34.6	299.0	
39.8	CARBONDALE	ANNA	BLACK SHALE	0.3	333.6	
39.5	CARBONDALE	HERRIN	COAL	3.7	333.9	UNCERTAIN CORRELATION
35.8	CARBONDALE		SHALE	6.5	337.6	
29.3	CARBONDALE		COAL	0.3	344.1	
29.1	CARBONDALE		SHALE	25.7	344.3	
3.4	CARBONDALE		SANDSTONE	4.0	370.0	
-0.6	CARBONDALE		SHALE	8.0	374.0	
-8.6	CARBONDALE		DARK SHALE	5.0	382.0	
-13.6	CARBONDALE	BRIAR HILL	COAL	1.0	387.0	UNCERTAIN CORRELATION
-14.6	CARBONDALE		GRAY SHALE	17.0	388.0	
-31.6	CARBONDALE		DARK SHALE	5.0	405.0	

-36.6	CARBONDALE	DARK SHALE	45.0	410.0
-81.6	CARBONDALE	SANDSTONE	55.0	455.0

MAPID: 05900038000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.323969 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.716556 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 510.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD-PITTSBURG CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.0			UNCONSOLIDATED	85.0	0.0	
288.0			ROCK	6.0	85.0	
282.0			COAL	4.4	91.0	
277.6			ROCK	37.6	95.4	
240.0			COAL	0.8	133.0	
239.2			ROCK	38.2	133.8	
201.0			COAL	1.0	172.0	
200.0			ROCK	26.7	173.0	
173.3			COAL	1.6	199.7	
171.8			ROCK	77.9	201.2	
93.9			COAL	3.7	279.1	
90.2			ROCK	6.5	282.8	
83.7			COAL	0.3	289.3	
83.4			ROCK	42.7	289.6	
40.8			COAL	1.0	332.2	
39.8			ROCK	122.0	333.2	

MAPID: 05900038000C **VERSION:** 3 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.323969 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.716556 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 3734.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTS 004, RUMELY **WELL TYPE:** Oil and Gas Test

COMMENT:

MAPID: 05900038000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.323969 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.716556 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 510.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD & PITTSBURG, RUMLEY **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
227.0	CARBONDALE	DEKOVEN	COAL	4.4	146.0	
227.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	146.0	
185.0	CARBONDALE	DAVIS	COAL	1.0	188.0	
146.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	227.0	49% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
118.0	TRADEWATER	MT. RORAH	COAL	1.3	255.0	

MAPID: 05900038000C **VERSION:** 5 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.323969 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.716556 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 373.4 **LOGGED (FT.):** 510.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD-PITTSBURG 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.4	PLEISTOCENE		CLAY	85.0	0.0	
288.4	CARBONDALE		SANDSTONE	41.3	85.0	
247.1	CARBONDALE		SHALE	3.2	126.3	
244.0	CARBONDALE		SHALE	8.6	129.4	
235.4	CARBONDALE		DARK SHALE	8.0	138.0	
227.4	CARBONDALE	DAVIS	COAL	4.4	146.0	
223.0	TRADEWATER		SHALE	1.6	150.4	
221.4	TRADEWATER		SANDSTONE	18.0	152.0	
203.4	TRADEWATER		SHALE	16.0	170.0	
187.4	TRADEWATER		DARK SHALE	2.0	186.0	
185.4	TRADEWATER		COAL	0.8	188.0	
184.6	TRADEWATER		SHALE	2.2	188.8	
182.4	TRADEWATER		SHALE	30.0	191.0	
152.4	TRADEWATER		LIMESTONE	2.0	221.0	
150.4	TRADEWATER		LIMESTONE	4.0	223.0	
146.4	TRADEWATER		COAL	1.0	227.0	
145.4	TRADEWATER		SHALE	4.0	228.0	
141.4	TRADEWATER		SANDSTONE	16.0	232.0	
125.4	TRADEWATER		DARK SHALE	6.0	248.0	
119.4	TRADEWATER		SHALE	0.7	254.0	
118.7	TRADEWATER		COAL	1.1	254.7	
117.6	TRADEWATER		SHALE	0.3	255.8	
117.3	TRADEWATER		COAL	0.2	256.1	
117.1	TRADEWATER		SHALE	4.8	256.3	
112.4	TRADEWATER		LIMESTONE	6.0	261.0	
106.4	TRADEWATER		SHALE	4.0	267.0	
102.4	TRADEWATER		SANDSTONE	10.0	271.0	
92.4	TRADEWATER		SHALE	8.0	281.0	
84.4	TRADEWATER		LIMESTONE	10.0	289.0	
74.4	TRADEWATER		SHALE	21.0	299.0	
53.4	TRADEWATER		SHALE	13.6	320.0	
39.8	TRADEWATER		SHALE	0.3	333.6	
39.5	TRADEWATER		COAL	3.7	333.9	
35.8	TRADEWATER		SHALE	6.5	337.6	
29.3	TRADEWATER		COAL	0.3	344.1	
29.1	TRADEWATER		SHALE	12.7	344.3	
16.4	TRADEWATER		SHALE	13.0	357.0	
3.4	TRADEWATER		SANDSTONE	4.0	370.0	
-0.6	TRADEWATER		SHALE	8.0	374.0	

-8.6	TRADEWATER	DARK SHALE	5.0	382.0
-13.6	TRADEWATER	COAL	1.0	387.0
-14.6	TRADEWATER	SHALE	6.0	388.0
-20.6	TRADEWATER	SHALE	11.0	394.0
-31.6	TRADEWATER	DARK SHALE	5.0	405.0
-36.6	TRADEWATER	SHALE & SANDSTONE	29.0	410.0
-65.6	TRADEWATER	SHALE	9.0	439.0
-74.6	TRADEWATER	DARK SHALE	7.0	448.0
-81.6	TRADEWATER	SANDSTONE	49.0	455.0
-130.6	TRADEWATER	SHALY SANDSTONE	6.0	504.0

MAPID: 05901254000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.328654 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.712868 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2377.0 **LOG TYPE:** Electric Log

SOURCE: MCGUIRE & VANDENBARK, MCCUE J ED **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
226.0	CARBONDALE	DEKOVEN	COAL	3.0	142.0	
226.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	142.0	
199.0	CARBONDALE	DAVIS	COAL	3.8	169.0	
154.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	214.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
136.0	TRADEWATER	STONEFORT	LIMESTONE	3.8	232.0	
103.0	TRADEWATER	MT. RORAH	COAL	4.0	265.0	

MAPID: 05901254000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.328654 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.712868 **DATE COLLECTED:** 12 / 0 / 1952

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1080.0 **LOG TYPE:** Electric Log

SOURCE: MCGUIRE & VANDENBARK **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
198.0	SPOON	DAVIS	UNCLASSIFIED	-	170.0	
-712.0	BASE OF PENN.		UNCLASSIFIED	-	1080.0	

MAPID: 05902404000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342613 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.71293 **DATE COLLECTED:** 2 / 18 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 220.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 167 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		SAND	121.5	0.0	CLAY AND GRAVEL
243.5			SHALE	8.9	121.5	BELOW SPRINGFIELD COAL - CGT
234.5			SANDY SHALE	9.9	130.5	
224.7			BLUE SHALE	8.4	140.3	
216.2			GRAY SANDSTONE	11.3	148.8	
205.0			DARK SHALE	9.6	160.0	
195.4			SHALE	5.3	169.6	
190.2			COAL	0.3	174.8	
189.9			LIGHT SHALE	3.9	175.1	
186.0			SANDSTONE	7.3	179.0	LIMESTONE NOTED
178.7			DARK SHALE	10.2	186.3	
168.5			LIMESTONE	2.0	196.5	
166.5			SHALE	1.5	198.5	
165.0			DARK SHALE	2.5	200.0	
162.5			COAL	1.0	202.5	
161.5			SHALE	14.0	203.5	
147.5			COAL	1.3	217.5	
146.2			SHALE	1.2	218.8	

MAPID: 05902403000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.357623 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.708275 **DATE COLLECTED:** 2 / 11 / 1959

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 192.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 166 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0	PLEISTOCENE		SANDY CLAY	118.0	0.0	
239.0	CARBONDALE		GRAY SANDSTONE	2.0	118.0	
237.0	CARBONDALE		DARK SHALE	13.0	120.0	
224.0	CARBONDALE	DAVIS	COAL	3.4	133.0	POSS. SAME AS 3'8" C AT 387'DPTH IN BYRD
220.6	TRADEWATER		SHALE	3.5	136.4	
217.1	TRADEWATER		SANDY SHALE	52.1	139.9	

MAPID: 05902372000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 31 **QUARTERS/FOOTAGES:** 100' N line, 2640' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.36453 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.702395 **DATE COLLECTED:** 12 / 18 / 1958
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 190.8 **LOG TYPE:** Multiple log types
SOURCE: BRANSFORD MINING CORP 163 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0	
375.0			SANDSTONE	48.1	30.0	SANDSTONE IS DIPPING AND FAULTED
326.9			CONGLOMERATE	0.3	78.1	SHALE, COAL, AND SANDSTONE
326.7			SANDSTONE	0.3	78.3	
326.4			UNDERCLAY	0.3	78.6	
326.2			SHALE	96.4	78.8	NOT CORED
229.7			SANDSTONE	9.5	175.3	
220.2			SANDSTONE/SHALE	6.0	184.8	CORE LOSS

MAPID: 05901229000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.347131 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.696161 **DATE COLLECTED:** 8 / 0 / 1951
SURFACE ELEVATION (FT.): 687.0 **LOGGED (FT.):** 320.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0	BASE OF PENN.		UNCLASSIFIED	-	320.0	

MAPID: 05900087602M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 185' S line, 2030' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.325299 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.688203 **DATE COLLECTED:** 8 / 25 / 1966
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-F. N. MURRAY,WENZEL C C **WELL TYPE:** Underground mine
COMMENT: SAMPLE # 1

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

MAPID: 05900087601M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 1340' S line, 703' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.320728 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.69135 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WENZEL C C,EAGLE VALLEY MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	CARBONDALE	SPRINGFIELD	COAL	4.4	0.0	AVERAGED THICKNESS

MAPID: 05900087604M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** 880' S line, 760' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.320912 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.690082 **DATE COLLECTED:** 8 / 25 / 1966
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 4.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-F. N. MURRAY,WENZEL C C **WELL TYPE:** Underground mine
COMMENT: SAMPLE # 3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	-		
-	CARBONDALE	SPRINGFIELD	COAL	4.3		
-	CARBONDALE		ROCK	0.0		

MAPID: 05902356000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 33 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.319397 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.688562 **DATE COLLECTED:** 11 / 17 / 1958

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 197.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 96 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	9.7	0.0	
450.3	CARBONDALE		SANDY SHALE	25.8	9.7	
424.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.5	35.5	
412.0	CARBONDALE	ANVIL ROCK	SHALE	1.2	48.0	
410.8	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	49.2	
397.3	CARBONDALE		SHALE	9.7	62.7	
387.7	CARBONDALE	BRERETON	GRAY LIMESTONE	0.8	72.3	
386.9	CARBONDALE		SHALE	0.5	73.1	
386.4	CARBONDALE	HERRIN	COAL	3.7	73.6	
382.7	CARBONDALE		UNDERCLAY	3.3	77.3	
379.5	CARBONDALE		SANDY SHALE	45.5	80.5	
334.0	CARBONDALE		SHALE	5.3	126.0	
328.7	CARBONDALE	BRIAR HILL	COAL	2.1	131.3	
326.6	CARBONDALE		SHALE & SANDSTONE	21.6	133.4	
305.0	CARBONDALE		SHALE	32.7	155.0	
272.3	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.3	187.7	
271.2	CARBONDALE	TURNER MINE	SHALE	2.8	188.8	
268.3	CARBONDALE	SPRINGFIELD	COAL	4.2	191.7	
264.2	CARBONDALE		SHALE	1.2	195.8	

MAPID: 05902302000C **VERSION:** 1 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.305661 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.695959 **DATE COLLECTED:** 10 / 1 / 1958

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 152.5 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CORP 79 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
444.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
435.0			SANDSTONE	25.8	9.0	START OF CORE 27'
409.2			BLACK SHALE	2.0	34.8	
407.2			COAL	0.7	36.8	
406.6			UNDERCLAY	6.6	37.4	NOT CORED
400.0			SHALE	15.5	44.0	
384.5			LIMESTONE	1.1	59.5	
383.4			SHALE	0.1	60.6	
383.3			BLACK SHALE	0.8	60.7	
382.6			SHALE	1.6	61.4	CORE LOSS
381.0			PYRITE	0.3	63.0	"COAL FILM ON TOP& BOTTOM"
380.7			UNDERCLAY	4.0	63.3	
376.7			SILTSTONE	3.8	67.3	
373.0			SILTSTONE	9.0	71.0	WITH SHALE
364.0			SHALE	9.7	80.0	
354.3			SHALE	62.8	89.7	WITH SILTSTONE; END OF CORE AT 129.33 FT

MAPID: 05902302000C **VERSION:** 2 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** SE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.305661 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.695959 **DATE COLLECTED:** 10 / 1 / 1958

SURFACE ELEVATION (FT.): 444.0 **LOGGED (FT.):** 152.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 79 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
444.0	PLEISTOCENE		CLAY	9.0	0.0	
435.0	TRADEWATER		SANDSTONE	25.8	9.0	BELOW DAVIS COAL - CGT
409.2	TRADEWATER		SHALE	2.1	34.8	
407.2	TRADEWATER		COAL	0.7	36.8	
406.5	TRADEWATER		UNDERCLAY	6.5	37.5	
400.0	TRADEWATER		SHALE	15.5	44.0	
384.5	TRADEWATER		LIMESTONE	0.9	59.5	
383.6	TRADEWATER		SHALE	1.7	60.4	
381.9	TRADEWATER		COAL	0.8	62.1	
381.1	TRADEWATER		SHALE	5.1	62.9	
376.0	TRADEWATER		SANDY SHALE	84.5	68.0	

MAPID: 05902336000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.313147 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.694562 **DATE COLLECTED:** 10 / 8 / 1958

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 80 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	3.0	0.0	
457.0	PLEISTOCENE		SAND	5.0	3.0	BROKEN
452.0	PLEISTOCENE		CLAY & SHALE	11.5	8.0	
440.5	TRADEWATER		SANDY SHALE	12.5	19.5	BELOW DAVIS COAL - CGT
428.0	TRADEWATER		SANDSTONE	21.0	32.0	
407.0	TRADEWATER		UNCLASSIFIED	0.5	53.0	
406.5	TRADEWATER		SANDSTONE	3.5	53.5	
403.0	TRADEWATER		SANDSTONE	1.5	57.0	BROKEN
401.5	TRADEWATER		SANDSTONE	6.7	58.5	
394.8	TRADEWATER		SHALE	0.4	65.2	
394.4	TRADEWATER		COAL	0.3	65.6	BONE
394.1	TRADEWATER		UNDERCLAY	4.6	65.9	
389.5	TRADEWATER		SANDY SHALE	23.0	70.5	
366.5	TRADEWATER		SHALE	6.3	93.5	
360.2	TRADEWATER		COAL	0.6	99.8	
359.7	TRADEWATER		SHALE	1.7	100.3	

MAPID: 05902357000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** SW SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.307982 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.688537 **DATE COLLECTED:** 11 / 19 / 1958

SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 167.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 97 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
454.0	PLEISTOCENE		CLAY	12.5	0.0	
441.5	CARBONDALE		SHALE	2.5	12.5	
439.0	CARBONDALE		SHALE	4.5	15.0	
434.5	CARBONDALE		SHALE	23.5	19.5	
411.0	CARBONDALE	BRERETON	LIMESTONE	4.5	43.0	
406.5	CARBONDALE		SHALE	0.5	47.5	
406.0	CARBONDALE	HERRIN	COAL	3.5	48.0	
402.5	CARBONDALE		UNDERCLAY	4.5	51.5	
398.0	CARBONDALE		SHALE	3.5	56.0	
394.5	CARBONDALE		SANDSTONE	10.0	59.5	
384.5	CARBONDALE		SHALE	38.9	69.5	
345.6	CARBONDALE	BRIAR HILL	COAL	2.3	108.4	
343.2	CARBONDALE		SHALE	47.5	110.8	
295.7	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.8	158.3	
294.9	CARBONDALE	TURNER MINE	SHALE	2.3	159.1	
292.6	CARBONDALE	SPRINGFIELD	COAL	4.2	161.4	
288.4	CARBONDALE		UNDERCLAY	1.5	165.6	GRAY

MAPID: 05902375000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.31717 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.694096 **DATE COLLECTED:** 11 / 25 / 1958
SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 75.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 98 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
425.0	PLEISTOCENE		CLAY	12.5	0.0	BROWN
412.5	CARBONDALE		SANDSTONE	24.0	12.5	
388.5	CARBONDALE		SANDSTONE	15.5	36.5	
373.0	CARBONDALE		SHALE	4.2	52.0	
368.8	CARBONDALE	DEKOVEN	COAL	4.2	56.2	
364.7	CARBONDALE		UNDERCLAY	2.7	60.3	
362.0	CARBONDALE		SHALE	3.8	63.0	
358.2	CARBONDALE		SHALE	2.7	66.8	
355.5	CARBONDALE	DAVIS	COAL	3.0	69.5	
352.5	TRADEWATER		UNDERCLAY	3.0	72.5	

MAPID: 059274A0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.309697 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694565 **DATE COLLECTED:** 8 / 24 / 1932
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **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	-		
-	SPOON	DEKOVEN	COAL	-		

MAPID: 059274A0010F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 34 **QUARTERS/FOOTAGES:** NW NW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.303973 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.690853 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 15.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-CADY, "OLD HOLLY MINE" **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	15.0	0.0	
385.0	CARBONDALE	SPRINGFIELD	COAL	-	15.0	

MAPID: 05902226000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.290689 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.694984 **DATE COLLECTED:** 3 / 17 / 1958

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 225.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 111 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		SAND	20.0	0.0	CLAY AND GRAVEL
370.0			SANDSTONE	51.6	20.0	BROWN GRAY
318.4			LIMESTONE	8.7	71.6	
309.7			SANDSTONE	3.9	80.3	
305.8			SHALE	11.3	84.2	
294.5			LIMESTONE	0.5	95.5	
294.0	CARBONDALE		SHALE	5.3	96.0	
288.7	CARBONDALE	HOUCHIN CREEK	COAL	1.1	101.3	CORRELATION UNCERTAIN
287.7			SHALE	3.9	102.3	
283.7			GRAY SANDSTONE	12.5	106.3	
271.2			BLUE SHALE	41.3	118.8	
230.0	CARBONDALE	SURVANT	COAL	2.3	160.0	CORRELATION UNCERTAIN
227.7			BLUE SHALE	52.5	162.3	
175.2	CARBONDALE		SHALE	4.3	214.8	
170.9	CARBONDALE	COLCHESTER	COAL	2.8	219.1	CORRELATION UNCERTAIN
168.1			SHALE	3.6	221.9	

MAPID: 05902324000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 25' N line, 1100' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.294511 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.694936 **DATE COLLECTED:** 10 / 7 / 1958

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 172.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 150 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
384.0	PLEISTOCENE		CLAY	33.3	0.0	
350.7	CARBONDALE		SHALE	19.9	33.3	
330.7	CARBONDALE		SANDSTONE	0.8	53.3	
329.9	CARBONDALE		SHALE	32.1	54.1	
297.8	CARBONDALE	MECCA QUARRY	SHALE	1.4	86.2	
296.4	CARBONDALE	COLCHESTER	COAL	0.5	87.6	
295.9	CARBONDALE		SHALE	4.4	88.1	
291.5	CARBONDALE		LIMESTONE	4.9	92.5	
286.6	CARBONDALE		GRAY SANDSTONE	38.1	97.4	
248.5	CARBONDALE	DEKOVEN	COAL	2.1	135.5	
246.4	CARBONDALE		SHALE	0.3	137.6	
246.1	CARBONDALE		SHALE	3.0	137.9	
243.1	CARBONDALE		SHALE	9.3	140.9	
233.7	CARBONDALE		BLUE SHALE	11.8	150.3	
222.0	CARBONDALE		SHALE	3.3	162.0	
218.7	CARBONDALE	DAVIS	COAL	3.5	165.3	
215.2	TRADEWATER		SHALE	3.3	168.8	

MAPID: 05902324000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 35 **QUARTERS/FOOTAGES:** 25' N line, 1100' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.294511 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.694936 **DATE COLLECTED:** 10 / 0 / 1958

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 172.0 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
296.0	CARBONDALE	COLCHESTER	COAL	0.5	88.0	
248.5	CARBONDALE	DEKOVEN	COAL	2.1	135.5	
248.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	135.5	
220.0	CARBONDALE	DAVIS	COAL	3.5	164.0	

MAPID: 05902395000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.266255 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.697787 **DATE COLLECTED:** 12 / 18 / 1958

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 202.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 99 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	5.0	0.0	SOFT; BROWN
340.0	PLEISTOCENE		SAND	27.0	5.0	
313.0	PLEISTOCENE		SANDY CLAY	73.5	32.0	
239.5			SHALE	39.5	105.5	
200.0			SHALE	9.8	145.0	
190.2			SHALE	0.9	154.8	
189.2			SHALE WITH LIMESTONE	1.8	155.8	
187.5			SHALE	1.9	157.5	
185.6	CARBONDALE	HOUCHIN CREEK	COAL	1.8	159.4	CORRELATION UNCERTAIN
183.8			SHALE	2.9	161.2	
180.9			SHALY SANDSTONE	22.9	164.1	
158.0			SHALE	3.0	187.0	
155.0			DARK SHALE	6.8	190.0	
148.2			COAL	1.8	196.8	
146.5			SHALE	3.5	198.5	

MAPID: 059274A0011F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** SE NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.265602 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.70101 **DATE COLLECTED:** 0 / 0 / 1927

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-CADY **WELL TYPE:** Underground mine

COMMENT: ABANDONED MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0			UNKNOWN	0.0	0.0	
-	CARBONDALE		ROCK	0.5		

MAPID: 05901126000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174948 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776649 **DATE COLLECTED:** 3 / 6 / 1952

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 452.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 26 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	148.0	0.0	
212.0	MODESTO		GRAY SHALE	3.9	148.0	
208.1	MODESTO		BLACK SHALE	1.4	151.9	
206.7	MODESTO		COAL	0.2	153.3	
206.5	MODESTO		UNDERCLAY	1.5	153.5	
204.9	MODESTO		SHALE & CLAYSTONE	0.9	155.1	
204.0	MODESTO		NO RECORD	6.0	156.0	ADJUST FOR MARKER
198.0	MODESTO		SILTY SHALE	2.3	162.0	GREEN-GRAY
195.7	MODESTO		GRAY SHALE	7.4	164.3	
188.2	MODESTO		SHALE & CLAYSTONE	4.7	171.8	
183.6	MODESTO	WEST FRANKLIN	LIMESTONE	1.7	176.4	
181.9	MODESTO		SHALE	12.3	178.1	GREEN-GRAY
169.6	MODESTO	WEST FRANKLIN	LIMESTONE	2.3	190.4	
167.2	MODESTO		SHALE	9.5	192.8	GREEN-GRAY
157.7	MODESTO		GRAY SHALE	53.8	202.3	
104.0	MODESTO		BLACK SHALE	2.5	256.0	
101.5	CARBONDALE	DANVILLE	COAL	0.5	258.5	
100.9	CARBONDALE		UNDERCLAY	2.3	259.1	
98.7	CARBONDALE		SILTSTONE	2.3	261.3	
96.4	CARBONDALE		SANDSTONE	5.3	263.6	
91.2	CARBONDALE		GRAY SHALE	6.8	268.8	
84.4	CARBONDALE		BLACK SHALE	1.2	275.6	
83.2	CARBONDALE	ALLENBY	COAL	0.1	276.8	
83.1	CARBONDALE		UNDERCLAY	2.0	276.9	
81.1	CARBONDALE		SHALE & CLAYSTONE	2.3	278.9	
78.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	281.1	
74.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.5	286.0	CLAY SHALE UPPER 1 IN.
67.4	CARBONDALE	ANVIL ROCK	SILTSTONE	3.8	292.6	
63.6	CARBONDALE		GRAY SHALE	13.3	296.4	
50.2	CARBONDALE		BLACK SHALE	6.7	309.8	
43.6	CARBONDALE	BRERETON	LIMESTONE	1.1	316.4	
42.5	CARBONDALE	ANNA	BLACK SHALE	0.6	317.5	
41.9	CARBONDALE	HERRIN	COAL	2.8	318.1	
39.2	CARBONDALE		UNDERCLAY	0.2	320.8	
39.0	CARBONDALE		SHALE & CLAYSTONE	0.3	321.0	
38.7	CARBONDALE		SILTSTONE	4.5	321.3	
34.2	CARBONDALE		GRAY SHALE	36.3	325.8	
-2.2	CARBONDALE	BRIAR HILL	COAL	1.7	362.2	
-3.8	CARBONDALE		SILTSTONE	3.8	363.8	

-7.6	CARBONDALE		GRAY SHALE	1.7	367.6
-9.3	CARBONDALE		SANDSTONE	4.0	369.3
-13.3	CARBONDALE		GRAY SHALE	14.3	373.3
-27.5	CARBONDALE		SILTSTONE	5.3	387.5
-32.8	CARBONDALE		GRAY SHALE	31.3	392.8
-64.1	CARBONDALE	ST. DAVID	LIMESTONE	0.8	424.1
-64.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	424.8
-67.5	CARBONDALE	SPRINGFIELD	COAL	5.2	427.5
-72.7	CARBONDALE		UNDERCLAY	1.3	432.7
-74.0	CARBONDALE		SHALE & CLAYSTONE	1.6	434.0
-75.6	CARBONDALE		SILTSTONE	9.1	435.6
-84.7	CARBONDALE		GRAY SHALE	4.1	444.7
-88.8	CARBONDALE		SILTSTONE	3.8	448.8

MAPID: 05901126000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174948 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.776649 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 320.8 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 26 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
102.0	CARBONDALE	DANVILLE	COAL	0.5	258.0	
101.4	CARBONDALE		ROCK	18.8	258.6	
82.6	CARBONDALE		SHALE & SANDSTONE	4.3	277.4	
78.3	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	4.9	281.7	
73.4	CARBONDALE	LAWSON	CLAYSTONE	0.2	286.6	
73.1	CARBONDALE	LAWSON	SANDSTONE	6.3	286.9	
66.8	CARBONDALE	LAWSON	SHALE & SILTSTONE	2.3	293.2	
64.6	CARBONDALE	LAWSON	GRAY SHALE	13.3	295.4	
51.2	CARBONDALE	CONANT	CALCAREOUS SHALE	0.8	308.8	
50.4	CARBONDALE	JAMESTOWN	BLACK SHALE	6.8	309.6	
43.7	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	1.1	316.3	
42.6	CARBONDALE	ANNA	BLACK SHALE	0.6	317.4	
42.0	CARBONDALE	HERRIN	COAL	2.8	318.0	

MAPID: 05901143000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 360' S line, 360' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16713 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.770219 **DATE COLLECTED:** 9 / 4 / 1952

SURFACE ELEVATION (FT.): 357.3 **LOGGED (FT.):** 429.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 43 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.3	PLEISTOCENE		UNCONSOLIDATED	130.8	0.0	
226.5	MODESTO		SILTSTONE	0.6	130.8	
226.0	MODESTO		GRAY SHALE	11.4	131.3	
214.5	MODESTO		BLACK SHALE	1.3	142.8	
213.3	MODESTO		COAL	1.6	144.0	
211.7	MODESTO		UNDERCLAY	2.1	145.6	
209.5	MODESTO		GRAY SHALE	0.8	147.8	
208.7	MODESTO		SILTSTONE	2.8	148.6	
206.0	MODESTO		GRAY SHALE	4.3	151.3	
201.7	MODESTO		CLAYSTONE	0.8	155.6	
200.9	MODESTO		SILTSTONE	1.3	156.4	
199.6	MODESTO		SANDSTONE	2.4	157.7	
197.2			NO RECORD	3.9	160.1	ADJUST FOR MARKER
193.3	MODESTO		LIMESTONE	1.6	164.0	
191.7	MODESTO		GRAY SHALE	4.8	165.6	
187.0			NO RECORD	4.7	170.3	ADJUST FOR MARKER
182.3	MODESTO		GRAY SHALE	8.1	175.0	GREENISH
174.2	MODESTO		LIMESTONE	1.8	183.1	
172.4	MODESTO		GRAY SHALE	58.3	184.9	
114.0	MODESTO		BLACK SHALE	6.4	243.3	
107.6	CARBONDALE	DANVILLE	COAL	2.0	249.7	
105.6	CARBONDALE		UNDERCLAY	0.6	251.7	
105.0	CARBONDALE		SANDSTONE	6.2	252.3	
98.9	CARBONDALE		GRAY SHALE	6.6	258.4	
92.3	CARBONDALE		BLACK SHALE	0.6	265.0	
91.7	CARBONDALE		SHALE	2.4	265.6	
89.3	CARBONDALE		CLAYSTONE	0.7	268.0	UCLY STRUCTURE
88.6	CARBONDALE		GRAY SHALE	0.3	268.7	
88.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	268.9	
82.6	CARBONDALE		SHALE	0.8	274.7	GREEN-GRAY
81.9	CARBONDALE	ANVIL ROCK	SILTSTONE	0.6	275.4	
81.3	CARBONDALE	ANVIL ROCK	SANDSTONE	4.8	276.0	
76.5	CARBONDALE		GRAY SHALE	16.2	280.8	
60.4	CARBONDALE	BRERETON	LIMESTONE	1.5	296.9	
58.9	CARBONDALE	ANNA	BLACK SHALE	8.0	298.4	
50.9	CARBONDALE	HERRIN	COAL	2.9	306.4	
48.0	CARBONDALE		UNDERCLAY	1.5	309.3	
46.5	CARBONDALE		SILTSTONE	1.8	310.8	
44.8	CARBONDALE		SANDSTONE	2.9	312.5	

41.9	CARBONDALE		GRAY SHALE	34.6	315.4	
7.3	CARBONDALE		BLACK SHALE	0.1	350.0	
7.2	CARBONDALE	BRIAR HILL	COAL	1.2	350.1	
6.0	CARBONDALE		SILTSTONE	1.0	351.3	
5.0	CARBONDALE		GRAY SHALE	62.7	352.3	SANDSTONE-SILTSTONE BANDS
-57.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	414.9	
-61.5	CARBONDALE	SPRINGFIELD	COAL	4.3	418.8	
-65.9			NO RECORD	0.8	423.2	ADJUST FOR MARKER
-66.6	CARBONDALE		UNDERCLAY	2.5	423.9	
-69.1	CARBONDALE		SANDSTONE	2.6	426.4	

MAPID: 05901252000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16923 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775696 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1776.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
-1416.0	BASE OF PENN.		UNCLASSIFIED	-	1776.0	

MAPID: 05901252000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16923 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.775696 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2890.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
118.0	CARBONDALE	DANVILLE	COAL	-	242.0	
110.0	CARBONDALE	SS BELOW NO. 7	SILTSTONE	3.0	250.0	
96.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	264.0	
88.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	6.0	272.0	
60.0	CARBONDALE	HERRIN	COAL	3.0	300.0	
18.0	CARBONDALE	BRIAR HILL	COAL	-	342.0	
7.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	8.0	353.0	
-47.0	CARBONDALE	SPRINGFIELD	COAL	5.0	407.0	BLACK SHALE ROOF
-90.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	30.0	450.0	
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	-	430.0	

MAPID: 05901252000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.16923 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.775696 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2890.0 **LOG TYPE:** Electric Log

SOURCE: MCBRIDE, W. C., INC., CRANE MYRTLE M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	482.0	
-170.0	CARBONDALE	SURVANT	COAL	2.0	530.0	
-229.0	CARBONDALE	COLCHESTER	COAL	0.5	589.0	
-298.0	CARBONDALE	DEKOVEN	COAL	3.0	658.0	
-298.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	658.0	
-320.0	CARBONDALE	DAVIS	COAL	4.0	680.0	
-355.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	715.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	743.0	

MAPID: 05902177000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 990' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157935 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.764571 **DATE COLLECTED:** 11 / 0 / 1957

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2118.0 **LOG TYPE:** Electric Log

SOURCE: TURNER, J. D., LOGSDON 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-112.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	472.0	
-165.0	CARBONDALE	SURVANT	COAL	2.0	525.0	
-225.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-295.0	CARBONDALE	DEKOVEN	COAL	4.0	655.0	
-295.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	655.0	
-323.0	CARBONDALE	DAVIS	COAL	4.0	683.0	
-353.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	713.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-360.0	TRADEWATER	STONEFORT	LIMESTONE	6.0	720.0	
-405.0	TRADEWATER	MT. RORAH	COAL	1.0	765.0	

MAPID: 05902242000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.157822 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.771941 **DATE COLLECTED:** 8 / 0 / 1958

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2798.0 **LOG TYPE:** Electric Log

SOURCE: KAPP, LOUIS H., JR., LOGSDON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-243.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	605.0	
-298.0	CARBONDALE	SURVANT	COAL	2.0	660.0	
-358.0	CARBONDALE	COLCHESTER	COAL	0.5	720.0	
-418.0	CARBONDALE	DEKOVEN	COAL	4.0	780.0	
-418.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	780.0	
-443.0	CARBONDALE	DAVIS	COAL	4.0	805.0	
-476.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	838.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-498.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	860.0	
-537.0	TRADEWATER	MT. RORAH	COAL	1.3	899.0	

MAPID: 05990009000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 300' S line, 300' E line of SE NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.166866 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773736 **DATE COLLECTED:** 8 / 31 / 1952

SURFACE ELEVATION (FT.): 357.3 **LOGGED (FT.):** 428.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. U43C **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.3	PLEISTOCENE		UNCONSOLIDATED	130.8	0.0	
226.5	MODESTO		SANDY SHALE	5.6	130.8	
221.0	MODESTO		GRAY SHALE	6.8	136.3	
214.1	MODESTO		BLACK SHALE	2.2	143.2	
212.0	MODESTO	CHAPEL	COAL	0.2	145.3	
211.8	MODESTO		UNDERCLAY	3.0	145.5	
208.8	MODESTO		GRAY SHALE	11.8	148.5	
197.0	MODESTO		SANDSTONE	3.7	160.3	
193.3	MODESTO		SANDY SHALE	2.0	164.0	
191.3	MODESTO		SHALE	9.0	166.0	RED-BROWN
182.3	MODESTO		SANDY SHALE	3.0	175.0	
179.3	MODESTO		GRAY SHALE	2.3	178.0	
177.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.7	180.3	
170.3	MODESTO		DARK SHALE	29.0	187.0	
141.3	MODESTO		GRAY SHALE	33.0	216.0	
108.3	MODESTO		BLACK SHALE	0.7	249.0	
107.6	CARBONDALE	DANVILLE	COAL	2.0	249.7	
105.6	CARBONDALE		UNDERCLAY	1.3	251.7	
104.3	CARBONDALE		SANDY SHALE	11.4	253.0	
92.9	CARBONDALE		BLACK SHALE	1.2	264.4	
91.7	CARBONDALE		GRAY SHALE	2.9	265.6	
88.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	268.5	
82.6	CARBONDALE		SANDY SHALE	2.0	274.7	
80.6	CARBONDALE		SANDSTONE	4.3	276.7	
76.3	CARBONDALE		SANDY SHALE	15.5	281.0	
60.8	CARBONDALE	BRERETON	LIMESTONE	2.0	296.5	
58.8	CARBONDALE	ANNA	BLACK SHALE	10.0	298.5	
48.8	CARBONDALE	HERRIN	COAL	1.0	308.5	
47.8	CARBONDALE		UNDERCLAY	2.7	309.5	
45.1	CARBONDALE		SHALY SANDSTONE	9.8	312.2	
35.3	CARBONDALE		SANDY SHALE	28.7	322.0	
6.6	CARBONDALE	BRIAR HILL	COAL	0.7	350.7	
6.0	CARBONDALE		SANDY SHALE	33.5	351.3	
-27.5	CARBONDALE		SANDSTONE	5.0	384.8	
-32.5	CARBONDALE	ST. DAVID	SANDY SHALE	24.0	389.8	
-56.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	413.8	
-60.5	CARBONDALE	SPRINGFIELD	COAL	5.4	417.8	
-66.0	CARBONDALE		SANDSTONE	5.1	423.3	

MAPID: 05901037000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185272 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775882 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 1670.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1313.0	BASE OF PENN.		UNCLASSIFIED	-	1670.0	

MAPID: 05901038000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185178 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.773967 **DATE COLLECTED:** 9 / 0 / 1949

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2006.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., WILSON M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	493.0	
-180.0	CARBONDALE	SURVANT	COAL	2.0	536.0	
-239.0	CARBONDALE	COLCHESTER	COAL	0.5	595.0	
-308.0	CARBONDALE	DEKOVEN	COAL	3.0	664.0	
-308.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	664.0	
-336.0	CARBONDALE	DAVIS	COAL	4.0	692.0	
-368.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	724.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-392.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	748.0	
-426.0	TRADEWATER	MT. RORAH	COAL	2.0	782.0	

MAPID: 05902471000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.17538 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.762786 **DATE COLLECTED:** 6 / 0 / 1966

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2872.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK, INC., LOGSDON EMELINE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-130.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	495.0	
-170.0	CARBONDALE	SURVANT	COAL	2.0	535.0	
-234.0	CARBONDALE	COLCHESTER	COAL	0.5	599.0	
-304.0	CARBONDALE	DEKOVEN	COAL	3.0	669.0	
-304.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	669.0	
-325.0	CARBONDALE	DAVIS	COAL	3.5	690.0	
-357.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	722.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-385.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	750.0	
-410.0	TRADEWATER	MT. RORAH	COAL	1.3	775.0	

MAPID: 05903634000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.183754 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.769484 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 272.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 45-G **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
128.2	CARBONDALE	DANVILLE	COAL	1.6	231.8	
126.6	CARBONDALE		ROCK	2.0	233.4	
124.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	235.4	
119.6	CARBONDALE	LAWSON	GRAY SHALE	1.5	240.4	
118.1	CARBONDALE	LAWSON	SANDSTONE	6.8	241.9	
111.3	CARBONDALE	LAWSON	SILTY SHALE	15.6	248.7	
95.7	CARBONDALE	ANNA	GRAY SHALE	4.7	264.3	
91.0	CARBONDALE	HERRIN	COAL	3.1	269.0	

MAPID: 05903635000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 660' N line, 660' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186226 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.771243 **DATE COLLECTED:** 3 / 15 / 1973

SURFACE ELEVATION (FT.): 358.2 **LOGGED (FT.):** 394.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 122-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.2	PLEISTOCENE		CLAY	6.0	0.0	
352.2	PLEISTOCENE		SAND	10.0	6.0	
342.2	PLEISTOCENE		GRAVEL	118.0	16.0	SAND AND CLAY
224.2	MODESTO		SANDY SHALE	5.0	134.0	
219.2	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	139.0	
215.7	MODESTO		GRAY SHALE	54.0	142.5	
161.7	CARBONDALE	DANVILLE	COAL	1.0	196.5	
160.7	CARBONDALE		GRAY SHALE	2.5	197.5	
158.2	CARBONDALE		SANDSTONE	4.5	200.0	
153.7	CARBONDALE		SANDY SHALE	25.0	204.5	
128.7	CARBONDALE		BLACK SHALE	1.0	229.5	
127.7	CARBONDALE		SANDY SHALE	6.5	230.5	
121.2	CARBONDALE		SANDSTONE	2.0	237.0	
119.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	239.0	
114.7	CARBONDALE		GRAY SHALE	2.5	243.5	
112.2	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	246.0	
103.2	CARBONDALE		GRAY SHALE	13.0	255.0	
90.2	CARBONDALE	ANNA	BLACK SHALE	7.0	268.0	
83.2	CARBONDALE	HERRIN	COAL	2.8	275.0	
80.4	CARBONDALE		UNDERCLAY	2.0	277.8	
78.4	CARBONDALE		SANDSTONE	15.2	279.8	
63.2	CARBONDALE		SANDY SHALE	24.0	295.0	
39.2	CARBONDALE	BRIAR HILL	COAL	1.3	319.0	
37.9	CARBONDALE		SANDY SHALE	49.0	320.3	
-11.1	CARBONDALE		GRAY SHALE	13.0	369.3	
-24.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	382.3	
-27.1	CARBONDALE		GRAY SHALE	0.7	385.3	
-27.8	CARBONDALE	SPRINGFIELD	COAL	5.0	386.0	
-32.8	CARBONDALE		UNDERCLAY	3.0	391.0	

MAPID: 05923776000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 1' E line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.183591 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.764667 **DATE COLLECTED:** 10 / 5 / 1973

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 382.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 189-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	PLEISTOCENE		SANDY CLAY	10.0	0.0	
345.0	PLEISTOCENE		CLAY	45.5	10.0	BLUE
299.5	PLEISTOCENE		SAND & GRAVEL	70.5	55.5	
229.0	MODESTO		SHALE	1.5	126.0	
227.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	127.5	
224.0	MODESTO	WEST FRANKLIN	SHALE	10.0	131.0	
214.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	141.0	
212.5	MODESTO		GRAY SHALE	51.0	142.5	
161.5	CARBONDALE	DANVILLE	COAL	1.0	193.5	
160.5	CARBONDALE		UNDERCLAY	3.0	194.5	
157.5	CARBONDALE		SANDY SHALE	5.0	197.5	
152.5	CARBONDALE		SANDSTONE	6.0	202.5	
146.5	CARBONDALE		GRAY SHALE	12.5	208.5	
134.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	221.0	
129.0	CARBONDALE		SHALE	1.5	226.0	
127.5	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	227.5	
120.5	CARBONDALE		GRAY SHALE	13.5	234.5	
107.0	CARBONDALE	BRERETON	LIMESTONE	0.5	248.0	
106.5	CARBONDALE		SHALE	0.5	248.5	
106.0	CARBONDALE	ANNA	BLACK SHALE	3.5	249.0	
102.5	CARBONDALE	ANNA	GRAY SHALE	1.5	252.5	
101.0	CARBONDALE	ANNA	BLACK SHALE	1.2	254.0	
99.8	CARBONDALE	HERRIN	COAL	1.5	255.2	
98.3	CARBONDALE	HERRIN	LIMESTONE	1.5	256.7	
96.8	CARBONDALE	HERRIN	COAL	1.2	258.2	
95.6	CARBONDALE		UNDERCLAY	3.1	259.4	
92.5	CARBONDALE		SANDSTONE	12.0	262.5	
80.5	CARBONDALE		SANDY SHALE	24.0	274.5	
56.5	CARBONDALE		GRAY SHALE	5.0	298.5	
51.5	CARBONDALE	BRIAR HILL	COAL	2.0	303.5	
49.5	CARBONDALE		SANDY SHALE	15.5	305.5	
34.0	CARBONDALE		SANDSTONE	16.0	321.0	
18.0	CARBONDALE		GRAY SHALE	27.6	337.0	
-9.6	CARBONDALE	ST. DAVID	LIMESTONE	0.7	364.6	
-10.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	365.3	
-12.8	CARBONDALE	SPRINGFIELD	COAL	5.1	367.8	
-17.9	CARBONDALE		SANDSTONE	10.0	372.9	

MAPID: 05923793000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 75' N line, 25' E line of NE NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184244 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776571 **DATE COLLECTED:** 11 / 21 / 1972

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 452.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 109-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
366.0	PLEISTOCENE		SAND	17.0	0.0	
349.0	PLEISTOCENE		CLAY	48.0	17.0	
301.0	PLEISTOCENE		SAND	69.5	65.0	AND GRAVEL
231.5	MODESTO		SANDY SHALE	17.0	134.5	
214.5	MODESTO		SHALE	10.0	151.5	
204.5	MODESTO		BLACK SHALE	1.0	161.5	
203.5	MODESTO		GRAY SHALE	22.5	162.5	
181.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	185.0	
180.0	MODESTO	WEST FRANKLIN	GRAY SHALE	5.0	186.0	
175.0	MODESTO	WEST FRANKLIN	SHALE	9.0	191.0	CONGLOMERATE
166.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	200.0	
164.5	MODESTO		GRAY SHALE	65.5	201.5	
99.0	CARBONDALE	DANVILLE	COAL	1.5	267.0	
97.5	CARBONDALE		SHALE	20.0	268.5	
77.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	288.5	
72.2	CARBONDALE		GRAY SHALE	2.2	293.8	
70.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	296.0	
60.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.5	306.0	
46.5	CARBONDALE	ANNA	BLACK SHALE	6.2	319.5	
40.3	CARBONDALE	HERRIN	COAL	3.2	325.7	
37.1	CARBONDALE		UNDERCLAY	3.6	328.9	
33.5	CARBONDALE		SANDSTONE	17.5	332.5	
16.0	CARBONDALE		SANDY SHALE	24.5	350.0	
-8.5	CARBONDALE	BRIAR HILL	COAL	2.0	374.5	
-10.5	CARBONDALE		SANDSTONE	33.5	376.5	WITH SHALE
-44.0	CARBONDALE		SANDY SHALE	17.0	410.0	
-61.0	CARBONDALE		GRAY SHALE	12.5	427.0	
-73.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	439.5	
-74.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	440.5	
-78.0	CARBONDALE	SPRINGFIELD	COAL	5.2	444.0	
-83.2	CARBONDALE		SHALE	3.0	449.2	

MAPID: 05923793000C **VERSION:** 2 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 75' N line, 25' E line of NE NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.184244 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776571 **DATE COLLECTED:** 11 / 21 / 1972

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 452.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 109-G-C **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	134.5	0.0	
230.5	MODESTO		SANDY SHALE	17.0	134.5	
213.5	MODESTO		SHALE	10.0	151.5	
203.5	MODESTO		BLACK SHALE	1.0	161.5	
202.5	MODESTO		GRAY SHALE	22.5	162.5	
180.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	185.0	
179.0	MODESTO	WEST FRANKLIN	GRAY SHALE	5.0	186.0	
174.0	MODESTO	WEST FRANKLIN	SHALE & CONGLOMERATE	9.0	191.0	
165.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	200.0	
163.5	MODESTO		GRAY SHALE	65.5	201.5	
98.0	CARBONDALE	DANVILLE	COAL	1.5	267.0	
96.5	CARBONDALE		SHALE	20.0	268.5	
76.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	288.5	LIGHT
71.2	CARBONDALE		GRAY SHALE	2.2	293.8	
69.0	CARBONDALE		SANDSTONE	10.0	296.0	
59.0	CARBONDALE		SANDY SHALE	13.5	306.0	
45.5	CARBONDALE	ANNA	BLACK SHALE	6.2	319.5	
39.3	CARBONDALE	HERRIN	COAL	3.2	325.7	
36.1	CARBONDALE		UNDERCLAY	3.6	328.9	
32.5	CARBONDALE		SANDSTONE	17.5	332.5	
15.0	CARBONDALE		SANDY SHALE	24.5	350.0	
-9.5	CARBONDALE	BRIAR HILL	COAL	2.0	374.5	
-11.5	CARBONDALE		SHALY SANDSTONE	33.5	376.5	
-45.0	CARBONDALE		SANDY SHALE	17.0	410.0	
-62.0	CARBONDALE		GRAY SHALE	12.5	427.0	
-74.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	439.5	
-75.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	440.5	
-79.0	CARBONDALE	SPRINGFIELD	COAL	5.2	444.0	
-84.2	CARBONDALE		SHALE	3.0	449.2	

MAPID: 05923846000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.192031 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.77221 **DATE COLLECTED:** 9 / 20 / 1973

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 409.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 176GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	7.0	0.0	
363.0	PLEISTOCENE		SAND	10.0	7.0	
353.0	PLEISTOCENE		CLAY	40.0	17.0	
313.0	PLEISTOCENE		SAND	65.0	57.0	AND GRAVEL
248.0	MODESTO		BLACK SHALE	2.0	122.0	
246.0	MODESTO		COAL	1.0	124.0	
245.0	MODESTO		UNDERCLAY	4.0	125.0	
241.0	MODESTO		SANDSTONE	20.0	129.0	
221.0	MODESTO		SANDY SHALE	78.0	149.0	WITH LIMESTONE
143.0	CARBONDALE	DANVILLE	COAL	0.5	227.0	
142.5	CARBONDALE		GRAY SHALE	15.5	227.5	
127.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	243.0	
120.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	250.0	
112.0	CARBONDALE		SANDY SHALE	14.0	258.0	
98.0	CARBONDALE	BRERETON	LIMESTONE	2.5	272.0	
95.5	CARBONDALE	ANNA	BLACK SHALE	3.0	274.5	
92.5	CARBONDALE	HERRIN	COAL	3.2	277.5	
89.3	CARBONDALE		UNDERCLAY	5.3	280.7	
84.0	CARBONDALE		SANDSTONE	11.0	286.0	
73.0	CARBONDALE		SANDY SHALE	31.0	297.0	
42.0	CARBONDALE	BRIAR HILL	COAL	1.8	328.0	
40.2	CARBONDALE		SANDY SHALE	52.2	329.8	
-12.0	CARBONDALE		GRAY SHALE	10.2	382.0	
-22.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	392.2	
-22.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	392.7	
-25.5	CARBONDALE	SPRINGFIELD	COAL	5.1	395.5	
-30.6	CARBONDALE		UNDERCLAY	8.4	400.6	

MAPID: 05923847000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.186193 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.771146 **DATE COLLECTED:** 5 / 6 / 1975

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 417.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 242-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	5.0	0.0	
355.0	PLEISTOCENE		SAND	6.0	5.0	
349.0	PLEISTOCENE		CLAY	42.0	11.0	
307.0	PLEISTOCENE		SAND & GRAVEL	74.5	53.0	
232.5	MODESTO		GRAY SHALE	20.5	127.5	
212.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	148.0	
209.0	MODESTO	WEST FRANKLIN	SHALE	13.0	151.0	
196.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	164.0	
194.5	MODESTO		GRAY SHALE	61.5	165.5	
133.0	CARBONDALE	DANVILLE	COAL	1.0	227.0	
132.0	CARBONDALE		UNDERCLAY	6.0	228.0	
126.0	CARBONDALE		GRAY SHALE	7.0	234.0	
119.0	CARBONDALE		BLACK SHALE	1.0	241.0	
118.0	CARBONDALE		GRAY SHALE	5.0	242.0	
113.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	247.0	
106.0	CARBONDALE		CLAYSTONE	1.0	254.0	
105.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	255.0	
94.0	CARBONDALE		GRAY SHALE	10.8	266.0	
83.2	CARBONDALE	BRERETON	LIMESTONE	0.8	276.8	
82.4	CARBONDALE	ANNA	BLACK SHALE	6.4	277.6	
76.0	CARBONDALE	HERRIN	COAL	2.8	284.0	
73.2	CARBONDALE		UNDERCLAY	4.2	286.8	
69.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	2.0	291.0	
67.0	CARBONDALE		SANDSTONE	15.0	293.0	
52.0	CARBONDALE		GRAY SHALE	25.0	308.0	
27.0	CARBONDALE	BRIAR HILL	COAL	2.0	333.0	
25.0	CARBONDALE		GRAY SHALE	1.0	335.0	
24.0	CARBONDALE		SANDY SHALE	51.0	336.0	
-27.0	CARBONDALE		GRAY SHALE	10.5	387.0	
-37.5	CARBONDALE	ST. DAVID	LIMESTONE	0.3	397.5	
-37.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.6	397.8	
-41.4	CARBONDALE	DYKERSBURG	GRAY SHALE	1.0	401.4	
-42.4	CARBONDALE	SPRINGFIELD	COAL	5.6	402.4	
-48.0	CARBONDALE		GRAY SHALE	1.0	408.0	
-49.0	CARBONDALE		SANDSTONE	8.7	409.0	

MAPID: 05990004000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 25' N line, 300' W line of NE SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.189866 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773033 **DATE COLLECTED:** 4 / 28 / 1973

SURFACE ELEVATION (FT.): 366.1 **LOGGED (FT.):** 420.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 141GB **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.1	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
361.1	PLEISTOCENE		SAND	14.0	5.0	
347.1	PLEISTOCENE		CLAY	44.0	19.0	LIGHT GRAY
303.1	PLEISTOCENE		SAND & GRAVEL	65.0	63.0	
238.1	MODESTO		CALCAREOUS SHALE	10.0	128.0	
228.1	MODESTO		BLACK SHALE	2.9	138.0	
225.2	MODESTO	CHAPEL	COAL	0.6	140.9	
224.6	MODESTO		UNDERCLAY	3.5	141.5	
221.1	MODESTO		SHALE	18.0	145.0	
203.1	MODESTO	WEST FRANKLIN	LIMESTONE	2.4	163.0	
200.7	MODESTO		SANDY SHALE	31.6	165.4	
169.1	MODESTO		CALCAREOUS SHALE	46.0	197.0	
123.1	CARBONDALE	DANVILLE	COAL	2.0	243.0	
121.1	CARBONDALE		SANDSTONE	10.0	245.0	
111.1	CARBONDALE		SHALE	8.5	255.0	
102.6	CARBONDALE	BANKSTON FORK	LIMESTONE	9.0	263.5	
93.6	CARBONDALE		SANDSTONE	7.0	272.5	
86.6	CARBONDALE		GRAY SHALE	11.0	279.5	
75.6	CARBONDALE	BRERETON	LIMESTONE	1.0	290.5	
74.6	CARBONDALE		GRAY SHALE	1.0	291.5	
73.6	CARBONDALE	ANNA	BLACK SHALE	3.0	292.5	
70.6	CARBONDALE	ENERGY	DARK GRAY SHALE	1.8	295.5	
68.8	CARBONDALE	HERRIN	COAL	2.4	297.3	
66.4	CARBONDALE		UNDERCLAY	3.3	299.7	
63.1	CARBONDALE		SANDY SHALE	9.0	303.0	
54.1	CARBONDALE	HIGGINSVILLE	LIMESTONE	2.0	312.0	
52.1	CARBONDALE		SANDSTONE	13.0	314.0	
39.1	CARBONDALE		SHALE	36.0	327.0	
3.1	CARBONDALE	BRIAR HILL	COAL	2.1	363.0	
1.0	CARBONDALE		SANDY SHALE	24.9	365.1	
-23.9	CARBONDALE		GRAY SHALE	16.7	390.0	
-40.6	CARBONDALE	ST. DAVID	LIMESTONE	1.3	406.7	
-41.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	408.0	
-45.1	CARBONDALE	SPRINGFIELD	COAL	5.0	411.2	
-50.1	CARBONDALE		UNDERCLAY	3.8	416.2	

MAPID: 05990006000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 50' N line, 100' E line of NE NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.175292 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776515 **DATE COLLECTED:** 1 / 17 / 1969

SURFACE ELEVATION (FT.): 360.7 **LOGGED (FT.):** 434.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 66GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.7	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
355.7	PLEISTOCENE		SAND	10.0	5.0	
345.7	PLEISTOCENE		CLAY	48.5	15.0	
297.2	PLEISTOCENE		SAND & GRAVEL	66.5	63.5	
230.7	MODESTO		GRAY SHALE	46.0	130.0	
184.7	MODESTO		SANDSTONE	14.0	176.0	
170.7	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	190.0	WHITE
169.2	MODESTO		SANDY SHALE	66.0	191.5	
103.2	CARBONDALE	DANVILLE	COAL	1.8	257.5	
101.4	CARBONDALE		SANDY SHALE	20.7	259.3	
80.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	280.0	WHITE
74.7	CARBONDALE		SANDSTONE	15.0	286.0	
59.7	CARBONDALE		SHALE	7.5	301.0	
52.2	CARBONDALE	BRERETON	LIMESTONE	2.7	308.5	
49.5	CARBONDALE	ANNA	BLACK SHALE	5.8	311.2	
43.7	CARBONDALE	HERRIN	COAL	3.2	317.0	
40.5	CARBONDALE		UNDERCLAY	3.8	320.2	
36.7	CARBONDALE		SANDSTONE	19.0	324.0	
17.7	CARBONDALE		SHALE	18.5	343.0	
-0.8	CARBONDALE	BRIAR HILL	COAL	1.7	361.5	
-2.5	CARBONDALE		SHALE	6.8	363.2	
-9.3	CARBONDALE		SANDY SHALE	25.0	370.0	
-34.3	CARBONDALE		GRAY SHALE	28.4	395.0	
-62.7	CARBONDALE		SHALE WITH LIMESTONE	0.9	423.4	
-63.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.4	424.3	
-67.0	CARBONDALE	SPRINGFIELD	COAL	5.4	427.7	
-72.4	CARBONDALE		UNDERCLAY	1.3	433.1	

MAPID: 05990008000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 50' N line, 100' W line of SW NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.183369 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.767307 **DATE COLLECTED:** 12 / 16 / 1968

SURFACE ELEVATION (FT.): 364.2 **LOGGED (FT.):** 387.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 45GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.2	PLEISTOCENE		UNCONSOLIDATED	131.8	0.0	
232.4	MODESTO		SANDSTONE	1.3	131.8	
231.1	MODESTO		SANDY SHALE	80.9	133.1	
150.2	CARBONDALE	DANVILLE	COAL	1.6	214.0	
148.6	CARBONDALE		UNDERCLAY	1.2	215.6	
147.4	CARBONDALE		SANDY SHALE	19.0	216.8	
128.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	235.8	
123.4	CARBONDALE		GRAY SHALE	1.5	240.8	
121.9	CARBONDALE		SANDSTONE	6.8	242.3	
115.1	CARBONDALE		SANDY SHALE	15.6	249.1	
99.5	CARBONDALE	ANNA	BLACK SHALE	1.4	264.7	
98.1	CARBONDALE	ENERGY	DARK GRAY SHALE	3.3	266.1	
94.8	CARBONDALE	HERRIN	COAL	3.1	269.4	
91.7	CARBONDALE		UNDERCLAY	3.4	272.5	
88.4	CARBONDALE		SANDSTONE	15.3	275.8	
73.1	CARBONDALE		SANDY SHALE	22.6	291.1	
50.5	CARBONDALE	BRIAR HILL	COAL	2.0	313.7	
48.5	CARBONDALE		SANDY SHALE	59.5	315.7	
-11.0	CARBONDALE		GRAY SHALE	1.0	375.2	
-11.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	376.1	
-15.0	CARBONDALE	TURNER MINE	GRAY SHALE	1.3	379.2	
-16.3	CARBONDALE	TURNER MINE	BLACK SHALE & COAL	0.1	380.5	
-16.4	CARBONDALE	SPRINGFIELD	COAL	5.1	380.6	
-21.5	CARBONDALE		SANDY SHALE	1.6	385.7	

MAPID: 05901039000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.210216 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.762179 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2745.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L, BRUGGER 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-85.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	444.0	
-125.0	CARBONDALE	SURVANT	COAL	2.5	484.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	536.0	
-251.0	CARBONDALE	DEKOVEN	COAL	4.0	610.0	
-251.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	610.0	
-279.0	CARBONDALE	DAVIS	COAL	4.5	638.0	
-311.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	670.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-341.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	700.0	
-357.0	TRADEWATER	MT. RORAH	COAL	2.0	716.0	

MAPID: 05901039000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.210216 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.762179 **DATE COLLECTED:** 8 / 0 / 1950

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1606.0 **LOG TYPE:** Electric Log

SOURCE: CRAWFORD J L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1247.0	BASE OF PENN.		UNCLASSIFIED	-	1606.0	

MAPID: 05901125000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 1815' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205056 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.762339 **DATE COLLECTED:** 2 / 1 / 1952

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 355.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	133.0	0.0	
227.0	MODESTO		GRAY SHALE	22.9	133.0	
204.1	CARBONDALE	DANVILLE	COAL	1.9	155.9	
202.2	CARBONDALE		UNDERCLAY	3.7	157.8	
198.5	CARBONDALE		NO RECORD	1.8	161.5	ADJUST FOR MARKER
196.7	CARBONDALE		GRAY SHALE	16.8	163.3	
179.8	CARBONDALE		BLACK SHALE	0.3	180.2	
179.5	CARBONDALE	ALLENBY	COAL	0.2	180.5	
179.3	CARBONDALE		GRAY SHALE	0.7	180.7	
178.7	CARBONDALE		NO RECORD	4.7	181.3	ADJUST FOR MARKER
174.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	186.0	
170.0	CARBONDALE	BANKSTON FORK	GREEN SHALE	0.6	190.0	
169.4	CARBONDALE	BANKSTON FORK	LIMESTONE	0.4	190.6	
169.0	CARBONDALE		SHALE	0.6	191.0	GREEN-GRAY-BLACK
168.4	CARBONDALE	ANVIL ROCK	SANDSTONE	5.9	191.6	
162.5	CARBONDALE		GRAY SHALE	14.7	197.5	
147.8	CARBONDALE	BRERETON	LIMESTONE	3.1	212.2	
144.7	CARBONDALE	ANNA	BLACK SHALE	3.5	215.3	
141.2	CARBONDALE	HERRIN	COAL	2.4	218.8	
138.9	CARBONDALE	HERRIN	SHALE	0.2	221.1	
138.7	CARBONDALE	HERRIN	COAL	1.0	221.3	
137.6	CARBONDALE		UNDERCLAY	2.1	222.4	
135.5	CARBONDALE		NO RECORD	0.5	224.5	ADJUST FOR MARKER
135.0	CARBONDALE		SHALEY CLAYSTONE	2.2	225.0	
132.8	CARBONDALE		SILTSTONE	1.4	227.2	
131.4	CARBONDALE		SANDSTONE	8.4	228.6	
123.0	CARBONDALE		SILTSTONE	8.2	237.0	
114.8	CARBONDALE		GRAY SHALE	19.4	245.2	
95.4	CARBONDALE		BLACK SHALE	2.0	264.6	
93.4	CARBONDALE	BRIAR HILL	COAL	1.8	266.6	
91.7	CARBONDALE		GRAY SHALE	0.2	268.3	
91.5	CARBONDALE		SILTSTONE	2.1	268.5	
89.4	CARBONDALE		GRAY SHALE	8.4	270.6	
81.0	CARBONDALE		SANDSTONE	9.4	279.0	
71.6	CARBONDALE		GRAY SHALE	1.2	288.4	
70.4	CARBONDALE		SILTSTONE	6.2	289.6	
64.2	CARBONDALE		SILTY SHALE	42.2	295.8	
22.1	CARBONDALE	ST. DAVID	LIMESTONE	0.4	337.9	
21.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.2	338.3	

17.5	CARBONDALE	SPRINGFIELD	COAL	5.7	342.5
11.8	CARBONDALE		UNDERCLAY	0.8	348.2
11.0	CARBONDALE		SHALE & CLAYSTONE	6.0	349.0

MAPID: 05901125000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 1815' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205056 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.762339 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 221.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 25 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
207.6	CARBONDALE	DANVILLE	COAL	1.9	162.4	
205.7	CARBONDALE		GRAY SHALE	22.8	164.3	
182.8	CARBONDALE	ALLENBY	COAL	0.2	187.2	
182.7	CARBONDALE		SHALE & SILTSTONE	0.7	187.3	
182.0	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	4.3	188.0	UPPER BENCH
177.7	CARBONDALE	BANKSTON FORK	GRAY SHALE	0.6	192.3	SHALE PARTING
177.2	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	0.4	192.8	LOWER BENCH
176.7	CARBONDALE	LAWSON	CLAYSTONE	0.1	193.3	
176.7	CARBONDALE	LAWSON	GRAY SHALE	0.5	193.3	
176.2	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.9	193.8	
170.2	CARBONDALE	LAWSON	SILTSTONE	1.3	199.8	
169.0	CARBONDALE	LAWSON	GRAY SHALE	13.4	201.0	
155.6	CARBONDALE	BRERETON	LIMESTONE	3.1	214.4	
152.5	CARBONDALE	ANNA	BLACK SHALE	1.5	217.5	
151.0	CARBONDALE	HERRIN	COAL	2.4	219.0	

MAPID: 05901253000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2004' N line, 571' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.195127 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.771384 **DATE COLLECTED:** 9 / 0 / 1953

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2743.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, WILSON MAX 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-136.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	493.0	
-173.0	CARBONDALE	SURVANT	COAL	1.6	530.0	
-233.0	CARBONDALE	COLCHESTER	COAL	0.5	590.0	
-290.0	CARBONDALE	DEKOVEN	COAL	3.0	647.0	
-290.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	647.0	
-315.0	CARBONDALE	DAVIS	COAL	4.0	672.0	
-348.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	705.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-373.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	730.0	
-407.0	TRADEWATER	MT. RORAH	COAL	0.5	764.0	

MAPID: 05901253000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2004' N line, 571' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.195127 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.771384 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2743.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
127.0	CARBONDALE	DANVILLE	COAL	-	230.0	
101.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	256.0	
91.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	266.0	
66.0	CARBONDALE	HERRIN	COAL	3.0	291.0	
21.0	CARBONDALE	BRIAR HILL	COAL	-	336.0	
-48.0	CARBONDALE	SPRINGFIELD	COAL	5.0	405.0	BLACK SHALE ROOF
-77.0	CARBONDALE	SS BELOW NO. 5		44.0	434.0	
-123.0	CARBONDALE	HOUCHIN CREEK	COAL	-	480.0	

MAPID: 05902003000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19424 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.770256 **DATE COLLECTED:** 8 / 0 / 1956

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2852.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, WILSON MAX **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	478.0	
-166.0	CARBONDALE	SURVANT	COAL	1.3	525.0	
-221.0	CARBONDALE	COLCHESTER	COAL	0.5	580.0	
-281.0	CARBONDALE	DEKOVEN	COAL	3.0	640.0	
-281.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	640.0	
-306.0	CARBONDALE	DAVIS	COAL	4.0	665.0	
-340.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	699.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-361.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	720.0	
-391.0	TRADEWATER	MT. RORAH	COAL	0.5	750.0	

MAPID: 05903636000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.205736 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769202 **DATE COLLECTED:** 12 / 14 / 1968

SURFACE ELEVATION (FT.): 375.4 **LOGGED (FT.):** 395.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 47-G **WELL TYPE:** Coal Test

COMMENT: MINE 90

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.4	PLEISTOCENE		SAND	111.5	0.0	
263.9	PLEISTOCENE		GRAVEL	30.0	111.5	
233.9	MODESTO		SANDSTONE	0.8	141.5	
233.1	MODESTO		GRAY SHALE	44.9	142.3	
188.2	CARBONDALE	DANVILLE	COAL	1.8	187.2	
186.4	CARBONDALE		GRAY SHALE	24.1	189.0	
162.3	CARBONDALE		BLACK SHALE	1.2	213.1	
161.1	CARBONDALE		GRAY SHALE	5.0	214.3	
156.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	219.3	
150.5	CARBONDALE		GRAY SHALE	1.6	224.9	
148.9	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	226.5	
136.9	CARBONDALE		GRAY SHALE	26.0	238.5	
110.9	CARBONDALE	HERRIN	COAL	5.8	264.5	
105.1	CARBONDALE		UNDERCLAY	2.7	270.3	
102.4	CARBONDALE		SANDSTONE	28.5	273.0	
73.9	CARBONDALE		GRAY SHALE	14.3	301.5	
59.6	CARBONDALE	BRIAR HILL	COAL	2.2	315.8	
57.4	CARBONDALE		GRAY SHALE	65.6	318.0	
-8.1	CARBONDALE	ST. DAVID	LIMESTONE	0.3	383.5	
-8.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	383.8	
-12.1	CARBONDALE	SPRINGFIELD	COAL	5.3	387.5	
-17.4	CARBONDALE		UNDERCLAY	2.2	392.8	

MAPID: 05923848000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1320' N line, 1' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.21157 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773373 **DATE COLLECTED:** 10 / 25 / 1974

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 445.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 220-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		CLAY	5.0	0.0	
372.0	PLEISTOCENE		SAND	22.5	5.0	
349.5	PLEISTOCENE		CLAY	37.0	27.5	
312.5	PLEISTOCENE		SAND & GRAVEL	80.5	64.5	
232.0	MODESTO		SANDY SHALE	16.0	145.0	
216.0	MODESTO		GRAY SHALE	12.0	161.0	
204.0	MODESTO		BLACK SHALE	4.0	173.0	
200.0	MODESTO		GRAY SHALE	71.0	177.0	
129.0	CARBONDALE	DANVILLE	COAL	1.5	248.0	
127.5	CARBONDALE		GRAY SHALE	18.5	249.5	
109.0	CARBONDALE		SANDSTONE	1.0	268.0	
108.0	CARBONDALE		BLACK SHALE	1.0	269.0	
107.0	CARBONDALE		GRAY SHALE	8.0	270.0	
99.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	278.0	
92.6	CARBONDALE		GRAY SHALE	3.6	284.4	
89.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	288.0	
80.0	CARBONDALE		GRAY SHALE	11.7	297.0	
68.3	CARBONDALE	BRERETON	LIMESTONE	3.8	308.7	
64.5	CARBONDALE	ANNA	BLACK SHALE	2.2	312.5	
62.3	CARBONDALE	HERRIN	COAL	3.5	314.7	
58.8	CARBONDALE		UNDERCLAY	2.5	318.2	
56.3	CARBONDALE		SANDSTONE	23.3	320.7	
33.0	CARBONDALE		GRAY SHALE	22.0	344.0	
11.0	CARBONDALE	BRIAR HILL	COAL	1.5	366.0	
9.5	CARBONDALE		SANDSTONE	53.5	367.5	AND SANDY SHALE
-44.0	CARBONDALE		GRAY SHALE	7.8	421.0	
-51.8	CARBONDALE	ST. DAVID	LIMESTONE	0.7	428.8	
-52.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	429.5	
-55.5	CARBONDALE	SPRINGFIELD	COAL	5.1	432.5	
-60.6	CARBONDALE		SHALE	1.0	437.6	
-61.6	CARBONDALE		SANDSTONE	6.5	438.6	

MAPID: 05923849000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.207075 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.776986 **DATE COLLECTED:** 11 / 5 / 1974

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 438.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 221-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	5.0	0.0	
373.0	PLEISTOCENE		SAND	23.5	5.0	
349.5	PLEISTOCENE		CLAY	36.0	28.5	
313.5	PLEISTOCENE		SAND & GRAVEL	82.0	64.5	
231.5	MODESTO		SHALE	2.5	146.5	
229.0	MODESTO		SANDSTONE	9.0	149.0	
220.0	MODESTO		GRAY SHALE	13.0	158.0	
207.0	MODESTO		BLACK SHALE	4.0	171.0	
203.0	MODESTO		CLAYSTONE	8.0	175.0	
195.0	MODESTO		SANDSTONE	2.0	183.0	
193.0	MODESTO		GRAY SHALE	4.0	185.0	
189.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	189.0	
187.0	MODESTO		GRAY SHALE	61.0	191.0	
126.0	CARBONDALE	DANVILLE	COAL	1.5	252.0	
124.5	CARBONDALE		GRAY SHALE	20.5	253.5	
104.0	CARBONDALE		CALCAREOUS SANDSTONE	4.5	274.0	
99.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	278.5	
97.5	CARBONDALE		SHALE	4.0	280.5	
93.5	CARBONDALE	ANVIL ROCK	SANDSTONE	4.5	284.5	
89.0	CARBONDALE		GRAY SHALE	14.0	289.0	
75.0	CARBONDALE	BRERETON	LIMESTONE	3.2	303.0	
71.8	CARBONDALE	ANNA	BLACK SHALE	2.8	306.2	
69.0	CARBONDALE	HERRIN	COAL	3.5	309.0	
65.5	CARBONDALE		UNDERCLAY	3.5	312.5	
62.0	CARBONDALE		SANDSTONE	24.0	316.0	
38.0	CARBONDALE		GRAY SHALE	16.0	340.0	
22.0	CARBONDALE	BRIAR HILL	COAL	2.0	356.0	
20.0	CARBONDALE		SANDSTONE	22.0	358.0	
-2.0	CARBONDALE		SANDY SHALE	31.5	380.0	
-33.5	CARBONDALE		GRAY SHALE	8.5	411.5	
-42.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	420.0	
-43.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	421.0	
-44.9	CARBONDALE	SPRINGFIELD	COAL	5.5	422.9	
-50.4	CARBONDALE		SHALE	1.5	428.4	
-51.9	CARBONDALE		SANDSTONE	9.0	429.9	

MAPID: 05990003000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 50' S line, 250' W line of SW NE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.196944 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.77326 **DATE COLLECTED:** 9 / 6 / 1973

SURFACE ELEVATION (FT.): 378.9 **LOGGED (FT.):** 452.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 183GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.9	PLEISTOCENE		UNCONSOLIDATED	148.0	0.0	
230.9	MODESTO		GRAY SHALE	9.0	148.0	
221.9	MODESTO		DARK SHALE	6.0	157.0	
215.9	MODESTO		BLACK SHALE	1.3	163.0	
214.6	MODESTO	CHAPEL	COAL	0.5	164.3	
214.1	MODESTO		UNDERCLAY	3.2	164.8	
210.9	MODESTO		GRAY SHALE	6.0	168.0	
204.9	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	174.0	
201.9	MODESTO	WEST FRANKLIN	SANDSTONE	13.0	177.0	
188.9	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	190.0	
187.9	MODESTO		GRAY SHALE	20.0	191.0	
167.9	MODESTO		SANDY SHALE	32.0	211.0	
135.9	CARBONDALE	DANVILLE	COAL	1.5	243.0	
134.4	CARBONDALE		SANDY SHALE	37.0	244.5	
97.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	281.5	
91.4	CARBONDALE		SANDSTONE	10.5	287.5	
80.9	CARBONDALE		GRAY SHALE	12.0	298.0	
68.9	CARBONDALE	BRERETON	LIMESTONE	2.8	310.0	
66.1	CARBONDALE	ANNA	BLACK SHALE	3.2	312.8	
62.9	CARBONDALE	HERRIN	COAL	3.5	316.0	
59.4	CARBONDALE		UNDERCLAY	3.5	319.5	
55.9	CARBONDALE		SANDSTONE	24.0	323.0	
31.9	CARBONDALE		SANDY SHALE	19.0	347.0	
12.9	CARBONDALE	BRIAR HILL	COAL	1.5	366.0	
11.4	CARBONDALE		SANDY SHALE	40.5	367.5	
-29.1	CARBONDALE		GRAY SHALE	26.0	408.0	
-55.1	CARBONDALE	ST. DAVID	LIMESTONE	0.5	434.0	
-55.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	434.5	
-58.1	CARBONDALE	SPRINGFIELD	COAL	5.6	437.0	
-63.7	CARBONDALE		CLAYSTONE	10.0	442.6	

MAPID: 05901043000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.219203 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.761919 **DATE COLLECTED:** 8 / 0 / 1960

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 1163.0 **LOG TYPE:** Electric Log

SOURCE: SKILES, C. E., INC., ABELL MARY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-55.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	416.0	
-102.0	CARBONDALE	SURVANT	COAL	2.0	463.0	
-163.0	CARBONDALE	COLCHESTER	COAL	0.5	524.0	
-215.0	CARBONDALE	DEKOVEN	COAL	4.0	576.0	
-215.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	576.0	
-239.0	CARBONDALE	DAVIS	COAL	5.0	600.0	
-274.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	635.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-303.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	664.0	

MAPID: 05901044000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.214708 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.762048 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2220.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, DRONE EUGENE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-56.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	413.0	
-95.0	CARBONDALE	SURVANT	COAL	1.3	452.0	
-153.0	CARBONDALE	COLCHESTER	COAL	0.5	510.0	
-218.0	CARBONDALE	DEKOVEN	COAL	3.0	575.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	575.0	
-250.0	CARBONDALE	DAVIS	COAL	4.0	607.0	
-283.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	640.0	48% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-305.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	662.0	
-333.0	TRADEWATER	MT. RORAH	COAL	2.0	690.0	

MAPID: 05901114000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.220895 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.777095 **DATE COLLECTED:** 1 / 21 / 1952

SURFACE ELEVATION (FT.): 374.1 **LOGGED (FT.):** 468.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.1	PLEISTOCENE		UNCONSOLIDATED	154.0	0.0	
220.1	MODESTO		GRAY SHALE	9.3	154.0	
210.8	MODESTO		LIMESTONE	1.3	163.3	
209.5	MODESTO		GRAY SHALE	0.7	164.6	
208.8	MODESTO		SANDSTONE	7.8	165.3	
201.1	MODESTO		GRAY SHALE	1.6	173.0	
199.5	MODESTO		SANDSTONE	1.4	174.6	
198.1	MODESTO		GRAY SHALE	10.8	176.0	
187.3	MODESTO		SANDSTONE	1.8	186.8	
185.5	MODESTO		GRAY SHALE	12.0	188.6	
173.5	MODESTO		BLACK SHALE	3.0	200.6	
170.5	MODESTO		COAL	0.9	203.6	
169.6	MODESTO		GRAY SHALE	5.0	204.5	
164.6	MODESTO	WEST FRANKLIN	LIMESTONE	4.9	209.5	
159.7	MODESTO		GRAY SHALE	66.3	214.4	
93.4	MODESTO		BLACK SHALE	2.3	280.7	
91.1	CARBONDALE	DANVILLE	COAL	1.8	283.0	
89.3	CARBONDALE		UNDERCLAY	1.1	284.8	
88.2	CARBONDALE		SANDSTONE	3.8	285.9	
84.4	CARBONDALE		GRAY SHALE	4.4	289.7	
80.0	CARBONDALE		SANDSTONE	8.1	294.1	
71.9	CARBONDALE		BLACK SHALE	1.5	302.2	
70.4	CARBONDALE		CLAYSTONE	1.3	303.7	
69.1	CARBONDALE		SANDSTONE	1.2	305.0	
67.9	CARBONDALE		SHALE	1.7	306.2	
66.3	CARBONDALE	ALLENBY	COAL	1.5	307.8	
64.8	CARBONDALE		UNDERCLAY	1.8	309.3	
62.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	311.2	LOWER SHALE BAND
56.8	CARBONDALE	ANVIL ROCK	SANDSTONE	9.6	317.3	
47.3	CARBONDALE		GRAY SHALE	16.9	326.8	
30.3	CARBONDALE	BRERETON	LIMESTONE	2.1	343.8	
28.3	CARBONDALE	ANNA	BLACK SHALE	1.3	345.8	
27.0	CARBONDALE	HERRIN	COAL	4.4	347.1	
22.6	CARBONDALE		UNDERCLAY	3.4	351.5	
19.2	CARBONDALE		SANDSTONE	2.4	354.9	
16.8	CARBONDALE		GRAY SHALE	3.7	357.3	
13.1	CARBONDALE		SANDSTONE	17.9	361.0	
-4.8	CARBONDALE		GRAY SHALE	20.3	378.9	
-25.1	CARBONDALE	BRIAR HILL	COAL	2.0	399.2	

-27.1	CARBONDALE		UNDERCLAY	0.9	401.2	
-28.0	CARBONDALE		SANDSTONE	2.7	402.1	
-30.7	CARBONDALE		GRAY SHALE	3.8	404.8	
-34.5	CARBONDALE		SANDSTONE	3.3	408.6	
-37.7	CARBONDALE		GRAY SHALE	1.8	411.8	
-39.5	CARBONDALE		SANDSTONE	8.5	413.6	SILTSTONE
-48.0	CARBONDALE		GRAY SHALE	38.8	422.1	
-86.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	460.9	
-88.2	CARBONDALE		GRAY SHALE	0.4	462.3	
-88.6	CARBONDALE	SPRINGFIELD	COAL	5.2	462.7	
-93.7	CARBONDALE		GRAY SHALE	0.4	467.8	

MAPID: 05901116000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216094 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.769769 **DATE COLLECTED:** 2 / 1 / 1952

SURFACE ELEVATION (FT.): 375.9 **LOGGED (FT.):** 427.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 16 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.9	PLEISTOCENE		UNCONSOLIDATED	162.4	0.0	
213.5	MODESTO	WEST FRANKLIN	LIMESTONE	6.4	162.4	
207.1	MODESTO		SHALE & CLAYSTONE	4.2	168.8	
202.9	MODESTO		GRAY SHALE	58.4	173.0	
144.5	MODESTO		CARBONACEOUS SHALE	1.3	231.4	
143.2	CARBONDALE	DANVILLE	COAL	2.3	232.7	
141.0	CARBONDALE		UNDERCLAY	1.0	234.9	
140.0	CARBONDALE		SHALE	4.1	235.9	GREENISH-GRAY
135.9	CARBONDALE		SANDY SILTSTONE	5.2	240.0	
130.7	CARBONDALE		SILTY SHALE	2.7	245.2	COAL STREAKS IN LOWER 1 FT.
128.0	CARBONDALE		COAL	0.1	247.9	
127.9	CARBONDALE		UNDERCLAY	0.5	248.0	
127.4	CARBONDALE		SILTSTONE	0.5	248.5	
126.9	CARBONDALE		SANDSTONE	5.2	249.0	
121.7	CARBONDALE		GRAY SHALE	1.8	254.2	
120.0	CARBONDALE	ALLENBY	COAL	0.5	255.9	
119.5	CARBONDALE		UNDERCLAY	2.2	256.4	
117.3	CARBONDALE		SHALE	0.7	258.6	GREEN-GRAY
116.6	CARBONDALE	BANKSTON FORK	LIMESTONE	6.4	259.3	
110.2	CARBONDALE		SHALE	0.7	265.7	GREEN-GRAY
109.6	CARBONDALE	ANVIL ROCK	SILTSTONE	5.4	266.3	
104.1	CARBONDALE	ANVIL ROCK	SANDSTONE	1.5	271.8	
102.6	CARBONDALE		GRAY SHALE	13.7	273.3	
89.0	CARBONDALE		CARBONACEOUS SHALE	0.4	286.9	(JAMESTOWN)
88.6	CARBONDALE		UNDERCLAY	0.2	287.3	
88.4	CARBONDALE		GRAY SHALE	0.9	287.5	
87.5	CARBONDALE	BRERETON	LIMESTONE	3.8	288.4	
83.7	CARBONDALE	ANNA	BLACK SHALE	2.0	292.2	
81.7	CARBONDALE	HERRIN	COAL	2.8	294.2	
79.0	CARBONDALE	HERRIN	SHALE	0.2	296.9	
78.8	CARBONDALE	HERRIN	COAL	1.1	297.1	
77.7	CARBONDALE		UNDERCLAY	1.7	298.2	
76.1	CARBONDALE		SHALE & CLAYSTONE	2.9	299.8	
73.1	CARBONDALE		SANDSTONE	2.7	302.8	
70.5	CARBONDALE		SHALE	0.8	305.4	GREEN-GRAY
69.6	CARBONDALE		SILTSTONE	1.5	306.3	GREEN-GRAY
68.1	CARBONDALE		SHALE	2.6	307.8	GREEN-GRAY
65.6	CARBONDALE		SANDSTONE	8.0	310.3	
57.6	CARBONDALE		SILTSTONE	4.7	318.3	

52.9	CARBONDALE		GRAY SHALE	25.5	323.0	
27.4	CARBONDALE	BRIAR HILL	COAL	2.0	348.5	
25.4	CARBONDALE		GRAY SHALE	0.8	350.5	
24.5	CARBONDALE		SANDSTONE	1.6	351.4	
22.9	CARBONDALE		SILTSTONE	1.1	353.0	
21.8	CARBONDALE		GRAY SHALE	29.3	354.1	
-7.5	CARBONDALE		SILTSTONE	16.2	383.4	
-23.7	CARBONDALE		GRAY SHALE	13.4	399.6	
-37.1	CARBONDALE	ST. DAVID	LIMESTONE	0.6	413.0	
-37.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	413.6	
-41.2	CARBONDALE	SPRINGFIELD	COAL	5.6	417.1	
-46.9	CARBONDALE		GRAY SHALE	0.7	422.8	DARK TO BLACK
-47.5	CARBONDALE		SILTSTONE	1.3	423.4	
-48.8	CARBONDALE		SHALE & CLAYSTONE	0.8	424.7	
-49.6	CARBONDALE		SILTSTONE	1.5	425.5	

MAPID: 05901116000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.216094 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.769769 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 298.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 16 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
134.1	CARBONDALE	DANVILLE	COAL	2.3	241.9	
131.8	CARBONDALE		ROCK	13.0	244.2	
118.8	CARBONDALE	ALLENBY	COAL	0.5	257.2	
118.3	CARBONDALE		CLAYSTONE	2.2	257.7	
116.1	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	5.5	259.9	
110.7	CARBONDALE	LAWSON	CALCAREOUS SHALE	0.7	265.3	
110.0	CARBONDALE	LAWSON	SILTSTONE	5.4	266.0	
104.6	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	1.5	271.4	
103.1	CARBONDALE	LAWSON	GRAY SHALE	13.7	272.9	
89.4	CARBONDALE	JAMESTOWN	CARBONACEOUS SHALE	0.4	286.6	
89.0	CARBONDALE		CARBONACEOUS SHALE	1.1	287.0	
87.9	CARBONDALE	BRERETON	LIMESTONE	3.9	288.1	
84.0	CARBONDALE	ANNA	BLACK SHALE	2.0	292.0	
82.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	4.0	294.0	

MAPID: 05902819000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.222007 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.776196 **DATE COLLECTED:** 9 / 0 / 1962

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 1603.0 **LOG TYPE:** Electric Log

SOURCE: DAVOUST R C CO, RABEN J 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-179.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	555.0	
-226.0	CARBONDALE	SURVANT	COAL	2.0	602.0	
-284.0	CARBONDALE	COLCHESTER	COAL	0.5	660.0	
-337.0	CARBONDALE	DEKOVEN	COAL	3.0	713.0	
-337.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	713.0	
-364.0	CARBONDALE	DAVIS	COAL	3.0	740.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	775.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-417.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	793.0	
-449.0	TRADEWATER	MT. RORAH	COAL	1.3	825.0	

MAPID: 05903259000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 39' S line, 21' W line of SE NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.215979 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.76919 **DATE COLLECTED:** 4 / 5 / 1967

SURFACE ELEVATION (FT.): 375.7 **LOGGED (FT.):** 423.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 191-H-Q **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.7	PLEISTOCENE		CLAY	143.1	0.0	
232.6	MODESTO		GRAY SHALE	5.6	143.1	
227.0	MODESTO		BLACK SHALE	3.3	148.7	
223.7	MODESTO		GRAY SHALE	3.7	152.0	
220.0	MODESTO		COAL	0.5	155.7	
219.5	MODESTO		UNDERCLAY	2.9	156.2	
216.6	MODESTO	WEST FRANKLIN	SHALY LIMESTONE	6.7	159.1	
209.9	MODESTO		GRAY SHALE	67.5	165.8	
142.4	CARBONDALE	DANVILLE	COAL	0.9	233.3	
141.5	CARBONDALE		GRAY SHALE	11.6	234.2	
129.9	CARBONDALE		COAL	0.3	245.8	
129.6	CARBONDALE		UNDERCLAY	1.1	246.1	
128.5	CARBONDALE		SANDSTONE	3.7	247.2	
124.8	CARBONDALE		GRAY SHALE	4.4	250.9	
120.4	CARBONDALE	ALLENBY	COAL	0.6	255.3	
119.8	CARBONDALE		GRAY SHALE	3.0	255.9	
116.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	258.9	
111.6	CARBONDALE		GRAY SHALE	3.9	264.1	
107.7	CARBONDALE	ANVIL ROCK	SANDSTONE	4.1	268.0	
103.6	CARBONDALE		GRAY SHALE	14.5	272.1	
89.1	CARBONDALE	BRERETON	LIMESTONE	4.5	286.6	
84.6	CARBONDALE	ANNA	BLACK SHALE	1.9	291.1	
82.7	CARBONDALE	HERRIN	COAL	3.8	293.0	
78.9	CARBONDALE		GRAY SHALE	3.7	296.8	
75.2	CARBONDALE		SANDSTONE	11.3	300.5	
63.9	CARBONDALE		SANDY SHALE	26.2	311.8	
37.7	CARBONDALE		GRAY SHALE	8.6	338.0	
29.1	CARBONDALE	BRIAR HILL	COAL	1.9	346.6	
27.2	CARBONDALE		SANDY SHALE	62.3	348.5	
-35.1	CARBONDALE	ST. DAVID	SHALY LIMESTONE	0.2	410.8	
-35.3	CARBONDALE	ST. DAVID	LIMESTONE	0.4	411.0	
-35.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	411.4	
-38.3	CARBONDALE		GRAY SHALE	0.5	414.0	
-38.8	CARBONDALE	SPRINGFIELD	COAL	5.4	414.5	
-44.2	CARBONDALE		GRAY SHALE	1.2	419.9	
-45.4	CARBONDALE		LIMESTONE	2.6	421.1	

MAPID: 05923794000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 660' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.227851 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.777156 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 503.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 165-G-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.7	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
235.7	MODESTO		SHALY SANDSTONE	25.0	135.0	
210.7	MODESTO		GRAY SHALE	20.0	160.0	
190.7	MODESTO		SANDSTONE	7.0	180.0	
183.7	MODESTO		GRAY SHALE	29.0	187.0	
154.7	MODESTO		BLACK SHALE	2.5	216.0	
152.2	MODESTO		COAL	0.5	218.5	
151.7	MODESTO		UNDERCLAY	3.5	219.0	
148.2	MODESTO		SHALE	14.0	222.5	CONGLOMERATED
134.2	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	236.5	
130.2	MODESTO	WEST FRANKLIN	SHALE	13.0	240.5	CONGLOMERATED
117.2	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	253.5	
116.2	MODESTO		GRAY SHALE	55.0	254.5	
61.2	CARBONDALE	DANVILLE	COAL	2.0	309.5	
59.2	CARBONDALE		UNDERCLAY	4.5	311.5	
54.7	CARBONDALE		SANDY SHALE	7.0	316.0	
47.7	CARBONDALE		BLACK SHALE	1.0	323.0	
46.7	CARBONDALE		SANDY SHALE	9.0	324.0	
37.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	333.0	
33.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.3	337.7	
20.7	CARBONDALE		SANDY SHALE	12.5	350.0	
8.2	CARBONDALE	BRERETON	LIMESTONE	4.2	362.5	
4.0	CARBONDALE	ANNA	BLACK SHALE	1.0	366.7	
3.0	CARBONDALE	HERRIN	COAL	4.0	367.7	
-1.0	CARBONDALE		UNDERCLAY	3.3	371.7	
-4.3	CARBONDALE		SANDSTONE	41.0	375.0	
-45.3	CARBONDALE		GRAY SHALE	7.5	416.0	
-52.8	CARBONDALE	BRIAR HILL	COAL	2.0	423.5	
-54.8	CARBONDALE		SANDY SHALE	6.0	425.5	
-60.8	CARBONDALE		SANDSTONE	18.5	431.5	
-79.3	CARBONDALE		SANDY SHALE	14.0	450.0	
-93.3	CARBONDALE		GRAY SHALE	21.0	464.0	
-114.3	CARBONDALE	ST. DAVID	LIMESTONE	0.7	485.0	
-115.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	485.7	
-117.6	CARBONDALE	SPRINGFIELD	COAL	5.0	488.3	
-122.6	CARBONDALE		SHALE	2.0	493.3	
-124.6	CARBONDALE		SANDSTONE	8.0	495.3	

MAPID: 05923827000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' N line, 1' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.224946 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.764009 **DATE COLLECTED:** 4 / 5 / 1974

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 422.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 224-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	10.0	0.0	
365.0	PLEISTOCENE		SAND	14.0	10.0	
351.0	PLEISTOCENE		CLAY	32.0	24.0	
319.0	PLEISTOCENE		SAND & GRAVEL	89.0	56.0	
230.0	MODESTO		GRAY SHALE	10.5	145.0	
219.5	MODESTO	WEST FRANKLIN	LIMESTONE	7.5	155.5	
212.0	MODESTO	WEST FRANKLIN	SANDSTONE	6.0	163.0	
206.0	MODESTO	WEST FRANKLIN	GRAY SHALE	5.0	169.0	
201.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	174.0	
199.0	MODESTO		GRAY SHALE	1.0	176.0	
198.0	MODESTO		BLACK SHALE	1.5	177.0	
196.5	MODESTO		DARK SHALE	10.0	178.5	
186.5	MODESTO		GRAY SHALE	37.0	188.5	
149.5	CARBONDALE	DANVILLE	COAL	2.3	225.5	
147.2	CARBONDALE		UNDERCLAY	5.2	227.8	
142.0	CARBONDALE		GRAY SHALE	5.5	233.0	
136.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	238.5	
131.0	CARBONDALE		GRAY SHALE	8.0	244.0	
123.0	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	252.0	
109.0	CARBONDALE		SANDY SHALE	8.5	266.0	
100.5	CARBONDALE	BRERETON	LIMESTONE	2.0	274.5	
98.5	CARBONDALE	ANNA	BLACK SHALE	1.1	276.5	
97.4	CARBONDALE	HERRIN	COAL	4.0	277.6	
93.5	CARBONDALE		UNDERCLAY	2.9	281.5	
90.5	CARBONDALE		SANDSTONE	19.5	284.5	
71.0	CARBONDALE		SANDY SHALE	28.5	304.0	
42.5	CARBONDALE	BRIAR HILL	COAL	1.5	332.5	
41.0	CARBONDALE		SANDY SHALE	8.0	334.0	
33.0	CARBONDALE		SANDSTONE	14.0	342.0	
19.0	CARBONDALE		SANDY SHALE	39.0	356.0	
-20.0	CARBONDALE		GRAY SHALE	7.0	395.0	
-27.0	CARBONDALE	ST. DAVID	LIMESTONE	1.5	402.0	
-28.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	403.5	
-31.5	CARBONDALE		LIMESTONE	0.4	406.5	
-31.9	CARBONDALE		GRAY SHALE	0.5	406.9	
-32.4	CARBONDALE	SPRINGFIELD	COAL	5.8	407.4	
-38.2	CARBONDALE		SANDY DARK SHALE	4.0	413.2	
-42.2	CARBONDALE		SANDSTONE	5.5	417.2	

MAPID: 05990011000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 50' N line, 50' W line of NW NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.229964 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.777038 **DATE COLLECTED:** 8 / 3 / 1973

SURFACE ELEVATION (FT.): 370.3 **LOGGED (FT.):** 500.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 167GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.3	PLEISTOCENE		UNCONSOLIDATED	138.0	0.0	
232.3	MODESTO		SHALY SANDSTONE	27.0	138.0	
205.3	MODESTO		GRAY SHALE	24.5	165.0	
180.8	MODESTO		GRAY SHALE	11.5	189.5	
169.3	MODESTO		SANDY SHALE	25.0	201.0	
144.3	MODESTO		GRAY SHALE	10.0	226.0	
134.3	MODESTO		SHALE	7.0	236.0	
127.3	MODESTO		SHALE & CONGLOMERATE	5.0	243.0	
122.3	MODESTO	WEST FRANKLIN	LIMESTONE	3.7	248.0	
118.6	MODESTO	WEST FRANKLIN	SHALE & CONGLOMERATE	6.0	251.7	
112.6	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	257.7	
110.6	MODESTO		SHALE & CONGLOMERATE	5.0	259.7	
105.6	MODESTO		GRAY SHALE	60.3	264.7	
45.3	CARBONDALE	DANVILLE	COAL	1.5	325.0	
43.8	CARBONDALE		UNDERCLAY	3.0	326.5	
40.8	CARBONDALE		SHALE	6.5	329.5	
34.3	CARBONDALE		BLACK SHALE	1.0	336.0	
33.3	CARBONDALE		SHALE	9.0	337.0	
24.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	346.0	LIGHT
19.3	CARBONDALE		SANDSTONE	10.0	351.0	
9.3	CARBONDALE		SHALE	11.0	361.0	
-1.7	CARBONDALE	BRERETON	LIMESTONE	4.5	372.0	DARK
-6.2	CARBONDALE	ANNA	BLACK SHALE	0.8	376.5	
-7.0	CARBONDALE	HERRIN	COAL	4.0	377.3	
-11.0	CARBONDALE		UNDERCLAY	3.2	381.3	
-14.2	CARBONDALE		SANDSTONE	20.5	384.5	
-34.7	CARBONDALE		SANDY SHALE	15.0	405.0	
-49.7	CARBONDALE		GRAY SHALE	8.0	420.0	
-57.7	CARBONDALE	BRIAR HILL	COAL	2.0	428.0	
-59.7	CARBONDALE		SANDY SHALE	7.0	430.0	
-66.7	CARBONDALE		SANDSTONE	18.0	437.0	
-84.7	CARBONDALE		SANDY SHALE	6.3	455.0	
-91.0	CARBONDALE		GRAY SHALE	20.0	461.3	
-111.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	481.3	
-112.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	482.3	
-114.7	CARBONDALE	SPRINGFIELD	COAL	4.9	485.0	
-119.6	CARBONDALE		SHALE	1.2	489.9	
-120.8	CARBONDALE		SANDSTONE	9.3	491.1	

MAPID: 05901121000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.238462 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.760683 **DATE COLLECTED:** 1 / 11 / 1952

SURFACE ELEVATION (FT.): 384.6 **LOGGED (FT.):** 469.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.6	PLEISTOCENE		UNCONSOLIDATED	154.3	0.0	
230.3	MODESTO		SANDSTONE	6.0	154.3	
224.3	MODESTO		SHALE	31.8	160.3	
192.6	MODESTO		SHALE	0.6	192.0	
192.0	MODESTO		COAL	0.3	192.6	
191.8	MODESTO		GRAY SHALE	4.5	192.8	
187.3	MODESTO		SANDSTONE	9.6	197.3	
177.7	MODESTO		GRAY SHALE	6.6	206.9	
171.1	MODESTO		BLACK SHALE	0.3	213.5	
170.8	MODESTO	WEST FRANKLIN	LIMESTONE	3.9	213.8	
166.9	MODESTO	WEST FRANKLIN	GREEN SHALE	0.7	217.7	
166.3	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	218.3	
164.8	MODESTO		SHALE	0.9	219.8	GREENISH-GRAY
163.8	MODESTO		NO RECORD	9.3	220.8	ADJUST FOR MARKER
154.6	MODESTO		SHALE	6.4	230.0	GREENISH-GRAY
148.2	MODESTO		GRAY SHALE	40.8	236.4	
107.3	MODESTO		BLACK SHALE	4.3	277.3	
103.1	CARBONDALE	DANVILLE	COAL	2.5	281.5	
100.6	CARBONDALE	DANVILLE	SHALE	0.6	284.0	GREEN-GRAY
100.0	CARBONDALE	DANVILLE	COAL	0.3	284.6	
99.7	CARBONDALE		UNDERCLAY	0.4	284.9	
99.3	CARBONDALE		GRAY SHALE	0.8	285.3	
98.5	CARBONDALE		SANDSTONE	8.8	286.1	
89.7	CARBONDALE	ALLENBY	COAL	0.3	294.9	
89.3	CARBONDALE		UNDERCLAY	0.6	295.3	
88.8	CARBONDALE		SHALE & CLAYSTONE	1.3	295.8	
87.5	CARBONDALE		SHALE	0.3	297.1	GREEN-GRAY
87.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	297.3	
82.6	CARBONDALE		GRAY SHALE	1.1	302.0	
81.5	CARBONDALE	ANVIL ROCK	SANDSTONE	14.7	303.1	
66.8	CARBONDALE		GRAY SHALE	10.7	317.8	
56.2	CARBONDALE		GRAY SHALE	0.8	328.4	CARBONACEOUS
55.4	CARBONDALE		SHALE	2.3	329.2	DARK TO BLACK
53.1	CARBONDALE	BRERETON	LIMESTONE	2.7	331.5	
50.4	CARBONDALE		SHALE	0.3	334.2	DARK TO BLACK
50.2	CARBONDALE	HERRIN	COAL	3.3	334.4	
46.9	CARBONDALE	HERRIN	COAL	0.1	337.7	
46.8	CARBONDALE	HERRIN	COAL	1.0	337.8	
45.8	CARBONDALE		UNDERCLAY	1.8	338.8	

44.0	CARBONDALE		SHALE & CLAYSTONE	0.9	340.6
43.1	CARBONDALE		GRAY SHALE	3.6	341.5
39.5	CARBONDALE		SILTY SHALE	16.3	345.1
23.3	CARBONDALE		SANDSTONE	7.8	361.3
15.5	CARBONDALE		SANDY SHALE	12.3	369.1
3.2	CARBONDALE		SHALY SANDSTONE	2.4	381.4
0.8	CARBONDALE		GRAY SHALE	5.7	383.8
-4.9	CARBONDALE	BRIAR HILL	COAL	2.1	389.5
-7.0	CARBONDALE		GRAY SHALE	5.3	391.6
-12.2	CARBONDALE		SANDSTONE	2.9	396.8
-15.2	CARBONDALE		SILTSTONE	20.7	399.8
-35.8	CARBONDALE		GRAY SHALE	37.1	420.4
-72.9	CARBONDALE	TURNER MINE	BLACK SHALE	5.5	457.5
-78.4	CARBONDALE	SPRINGFIELD	COAL	5.7	463.0
-84.1	CARBONDALE		UNDERCLAY	0.3	468.7

MAPID: 05901121000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.238462 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760683 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 342.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 21 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
90.4	CARBONDALE	DANVILLE	COAL	3.4	294.6	
87.0	CARBONDALE	ALLENBY	COAL	0.3	298.0	
86.7	CARBONDALE		CLAYSTONE	1.5	298.3	
85.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	299.8	
80.2	CARBONDALE	LAWSON	GRAY SHALE	1.1	304.8	
79.1	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	14.7	305.9	
64.4	CARBONDALE	LAWSON	GRAY SHALE	11.4	320.6	
53.0	CARBONDALE	JAMESTOWN	CARBONACEOUS SHALE	0.5	332.0	
52.5	CARBONDALE		CARBONACEOUS SHALE	2.6	332.5	
49.9	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	2.7	335.1	
47.2	CARBONDALE	ANNA	BLACK SHALE	0.3	337.8	
47.0	CARBONDALE	HERRIN	COAL	4.5	338.0	

MAPID: 05923791000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239328 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.7772 **DATE COLLECTED:** 6 / 12 / 1972

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 542.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 94-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.0	PLEISTOCENE		UNCONSOLIDATED	135.5	0.0	
237.5	MODESTO		GRAY SHALE	19.5	135.5	
218.0	MODESTO		BLACK SHALE	1.0	155.0	
217.0	MODESTO	CHAPEL	COAL	1.0	156.0	
216.0	MODESTO		UNDERCLAY	1.5	157.0	
214.5	MODESTO		UNDERCLAY	7.5	158.5	
207.0	MODESTO		GRAY SHALE	8.0	166.0	
199.0	MODESTO		LIMESTONE	3.0	174.0	
196.0	MODESTO		SANDSTONE	29.5	177.0	
166.5	MODESTO		SANDY SHALE	18.5	206.5	
148.0	MODESTO		CALCAREOUS SANDSTONE	3.0	225.0	
145.0	MODESTO		SANDSTONE	24.0	228.0	AND SANDY SHALE
121.0	MODESTO		GRAY SHALE	10.0	252.0	
111.0	MODESTO		BLACK SHALE	2.5	262.0	WITH
108.5	MODESTO		UNDERCLAY	2.5	264.5	
106.0	MODESTO		GRAY SHALE	5.0	267.0	
101.0	MODESTO		SANDSTONE	6.0	272.0	
95.0	MODESTO		GRAY SHALE	9.0	278.0	
86.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.5	287.0	
80.5	MODESTO	WEST FRANKLIN	GRAY SHALE	5.0	292.5	
75.5	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	297.5	
67.5	MODESTO		GRAY SHALE	58.0	305.5	
9.5	CARBONDALE	DANVILLE	COAL	1.5	363.5	
8.0	CARBONDALE		SANDY SHALE	5.0	365.0	
3.0	CARBONDALE		SANDSTONE	5.5	370.0	
-2.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	375.5	
-8.7	CARBONDALE	ANVIL ROCK	SANDSTONE	23.3	381.7	
-32.0	CARBONDALE		SANDSTONE	3.7	405.0	
-35.7	CARBONDALE	BRERETON	LIMESTONE	4.7	408.7	
-40.4	CARBONDALE	ANNA	BLACK SHALE	0.5	413.4	
-40.9	CARBONDALE	HERRIN	COAL	4.0	413.9	
-44.9	CARBONDALE		UNDERCLAY	3.1	417.9	
-48.0	CARBONDALE		SANDSTONE	27.0	421.0	
-75.0	CARBONDALE		SANDY SHALE	18.0	448.0	
-93.0	CARBONDALE	BRIAR HILL	COAL	1.8	466.0	
-94.8	CARBONDALE		SANDY SHALE	17.2	467.8	
-112.0	CARBONDALE		SANDSTONE	22.5	485.0	
-134.5	CARBONDALE		SANDY SHALE	17.1	507.5	

-151.6	CARBONDALE		GRAY SHALE	5.0	524.6
-156.6	CARBONDALE	ST. DAVID	LIMESTONE	0.3	529.6
-156.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	529.9
-158.9	CARBONDALE		LIMESTONE	1.6	531.9
-160.5	CARBONDALE	SPRINGFIELD	COAL	5.3	533.5
-165.8	CARBONDALE		SANDY SHALE	2.0	538.8
-167.8	CARBONDALE		SANDSTONE	1.5	540.8

MAPID: 05923934000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239176 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773982 **DATE COLLECTED:** 6 / 14 / 1973

SURFACE ELEVATION (FT.): 367.9 **LOGGED (FT.):** 532.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 161-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
367.9	PLEISTOCENE		UNCONSOLIDATED	132.0	0.0	
235.9	MODESTO		BLACK SHALE	2.7	132.0	
233.2	MODESTO	CHAPEL	COAL	1.6	134.7	
231.6	MODESTO		GRAY SHALE	16.7	136.3	
214.9	MODESTO		SANDSTONE	20.0	153.0	
194.9	MODESTO		SHALE	34.0	173.0	
160.9	MODESTO		SANDSTONE	8.0	207.0	
152.9	MODESTO		GRAY SHALE	15.0	215.0	
137.9	MODESTO		SANDSTONE	5.0	230.0	
132.9	MODESTO		GRAY SHALE	9.5	235.0	
123.4	MODESTO		BLACK SHALE	1.5	244.5	
121.9	MODESTO		COAL	0.5	246.0	
121.4	MODESTO		GRAY SHALE	4.0	246.5	
117.4	MODESTO		SANDSTONE	9.5	250.5	
107.9	MODESTO		GRAY SHALE	5.0	260.0	
102.9	MODESTO	WEST FRANKLIN	LIMESTONE	7.0	265.0	
95.9	MODESTO		GRAY SHALE	14.0	272.0	
81.9	MODESTO		BLACK SHALE	2.0	286.0	LIMESTONE
79.9	MODESTO		SHALE	53.0	288.0	
26.9	CARBONDALE	DANVILLE	COAL	2.0	341.0	
24.9	CARBONDALE		GRAY SHALE	4.5	343.0	
20.4	CARBONDALE		BLACK SHALE	2.0	347.5	
18.4	CARBONDALE		GRAY SHALE	5.5	349.5	
12.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	355.0	
8.4	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	359.5	
-6.6	CARBONDALE		GRAY SHALE	12.5	374.5	
-19.1	CARBONDALE		BLACK SHALE	1.5	387.0	
-20.6	CARBONDALE	BRERETON	LIMESTONE	3.6	388.5	
-24.2	CARBONDALE	ANNA	BLACK SHALE	0.4	392.1	
-24.6	CARBONDALE	HERRIN	COAL	3.8	392.5	
-28.4	CARBONDALE		UNDERCLAY	3.0	396.3	
-31.4	CARBONDALE		SANDSTONE	14.0	399.3	
-45.4	CARBONDALE		GRAY SHALE	32.3	413.3	
-77.7	CARBONDALE	BRIAR HILL	COAL	2.0	445.6	
-79.7	CARBONDALE		GRAY SHALE	13.0	447.6	
-92.7	CARBONDALE		SANDSTONE	14.0	460.6	
-106.7	CARBONDALE		SHALE	36.4	474.6	
-143.1	CARBONDALE		SHALE	1.0	511.0	LIMESTONE
-144.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	512.0	

-145.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	513.0
-148.6	CARBONDALE	SPRINGFIELD	COAL	5.9	516.5
-154.5	CARBONDALE		BLACK SHALE	2.0	522.4
-156.5	CARBONDALE		SANDSTONE	8.0	524.4

MAPID: 05990016000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 300' S line, 75' W line of NW NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.238618 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.767706 **DATE COLLECTED:** 6 / 30 / 1973

SURFACE ELEVATION (FT.): 379.7 **LOGGED (FT.):** 505.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 164GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
379.7	PLEISTOCENE		UNCONSOLIDATED	145.0	0.0	
234.7	MODESTO		SANDSTONE	23.0	145.0	
211.7	MODESTO	NEW HAVEN	LIMESTONE	15.0	168.0	
196.7	MODESTO	NEW HAVEN	LIMESTONE	1.0	183.0	
195.7	MODESTO		SANDY SHALE	20.0	184.0	
175.7	MODESTO		GRAY SHALE	2.5	204.0	
173.2	MODESTO		BLACK SHALE	1.0	206.5	
172.2	MODESTO		SANDSTONE	11.0	207.5	
161.2	MODESTO		GRAY SHALE	15.0	218.5	
146.2	MODESTO		BLACK SHALE	2.0	233.5	
144.2	MODESTO	CHAPEL	COAL	0.5	235.5	
143.7	MODESTO		GRAY SHALE	11.5	236.0	
132.2	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	247.5	
126.2	MODESTO		GRAY SHALE	8.0	253.5	
118.2	MODESTO		SANDY SHALE	7.0	261.5	
111.2	MODESTO		BLACK SHALE	2.0	268.5	
109.2	MODESTO		GRAY SHALE	15.0	270.5	
94.2	MODESTO		SANDY SHALE	30.0	285.5	
64.2	CARBONDALE	DANVILLE	COAL	2.0	315.5	
62.2	CARBONDALE		SANDY SHALE	6.0	317.5	
56.2	CARBONDALE		SANDSTONE	7.0	323.5	
49.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	330.5	
45.2	CARBONDALE		SANDSTONE	14.0	334.5	
31.2	CARBONDALE		SANDY SHALE	12.0	348.5	
19.2	CARBONDALE	BRERETON	LIMESTONE	6.3	360.5	
12.9	CARBONDALE	ANNA	BLACK SHALE	0.8	366.8	
12.1	CARBONDALE	HERRIN	COAL	3.8	367.6	
8.3	CARBONDALE		UNDERCLAY	2.5	371.4	
5.8	CARBONDALE		SANDY SHALE	10.0	373.9	
-4.2	CARBONDALE		SANDSTONE	12.1	383.9	
-16.3	CARBONDALE		GRAY SHALE	27.0	396.0	
-43.3	CARBONDALE	BRIAR HILL	COAL	2.0	423.0	
-45.3	CARBONDALE		SANDY SHALE	23.0	425.0	
-68.3	CARBONDALE		SANDSTONE	12.0	448.0	
-80.3	CARBONDALE		SANDY SHALE	33.0	460.0	
-113.3	CARBONDALE		SHALE WITH LIMESTONE	1.0	493.0	
-114.3	CARBONDALE		BLACK SHALE	2.0	494.0	
-116.3	CARBONDALE	ST. DAVID	LIMESTONE	0.3	496.0	
-116.6	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	496.3	

-118.4	CARBONDALE	SPRINGFIELD	COAL	5.9	498.1
-124.3	CARBONDALE		BLACK SHALE	1.5	504.0

MAPID: 05990017000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 300' S line, 75' E line of SE NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.239431 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.773902 **DATE COLLECTED:** 6 / 14 / 1973

SURFACE ELEVATION (FT.): 367.9 **LOGGED (FT.):** 532.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 161GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
367.9	PLEISTOCENE		UNCONSOLIDATED	132.0	0.0	
235.9	MODESTO		BLACK SHALE	2.7	132.0	
233.2	MODESTO	WOMAC	COAL	1.6	134.7	
231.6	MODESTO		GRAY SHALE	6.2	136.3	
225.4	MODESTO		SANDY SHALE	10.5	142.5	
214.9	MODESTO		SANDSTONE	20.0	153.0	
194.9	MODESTO		SANDY SHALE	20.0	173.0	
174.9	MODESTO		GRAY SHALE	14.0	193.0	
160.9	MODESTO		SANDSTONE	8.0	207.0	
152.9	MODESTO		GRAY SHALE	15.0	215.0	
137.9	MODESTO		SANDSTONE	5.0	230.0	
132.9	MODESTO		DARK GRAY SHALE	9.5	235.0	
123.4	MODESTO		BLACK SHALE	1.5	244.5	
121.9	MODESTO	CHAPEL	COAL	0.5	246.0	
121.4	MODESTO		GRAY SHALE	4.0	246.5	
117.4	MODESTO		SANDSTONE	9.5	250.5	
107.9	MODESTO		GRAY SHALE	5.0	260.0	
102.9	MODESTO	WEST FRANKLIN	LIMESTONE	7.0	265.0	
95.9	MODESTO		GRAY SHALE	14.0	272.0	
81.9	MODESTO		CALCAREOUS BLACK SHALE	2.0	286.0	
79.9	MODESTO		DARK GRAY SHALE	8.0	288.0	
71.9	MODESTO		GRAY SHALE	16.0	296.0	
55.9	MODESTO		SANDY SHALE	20.0	312.0	
35.9	MODESTO		DARK GRAY SHALE	9.0	332.0	
26.9	CARBONDALE	DANVILLE	COAL	2.0	341.0	
24.9	CARBONDALE		GRAY SHALE	4.5	343.0	
20.4	CARBONDALE		BLACK SHALE	2.0	347.5	
18.4	CARBONDALE		SANDY SHALE	5.5	349.5	
12.9	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	355.0	
8.4	CARBONDALE		SANDSTONE	15.0	359.5	
-6.6	CARBONDALE		GRAY SHALE	12.5	374.5	
-19.1	CARBONDALE		BLACK SHALE	1.5	387.0	
-20.6	CARBONDALE	BRERETON	LIMESTONE	3.6	388.5	
-24.2	CARBONDALE	ANNA	BLACK SHALE	0.4	392.1	
-24.6	CARBONDALE	HERRIN	COAL	3.8	392.5	
-28.4	CARBONDALE		UNDERCLAY	3.0	396.3	
-31.4	CARBONDALE		SANDSTONE	14.0	399.3	
-45.4	CARBONDALE		SANDY SHALE	32.3	413.3	

-77.7	CARBONDALE	BRIAR HILL	COAL	2.0	445.6
-79.7	CARBONDALE		SANDY SHALE	13.0	447.6
-92.7	CARBONDALE		SANDSTONE	14.0	460.6
-106.7	CARBONDALE		SANDY SHALE	34.4	474.6
-141.1	CARBONDALE		SHALE	2.0	509.0
-143.1	CARBONDALE		SHALE WITH LIMESTONE	1.0	511.0
-144.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	512.0
-145.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	513.0
-148.6	CARBONDALE	SPRINGFIELD	COAL	5.9	516.5
-154.5	CARBONDALE		BLACK SHALE	2.0	522.4
-156.5	CARBONDALE		SANDSTONE	8.0	524.4

MAPID: 05901047000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.260814 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.776181 **DATE COLLECTED:** 5 / 0 / 1949

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2398.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DOERR **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-379.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	750.0	
-427.0	CARBONDALE	SURVANT	COAL	1.3	798.0	
-479.0	CARBONDALE	COLCHESTER	COAL	0.5	850.0	
-545.0	CARBONDALE	DEKOVEN	COAL	3.0	916.0	
-545.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	916.0	
-569.0	CARBONDALE	DAVIS	COAL	4.0	940.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901047000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: RIDGWAY **LONGITUDE:** -88.260814 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.776181 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2398.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-125.0	CARBONDALE	DANVILLE	COAL	-	496.0	
-149.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	520.0	
-159.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	24.0	530.0	
-191.0	CARBONDALE	HERRIN	COAL	-	562.0	
-301.0	CARBONDALE	SPRINGFIELD	COAL	-	672.0	
-319.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE	10.0	690.0	
-377.0	CARBONDALE	HOUCHIN CREEK	COAL	-	748.0	

MAPID: 05901048000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.248875 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.769853 **DATE COLLECTED:** 7 / 0 / 1949
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 1744.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1373.0	BASE OF PENN.		UNCLASSIFIED	-	1744.0	

MAPID: 05901048000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.248875 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.769853 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2308.0 **LOG TYPE:** Electric Log
SOURCE: OIL MANAGEMENT, INC. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-121.0	CARBONDALE	HERRIN	COAL	4.0	492.0	
-175.0	CARBONDALE	BRIAR HILL	COAL	-	546.0	
-253.0	CARBONDALE	SPRINGFIELD	COAL	8.0	624.0	BLACK SHALE ROOF
-309.0	CARBONDALE	HOUCHIN CREEK	COAL	-	680.0	

MAPID: 05901048000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.248875 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.769853 **DATE COLLECTED:** 7 / 0 / 1949

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 2308.0 **LOG TYPE:** Electric Log

SOURCE: OIL MANAGEMENT, INC., DRONE AMOS P **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-311.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	682.0	
-354.0	CARBONDALE	SURVANT	COAL	2.0	725.0	
-413.0	CARBONDALE	COLCHESTER	COAL	0.5	784.0	
-461.0	CARBONDALE	DEKOVEN	COAL	5.0	832.0	
-461.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	832.0	
-486.0	CARBONDALE	DAVIS	COAL	4.0	857.0	
-521.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	892.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-541.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	912.0	

MAPID: 05903417000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 250' S line, 150' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.248316 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.761349 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 560.0 **LOG TYPE:** Drillers Log

SOURCE: SUN OIL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.0	PLEISTOCENE		UNCONSOLIDATED	156.0	0.0	
227.0			SHALE	13.0	156.0	
214.0			DARK SHALE	1.5	169.0	
212.5	MODESTO	CHAPEL	COAL	1.5	170.5	
211.0	MODESTO		SHALE	3.0	172.0	
208.0	MODESTO		SANDSTONE	5.0	175.0	
203.0	MODESTO		SHALE	10.5	180.0	
192.5	MODESTO		LIMESTONE	1.5	190.5	
191.0	MODESTO		SHALE	1.0	192.0	
190.0	MODESTO		LIMESTONE	2.0	193.0	
188.0	MODESTO		SANDY SHALE	3.0	195.0	
185.0	MODESTO		SANDSTONE	12.0	198.0	
173.0	MODESTO		SANDY SHALE	32.0	210.0	
141.0	MODESTO		LIMESTONE	2.5	242.0	
138.5	MODESTO		SANDY SHALE	51.5	244.5	
87.0	MODESTO		SANDSTONE	11.0	296.0	
76.0	MODESTO		SHALE	3.5	307.0	
72.5	MODESTO		LIMESTONE	5.5	310.5	
67.0	MODESTO		SHALE	10.0	316.0	
57.0	MODESTO		BLACK SHALE	7.5	326.0	
49.5	MODESTO		SHALE	31.5	333.5	
18.0	MODESTO		DARK SHALE	5.0	365.0	
13.0	CARBONDALE	DANVILLE	COAL	3.0	370.0	
10.0	CARBONDALE		SHALE	1.5	373.0	
8.5	CARBONDALE		SANDSTONE	7.5	374.5	
1.0	CARBONDALE		SHALE	2.0	382.0	
-1.0	CARBONDALE	ALLENBY	COAL	0.5	384.0	
-1.5	CARBONDALE		SHALE	1.5	384.5	
-3.0	CARBONDALE		LIMESTONE	3.5	386.0	
-6.5	CARBONDALE		LIMESTONE & SHALE	1.0	389.5	
-7.5	CARBONDALE		SHALE	2.5	390.5	
-10.0	CARBONDALE		SANDSTONE	12.5	393.0	
-22.5	CARBONDALE		SHALE	11.5	405.5	
-34.0	CARBONDALE		DARK SHALE	2.5	417.0	
-36.5	CARBONDALE		LIMESTONE	4.5	419.5	
-41.0	CARBONDALE	HERRIN	COAL	4.5	424.0	
-45.5	CARBONDALE		SHALE	2.5	428.5	
-48.0	CARBONDALE		SANDSTONE	4.0	431.0	
-52.0	CARBONDALE		SHALE	39.0	435.0	

-91.0	CARBONDALE	BRIAR HILL	COAL	1.5	474.0
-92.5	CARBONDALE		SHALE	5.5	475.5
-98.0	CARBONDALE		SANDSTONE	14.0	481.0
-112.0	CARBONDALE		SANDSTONE/SHALE	43.0	495.0
-155.0	CARBONDALE		LIMESTONE	0.5	538.0
-155.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	538.5
-159.0	CARBONDALE	SPRINGFIELD	COAL	6.0	542.0
-165.0	CARBONDALE		SHALE	1.0	548.0
-166.0	CARBONDALE		SANDSTONE/LIMESTONE	7.0	549.0
-173.0	CARBONDALE		SHALE	4.0	556.0

MAPID: 05903417000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 250' S line, 150' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.248316 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.761349 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 431.5 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
73.0	MODESTO	PIASA	LIMESTONE	5.5	310.0	
67.5	MODESTO		GRAY SHALE	58.5	315.5	
9.0	CARBONDALE	DANVILLE	COAL	3.0	374.0	
6.0	CARBONDALE		SHALE & SANDSTONE	9.0	377.0	
-3.0	CARBONDALE	ALLENBY	BLACK SHALE	0.5	386.0	
-3.5	CARBONDALE		GRAY SHALE	1.5	386.5	
-5.0	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	4.5	388.0	
-9.5	CARBONDALE	LAWSON	SILTY SHALE	2.5	392.5	
-12.0	CARBONDALE	LAWSON	SANDSTONE	12.5	395.0	
-24.5	CARBONDALE	LAWSON	GRAY SHALE	9.5	407.5	
-34.0	CARBONDALE	LAWSON	SILTY SHALE	2.0	417.0	
-36.0	CARBONDALE	LAWSON	BLACK SHALE	2.5	419.0	
-38.5	CARBONDALE	BRERETON	LIMESTONE	4.5	421.5	
-43.0	CARBONDALE	ANNA	BLACK SHALE	1.0	426.0	
-44.0	CARBONDALE	HERRIN	COAL	4.5	427.0	

MAPID: 05923935000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 6 **QUARTERS/FOOTAGES:** 660' S line, 1' E line of SE NW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.256903 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.770802 **DATE COLLECTED:** 6 / 6 / 1972

SURFACE ELEVATION (FT.): 372.4 **LOGGED (FT.):** 645.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 93-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
372.4	PLEISTOCENE		UNCONSOLIDATED	136.5	0.0	
235.9	MODESTO		GRAY SHALE	14.5	136.5	
221.4	MODESTO		SANDSTONE	23.0	151.0	
198.4	MODESTO		SHALE	4.0	174.0	
194.4	MODESTO		LIMESTONE	1.0	178.0	
193.4	MODESTO		GRAY SHALE	96.0	179.0	
97.4	MODESTO	CHAPEL	COAL	1.0	275.0	
96.4	MODESTO		UNDERCLAY	2.0	276.0	
94.4	MODESTO		SANDSTONE	4.5	278.0	
89.9	MODESTO		GRAY SHALE	16.7	282.5	
73.2	MODESTO		LIMESTONE	4.0	299.2	
69.2	MODESTO		SANDSTONE	23.8	303.2	
45.4	MODESTO		SANDY SHALE	10.0	327.0	
35.4	MODESTO		GRAY SHALE	18.0	337.0	
17.4	MODESTO		SANDSTONE	7.5	355.0	
9.9	MODESTO		LIMESTONE	3.0	362.5	
6.9	MODESTO		SANDSTONE	18.0	365.5	
-11.1	MODESTO		GRAY SHALE	5.5	383.5	
-16.6	MODESTO		COAL	1.0	389.0	
-17.6	MODESTO		UNDERCLAY	7.5	390.0	
-25.1	MODESTO		SANDY SHALE	7.5	397.5	
-32.6	MODESTO		SANDSTONE	6.4	405.0	
-39.0	MODESTO		GRAY SHALE	5.0	411.4	
-44.0	MODESTO	WEST FRANKLIN	LIMESTONE	9.5	416.4	
-53.5	MODESTO		SHALE	9.1	425.9	WITH LIMESTONE
-62.6	MODESTO		GRAY SHALE	5.7	435.0	
-68.3	MODESTO		BLACK SHALE	3.0	440.7	
-71.3	MODESTO		GRAY SHALE	45.0	443.7	
-116.3	CARBONDALE	DANVILLE	COAL	2.0	488.7	
-118.3	CARBONDALE		GRAY SHALE	6.3	490.7	
-124.6	CARBONDALE		SANDSTONE	5.7	497.0	
-130.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	502.7	
-134.3	CARBONDALE		GRAY SHALE	1.3	506.7	
-135.6	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	508.0	
-140.6	CARBONDALE		LIMESTONE	1.7	513.0	
-142.3	CARBONDALE		SANDSTONE	10.0	514.7	
-152.3	CARBONDALE		SANDY SHALE	9.0	524.7	
-161.3	CARBONDALE		GRAY SHALE	2.0	533.7	
-163.3	CARBONDALE	BRERETON	LIMESTONE	4.5	535.7	

-167.8	CARBONDALE	ANNA	BLACK SHALE	0.5	540.2
-168.3	CARBONDALE	HERRIN	COAL	4.0	540.7
-172.3	CARBONDALE		UNDERCLAY	4.8	544.7
-177.1	CARBONDALE		SANDSTONE	28.5	549.5
-205.6	CARBONDALE		GRAY SHALE	13.5	578.0
-219.1	CARBONDALE	BRIAR HILL	COAL	1.5	591.5
-220.6	CARBONDALE		GRAY SHALE	2.0	593.0
-222.6	CARBONDALE		SANDY SHALE	5.5	595.0
-228.1	CARBONDALE		SANDSTONE	0.5	600.5
-228.6	CARBONDALE		SANDY SHALE	31.0	601.0
-259.6	CARBONDALE		GRAY SHALE	2.5	632.0
-262.1	CARBONDALE	ST. DAVID	LIMESTONE	1.3	634.5
-263.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	635.8
-266.6	CARBONDALE		COAL	5.5	639.0
-272.0	CARBONDALE		DARK SHALE	1.4	644.4

MAPID: 05901049000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.258128 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.752395 **DATE COLLECTED:** 8 / 0 / 1942

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, DRONE MATT 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	513.0	
-173.0	CARBONDALE	SURVANT	COAL	3.0	552.0	
-231.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-291.0	CARBONDALE	DEKOVEN	COAL	4.0	670.0	
-291.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	670.0	
-323.0	CARBONDALE	DAVIS	COAL	6.0	702.0	
-361.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	740.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	762.0	

MAPID: 05901049000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.258128 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.752395 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 2939.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
115.0	CARBONDALE	DANVILLE	COAL	-	264.0	
105.0	CARBONDALE	SS BELOW NO. 7	CALCAREOUS SANDSTONE	10.0	274.0	
92.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	287.0	
83.0	CARBONDALE	ANVIL ROCK	SILTSTONE	6.0	296.0	
58.0	CARBONDALE	HERRIN	COAL	4.0	321.0	
9.0	CARBONDALE	BRIAR HILL	COAL	-	370.0	
-3.0	CARBONDALE	CANTON	SILTSTONE	8.0	382.0	
-55.0	CARBONDALE	SPRINGFIELD	COAL	5.0	434.0	BLACK SHALE ROOF
-129.0	CARBONDALE	HOUCHIN CREEK	COAL	-	508.0	

MAPID: 05903603000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 2640' N line, 1650' E line

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.25354 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.753475 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 329.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 91-G-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
121.0	CARBONDALE	DANVILLE	COAL	1.5	269.0	
119.5	CARBONDALE		SHALE & SANDSTONE	18.8	270.5	
100.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	289.3	
94.7	CARBONDALE	LAWSON	GRAY SHALE	1.2	295.3	
93.5	CARBONDALE	LAWSON	SANDSTONE	3.0	296.5	
90.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	10.0	299.5	
80.5	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.0	309.5	
75.5	CARBONDALE	LAWSON	GRAY SHALE	6.5	314.5	
69.0	CARBONDALE	BRERETON	LIMESTONE	3.5	321.0	
65.5	CARBONDALE	ANNA	BLACK SHALE	0.5	324.5	
65.0	CARBONDALE	HERRIN	COAL	4.3	325.0	

MAPID: 05992304000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW SW

QUADRANGLE: RIDGWAY **LONGITUDE:** -88.258672 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753304 **DATE COLLECTED:** 7 / 7 / 1972

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 291.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 97-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	98.0	0.0	
282.0	MODESTO		GRAY SHALE	17.0	98.0	
265.0	CARBONDALE	DANVILLE	COAL	0.8	115.0	
264.2	CARBONDALE		UNDERCLAY	1.5	115.8	
262.7	CARBONDALE		SANDY SHALE	12.7	117.3	
250.0	CARBONDALE		SANDSTONE	3.5	130.0	
246.5	CARBONDALE		SHALE	1.2	133.5	
245.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	134.7	
239.8	CARBONDALE		GRAY SHALE	4.8	140.2	
235.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	145.0	
231.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	149.0	
222.0	CARBONDALE		SHALE	6.5	158.0	
215.5	CARBONDALE	BRERETON	LIMESTONE	3.7	164.5	
211.8	CARBONDALE	ANNA	BLACK SHALE	0.5	168.2	
211.3	CARBONDALE	HERRIN	COAL	4.3	168.7	
207.0	CARBONDALE		UNDERCLAY	3.0	173.0	
204.0	CARBONDALE		SANDSTONE	12.0	176.0	
192.0	CARBONDALE		SANDY SHALE	30.0	188.0	
162.0	CARBONDALE	BRIAR HILL	COAL	2.0	218.0	
160.0	CARBONDALE		SANDY SHALE	5.5	220.0	
154.5	CARBONDALE		SANDSTONE	19.5	225.5	
135.0	CARBONDALE		SANDY SHALE	33.3	245.0	
101.7	CARBONDALE		GRAY SHALE	2.7	278.3	
99.0	CARBONDALE		CALCAREOUS SHALE	1.0	281.0	
98.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	282.0	
97.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	282.5	
95.8	CARBONDALE	SPRINGFIELD	COAL	4.8	284.2	
91.0	CARBONDALE		SHALE	2.3	289.0	

MAPID: 05901135000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.233819 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753415 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 321.9 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 35 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
230.0	MODESTO		GRAY SHALE	9.8	130.0	
220.2			NO RECORD	6.6	139.8	ADJUST FOR MARKER
213.6	CARBONDALE	DANVILLE	COAL	2.3	146.4	
211.2	CARBONDALE		UNDERCLAY	1.0	148.8	
210.2	CARBONDALE		GRAY SHALE	1.2	149.8	
209.1	CARBONDALE		SANDSTONE	2.3	150.9	
206.8	CARBONDALE		SILTSTONE	1.8	153.2	
205.0	CARBONDALE		GRAY SHALE	0.7	155.0	
204.3			NO RECORD	6.3	155.7	ADJUST FOR MARKER
198.0	CARBONDALE	ALLENBY	COAL	0.7	162.0	
197.3	CARBONDALE		UNDERCLAY	0.1	162.7	
197.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	162.8	
192.0	CARBONDALE		SHALE & CLAYSTONE	1.1	168.0	
190.9	CARBONDALE		GRAY SHALE	0.6	169.1	
190.3	CARBONDALE	ANVIL ROCK	SILTSTONE	1.9	169.7	
188.4	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	171.6	
184.7	CARBONDALE	ANVIL ROCK	SILTSTONE	2.6	175.3	
182.1	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	177.9	
178.3	CARBONDALE		GRAY SHALE	11.8	181.7	
166.5	CARBONDALE	BRERETON	LIMESTONE	4.9	193.5	
161.6	CARBONDALE	ANNA	BLACK SHALE	1.2	198.4	
160.5	CARBONDALE	HERRIN	COAL	3.2	199.5	
157.3	CARBONDALE	HERRIN	SHALE	0.2	202.7	BLUE BAND
157.1	CARBONDALE	HERRIN	COAL	1.1	202.9	
156.0	CARBONDALE		UNDERCLAY	1.0	204.0	
155.0	CARBONDALE		SHALE & CLAYSTONE	1.3	205.0	GREENISH-GRAY
153.7	CARBONDALE		SILTSTONE	4.5	206.3	
149.2	CARBONDALE		SANDSTONE	3.1	210.8	
146.1	CARBONDALE		GRAY SHALE	11.1	213.9	
135.0	CARBONDALE		SANDSTONE	2.0	225.0	
133.0	CARBONDALE		SHALE	11.8	227.0	GREENISH-GRAY
121.2	CARBONDALE		SILTSTONE	5.8	238.8	
115.4	CARBONDALE		GRAY SHALE	7.6	244.6	
107.8	CARBONDALE	BRIAR HILL	COAL	2.1	252.2	
105.7	CARBONDALE		GRAY SHALE	11.7	254.3	
94.1	CARBONDALE		SANDY SHALE	43.1	265.9	
51.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	309.0	
47.9	CARBONDALE	SPRINGFIELD	COAL	4.8	312.1	

43.1	CARBONDALE	SANDSTONE	5.0	316.9

MAPID: 05901135000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.233819 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.753415 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 204.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 35 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
212.9	CARBONDALE	DANVILLE	COAL	2.3	147.1	
210.5	CARBONDALE		ROCK	13.3	149.5	
197.3	CARBONDALE	ALLENBY	COAL	0.7	162.7	
196.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	163.4	
191.4	CARBONDALE	LAWSON	CLAYSTONE	1.7	168.6	
189.7	CARBONDALE	LAWSON	SILTSTONE	8.3	170.3	
181.5	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	3.8	178.5	
177.7	CARBONDALE	LAWSON	SILTY SHALE	9.8	182.3	
167.9	CARBONDALE	JAMESTOWN	BLACK SHALE	0.6	192.1	
167.3	CARBONDALE		GRAY SHALE	1.4	192.7	
165.9	CARBONDALE	BRERETON	LIMESTONE	4.9	194.1	
161.0	CARBONDALE	ANNA	BLACK SHALE	1.0	199.0	
160.0	CARBONDALE	HERRIN	COAL	4.4	200.0	

MAPID: 05901136000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.247802 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753304 **DATE COLLECTED:** 7 / 22 / 1952

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 436.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 36 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0	PLEISTOCENE		UNCONSOLIDATED	160.0	0.0	
225.0	MODESTO		GRAY SHALE	14.6	160.0	
210.4	MODESTO		BLACK SHALE	0.3	174.6	
210.1	MODESTO		COAL	0.7	174.9	
209.4	MODESTO		UNDERCLAY	4.2	175.6	
205.2	MODESTO		NO RECORD	0.3	179.8	ADJUST FOR MARKER
205.0	MODESTO		SANDSTONE	1.5	180.0	
203.5	MODESTO		GRAY SHALE	8.3	181.5	
195.2	MODESTO		SANDSTONE	1.5	189.8	
193.7	MODESTO		GRAY SHALE	1.5	191.3	
192.2	MODESTO		SANDSTONE	6.8	192.8	
185.3	MODESTO		SHALE	10.7	199.7	
174.7	MODESTO	WEST FRANKLIN	LIMESTONE	1.4	210.3	
173.2	MODESTO		NO RECORD	1.3	211.8	ADJUST FOR MARKER
172.0	MODESTO	WEST FRANKLIN	LIMESTONE	0.3	213.0	
171.7	MODESTO		GRAY SHALE	5.2	213.3	
166.5	MODESTO	WEST FRANKLIN	LIMESTONE	1.4	218.5	
165.1	MODESTO		GRAY SHALE	42.9	219.9	
122.2	MODESTO		BONE COAL	0.2	262.8	
122.0	MODESTO		UNDERCLAY	1.9	263.0	
120.1	MODESTO		SANDSTONE	7.0	264.9	
113.1	MODESTO		GRAY SHALE	3.4	271.9	
109.7	MODESTO		BLACK SHALE	0.4	275.3	
109.2	CARBONDALE	DANVILLE	COAL	2.3	275.8	
107.0	CARBONDALE		BLACK SHALE	1.5	278.0	
105.5	CARBONDALE		NO RECORD	1.5	279.5	ADJUST FOR MARKER
104.0	CARBONDALE		UNDERCLAY	0.6	281.0	
103.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	281.6	
98.6	CARBONDALE		GRAY SHALE	5.3	286.4	
93.2	CARBONDALE		SANDSTONE	9.9	291.8	
83.3	CARBONDALE		GRAY SHALE	11.8	301.7	
71.5	CARBONDALE	BRERETON	LIMESTONE	4.7	313.5	
66.9	CARBONDALE		BLACK SHALE	0.4	318.1	
66.4	CARBONDALE	HERRIN	COAL	4.3	318.6	
62.1	CARBONDALE		UNDERCLAY	3.8	322.9	
58.3	CARBONDALE		SILTSTONE	13.7	326.7	
44.7	CARBONDALE		GRAY SHALE	24.8	340.3	
19.8	CARBONDALE		BONE COAL	0.3	365.2	
19.6	CARBONDALE		BLACK SHALE	0.3	365.4	

19.4	CARBONDALE		SILTSTONE	3.8	365.6
15.6	CARBONDALE	BRIAR HILL	COAL	0.8	369.4
14.8	CARBONDALE		UNDERCLAY	2.6	370.2
12.2	CARBONDALE		GRAY SHALE	49.2	372.8
-37.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	422.0
-38.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	423.0
-41.0	CARBONDALE	SPRINGFIELD	COAL	4.5	426.0
-45.5	CARBONDALE		UNDERCLAY	4.0	430.5
-49.5	CARBONDALE		SANDSTONE	1.5	434.5

MAPID: 05924029000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' N line, 950' W line of SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244504 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.748809 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1530.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1172.0	BASE OF PENN.		UNCLASSIFIED	-	1530.0	

MAPID: 05990302000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229178 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.746638 **DATE COLLECTED:** 5 / 4 / 1949

SURFACE ELEVATION (FT.): 349.2 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE E409 **WELL TYPE:** Coal Test

COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
349.2	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
337.2	PLEISTOCENE		SANDY CLAY	18.0	12.0	
319.2	PLEISTOCENE		SAND	34.0	30.0	

MAPID: 05990304000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NE NE
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.233892 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.757146 **DATE COLLECTED:** 5 / 3 / 1949
SURFACE ELEVATION (FT.): 374.7 **LOGGED (FT.):** 102.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE E607 **WELL TYPE:** Coal Test
COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.7	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
354.7	PLEISTOCENE		CLAY	40.0	20.0	
314.7	PLEISTOCENE		SAND	42.0	60.0	

MAPID: 05900297000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.221195 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.74764 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:**
SOURCE: DELTA DRC, STINSON W 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
228.0	CARBONDALE	HERRIN	COAL	-	130.0	
118.0	CARBONDALE	SPRINGFIELD	COAL	5.0	240.0	DEPTH UNCERTAIN

MAPID: 05901050000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214388 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.749515 **DATE COLLECTED:** 5 / 0 / 1950
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1879.0 **LOG TYPE:** Electric Log
SOURCE: ANGLE, CLARENCE, PEEPLES MORTON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
33.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	327.0	
-15.0	CARBONDALE	SURVANT	COAL	1.3	375.0	
-72.0	CARBONDALE	COLCHESTER	COAL	0.5	432.0	
-128.0	CARBONDALE	DEKOVEN	COAL	3.0	488.0	
-128.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	488.0	
-160.0	CARBONDALE	DAVIS	COAL	4.0	520.0	
-192.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	552.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-220.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	580.0	
-244.0	TRADEWATER	MT. RORAH	COAL	2.0	604.0	

MAPID: 05901050000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214388 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.749515 **DATE COLLECTED:** 5 / 0 / 1950

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1424.0 **LOG TYPE:** Electric Log

SOURCE: ANGLE, CLARENCE **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-74.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	434.0	
-160.0	SPOON	DAVIS	UNCLASSIFIED	-	520.0	
-1064.0	BASE OF PENN.		UNCLASSIFIED	-	1424.0	

MAPID: 05901053000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221253 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.760039 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1932.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
176.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	184.0	
170.0	CARBONDALE	ANVIL ROCK	SILTSTONE	10.0	190.0	
141.0	CARBONDALE	HERRIN	COAL	3.0	219.0	
94.0	CARBONDALE	BRIAR HILL	COAL	-	266.0	
78.0	CARBONDALE	CANTON	SILTSTONE/SANDSTONE	16.0	282.0	
18.0	CARBONDALE	SPRINGFIELD	COAL	4.0	342.0	BLACK SHALE ROOF
0.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	38.0	360.0	
-46.0	CARBONDALE	HOUCHIN CREEK	COAL	-	406.0	

MAPID: 05901053000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221253 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760039 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 222.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
202.0	CARBONDALE	DANVILLE	COAL	2.0	158.0	
200.0	CARBONDALE		SHALE & SANDSTONE	20.0	160.0	
180.0	CARBONDALE	ALLENBY	BLACK SHALE	0.5	180.0	
179.5	CARBONDALE		CLAYSTONE & SHALE	3.5	180.5	
176.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	184.0	
172.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	27.0	188.0	
145.0	CARBONDALE	BRERETON	LIMESTONE	3.0	215.0	
142.0	CARBONDALE	ANNA	BLACK SHALE	2.0	218.0	
140.0	CARBONDALE	HERRIN	COAL	2.0	220.0	

MAPID: 05901053000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.221253 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.760039 **DATE COLLECTED:** 12 / 0 / 1949

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1932.0 **LOG TYPE:** Electric Log

SOURCE: ENGLE, GEORGE S., STINSON R V **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-48.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	408.0	
-102.0	CARBONDALE	SURVANT	COAL	2.0	462.0	
-162.0	CARBONDALE	COLCHESTER	COAL	0.5	522.0	
-208.0	CARBONDALE	DEKOVEN	COAL	3.5	568.0	
-208.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	568.0	
-238.0	CARBONDALE	DAVIS	COAL	6.0	598.0	
-272.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	632.0	23% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-296.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	656.0	
-327.0	TRADEWATER	MT. RORAH	COAL	2.0	687.0	

MAPID: 05901115000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.211016 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.750482 **DATE COLLECTED:** 1 / 0 / 1952

SURFACE ELEVATION (FT.): 361.3 **LOGGED (FT.):** 266.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 15 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.3	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
231.3	CARBONDALE	BRERETON	LIMESTONE	1.1	130.0	
230.2	CARBONDALE	ANNA	BLACK SHALE	0.6	131.1	
229.6	CARBONDALE		NO RECORD	4.3	131.7	ADJUST FOR MARKER
225.3	CARBONDALE	ANNA	BLACK SHALE	1.7	136.0	
223.6	CARBONDALE		NO RECORD	0.3	137.7	ADJUST FOR MARKER
223.3	CARBONDALE	HERRIN	COAL	2.3	138.0	
221.0	CARBONDALE		UNDERCLAY	0.9	140.3	
220.1	CARBONDALE		NO RECORD	2.8	141.2	ADJUST FOR MARKER
217.3	CARBONDALE		SILTY SHALE	4.0	144.0	
213.3	CARBONDALE		SANDSTONE	2.1	148.0	
211.2	CARBONDALE		GRAY SHALE	31.9	150.1	
179.3	CARBONDALE		BLACK SHALE	4.9	182.0	
174.4	CARBONDALE	BRIAR HILL	COAL	2.4	186.9	
172.0	CARBONDALE		SHALE	0.6	189.3	GREEN-GRAY
171.4	CARBONDALE		SILTY SHALE	4.8	189.9	SOME COAL BANDS UPPER
166.6	CARBONDALE		SANDSTONE	6.3	194.7	
160.3	CARBONDALE		GRAY SHALE	1.2	201.0	
159.1	CARBONDALE		SANDSTONE	8.8	202.2	
150.3	CARBONDALE		GRAY SHALE	45.2	211.0	SILTY UPPER
105.1	CARBONDALE	ST. DAVID	LIMESTONE	0.9	256.2	
104.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	257.1	
101.4	CARBONDALE	SPRINGFIELD	COAL	5.3	259.9	
96.0	CARBONDALE		GRAY SHALE	0.8	265.3	

MAPID: 05901138000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220077 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74855 **DATE COLLECTED:** 7 / 30 / 1952

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 38 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.0	PLEISTOCENE		UNCONSOLIDATED	124.0	0.0	
238.0	CARBONDALE		GRAY SHALE	1.3	124.0	
236.7	CARBONDALE	BRERETON	LIMESTONE	2.1	125.3	
234.7	CARBONDALE	ANNA	BLACK SHALE	0.7	127.3	
234.0	CARBONDALE	HERRIN	COAL	4.7	128.0	
229.3	CARBONDALE		UNDERCLAY	2.4	132.7	
226.9	CARBONDALE		NO RECORD	8.4	135.1	ADJUST FOR MARKER
218.5	CARBONDALE		GRAY SHALE	3.8	143.5	
214.7	CARBONDALE		SANDSTONE	8.5	147.3	SHALE BAND
206.2	CARBONDALE		GRAY SHALE	22.3	155.8	
183.8	CARBONDALE	BRIAR HILL	COAL	2.3	178.2	
181.6	CARBONDALE		NO RECORD	1.3	180.4	ADJUST FOR MARKER
180.3	CARBONDALE		UNDERCLAY	1.8	181.7	
178.6	CARBONDALE		GRAY SHALE	4.8	183.4	
173.7	CARBONDALE		SANDSTONE	18.8	188.3	
154.9	CARBONDALE		BLACK SHALE	0.3	207.1	
154.6	CARBONDALE		SILTSTONE	9.6	207.4	
145.0	CARBONDALE		GRAY SHALE	24.7	217.0	
120.3	CARBONDALE	ST. DAVID	LIMESTONE	0.5	241.7	
119.8	CARBONDALE	TURNER MINE	SHALE	3.2	242.2	GREEN-GRAY-BLACK
116.7	CARBONDALE	SPRINGFIELD	COAL	5.2	245.3	
111.5	CARBONDALE		UNDERCLAY	2.3	250.5	
109.2	CARBONDALE		SILTSTONE	2.2	252.8	

MAPID: 05902835000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223494 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.74935 **DATE COLLECTED:** 12 / 0 / 1962

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 2660.0 **LOG TYPE:** Electric Log

SOURCE: BANE, T. M., STINSON HEIRS 1-A **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
27.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	325.0	
-18.0	CARBONDALE	SURVANT	COAL	1.2	370.0	
-78.0	CARBONDALE	COLCHESTER	COAL	0.5	430.0	
-133.0	CARBONDALE	DEKOVEN	COAL	3.0	485.0	
-133.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	485.0	
-160.0	CARBONDALE	DAVIS	COAL	3.8	512.0	
-194.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	546.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-223.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	575.0	
-248.0	TRADEWATER	MT. RORAH	COAL	1.2	600.0	

MAPID: 05924157000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' N line, 1' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215533 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.749495 **DATE COLLECTED:** 12 / 15 / 1981

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 275.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 288-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	132.0	0.0	
-	CARBONDALE	ANNA	BLACK SHALE	2.0	132.0	
-	CARBONDALE	HERRIN	COAL	3.8	134.0	
-	CARBONDALE		UNDERCLAY	3.0	137.8	
-	CARBONDALE		SILTY CLAYSTONE	7.0	140.8	
-	CARBONDALE		SANDY SHALE	28.0	147.8	
-	CARBONDALE		GRAY SHALE	7.7	175.8	
-	CARBONDALE	BRIAR HILL	COAL	2.1	183.5	
-	CARBONDALE		SANDY SHALE	1.9	185.6	
-	CARBONDALE		SANDY SHALE	4.4	187.5	WITH SANDSTONE
-	CARBONDALE		SANDSTONE	15.7	191.8	WITH SANDSTONE
-	CARBONDALE		SANDY SHALE	38.0	207.5	WITH SANDSTONE
-	CARBONDALE		GRAY SHALE	6.0	245.5	
-	CARBONDALE		SHALE	1.0	251.5	WITH LIMESTONE
-	CARBONDALE	ST. DAVID	LIMESTONE	0.3	252.5	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	252.8	
-	CARBONDALE	SPRINGFIELD	COAL	5.9	255.9	
-	CARBONDALE		SANDY SHALE	13.5	261.8	

MAPID: 05990303000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 0' S line, 0' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.220177 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.753873 **DATE COLLECTED:** 5 / 9 / 1949

SURFACE ELEVATION (FT.): 348.7 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE E513 **WELL TYPE:** Coal Test

COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.7	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
343.7	PLEISTOCENE		SAND	65.0	5.0	

MAPID: 05901103000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.201939 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747083 **DATE COLLECTED:** 9 / 19 / 1951

SURFACE ELEVATION (FT.): 360.9 **LOGGED (FT.):** 327.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.9	PLEISTOCENE		UNCONSOLIDATED	141.0	0.0	
219.9	MODESTO		ROCK	5.4	141.0	BROKEN CORE MOSTLY SHALE
214.5	MODESTO		BLACK SHALE	4.6	146.4	
209.9	CARBONDALE	DANVILLE	COAL	1.7	151.0	
208.1	CARBONDALE		SHALE & CLAYSTONE	1.2	152.8	
207.0	CARBONDALE		SILTSTONE	2.1	153.9	
204.9	CARBONDALE		SANDSTONE	4.4	156.0	
200.5	CARBONDALE		GRAY SHALE	5.9	160.4	
194.6	CARBONDALE		BLACK SHALE	0.5	166.3	COAL STREAKS AT BASE
194.1	CARBONDALE		SILTSTONE	2.2	166.8	
191.9	CARBONDALE		GRAY SHALE	1.3	169.0	
190.6	CARBONDALE		SHALE & CLAYSTONE	2.5	170.3	
188.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	172.8	
182.4	CARBONDALE		SHALE & CLAYSTONE	0.8	178.5	
181.6	CARBONDALE	ANVIL ROCK	SILTSTONE	1.5	179.3	
180.1	CARBONDALE	ANVIL ROCK	SANDSTONE	11.4	180.8	
168.7	CARBONDALE		GRAY SHALE	12.0	192.2	
156.7	CARBONDALE	BRERETON	LIMESTONE	3.8	204.2	
152.9	CARBONDALE	ANNA	BLACK SHALE	3.0	208.0	
149.9	CARBONDALE	HERRIN	COAL	2.3	211.0	
147.6	CARBONDALE	HERRIN	SHALE	0.1	213.3	
147.5	CARBONDALE	HERRIN	COAL	1.2	213.4	
146.3	CARBONDALE		UNDERCLAY	1.4	214.6	
144.9	CARBONDALE		SHALE & CLAYSTONE	1.2	216.0	
143.7	CARBONDALE		SILTSTONE	11.9	217.2	
131.8	CARBONDALE		GRAY SHALE	23.8	229.1	
108.1	CARBONDALE		BLACK SHALE	2.0	252.8	
106.1	CARBONDALE	BRIAR HILL	COAL	1.4	254.8	
104.6	CARBONDALE		SHALE	1.0	256.3	GREENISH-GRAY
103.6	CARBONDALE		SANDSTONE	0.9	257.3	
102.7	CARBONDALE		GRAY SHALE	0.9	258.2	
101.8	CARBONDALE		SILTSTONE	3.9	259.1	
97.9	CARBONDALE		SANDSTONE	2.3	263.0	
95.6	CARBONDALE		SILTSTONE	1.8	265.3	
93.8	CARBONDALE		SANDSTONE	2.8	267.1	
91.1	CARBONDALE		SILTSTONE	5.5	269.8	
85.6	CARBONDALE		GRAY SHALE	2.3	275.3	
83.3	CARBONDALE		SILTSTONE	2.0	277.6	
81.3	CARBONDALE		GRAY SHALE	36.4	279.6	

44.9	CARBONDALE	ST. DAVID	LIMESTONE	0.8	316.0
44.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	316.8
40.7	CARBONDALE	SPRINGFIELD	COAL	4.8	320.2
35.9	CARBONDALE		SANDSTONE	2.0	325.0

MAPID: 05901103000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.201939 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.747083 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 214.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 3 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
207.4	CARBONDALE	DANVILLE	COAL	1.6	153.6	
205.8	CARBONDALE		ROCK	13.6	155.2	
192.2	CARBONDALE	ALLENBY	BONE COAL	0.5	168.8	
191.7	CARBONDALE		SHALE & SILTSTONE	6.0	169.3	
185.7	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	5.7	175.3	
180.1	CARBONDALE	LAWSON	CLAYSTONE	0.8	180.9	
179.3	CARBONDALE	LAWSON	SILTSTONE	1.5	181.7	
177.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	8.4	183.2	
169.4	CARBONDALE	LAWSON	SILTSTONE	2.7	191.6	
166.7	CARBONDALE	LAWSON	GRAY SHALE	9.3	194.3	
157.4	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.8	203.6	
153.6	CARBONDALE	ANNA	BLACK SHALE	3.6	207.4	
150.0	CARBONDALE	HERRIN	COAL	3.4	211.0	

MAPID: 05901642000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.203168 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.760578 **DATE COLLECTED:** 11 / 0 / 1954

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 2737.0 **LOG TYPE:** Electric Log

SOURCE: FARRAR, FLETCHER F., RISTER ALFRED **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-49.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	408.0	
-94.0	CARBONDALE	SURVANT	COAL	1.6	453.0	
-146.0	CARBONDALE	COLCHESTER	COAL	0.5	505.0	
-218.0	CARBONDALE	DEKOVEN	COAL	3.0	577.0	
-218.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	577.0	
-246.0	CARBONDALE	DAVIS	COAL	4.0	605.0	
-278.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	637.0	52% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-301.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	660.0	
-326.0	TRADEWATER	MT. RORAH	COAL	1.2	685.0	

MAPID: 05901939000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209893 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.751422 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2818.0 **LOG TYPE:** Electric Log

SOURCE: SKILES OIL CORP, PEEPLES J M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
22.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	335.0	
-33.0	CARBONDALE	SURVANT	COAL	2.0	390.0	
-93.0	CARBONDALE	COLCHESTER	COAL	0.5	450.0	
-141.0	CARBONDALE	DEKOVEN	COAL	2.0	498.0	
-141.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	498.0	
-173.0	CARBONDALE	DAVIS	COAL	5.0	530.0	
-213.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	570.0	27% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-235.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	592.0	
-257.0	TRADEWATER	MT. RORAH	COAL	1.0	614.0	

MAPID: 05901939000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.209893 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.751422 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 1430.0 **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
-1073.0	BASE OF PENN.		UNCLASSIFIED	-	1430.0	

MAPID: 05903637000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 1' E line of SW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.20643 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.74968 **DATE COLLECTED:** 2 / 6 / 1968
SURFACE ELEVATION (FT.): 360.2 **LOGGED (FT.):** 265.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. G-26 **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.2	PLEISTOCENE		UNCONSOLIDATED	138.0	0.0	
222.2	CARBONDALE	HERRIN	COAL	3.5	138.0	
218.7	CARBONDALE		UNDERCLAY	4.5	141.5	
214.2	CARBONDALE		SANDSTONE	14.0	146.0	
200.2	CARBONDALE		GRAY SHALE	22.8	160.0	
177.4	CARBONDALE	BRIAR HILL	COAL	2.1	182.8	
175.3	CARBONDALE		UNDERCLAY	0.9	184.9	
174.4	CARBONDALE		SANDSTONE	3.2	185.8	
171.2	CARBONDALE		SANDY SHALE	15.0	189.0	
156.2	CARBONDALE		GRAY SHALE	21.0	204.0	
135.2	CARBONDALE		SANDY SHALE	18.0	225.0	
117.2	CARBONDALE		GRAY SHALE	8.9	243.0	
108.3	CARBONDALE		SHALE	0.5	251.9	SOFT
107.8	CARBONDALE		GRAY SHALE	0.4	252.4	
107.4	CARBONDALE		SHALE	0.3	252.8	SOFT
107.1	CARBONDALE		SHALE	0.7	253.1	WITH LIMESTONE
106.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	253.8	
103.2	CARBONDALE	SPRINGFIELD	COAL	5.7	257.0	
97.5	CARBONDALE		GRAY SHALE	1.9	262.7	
95.6	CARBONDALE		UNDERCLAY	0.6	264.6	

MAPID: 05903638000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 1' E line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.192752 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.752718 **DATE COLLECTED:** 1 / 3 / 1969

SURFACE ELEVATION (FT.): 359.8 **LOGGED (FT.):** 350.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 61-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.8	PLEISTOCENE		UNCONSOLIDATED	132.8	0.0	
227.0			GRAY SHALE	33.9	132.8	
193.1			SANDSTONE	12.2	166.7	
180.9	CARBONDALE		SANDY SHALE	5.7	178.9	
175.2	CARBONDALE		GRAY SHALE	2.9	184.6	
172.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	187.5	
166.2	CARBONDALE		GRAY SHALE	2.3	193.6	
163.9	CARBONDALE	ANVIL ROCK	SANDSTONE	10.2	195.9	
153.7	CARBONDALE		GRAY SHALE	10.3	206.1	
143.4	CARBONDALE	ANNA	BLACK SHALE	3.4	216.4	
140.0	CARBONDALE		GRAY SHALE	5.6	219.8	
134.4	CARBONDALE	HERRIN	COAL	2.3	225.4	
132.1	CARBONDALE	HERRIN	SHALE	0.1	227.7	
132.0	CARBONDALE	HERRIN	COAL	0.9	227.8	
131.1	CARBONDALE		UNDERCLAY	0.9	228.7	
130.2	CARBONDALE		SANDSTONE	7.3	229.6	
122.9	CARBONDALE		SANDY SHALE	26.0	236.9	
96.9	CARBONDALE		GRAY SHALE	8.3	262.9	
88.6	CARBONDALE	BRIAR HILL	COAL	1.8	271.2	
86.8	CARBONDALE		SANDY SHALE	36.8	273.0	
50.0	CARBONDALE		GRAY SHALE	30.0	309.8	
20.0	CARBONDALE		SHALE	0.5	339.8	FOSSILIFEROUS
19.6	CARBONDALE	ST. DAVID	LIMESTONE	0.2	340.2	
19.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	340.4	
16.5	CARBONDALE	SPRINGFIELD	COAL	5.2	343.3	
11.3	CARBONDALE		GRAY SHALE	0.4	348.5	
10.9	CARBONDALE		SANDY SHALE	2.0	348.9	

MAPID: 05903639000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.201847 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747996 **DATE COLLECTED:** 9 / 30 / 1971

SURFACE ELEVATION (FT.): 354.7 **LOGGED (FT.):** 335.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 77-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.7	PLEISTOCENE		UNCONSOLIDATED	134.0	0.0	
220.7	MODESTO		GRAY SHALE	18.0	134.0	
202.7	CARBONDALE	DANVILLE	COAL	1.9	152.0	
200.8	CARBONDALE		UNDERCLAY	0.4	153.9	
200.4	CARBONDALE		SANDY SHALE	4.3	154.3	
196.1	CARBONDALE		SANDSTONE	6.4	158.6	
189.7	CARBONDALE		GRAY SHALE	3.3	165.0	
186.4	CARBONDALE		SHALE	2.6	168.3	
183.8	CARBONDALE		SANDSTONE	0.4	170.9	
183.4	CARBONDALE		GRAY SHALE	5.0	171.3	
178.4	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	176.3	
172.9	CARBONDALE	ANVIL ROCK	SHALE	0.2	181.8	
172.7	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	182.0	
164.7	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	3.0	190.0	
161.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.2	193.0	
159.5	CARBONDALE		GRAY SHALE	8.5	195.2	
151.0	CARBONDALE	BRERETON	LIMESTONE	3.5	203.7	
147.5	CARBONDALE	ANNA	BLACK SHALE	3.6	207.2	
143.9	CARBONDALE	HERRIN	COAL	3.6	210.8	
140.3	CARBONDALE		UNDERCLAY	2.9	214.4	
137.4	CARBONDALE		SHALE	1.0	217.3	
136.4	CARBONDALE		SANDSTONE	9.0	218.3	
127.4	CARBONDALE		CALCAREOUS SANDSTONE	0.5	227.3	
126.9	CARBONDALE		SHALY SANDSTONE	3.6	227.8	
123.3	CARBONDALE		GRAY SHALE	5.6	231.4	FOSSILIFEROUS
117.7	CARBONDALE		GRAY SHALE	20.3	237.0	
97.4	CARBONDALE	BRIAR HILL	COAL	1.7	257.3	
95.7	CARBONDALE		UNDERCLAY	0.2	259.0	
95.5	CARBONDALE		GRAY SHALE	0.4	259.2	
95.1	CARBONDALE		SANDSTONE	2.4	259.6	
92.7	CARBONDALE		SANDY SHALE	1.3	262.0	
91.4	CARBONDALE		GRAY SHALE	2.6	263.3	
88.8	CARBONDALE		SANDSTONE	9.0	265.9	
79.8	CARBONDALE		SHALE	1.9	274.9	
77.9	CARBONDALE		SANDSTONE	4.4	276.8	
73.5	CARBONDALE		SHALY SANDSTONE	11.5	281.2	
62.0	CARBONDALE		SANDY SHALE	17.6	292.7	
44.4	CARBONDALE		GRAY SHALE	9.7	310.3	

34.7	CARBONDALE	ST. DAVID	LIMESTONE	0.9	320.0
33.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	320.9
31.4	CARBONDALE	SPRINGFIELD	COAL	5.0	323.3
26.4	CARBONDALE		SANDSTONE	1.2	328.3
25.2	CARBONDALE		SANDY SHALE	0.4	329.5
24.8	CARBONDALE		SANDSTONE	2.8	329.9
22.0	CARBONDALE		SANDY SHALE	2.5	332.7

MAPID: 05903640000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19847 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.751682 **DATE COLLECTED:** 10 / 13 / 1971

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 368.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 78GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	149.5	0.0	
210.5	MODESTO		SHALE	26.5	149.5	
184.0	CARBONDALE	DANVILLE	COAL	2.0	176.0	
182.0	CARBONDALE		GRAY SHALE	2.5	178.0	
179.5	CARBONDALE		SANDSTONE	11.0	180.5	
168.5	CARBONDALE		DARK SHALE	1.0	191.5	
167.5	CARBONDALE		GRAY SHALE	1.0	192.5	
166.5	CARBONDALE		SANDSTONE	1.0	193.5	
165.5	CARBONDALE		GRAY SHALE	5.5	194.5	
160.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	200.0	
155.0	CARBONDALE		SHALE	2.5	205.0	
152.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.5	207.5	
131.0	CARBONDALE	BRERETON	LIMESTONE	1.5	229.0	
129.5	CARBONDALE	ANNA	BLACK SHALE	3.5	230.5	
126.0	CARBONDALE		SHALE	1.5	234.0	
124.5	CARBONDALE		LIMESTONE	0.4	235.5	
124.1	CARBONDALE	HERRIN	COAL	3.5	235.9	
120.6	CARBONDALE		UNDERCLAY	3.6	239.4	
117.0	CARBONDALE		LIMESTONE	2.5	243.0	
114.5	CARBONDALE		SANDSTONE	10.0	245.5	
104.5	CARBONDALE		GRAY SHALE	26.5	255.5	
78.0	CARBONDALE	BRIAR HILL	COAL	2.0	282.0	
76.0	CARBONDALE		SANDSTONE	3.5	284.0	
72.5	CARBONDALE		GRAY SHALE	4.0	287.5	
68.5	CARBONDALE		SANDSTONE	14.5	291.5	
54.0	CARBONDALE		SHALY SANDSTONE	8.0	306.0	
46.0	CARBONDALE		SANDY SHALE	20.0	314.0	
26.0	CARBONDALE		GRAY SHALE	23.6	334.0	
2.4	CARBONDALE	ST. DAVID	LIMESTONE	1.1	357.6	
1.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	358.7	
-2.0	CARBONDALE	SPRINGFIELD	COAL	5.5	362.0	
-7.5	CARBONDALE		DARK SHALE	0.6	367.5	

MAPID: 05903641000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.204151 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748823 **DATE COLLECTED:** 3 / 6 / 1973

SURFACE ELEVATION (FT.): 361.3 **LOGGED (FT.):** 272.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 121-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.3	PLEISTOCENE		UNCONSOLIDATED	145.0	0.0	
216.3	CARBONDALE		GRAY SHALE	40.5	145.0	
175.8	CARBONDALE	BRIAR HILL	COAL	1.7	185.5	
174.1	CARBONDALE		SANDY SHALE	8.3	187.2	
165.8	CARBONDALE		SANDSTONE	10.0	195.5	
155.8	CARBONDALE		SANDY SHALE	44.0	205.5	
111.8	CARBONDALE		GRAY SHALE	4.0	249.5	
107.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.2	253.5	
106.6	CARBONDALE	TURNER MINE	LIMESTONE	0.3	254.7	
106.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	255.0	
104.5	CARBONDALE	SPRINGFIELD	COAL	5.5	256.8	
99.0	CARBONDALE		UNDERCLAY	1.9	262.3	
97.1	CARBONDALE		GRAY SHALE	4.0	264.2	
93.1	CARBONDALE		LIMESTONE	4.0	268.2	

MAPID: 05903642000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.203041 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.751579 **DATE COLLECTED:** 3 / 22 / 1973

SURFACE ELEVATION (FT.): 354.7 **LOGGED (FT.):** 273.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 125-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.7	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
224.7	CARBONDALE		GRAY SHALE	3.5	130.0	
221.2	CARBONDALE	BRERETON	LIMESTONE	5.0	133.5	
216.2	CARBONDALE	ANNA	BLACK SHALE	1.8	138.5	
214.4	CARBONDALE	HERRIN	COAL	3.7	140.3	
210.7	CARBONDALE		UNDERCLAY	2.5	144.0	
208.2	CARBONDALE		GRAY SHALE	4.5	146.5	
203.7	CARBONDALE		LIMESTONE	1.0	151.0	
202.7	CARBONDALE		SANDY SHALE	30.0	152.0	
172.7	CARBONDALE		GRAY SHALE	10.5	182.0	
162.2	CARBONDALE	BRIAR HILL	COAL	1.9	192.5	
160.3	CARBONDALE		GRAY SHALE	2.0	194.4	
158.3	CARBONDALE		SANDSTONE	12.0	196.4	
146.3	CARBONDALE		SANDY SHALE	40.6	208.4	
105.7	CARBONDALE		GRAY SHALE	12.0	249.0	
93.7	CARBONDALE		BLACK SHALE	1.0	261.0	
92.7	CARBONDALE		LIMESTONE	1.0	262.0	
91.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	263.0	
89.7	CARBONDALE	SPRINGFIELD	COAL	5.3	265.0	
84.4	CARBONDALE		UNDERCLAY	3.0	270.3	

MAPID: 05903643000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 330' E line of SE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.203029 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.750665 **DATE COLLECTED:** 3 / 28 / 1973

SURFACE ELEVATION (FT.): 352.7 **LOGGED (FT.):** 271.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 127G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.7	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
222.7	CARBONDALE		GRAY SHALE	8.0	130.0	
214.7	CARBONDALE	BRERETON	LIMESTONE	1.0	138.0	
213.7	CARBONDALE	ANNA	BLACK SHALE	7.0	139.0	
206.7	CARBONDALE		SHALE	1.0	146.0	
205.7	CARBONDALE	HERRIN	COAL	2.4	147.0	
203.3	CARBONDALE		UNDERCLAY	4.6	149.4	
198.7	CARBONDALE		SANDSTONE	8.0	154.0	
190.7	CARBONDALE		SANDY SHALE	32.7	162.0	
158.0	CARBONDALE	BRIAR HILL	COAL	1.9	194.7	
156.1	CARBONDALE		UNDERCLAY	1.0	196.6	
155.1	CARBONDALE		SANDSTONE	10.0	197.6	
145.1	CARBONDALE		SANDY SHALE	42.4	207.6	
102.7	CARBONDALE		GRAY SHALE	13.0	250.0	
89.7	CARBONDALE	ST. DAVID	LIMESTONE	0.5	263.0	
89.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	263.5	
87.0	CARBONDALE	SPRINGFIELD	COAL	5.5	265.7	

MAPID: 05923790000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' S line, 330' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193909 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747246 **DATE COLLECTED:** 9 / 26 / 1973

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 358.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 188-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.0	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
226.0	MODESTO		GRAY SHALE	33.0	135.0	
193.0	CARBONDALE	DANVILLE	COAL	1.5	168.0	
191.5	CARBONDALE		GRAY SHALE	2.5	169.5	
189.0	CARBONDALE		SANDSTONE	5.0	172.0	
184.0	CARBONDALE		SANDY SHALE	6.5	177.0	
177.5	CARBONDALE		BLACK SHALE	0.5	183.5	
177.0	CARBONDALE		GRAY SHALE	6.0	184.0	
171.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	190.0	
165.2	CARBONDALE		GRAY SHALE	2.2	195.8	
163.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	198.0	
158.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	203.0	
146.0	CARBONDALE	BRERETON	LIMESTONE	0.8	215.0	
145.2	CARBONDALE	ANNA	BLACK SHALE	3.0	215.8	
142.2	CARBONDALE	ANNA	GRAY SHALE	4.0	218.8	
138.2	CARBONDALE	ANNA	BLACK SHALE	2.0	222.8	
136.2	CARBONDALE	HERRIN	COAL	3.0	224.8	
133.2	CARBONDALE		UNDERCLAY	3.2	227.8	
130.0	CARBONDALE		SANDSTONE	5.0	231.0	
125.0	CARBONDALE		SANDY SHALE	19.0	236.0	
106.0	CARBONDALE		GRAY SHALE	17.5	255.0	
88.5	CARBONDALE	BRIAR HILL	COAL	1.5	272.5	
87.0	CARBONDALE		SANDY SHALE	7.0	274.0	
80.0	CARBONDALE		SANDSTONE	15.0	281.0	
65.0	CARBONDALE		SANDY SHALE	24.0	296.0	
41.0	CARBONDALE		GRAY SHALE	18.8	320.0	
22.2	CARBONDALE	ST. DAVID	LIMESTONE	0.7	338.8	
21.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	339.5	
18.0	CARBONDALE	SPRINGFIELD	COAL	5.3	343.0	
12.7	CARBONDALE		SANDSTONE	5.0	348.3	
7.7	CARBONDALE		SHALE	5.0	353.3	

MAPID: 05924092000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 956' S line, 1300' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.206386 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.749632 **DATE COLLECTED:** 1 / 22 / 1981

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 270.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY C C,PLUG AFFID **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.0			UNKNOWN	0.0	0.0	

MAPID: 05901102000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** SW NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.182264 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.759105 **DATE COLLECTED:** 9 / 28 / 1951

SURFACE ELEVATION (FT.): 359.2 **LOGGED (FT.):** 384.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.2	PLEISTOCENE		UNCONSOLIDATED	129.7	0.0	
229.5	MODESTO	WEST FRANKLIN	LIMESTONE	8.3	129.7	
221.2	MODESTO		GRAY SHALE	49.6	138.0	
171.6	CARBONDALE	DANVILLE	COAL	1.4	187.6	
170.2	CARBONDALE		SHALE	6.1	189.0	GREEN-GRAY
164.1	CARBONDALE		SILTSTONE	6.4	195.1	
157.7	CARBONDALE		SANDSTONE	19.8	201.5	SHALE BANDS
137.9	CARBONDALE		BLACK SHALE	0.6	221.3	COAL STREAKS
137.3	CARBONDALE		UNDERCLAY	0.3	221.9	
137.0	CARBONDALE		GRAY SHALE	1.2	222.2	
135.9	CARBONDALE		BLACK SHALE	0.6	223.3	
135.3	CARBONDALE		CLAYSTONE	1.1	223.9	
134.2	CARBONDALE		SHALE	1.6	225.0	GREEN, LIME NODULES
132.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	226.6	TAN
129.0	CARBONDALE		CLAYSTONE	4.0	230.2	GREEN-GRAY
125.0	CARBONDALE	ANVIL ROCK	SILTSTONE	2.2	234.2	
122.9	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	236.3	
117.9	CARBONDALE		GRAY SHALE	10.0	241.3	
107.9	CARBONDALE	BRERETON	LIMESTONE	0.2	251.3	ARGILLACEOUS
107.7	CARBONDALE	ANNA	BLACK SHALE	7.0	251.5	
100.7	CARBONDALE	HERRIN	COAL	3.4	258.5	
97.3	CARBONDALE		UNDERCLAY	1.6	261.9	
95.7	CARBONDALE		GRAY SHALE	5.2	263.5	
90.5	CARBONDALE		SANDSTONE	5.5	268.7	
85.0	CARBONDALE		GRAY SHALE	28.1	274.2	
56.9	CARBONDALE		BLACK SHALE	0.2	302.3	
56.8	CARBONDALE	BRIAR HILL	COAL	1.9	302.4	
54.9	CARBONDALE		GRAY SHALE	1.5	304.3	
53.4	CARBONDALE		SILTSTONE	1.3	305.8	
52.0	CARBONDALE		SANDSTONE	1.3	307.2	
50.8	CARBONDALE		GRAY SHALE	3.0	308.4	
47.8	CARBONDALE		SILTSTONE	0.8	311.4	
47.0	CARBONDALE		SANDSTONE	12.5	312.2	SHALE BANDS
34.5	CARBONDALE		SILTSTONE	17.0	324.7	
17.5	CARBONDALE		GRAY SHALE	31.3	341.7	
-13.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	373.0	
-14.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	373.5	
-16.8	CARBONDALE	SPRINGFIELD	COAL	5.4	376.0	
-22.2	CARBONDALE		SHALE	1.3	381.4	GREEN-GRAY

-23.5	CARBONDALE		SILTSTONE	1.7	382.7

MAPID: 05901124000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.19272 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.761812 **DATE COLLECTED:** 1 / 15 / 1952

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 361.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 24 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	136.0	0.0	
224.0	MODESTO		GRAY SHALE	49.8	136.0	
174.2	MODESTO		BLACK SHALE	2.5	185.8	
171.7	CARBONDALE	DANVILLE	COAL	2.0	188.3	
169.7	CARBONDALE		UNDERCLAY	1.3	190.3	
168.3	CARBONDALE		SILTSTONE	4.1	191.7	
164.2	CARBONDALE		GRAY SHALE	5.8	195.8	
158.5	CARBONDALE		BLACK SHALE	0.1	201.5	BONE COAL
158.4	CARBONDALE		UNDERCLAY	1.4	201.6	
157.0	CARBONDALE		GRAY SHALE	1.3	203.0	
155.7	CARBONDALE		NO RECORD	1.8	204.3	ADJUST FOR MARKER
154.0	CARBONDALE		SHALE	1.9	206.0	GREEN-GRAY
152.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	207.9	
148.5	CARBONDALE		SHALE	1.1	211.5	
147.4	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	212.6	
140.4	CARBONDALE		GRAY SHALE	11.4	219.6	
129.0	CARBONDALE	BRERETON	LIMESTONE	0.5	231.0	
128.5	CARBONDALE	ANNA	SHALE	8.6	231.5	GREEN-GRAY-BLACK
119.9	CARBONDALE	HERRIN	COAL	2.6	240.1	
117.3	CARBONDALE		UNDERCLAY	2.6	242.7	
114.7	CARBONDALE		SANDSTONE	8.6	245.3	
106.1	CARBONDALE		GRAY SHALE	26.4	253.9	
79.7	CARBONDALE	BRIAR HILL	COAL	1.7	280.3	
78.0	CARBONDALE		SILTSTONE	3.3	282.0	
74.7	CARBONDALE		GRAY SHALE	2.3	285.3	
72.3	CARBONDALE		SANDSTONE	31.4	287.7	
40.9	CARBONDALE		SHALE	32.9	319.1	SILTY UPPER
8.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	352.0	
6.3	CARBONDALE	SPRINGFIELD	COAL	5.4	353.7	
0.9	CARBONDALE		SILTSTONE	1.9	359.1	

MAPID: 05901127000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.183312 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747213 **DATE COLLECTED:** 1 / 22 / 1952

SURFACE ELEVATION (FT.): 362.8 **LOGGED (FT.):** 370.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 27 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.8	PLEISTOCENE		UNCONSOLIDATED	125.0	0.0	
237.8	MODESTO		SILTSTONE	7.1	125.0	
230.7	MODESTO		LIMESTONE	1.1	132.1	
229.6	MODESTO		GRAY SHALE	13.8	133.2	
215.9			NO RECORD	3.1	146.9	ADJUST FOR MARKER
212.8	MODESTO		GRAY SHALE	19.4	150.0	
193.4			NO RECORD	0.6	169.4	ADJUST FOR MARKER
192.8	MODESTO		GRAY SHALE	11.1	170.0	
181.7	MODESTO		SANDSTONE	12.3	181.1	
169.4			GRAY SHALE	8.1	193.4	SOME CARBONACEOUS
161.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	201.5	
157.5			NO RECORD	3.8	205.3	ADJUSTMENT FOR MARKER
153.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.3	209.0	
152.5	CARBONDALE	ANVIL ROCK	SILTSTONE	1.1	210.3	
151.4	CARBONDALE	ANVIL ROCK	SANDSTONE	4.4	211.4	
147.0	CARBONDALE	ANVIL ROCK	SILTSTONE	5.3	215.8	
141.6	CARBONDALE		GRAY SHALE	6.9	221.2	
134.7	CARBONDALE		NO RECORD	0.4	228.1	ADJUSTMENT FOR MARKER
134.3	CARBONDALE		GRAY SHALE	1.6	228.5	
132.7	CARBONDALE	BRERETON	LIMESTONE	3.2	230.1	
129.5	CARBONDALE	ANNA	BLACK SHALE	7.5	233.3	
122.0	CARBONDALE	HERRIN	COAL	3.1	240.8	
119.0	CARBONDALE		UNDERCLAY	1.5	243.8	
117.5	CARBONDALE		UNDERCLAY	1.5	245.3	
116.0	CARBONDALE		SANDSTONE	2.4	246.8	
113.5	CARBONDALE		SILTSTONE	4.7	249.3	
108.9	CARBONDALE		SHALE	3.3	253.9	GREEN-GRAY
105.6	CARBONDALE		SILTSTONE	5.5	257.2	
100.1	CARBONDALE		GRAY SHALE	23.8	262.7	
76.3			NO RECORD	1.0	286.5	ADJUSTMENT FOR MARKER
75.3	CARBONDALE		GRAY SHALE	4.2	287.5	
71.1	CARBONDALE	BRIAR HILL	COAL	2.2	291.7	SHALE IN UPPER
68.9	CARBONDALE		GRAY SHALE	0.4	293.9	
68.5	CARBONDALE		SILTSTONE	1.3	294.3	
67.3	CARBONDALE		SANDSTONE	0.7	295.5	
66.6	CARBONDALE		SILTSTONE	2.3	296.2	
64.4	CARBONDALE		GRAY SHALE	1.6	298.4	
62.8	CARBONDALE		SILTSTONE	1.4	300.0	
61.4	CARBONDALE		SANDSTONE	1.0	301.4	

60.4	CARBONDALE		SILTSTONE	9.2	302.4
51.2	CARBONDALE		GRAY SHALE	5.0	311.6
46.2	CARBONDALE		SILTSTONE	1.3	316.6
45.0	CARBONDALE		GRAY SHALE	41.4	317.8
3.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.2	359.3
-0.6	CARBONDALE	SPRINGFIELD	COAL	5.3	363.4
-5.9	CARBONDALE		GRAY SHALE	1.3	368.7

MAPID: 05901134000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191575 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753627 **DATE COLLECTED:** 3 / 21 / 1952

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 349.6 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 34 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	140.0	0.0	
220.0	MODESTO		GRAY SHALE	21.9	140.0	
198.1	CARBONDALE	DANVILLE	COAL	2.1	161.9	
196.0	CARBONDALE		UNDERCLAY	1.5	164.0	
194.5	CARBONDALE		SHALE	5.1	165.5	GREEN TO GRAY
189.3	CARBONDALE		SANDSTONE	4.8	170.7	
184.6	CARBONDALE		GRAY SHALE	12.8	175.4	
171.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.6	188.2	
167.2	CARBONDALE	ANVIL ROCK	SANDSTONE	3.8	192.8	
163.5	CARBONDALE		GRAY SHALE	20.3	196.5	
143.2	CARBONDALE	BRERETON	LIMESTONE	1.0	216.8	
142.2	CARBONDALE	ANNA	BLACK SHALE	7.8	217.8	
134.4	CARBONDALE	HERRIN	COAL	2.7	225.6	
131.7	CARBONDALE		UNDERCLAY	2.1	228.3	
129.7	CARBONDALE		GRAY SHALE	39.2	230.3	
90.5	CARBONDALE		BLACK SHALE	0.4	269.5	
90.1	CARBONDALE	BRIAR HILL	COAL	1.0	269.9	
89.1	CARBONDALE		SANDY SHALE	67.3	270.9	SANDSTONE BANDS IN UPPER 30'
21.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	338.3	
18.5	CARBONDALE	SPRINGFIELD	COAL	5.5	341.5	
13.0	CARBONDALE		UNDERCLAY	0.5	347.0	
12.5	CARBONDALE		GRAY SHALE	2.1	347.5	

MAPID: 05902907000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191582 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760908 **DATE COLLECTED:** 6 / 0 / 1963

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1608.0 **LOG TYPE:** Electric Log

SOURCE: FARRAR OIL CO., INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-170.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	530.0	
-274.0	SPOON	DAVIS	UNCLASSIFIED	-	634.0	
-1248.0	BASE OF PENN.		UNCLASSIFIED	-	1608.0	

MAPID: 05902907000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191582 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.760908 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2933.0 **LOG TYPE:** Electric Log

SOURCE: FARRAR OIL CO., INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
124.0	CARBONDALE	HERRIN	COAL	3.0	236.0	
78.0	CARBONDALE	BRIAR HILL	COAL	-	282.0	
7.0	CARBONDALE	SPRINGFIELD	COAL	5.0	353.0	BLACK SHALE ROOF
-118.0	CARBONDALE	HOUCHIN CREEK	COAL	-	478.0	

MAPID: 05902907000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.191582 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.760908 **DATE COLLECTED:** 6 / 0 / 1963

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2933.0 **LOG TYPE:** Electric Log

SOURCE: FARRAR OIL CO., INC., HOWARD **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	429.0	
-120.0	CARBONDALE	SURVANT	COAL	3.0	480.0	
-172.0	CARBONDALE	COLCHESTER	COAL	0.5	532.0	
-242.0	CARBONDALE	DEKOVEN	COAL	3.8	602.0	
-242.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	602.0	
-270.0	CARBONDALE	DAVIS	COAL	4.0	630.0	
-302.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.8	662.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-330.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	690.0	
-355.0	TRADEWATER	MT. RORAH	COAL	1.3	715.0	

MAPID: 05903281000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188081 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.758184 **DATE COLLECTED:** 4 / 27 / 1967

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 362.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1919-Q **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	132.5	0.0	
227.5	MODESTO		GRAY SHALE	36.8	132.5	
190.7	CARBONDALE	DANVILLE	COAL	1.9	169.3	
188.8	CARBONDALE		GRAY SHALE	2.1	171.2	
186.7	CARBONDALE		SANDY SHALE	9.2	173.3	
177.5	CARBONDALE		SANDSTONE	5.5	182.5	
172.0	CARBONDALE		SANDY SHALE	7.9	188.0	
164.1	CARBONDALE		GRAY SHALE	3.5	195.9	
160.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	199.4	
155.6	CARBONDALE		GRAY SHALE	0.6	204.4	
155.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	205.0	
143.0	CARBONDALE		GRAY SHALE	8.8	217.0	
134.2	CARBONDALE	BRERETON	LIMESTONE	1.2	225.8	
133.0	CARBONDALE	ANNA	GRAY SHALE	0.4	227.0	
132.6	CARBONDALE	ANNA	DARK SHALE	0.4	227.4	
132.2	CARBONDALE	ANNA	BLACK SHALE	4.4	227.8	
127.8	CARBONDALE	ANNA	DARK SHALE	2.6	232.2	
125.2	CARBONDALE	HERRIN	COAL	2.3	234.8	
122.9	CARBONDALE	HERRIN	GRAY SHALE	1.4	237.1	
121.5	CARBONDALE	HERRIN	COAL	0.3	238.5	
121.2	CARBONDALE		UNDERCLAY	2.9	238.8	
118.4	CARBONDALE		SANDSTONE	4.1	241.6	
114.3	CARBONDALE		SANDY SHALE	34.3	245.7	
80.0	CARBONDALE	BRIAR HILL	COAL	1.8	280.0	
78.2	CARBONDALE		SANDY SHALE	50.8	281.8	
27.4	CARBONDALE		GRAY SHALE	19.0	332.6	
8.4	CARBONDALE	ST. DAVID	LIMESTONE	0.7	351.6	
7.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	352.3	
5.0	CARBONDALE	SPRINGFIELD	COAL	5.7	355.0	
-0.7	CARBONDALE		UNDERCLAY	1.3	360.7	

MAPID: 05903644000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.185686 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.755442 **DATE COLLECTED:** 4 / 27 / 1967

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 362.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1919-Q **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	132.5	0.0	
-	MODESTO		GRAY SHALE	36.8	132.5	
-	CARBONDALE	DANVILLE	COAL	1.9	169.3	
-	CARBONDALE		GRAY SHALE	2.1	171.2	
-	CARBONDALE		SANDY SHALE	9.2	173.3	
-	CARBONDALE		SANDSTONE	5.5	182.5	
-	CARBONDALE		SANDY SHALE	7.9	188.0	
-	CARBONDALE		GRAY SHALE	3.5	195.9	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	199.4	
-	CARBONDALE		GRAY SHALE	0.6	204.4	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	205.0	
-	CARBONDALE		GRAY SHALE	8.8	217.0	
-	CARBONDALE	BRERETON	LIMESTONE	1.2	225.8	
-	CARBONDALE	ANNA	GRAY SHALE	0.8	227.0	DARK
-	CARBONDALE	ANNA	BLACK SHALE	4.4	227.8	
-	CARBONDALE	ANNA	GRAY SHALE	2.6	232.2	DARK
-	CARBONDALE	HERRIN	COAL	2.3	234.8	
-	CARBONDALE	HERRIN	GRAY SHALE	1.4	237.1	
-	CARBONDALE	HERRIN	COAL	0.3	238.5	
-	CARBONDALE		UNDERCLAY	2.9	238.8	
-	CARBONDALE		SANDSTONE	4.1	241.6	
-	CARBONDALE		SANDY SHALE	34.3	245.7	
-	CARBONDALE	BRIAR HILL	COAL	1.8	280.0	
-	CARBONDALE		SANDY SHALE	50.8	281.8	
-	CARBONDALE		GRAY SHALE	19.0	332.6	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.7	351.6	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	352.3	
-	CARBONDALE	SPRINGFIELD	COAL	5.7	355.0	
-	CARBONDALE		UNDERCLAY	1.3	360.7	

MAPID: 05903645000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1980' S line, 2640' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.183153 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.752675 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 242.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 106-G-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
183.0	CARBONDALE	DANVILLE	COAL	1.2	177.0	
181.8	CARBONDALE		SHALE & SANDSTONE	26.8	178.2	
155.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	205.0	
149.4	CARBONDALE	LAWSON	SANDSTONE	7.4	210.6	
142.0	CARBONDALE	LAWSON	GRAY SHALE	12.0	218.0	
130.0	CARBONDALE	BRERETON	LIMESTONE	1.5	230.0	
128.5	CARBONDALE	ANNA	BLACK SHALE	7.5	231.5	
121.0	CARBONDALE	HERRIN	COAL	3.0	239.0	

MAPID: 05923792000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.173877 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.748064 **DATE COLLECTED:** 10 / 11 / 1972

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 387.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 108-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.0	PLEISTOCENE		UNCONSOLIDATED	36.5	0.0	
342.5	MODESTO		SANDSTONE	11.5	36.5	
331.0	MODESTO		GRAY SHALE	20.0	48.0	
311.0	MODESTO		LIMESTONE	1.5	68.0	
309.5	MODESTO		GRAY SHALE	34.0	69.5	
275.5	MODESTO		SANDSTONE	5.0	103.5	
270.5	MODESTO		GRAY SHALE	38.0	108.5	
232.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	146.5	
229.0	MODESTO		GRAY SHALE	45.5	150.0	
183.5	CARBONDALE	DANVILLE	COAL	1.5	195.5	
182.0	CARBONDALE		UNDERCLAY	2.5	197.0	
179.5	CARBONDALE		GRAY SHALE	8.5	199.5	
171.0	CARBONDALE		SANDY SHALE	3.0	208.0	
168.0	CARBONDALE		GRAY SHALE	11.7	211.0	
156.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	222.7	
151.0	CARBONDALE		GRAY SHALE	2.0	228.0	
149.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	230.0	
141.0	CARBONDALE		GRAY SHALE	8.8	238.0	
132.2	CARBONDALE	BRERETON	LIMESTONE	2.0	246.8	
130.2	CARBONDALE	ANNA	DARK SHALE	0.5	248.8	
129.7	CARBONDALE	ANNA	BLACK SHALE	6.7	249.3	
123.0	CARBONDALE	HERRIN	COAL	0.5	256.0	
122.5	CARBONDALE	HERRIN	LIMESTONE	1.0	256.5	
121.5	CARBONDALE	HERRIN	COAL	1.2	257.5	
120.3	CARBONDALE		UNDERCLAY	4.3	258.7	
116.0	CARBONDALE		SANDSTONE	27.0	263.0	
89.0	CARBONDALE		GRAY SHALE	14.5	290.0	
74.5	CARBONDALE	BRIAR HILL	COAL	2.0	304.5	
72.5	CARBONDALE		SANDY SHALE	33.5	306.5	
39.0	CARBONDALE		SANDSTONE	5.0	340.0	
34.0	CARBONDALE		SANDY SHALE	20.0	345.0	
14.0	CARBONDALE		GRAY SHALE	10.1	365.0	
3.9	CARBONDALE	ST. DAVID	LIMESTONE	1.2	375.1	
2.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	376.3	
-0.6	CARBONDALE	SPRINGFIELD	COAL	5.4	379.6	
-6.0	CARBONDALE		SHALE	2.0	385.0	WITH COAL STREAKS

MAPID: 05923828000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.178696 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.75452 **DATE COLLECTED:** 9 / 18 / 1974

SURFACE ELEVATION (FT.): 357.6 **LOGGED (FT.):** 388.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 218-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.6	PLEISTOCENE		UNCONSOLIDATED	133.0	0.0	
224.6	MODESTO		SANDSTONE	6.5	133.0	
218.1	MODESTO		SANDSTONE	8.0	139.5	WITH SHALE STREAKS
210.1	MODESTO		GRAY SHALE	45.5	147.5	
164.6	CARBONDALE	DANVILLE	COAL	1.0	193.0	
163.6	CARBONDALE		UNDERCLAY	1.0	194.0	
162.6	CARBONDALE		SANDSTONE	8.0	195.0	
154.6	CARBONDALE		SANDY SHALE	12.0	203.0	
142.6	CARBONDALE		SANDSTONE	2.0	215.0	
140.6	CARBONDALE		GRAY SHALE	9.0	217.0	
131.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	226.0	
126.6	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	8.0	231.0	
118.6	CARBONDALE		GRAY SHALE	12.3	239.0	
106.3	CARBONDALE	BRERETON	LIMESTONE	0.7	251.3	
105.6	CARBONDALE	ANNA	BLACK SHALE	7.2	252.0	
98.4	CARBONDALE	HERRIN	COAL	2.0	259.2	
96.4	CARBONDALE	HERRIN	LIMESTONE	0.8	261.2	
95.6	CARBONDALE	HERRIN	COAL	1.0	262.0	
94.6	CARBONDALE		UNDERCLAY	4.5	263.0	
90.1	CARBONDALE		SANDSTONE	12.5	267.5	
77.6	CARBONDALE		SANDY SHALE	29.0	280.0	
48.6	CARBONDALE	BRIAR HILL	COAL	2.0	309.0	
46.6	CARBONDALE		SANDY SHALE	10.0	311.0	
36.6	CARBONDALE		SANDSTONE	19.0	321.0	
17.6	CARBONDALE		SANDY SHALE	28.2	340.0	
-10.6	CARBONDALE		GRAY SHALE	6.8	368.2	
-17.4	CARBONDALE	ST. DAVID	LIMESTONE	2.0	375.0	
-19.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	377.0	
-22.2	CARBONDALE	SPRINGFIELD	COAL	0.7	379.8	
-22.9	CARBONDALE	SPRINGFIELD	COAL	5.3	380.5	
-28.2	CARBONDALE		SANDSTONE	2.6	385.8	

MAPID: 05923857000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.18452 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.753618 **DATE COLLECTED:** 10 / 0 / 1975

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2950.0 **LOG TYPE:** Nuclear Log

SOURCE: TURNER, J. D., PEEPLES HELEN W 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	436.0	
-133.0	CARBONDALE	SURVANT	COAL	2.0	496.0	
-191.0	CARBONDALE	COLCHESTER	COAL	0.5	554.0	
-247.0	CARBONDALE	DEKOVEN	COAL	4.5	610.0	
-247.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	610.0	
-279.0	CARBONDALE	DAVIS	COAL	5.8	642.0	
-317.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	680.0	22% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-337.0	TRADEWATER	STONEFORT	LIMESTONE	0.0	700.0	
-364.0	TRADEWATER	MT. RORAH	COAL	3.5	727.0	

MAPID: 05990018000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 75' S line, 25' E line of SE NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.188164 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.758389 **DATE COLLECTED:** 4 / 27 / 1967

SURFACE ELEVATION (FT.): 359.5 **LOGGED (FT.):** 362.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 8GC **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
359.5	PLEISTOCENE		UNCONSOLIDATED	132.5	0.0	
227.0	MODESTO		GRAY SHALE	36.8	132.5	
190.2	CARBONDALE	DANVILLE	COAL	1.9	169.3	
188.3	CARBONDALE		GRAY SHALE	2.1	171.2	
186.2	CARBONDALE		SANDY SHALE	9.2	173.3	
177.0	CARBONDALE		SANDSTONE	5.5	182.5	GRAY
171.5	CARBONDALE		SANDY SHALE	7.9	188.0	
163.6	CARBONDALE		GRAY SHALE	3.5	195.9	
160.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	199.4	
155.1	CARBONDALE		GRAY SHALE	0.6	204.4	
154.5	CARBONDALE		SANDY SHALE	12.0	205.0	
142.5	CARBONDALE		GRAY SHALE	8.8	217.0	
133.7	CARBONDALE	BRERETON	LIMESTONE	1.2	225.8	
132.5	CARBONDALE		GRAY SHALE	0.4	227.0	
132.1	CARBONDALE		DARK GRAY SHALE	0.4	227.4	
131.7	CARBONDALE	ANNA	BLACK SHALE	4.4	227.8	
127.3	CARBONDALE		DARK GRAY SHALE	2.6	232.2	
124.7	CARBONDALE	HERRIN	COAL	2.3	234.8	
122.4	CARBONDALE	HERRIN	GRAY SHALE	1.4	237.1	
121.0	CARBONDALE	HERRIN	COAL	0.3	238.5	
120.7	CARBONDALE		UNDERCLAY	2.9	238.8	
117.9	CARBONDALE		GRAY SHALE	4.1	241.6	
113.8	CARBONDALE		SANDY SHALE	34.3	245.7	
79.5	CARBONDALE	BRIAR HILL	COAL	1.8	280.0	
77.7	CARBONDALE		SANDY SHALE	50.8	281.8	
26.9	CARBONDALE		GRAY SHALE	19.0	332.6	
7.9	CARBONDALE	ST. DAVID	LIMESTONE	0.7	351.6	
7.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	352.3	
4.5	CARBONDALE	SPRINGFIELD	COAL	5.7	355.0	
-1.2	CARBONDALE		UNDERCLAY	2.0	360.7	

MAPID: 05990019000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 200' S line, 75' W line of SW NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.183164 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.75874 **DATE COLLECTED:** 8 / 25 / 1951

SURFACE ELEVATION (FT.): 359.2 **LOGGED (FT.):** 384.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. UO2C **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.2	PLEISTOCENE		UNCONSOLIDATED	129.7	0.0	
229.5	MODESTO		GRAY SHALE	8.3	129.7	
221.2	MODESTO		DARK SHALE	20.5	138.0	
200.7	MODESTO		GRAY SHALE	22.5	158.5	
178.2	MODESTO		GRAY SHALE	11.4	181.0	
166.8	CARBONDALE	DANVILLE	COAL	1.4	192.4	
165.4	CARBONDALE		UNDERCLAY	0.8	193.8	
164.5	CARBONDALE		SANDY SHALE	21.3	194.7	
143.2	CARBONDALE		SANDSTONE	2.0	216.0	GRAY
141.2	CARBONDALE		GRAY SHALE	2.5	218.0	
138.7	CARBONDALE		DARK SHALE	0.5	220.5	
138.2	CARBONDALE		GREEN SHALE	2.0	221.0	
136.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	223.0	
131.9	CARBONDALE		GRAY SHALE	4.0	227.3	
127.9	CARBONDALE		SANDY SHALE	1.7	231.3	
126.2	CARBONDALE		SANDSTONE	11.0	233.0	GRAY
115.2	CARBONDALE		DARK SHALE	11.0	244.0	
104.2	CARBONDALE	ANNA	BLACK SHALE	5.3	255.0	
98.9	CARBONDALE	HERRIN	COAL	1.2	260.3	
97.6	CARBONDALE	HERRIN	BLACK SHALE	0.2	261.6	
97.5	CARBONDALE	HERRIN	SHALE	0.0	261.7	
97.4	CARBONDALE	HERRIN	GRAY SHALE	0.3	261.8	
97.1	CARBONDALE	HERRIN	SILTSTONE	0.3	262.1	
96.8	CARBONDALE	HERRIN	COAL	0.2	262.4	BROWN
96.6	CARBONDALE	HERRIN	GRAY SHALE	0.2	262.6	VITRAIN
96.4	CARBONDALE	HERRIN	COAL	1.0	262.8	
95.4	CARBONDALE		UNDERCLAY	4.3	263.8	
91.1	CARBONDALE		SANDSTONE	5.0	268.1	
86.1	CARBONDALE		SANDY SHALE	9.0	273.1	
77.1	CARBONDALE		DARK SHALE	22.0	282.1	
55.1	CARBONDALE	BRIAR HILL	COAL	1.9	304.1	
53.2	CARBONDALE		UNDERCLAY	1.1	306.0	
52.1	CARBONDALE		DARK SHALE	4.0	307.1	
48.1	CARBONDALE		SANDY SHALE	43.0	311.1	
5.1	CARBONDALE		DARK SHALE	20.0	354.1	
-14.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	374.1	
-16.6	CARBONDALE	SPRINGFIELD	COAL	5.4	375.8	
-22.1	CARBONDALE		UNDERCLAY	2.8	381.3	

MAPID: 05901104000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2310' S line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.164971 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753623 **DATE COLLECTED:** 10 / 0 / 1951

SURFACE ELEVATION (FT.): 373.2 **LOGGED (FT.):** 656.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
373.2	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0	
342.2	MODESTO		SANDY SHALE	39.0	31.0	SANDSTONE BANDS AND LAMINATIONS
303.2	MODESTO		GRAY SHALE	70.8	70.0	
232.4	MODESTO		BLACK SHALE	6.3	140.8	
226.2	MODESTO		SHALE & CLAYSTONE	2.1	147.0	
224.1	MODESTO		SHALE	11.4	149.1	GREENISH-GRAY
212.7	MODESTO		SHALE & CLAYSTONE	1.8	160.5	CARBONACEOUS FOSSILIFEROUS
210.9	MODESTO		COAL	0.2	162.3	
210.8	MODESTO		UNDERCLAY	0.3	162.4	
210.5	MODESTO		SHALE	4.6	162.7	GREENISH-GRAY
205.9	MODESTO		SHALY SANDSTONE	12.6	167.3	SHALE BANDS AND LAMINATIONS
193.4	MODESTO		GRAY SHALE	14.0	179.8	SANDSTONE BAND
179.4	MODESTO		SILTSTONE	17.7	193.8	
161.7	MODESTO		GRAY SHALE	60.5	211.5	
101.2	MODESTO		BLACK SHALE	1.8	272.0	
99.4	MODESTO	CHAPEL	COAL	1.4	273.8	
97.9	MODESTO		UNDERCLAY	0.4	275.3	
97.5	MODESTO		NO RECORD	1.3	275.7	ADJUST FOR MARKER
96.2	MODESTO		SHALE & CLAYSTONE	0.9	277.0	
95.3	MODESTO		GRAY SHALE	15.2	277.9	
80.1	MODESTO		SANDSTONE	28.3	293.1	
51.9	MODESTO		SILTSTONE	9.5	321.3	
42.4	MODESTO		GRAY SHALE	21.7	330.8	
20.7	MODESTO		SHALY SILTSTONE	13.5	352.5	GREENISH
7.2	MODESTO		GRAY SHALE	20.2	366.0	
-13.0	MODESTO		SILTSTONE	8.1	386.2	
-21.1	MODESTO		SILTY SHALE	9.7	394.3	
-30.7	MODESTO		SHALE & CLAYSTONE	6.3	403.9	
-37.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.2	410.2	
-39.1	MODESTO		NO RECORD	1.7	412.3	ADJUST FOR MARKER
-40.8	MODESTO	WEST FRANKLIN	CALCAREOUS SHALE	6.3	414.0	YELLOW-GREEN-GRAY
-47.1	MODESTO	WEST FRANKLIN	LIMESTONE	0.4	420.3	
-47.5	MODESTO	WEST FRANKLIN	CALCAREOUS SHALE	7.6	420.7	REDISH-GREEN-GRAY
-55.1	MODESTO		GRAY SHALE	38.9	428.3	
-94.0	CARBONDALE	DANVILLE	SHALY COAL	0.8	467.2	
-94.8	CARBONDALE		UNDERCLAY	0.8	468.0	
-95.6	CARBONDALE		SHALE & CLAYSTONE	1.3	468.8	
-97.0	CARBONDALE		SHALY SILTSTONE	11.1	470.2	

-108.1	CARBONDALE		SANDSTONE	4.6	481.3	
-112.6	CARBONDALE		GRAY SHALE	6.3	485.8	COAL STREAKS IN LOWER 1 FOOT
-119.0	CARBONDALE		SHALE & CLAYSTONE	5.8	492.2	
-124.8	CARBONDALE		SHALE & CLAYSTONE	5.8	498.0	
-130.6	CARBONDALE		SILTY SHALE	3.0	503.8	GREEN-GRAY
-133.6	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	506.8	
-139.6	CARBONDALE	ANVIL ROCK	SILTSTONE	1.7	512.8	
-141.3	CARBONDALE		GRAY SHALE	11.4	514.5	
-152.7	CARBONDALE	BRERETON	LIMESTONE	2.4	525.9	
-155.1	CARBONDALE	BRERETON	SHALE & CLAYSTONE	0.3	528.3	
-155.5	CARBONDALE	ANNA	BLACK SHALE	7.0	528.7	
-162.5	CARBONDALE	HERRIN	COAL	2.3	535.7	
-164.8	CARBONDALE		UNDERCLAY	2.4	538.0	
-167.2	CARBONDALE		SILTY SHALE	3.3	540.4	GREENISH-GRAY
-170.5	CARBONDALE		GRAY SHALE	10.8	543.7	
-181.3	CARBONDALE		SILTSTONE	5.1	554.5	
-186.4	CARBONDALE		SANDSTONE	1.3	559.6	
-187.7	CARBONDALE		GRAY SHALE	20.1	560.9	
-207.8	CARBONDALE	BRIAR HILL	COAL	1.4	581.0	
-209.2	CARBONDALE		UNDERCLAY	2.4	582.4	
-211.6	CARBONDALE		GRAY SHALE	8.2	584.8	
-219.8	CARBONDALE		SILTSTONE	4.4	593.0	
-224.2	CARBONDALE		SANDSTONE	3.3	597.4	
-227.5	CARBONDALE		SILTSTONE	33.3	600.7	
-260.8	CARBONDALE		GRAY SHALE	8.6	634.0	
-269.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	642.6	
-270.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	643.6	
-274.2	CARBONDALE	SPRINGFIELD	COAL	5.1	647.4	
-279.3	CARBONDALE		UNDERCLAY	1.3	652.5	
-280.6	CARBONDALE		CLAYSTONE & SILTY SHALE	2.2	653.8	

MAPID: 05901104000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2310' S line, 2310' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.164971 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.753623 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 373.0 **LOGGED (FT.):** 538.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 4 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-98.8	CARBONDALE	DANVILLE	BONE COAL	0.8	471.8	
-99.6	CARBONDALE		ROCK	23.6	472.6	
-123.2	CARBONDALE	ALLENBY	CARBONACEOUS SANDSTONE	1.8	496.2	
-124.9	CARBONDALE		CLAYSTONE	2.3	497.9	
-127.2	CARBONDALE	BANKSTON FORK	ROCK	3.5	500.2	UPPER BENCH
-130.7	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	0.7	503.7	SHALE PARTING
-131.3	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	1.7	504.3	LOWER BENCH
-133.0	CARBONDALE	LAWSON	MOTTLED SHALE	1.3	506.0	
-134.3	CARBONDALE	LAWSON	SILTSTONE	1.7	507.3	
-136.0	CARBONDALE	LAWSON	SANDSTONE	6.0	509.0	
-142.0	CARBONDALE	LAWSON	SILTSTONE	1.7	515.0	
-143.7	CARBONDALE	LAWSON	GRAY SHALE	11.4	516.7	
-155.1	CARBONDALE	BRERETON	LIMESTONE	2.4	528.1	
-157.5	CARBONDALE	ANNA	BLACK SHALE	5.5	530.5	
-163.0	CARBONDALE	HERRIN	COAL	2.5	536.0	

MAPID: 05901107000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.170741 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.749941 **DATE COLLECTED:** 11 / 29 / 1951

SURFACE ELEVATION (FT.): 392.9 **LOGGED (FT.):** 307.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 7 **WELL TYPE:** Coal Test

COMMENT: BROKEN, FRACTURED, JOINTED FAULTED AREA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.9	PLEISTOCENE		UNCONSOLIDATED	62.0	0.0	
330.9			GRAY SHALE	72.9	62.0	
258.0			LIMESTONE	0.5	134.9	
257.5			BLACK SHALE	0.2	135.4	
257.3			COAL	0.0	135.6	
257.3			UNDERCLAY	2.2	135.6	
255.1			NO RECORD	6.2	137.8	ADJUST FOR MARKER
248.9			GRAY SHALE	58.0	144.0	
190.9			GRAY SHALE	3.1	202.0	CARBONACEOUS
187.8			GRAY SHALE	35.1	205.1	
152.7			BLACK SHALE	0.4	240.2	
152.3			COAL	0.7	240.6	
151.6			GRAY SHALE	17.0	241.3	
134.6			SANDSTONE	2.0	258.3	
132.6			GRAY SHALE	46.8	260.3	

MAPID: 05901139000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.174098 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.758197 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.1 **LOGGED (FT.):** 398.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 39 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.1	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
221.1	MODESTO		SANDY SHALE	18.9	135.0	LIME NODULES
202.2	MODESTO		GRAY SHALE	2.1	153.9	LIME NODULES
200.1	MODESTO	WEST FRANKLIN	LIMESTONE	1.6	156.0	
198.5	MODESTO		NO RECORD	2.1	157.6	ADJUST FOR MARKER
196.4	MODESTO		SHALE	52.8	159.7	
143.7	CARBONDALE	DANVILLE	COAL	1.9	212.4	
141.8	CARBONDALE		UNDERCLAY	2.3	214.3	
139.6	CARBONDALE		SILTY SHALE	5.7	216.5	
133.9	CARBONDALE		SANDSTONE	11.6	222.2	
122.3	CARBONDALE		SHALE	2.3	233.8	SIDERITE
120.0	CARBONDALE		BLACK SHALE	1.0	236.1	
119.0	CARBONDALE	ALLENBY	BONE COAL	0.1	237.1	
118.9	CARBONDALE		UNDERCLAY	1.5	237.2	
117.4	CARBONDALE		GRAY SHALE	5.4	238.7	
112.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.6	244.1	
107.4	CARBONDALE	ANVIL ROCK	SILTY SHALE	3.8	248.7	
103.7	CARBONDALE	ANVIL ROCK	SANDSTONE	2.4	252.4	
101.3	CARBONDALE		GRAY SHALE	14.4	254.8	
86.8	CARBONDALE	BRERETON	LIMESTONE	1.3	269.3	
85.6	CARBONDALE	ANNA	BLACK SHALE	7.3	270.5	
78.3	CARBONDALE	HERRIN	COAL	1.4	277.8	
76.9	CARBONDALE	HERRIN	SHALE	0.8	279.2	
76.1	CARBONDALE	HERRIN	COAL	0.9	280.0	
75.2	CARBONDALE		UNDERCLAY	0.6	280.9	
74.6	CARBONDALE		NO RECORD	0.5	281.5	ADJUST FOR MARKER
74.1	CARBONDALE		SHALE	3.1	282.0	
71.0	CARBONDALE		SANDSTONE	13.3	285.1	SILTY BANDS
57.8	CARBONDALE		GRAY SHALE	25.2	298.3	
32.6	CARBONDALE	BRIAR HILL	COAL	2.0	323.5	
30.6	CARBONDALE		SHALE	61.6	325.5	SILTY BANDS
-31.1	CARBONDALE	ST. DAVID	LIMESTONE	0.6	387.2	
-31.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	387.8	
-34.2	CARBONDALE	SPRINGFIELD	COAL	5.4	390.3	
-39.7	CARBONDALE		SILTSTONE	2.0	395.8	
-41.7	CARBONDALE		SHALE	0.8	397.8	

MAPID: 05901140000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.165488 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.758207 **DATE COLLECTED:** 9 / 28 / 1952

SURFACE ELEVATION (FT.): 359.8 **LOGGED (FT.):** 462.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 40 **WELL TYPE:** Coal Test

COMMENT: FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.8	PLEISTOCENE		UNCONSOLIDATED	147.0	0.0	
212.8	MODESTO		SHALE	89.8	147.0	
123.0	MODESTO		BLACK SHALE	1.2	236.8	
121.9	MODESTO		NO RECORD	0.8	237.9	ADJUST FOR MARKER
121.0	MODESTO	CHAPEL	COAL	1.3	238.8	
119.8	MODESTO		UNDERCLAY	1.9	240.0	
117.9	MODESTO		SHALE	8.9	241.9	GREEN-GRAY
109.0	MODESTO		LIMESTONE	0.7	250.8	
108.3	MODESTO		SHALE	0.4	251.5	
107.9	MODESTO		NO RECORD	8.1	251.9	ADJUST FOR MARKER
99.8	MODESTO		SANDSTONE	29.8	260.0	
70.0	MODESTO		SHALE	29.5	289.8	
40.5	MODESTO		SANDSTONE	15.4	319.3	
25.1	MODESTO		GRAY SHALE	29.5	334.7	SILT AND CLAY BANDS
-4.4	MODESTO	WEST FRANKLIN	LIMESTONE	7.3	364.2	
-11.7	MODESTO		SHALE	9.8	371.5	GREEN-GRAY
-21.5	MODESTO		GRAY SHALE	53.5	381.3	
-75.0	MODESTO		LIMESTONE	0.3	434.8	
-75.3	CARBONDALE	DANVILLE	COAL	0.3	435.1	COOKED
-75.6	CARBONDALE		IGNEOUS INTRUSION	2.6	435.4	
-78.2	CARBONDALE		SANDSTONE	3.4	438.0	
-81.6	CARBONDALE		SHALE	1.8	441.4	
-83.4	CARBONDALE		SANDSTONE	2.2	443.2	
-85.6	CARBONDALE		SHALE	13.7	445.4	
-99.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.4	459.1	

MAPID: 05901698000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.168587 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.753627 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1726.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1363.0	BASE OF PENN.		UNCLASSIFIED	-	1726.0	

MAPID: 05901698000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.168587 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.753627 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2488.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	3.0	515.0	
-	CARBONDALE	BRIAR HILL	COAL	-	560.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.0	633.0	BLACK SHALE ROOF
-	CARBONDALE	HOUCHIN CREEK	COAL	-	698.0	

MAPID: 05923795000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.169651 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747201 **DATE COLLECTED:** 8 / 15 / 1974

SURFACE ELEVATION (FT.): 485.0 **LOGGED (FT.):** 777.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 214-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
485.0	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0	
421.0	BOND		GRAY SHALE	20.0	64.0	SOFT
401.0	BOND		COAL	0.5	84.0	
400.5	BOND		UNDERCLAY	5.0	84.5	
395.5	BOND		SANDSTONE	3.5	89.5	
392.0	BOND		GRAY SHALE	4.0	93.0	
388.0	BOND		SHALY SANDSTONE	3.0	97.0	
385.0	BOND		GRAY SHALE	25.0	100.0	
360.0	BOND	CARTHAGE	LIMESTONE	9.0	125.0	
351.0	MODESTO		SANDSTONE	13.0	134.0	
338.0	MODESTO		SHALE	24.0	147.0	WITH SANDSTONE STREAKS
314.0	MODESTO		GRAY SHALE	23.0	171.0	
291.0	MODESTO		SANDSTONE	1.5	194.0	
289.5	MODESTO		GRAY SHALE	77.0	195.5	
212.5	MODESTO		BLACK SHALE	1.5	272.5	
211.0	MODESTO		UNDERCLAY	3.0	274.0	
208.0	MODESTO		SANDY SHALE	21.0	277.0	
187.0	MODESTO		SANDSTONE	10.0	298.0	
177.0	MODESTO		SANDY SHALE	94.5	308.0	
82.5	MODESTO	CHAPEL	COAL	1.0	402.5	
81.5	MODESTO		UNDERCLAY	3.5	403.5	
78.0	MODESTO		SANDSTONE	43.0	407.0	
35.0	MODESTO		SHALY SANDSTONE	21.0	450.0	
14.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	471.0	
12.0	MODESTO		SHALY SANDSTONE	119.0	473.0	
-107.0	CARBONDALE	DANVILLE	COAL	1.0	592.0	
-108.0	CARBONDALE		SANDY SHALE	24.0	593.0	
-132.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	617.0	
-135.5	CARBONDALE		SHALE	3.5	620.5	
-139.0	CARBONDALE	ANVIL ROCK	SANDSTONE	9.0	624.0	
-148.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	633.0	
-157.0	CARBONDALE	BRERETON	LIMESTONE	1.0	642.0	
-158.0	CARBONDALE	ANNA	BLACK SHALE	6.5	643.0	
-164.5	CARBONDALE	HERRIN	COAL	3.2	649.5	
-167.7	CARBONDALE		UNDERCLAY	3.3	652.7	
-171.0	CARBONDALE		SANDSTONE	19.0	656.0	
-190.0	CARBONDALE		SANDY SHALE	20.0	675.0	
-210.0	CARBONDALE	BRIAR HILL	COAL	1.5	695.0	
-211.5	CARBONDALE		SANDY SHALE	3.5	696.5	

-215.0	CARBONDALE		SANDSTONE	17.0	700.0	
-232.0	CARBONDALE		SANDY SHALE	24.5	717.0	WITH SANDSTONE
-256.5	CARBONDALE		SANDY SHALE	10.0	741.5	
-266.5	CARBONDALE		GRAY SHALE	5.5	751.5	
-272.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	757.0	
-272.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	757.8	
-275.8	CARBONDALE		SHALE	0.7	760.8	
-276.5	CARBONDALE	SPRINGFIELD	COAL	5.3	761.5	
-281.8	CARBONDALE		SANDSTONE	10.8	766.8	

MAPID: 05923812000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.169699 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.750862 **DATE COLLECTED:** 5 / 24 / 1974

SURFACE ELEVATION (FT.): 399.4 **LOGGED (FT.):** 428.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 210-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.4	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0	
342.4	MODESTO		GRAY SHALE	52.0	57.0	
290.4	MODESTO		BLACK SHALE	2.0	109.0	
288.4	MODESTO		UNDERCLAY	5.5	111.0	
282.9	MODESTO		GRAY SHALE	19.5	116.5	
263.4	MODESTO		SANDSTONE	9.0	136.0	
254.4	MODESTO		GRAY SHALE	14.0	145.0	
240.4	MODESTO		SANDSTONE	3.0	159.0	
237.4	MODESTO		GRAY SHALE	57.0	162.0	
180.4	CARBONDALE		SANDSTONE	12.0	219.0	
168.4	CARBONDALE		GRAY SHALE	14.0	231.0	
154.4	CARBONDALE		SANDSTONE	9.8	245.0	
144.6	CARBONDALE		BLACK SHALE	1.2	254.8	
143.4	CARBONDALE		SHALE	5.0	256.0	
138.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	261.0	
133.4	CARBONDALE		GRAY SHALE	3.5	266.0	
129.9	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	269.5	
121.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.7	278.0	
111.7	CARBONDALE	BRERETON	LIMESTONE	1.3	287.7	
110.4	CARBONDALE	ANNA	BLACK SHALE	6.5	289.0	
103.9	CARBONDALE	HERRIN	COAL	3.0	295.5	
100.9	CARBONDALE		UNDERCLAY	4.0	298.5	
96.9	CARBONDALE		SANDSTONE	25.5	302.5	
71.4	CARBONDALE		GRAY SHALE	15.5	328.0	
55.9	CARBONDALE	BRIAR HILL	COAL	2.0	343.5	
53.9	CARBONDALE		SANDY SHALE	6.5	345.5	
47.4	CARBONDALE		SANDSTONE	16.0	352.0	WITH SANDY SHALE
31.4	CARBONDALE		SANDSTONE	10.0	368.0	
21.4	CARBONDALE		SANDY SHALE	20.0	378.0	
1.4	CARBONDALE		GRAY SHALE	11.4	398.0	
-10.0	CARBONDALE	ST. DAVID	LIMESTONE	0.4	409.4	
-10.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	409.8	
-12.6	CARBONDALE	SPRINGFIELD	COAL	5.2	412.0	
-17.8	CARBONDALE		SANDSTONE	11.0	417.2	

MAPID: 05923829000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 660' N line, 330' W line of NE SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.168573 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.752716 **DATE COLLECTED:** 8 / 1 / 1974

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 661.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	74.0	0.0	
306.0	MODESTO		SANDY SHALE	16.0	74.0	
290.0	MODESTO		GRAY SHALE	55.0	90.0	
235.0	MODESTO		BLACK SHALE	3.0	145.0	
232.0	MODESTO		GRAY SHALE	11.0	148.0	
221.0	MODESTO		SANDY SHALE	6.0	159.0	
215.0	MODESTO		GRAY SHALE	5.0	165.0	
210.0	MODESTO	WOMAC	COAL	1.5	170.0	
208.5	MODESTO		UNDERCLAY	2.5	171.5	
206.0	MODESTO		SANDSTONE	16.0	174.0	
190.0	MODESTO		GRAY SHALE	6.5	190.0	
183.5	MODESTO		LIMESTONE	2.0	196.5	
181.5	MODESTO		SANDSTONE	20.0	198.5	
161.5	MODESTO		GRAY SHALE	63.0	218.5	
98.5	MODESTO	CHAPEL	COAL	1.5	281.5	
97.0	MODESTO		UNDERCLAY	2.0	283.0	
95.0	MODESTO		SHALE	16.0	285.0	
79.0	MODESTO		SANDSTONE	28.0	301.0	
51.0	MODESTO		GRAY SHALE	56.0	329.0	
-5.0	MODESTO		SANDSTONE	32.0	385.0	
-37.0	MODESTO		CALCAREOUS SANDSTONE	15.0	417.0	
-52.0			SANDY SHALE	69.5	432.0	
-121.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	501.5	
-125.0	CARBONDALE		SANDY SHALE	3.5	505.0	
-128.5	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	508.5	
-138.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.5	518.5	
-147.0	CARBONDALE	BRERETON	LIMESTONE	1.5	527.0	
-148.5	CARBONDALE	ANNA	BLACK SHALE	6.0	528.5	
-154.5	CARBONDALE	HERRIN	COAL	3.5	534.5	
-158.0	CARBONDALE		UNDERCLAY	3.5	538.0	
-161.5	CARBONDALE		SANDSTONE	12.5	541.5	
-174.0	CARBONDALE		SANDY SHALE	27.0	554.0	
-201.0	CARBONDALE	BRIAR HILL	COAL	2.0	581.0	
-203.0	CARBONDALE		SANDY SHALE	28.7	583.0	
-231.7	CARBONDALE		GRAY SHALE	20.0	611.7	
-251.7	CARBONDALE		SHALE	0.5	631.7	SOFT
-252.2	CARBONDALE	SPRINGFIELD	COAL	1.6	632.2	
-253.8	CARBONDALE		SHALE	0.4	633.8	SOFT

-254.2	CARBONDALE	SANDSTONE	8.8	634.2	
-263.0	CARBONDALE	SANDSTONE	11.0	643.0	WITH SHALE STRKS
-274.0	CARBONDALE	SANDSTONE	7.5	654.0	

MAPID: 05923850000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' S line, 330' E line of SW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.170893 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.754532 **DATE COLLECTED:** 10 / 18 / 1974

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 402.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 219-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.0	PLEISTOCENE		UNCONSOLIDATED	128.0	0.0	
235.0	MODESTO		SHALE	5.0	128.0	
230.0	MODESTO		SHALY SANDSTONE	13.0	133.0	
217.0	MODESTO		GRAY SHALE	6.3	146.0	SOFT
210.7	MODESTO	WEST FRANKLIN	LIMESTONE	4.4	152.3	
206.3	MODESTO		GRAY SHALE	58.3	156.7	
148.0	CARBONDALE	DANVILLE	COAL	2.0	215.0	
146.0	CARBONDALE		GRAY SHALE	17.5	217.0	
128.5	CARBONDALE		SHALY SANDSTONE	7.5	234.5	
121.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	242.0	
117.0	CARBONDALE		SHALE	2.0	246.0	
115.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	248.0	
107.0	CARBONDALE		GRAY SHALE	11.2	256.0	
95.8	CARBONDALE	BRERETON	LIMESTONE	1.0	267.2	
94.8	CARBONDALE	ANNA	BLACK SHALE	6.8	268.2	
88.0	CARBONDALE	HERRIN	COAL	3.0	275.0	
85.0	CARBONDALE		UNDERCLAY	4.0	278.0	
81.0	CARBONDALE		CALCAREOUS SANDSTONE	8.0	282.0	
73.0	CARBONDALE		SHALY SANDSTONE	22.5	290.0	
50.5	CARBONDALE		GRAY SHALE	10.0	312.5	
40.5	CARBONDALE	BRIAR HILL	COAL	1.5	322.5	
39.0	CARBONDALE		SHALE	4.5	324.0	
34.5	CARBONDALE		SANDY SHALE	17.5	328.5	
17.0	CARBONDALE		SANDSTONE	4.0	346.0	
13.0	CARBONDALE		SANDY SHALE	26.2	350.0	
-13.2	CARBONDALE		GRAY SHALE	8.4	376.2	
-21.6	CARBONDALE	ST. DAVID	LIMESTONE	0.4	384.6	
-22.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	385.0	
-24.7	CARBONDALE		GRAY SHALE	1.0	387.7	
-25.7	CARBONDALE	SPRINGFIELD	COAL	5.2	388.7	
-30.9	CARBONDALE		SHALE	2.5	393.9	
-33.4	CARBONDALE		SANDSTONE	6.5	396.4	

MAPID: 05923874000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 260' S line, 50' W line of NW NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.173821 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.753395 **DATE COLLECTED:** 7 / 22 / 1974

SURFACE ELEVATION (FT.): 360.2 **LOGGED (FT.):** 391.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 212-G-C **WELL TYPE:** Coal Test

COMMENT: PERMIT 34; EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.2	PLEISTOCENE		UNCONSOLIDATED	128.5	0.0	
231.7	MODESTO		GRAY SHALE	8.5	128.5	
223.2	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	137.0	
217.2	MODESTO	WEST FRANKLIN	SHALY LIMESTONE	3.5	143.0	
213.7	MODESTO		SHALE & CONGLOMERATE	6.5	146.5	
207.2	MODESTO		GRAY SHALE	44.0	153.0	
163.2	CARBONDALE	DANVILLE	COAL	1.0	197.0	
162.2	CARBONDALE		SANDY SHALE	2.0	198.0	
160.2	CARBONDALE		SANDSTONE	17.0	200.0	
143.2	CARBONDALE		GRAY SHALE	6.0	217.0	
137.2	CARBONDALE		BLACK SHALE	1.0	223.0	
136.2	CARBONDALE		GRAY SHALE	3.5	224.0	
132.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	227.5	LIGHT
127.2	CARBONDALE		GRAY SHALE	1.5	233.0	
125.7	CARBONDALE		SANDSTONE	10.5	234.5	
115.2	CARBONDALE		SANDY SHALE	9.0	245.0	
106.2	CARBONDALE	BRERETON	LIMESTONE	1.0	254.0	DARK
105.2	CARBONDALE		SHALE	0.5	255.0	
104.7	CARBONDALE	ANNA	BLACK SHALE	6.0	255.5	
98.7	CARBONDALE	HERRIN	COAL	3.5	261.5	
95.2	CARBONDALE		UNDERCLAY	3.5	265.0	
91.7	CARBONDALE		SANDSTONE/LIMESTONE	4.5	268.5	
87.2	CARBONDALE		SHALY SANDSTONE	28.5	273.0	
58.7	CARBONDALE		GRAY SHALE	6.5	301.5	
52.2	CARBONDALE	BRIAR HILL	COAL	2.0	308.0	
50.2	CARBONDALE		CLAYSTONE	0.5	310.0	
49.7	CARBONDALE		SHALY SANDSTONE	53.5	310.5	
-3.8	CARBONDALE		GRAY SHALE	8.0	364.0	
-11.8	CARBONDALE	ST. DAVID	LIMESTONE	1.0	372.0	
-12.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	373.0	
-15.5	CARBONDALE	SPRINGFIELD	COAL	5.0	375.7	
-20.5	CARBONDALE		SHALE	1.8	380.7	
-22.3	CARBONDALE		SANDSTONE	4.5	382.5	
-26.8	CARBONDALE		SANDY SHALE	4.5	387.0	

MAPID: 05901056000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.160124 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.744597 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 1700.0 **LOG TYPE:** Electric Log

SOURCE: RYAN OIL CO., ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1245.0	BASE OF PENN.		UNCLASSIFIED	-	1700.0	

MAPID: 05901056000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.160124 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.744597 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2961.0 **LOG TYPE:** Electric Log

SOURCE: RYAN OIL CO., ETAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
211.0	CARBONDALE	DANVILLE	COAL	-	244.0	
185.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	270.0	
147.0	CARBONDALE	HERRIN	COAL	4.0	308.0	
101.0	CARBONDALE	BRIAR HILL	COAL	-	354.0	
81.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	10.0	374.0	
24.0	CARBONDALE	SPRINGFIELD	COAL	5.0	431.0	BLACK SHALE ROOF
-15.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	-	470.0	
-37.0	CARBONDALE	HOUCHIN CREEK	COAL	-	492.0	

MAPID: 05901056000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.160124 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.744597 **DATE COLLECTED:** 6 / 0 / 1949

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 2961.0 **LOG TYPE:** Electric Log

SOURCE: RYAN OIL CO., ETAL, LOGSDON THOS O **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-41.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	496.0	
-90.0	CARBONDALE	SURVANT	COAL	3.0	545.0	
-145.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-200.0	CARBONDALE	DEKOVEN	COAL	4.0	655.0	
-200.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	655.0	
-231.0	CARBONDALE	DAVIS	COAL	4.0	686.0	
-263.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	718.0	37% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-289.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	744.0	
-313.0	TRADEWATER	MT. RORAH	COAL	1.2	768.0	

MAPID: 05901106000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.174108 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.732662 **DATE COLLECTED:** 1 / 15 / 1951

SURFACE ELEVATION (FT.): 470.3 **LOGGED (FT.):** 671.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
470.3	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
405.3	BOND		LIMESTONE	1.3	65.0	
404.0	BOND		GRAY SHALE	42.8	66.3	SILTY BANDS
361.2	BOND		SANDSTONE	16.0	109.1	SHALE BAND
345.2	BOND		DARK SHALE	0.5	125.1	
344.7	BOND		COAL	0.7	125.6	
344.0	BOND		UNDERCLAY	3.8	126.3	
340.2	BOND		NO RECORD	4.9	130.1	ADJUST FOR MARKER
335.3	BOND		SHALE	5.3	135.0	GRAY-GREEN
330.0	BOND		LIMESTONE	1.2	140.3	
328.9	BOND		GRAY SHALE	21.2	141.4	
307.7	BOND	CARTHAGE	LIMESTONE	9.5	162.6	
298.2	MODESTO		BLACK SHALE	0.6	172.1	FOSSILIFEROUS, CALCAREOUS
297.6	MODESTO		SILTSTONE	12.1	172.7	
285.5	MODESTO		GRAY SHALE	5.5	184.8	
280.0	MODESTO	NEW HAVEN	COAL	0.2	190.3	
279.9	MODESTO		UNDERCLAY	4.3	190.4	
275.6	MODESTO		NO RECORD	0.6	194.7	ADJUST
275.0	MODESTO		SILTSTONE	7.5	195.3	SHALE BAND
267.5	MODESTO		GRAY SHALE	113.0	202.8	SILTSTONE BANDS
154.5	MODESTO		BLACK SHALE	2.2	315.8	
152.4	MODESTO		LIMESTONE	0.5	317.9	
151.9	MODESTO		BLACK SHALE	3.3	318.4	CALCAREOUS FOSSILIFEROUS
148.6	MODESTO		LIMESTONE	0.4	321.7	
148.2	MODESTO		GRAY SHALE	0.3	322.1	
147.9	MODESTO		SHALE	17.5	322.4	GREEN-GRAY
130.4	MODESTO		GRAY SHALE	5.6	339.9	
124.8	MODESTO	WOMAC	COAL	1.6	345.5	
123.2	MODESTO		SILTSTONE & SHALE	25.6	347.1	
97.6	MODESTO		GRAY SHALE	75.3	372.7	
22.4	MODESTO		BLACK SHALE	0.8	447.9	
21.5	MODESTO	CHAPEL	COAL	1.0	448.8	
20.6	MODESTO		UNDERCLAY	1.2	449.7	
19.4	MODESTO		GRAY SHALE	22.1	450.9	SILTY BANDS
-2.6	MODESTO		SANDSTONE	18.1	472.9	
-20.7	MODESTO		SILTSTONE & SHALE	19.8	491.0	
-40.5	MODESTO		GRAY SHALE	2.8	510.8	LOWER IS BLACK SHALE
-43.3	MODESTO	WEST FRANKLIN	LIMESTONE	4.5	513.6	BROWN-GRAY
-47.8	MODESTO		GRAY SHALE	53.5	518.1	SILTY BANDS

-101.3	MODESTO		SANDSTONE	2.3	571.6	
-103.5	MODESTO		GRAY SHALE	22.6	573.8	
-126.1	MODESTO		BLACK SHALE	4.3	596.4	
-130.4	MODESTO		GRAY SHALE	30.3	600.7	
-160.7	MODESTO		BLACK SHALE	4.2	631.0	
-164.9	CARBONDALE	DANVILLE	COAL	1.8	635.2	
-166.6	CARBONDALE		UNDERCLAY	0.3	636.9	
-167.0	CARBONDALE		SHALE	4.7	637.3	GRAY-GREEN
-171.6	CARBONDALE		GRAY SHALE	9.3	641.9	
-181.0	CARBONDALE		SANDSTONE	1.2	651.3	
-182.1	CARBONDALE		GRAY SHALE	2.8	652.4	
-185.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.4	655.3	
-188.4	CARBONDALE		SHALE	1.9	658.7	GREENISH GRAY
-190.3	CARBONDALE		GRAY SHALE	6.1	660.6	
-196.4	CARBONDALE		SHALE	0.9	666.7	BROWN WITH COAL STREAKS
-197.3	CARBONDALE		GRAY SHALE	3.4	667.6	

MAPID: 05901854000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.166807 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.733673 **DATE COLLECTED:** 10 / 0 / 1955

SURFACE ELEVATION (FT.): 409.0 **LOGGED (FT.):** 2706.0 **LOG TYPE:** Electric Log

SOURCE: ATHA, H. D., LOGSDON T O 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
29.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	380.0	
-19.0	CARBONDALE	SURVANT	COAL	2.0	428.0	
-81.0	CARBONDALE	COLCHESTER	COAL	0.5	490.0	
-131.0	CARBONDALE	DEKOVEN	COAL	4.0	540.0	
-131.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	540.0	
-156.0	CARBONDALE	DAVIS	COAL	6.0	565.0	
-193.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	602.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-224.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	633.0	

MAPID: 05901993000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.164482 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.735498 **DATE COLLECTED:** 4 / 0 / 1956

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: ATHA, H. D., LOGSDON T O 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-85.0	CARBONDALE	COLCHESTER	COAL	0.5	506.0	
-140.0	CARBONDALE	DEKOVEN	COAL	3.0	561.0	
-140.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	561.0	
-168.0	CARBONDALE	DAVIS	COAL	4.5	589.0	
-199.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	620.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-231.0	TRADEWATER	STONEFORT	LIMESTONE	2.5	652.0	

MAPID: 05902080000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1650' S line, 1650' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.162904 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.737371 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 224.5 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
249.0	CARBONDALE		SHALE	10.0	173.0	
239.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	183.0	
235.0	CARBONDALE	LAWSON	SILTY SHALE	21.0	187.0	
214.0	CARBONDALE	LAWSON	CALCAREOUS SHALE	7.0	208.0	
207.0	CARBONDALE	LAWSON	CLAYSTONE & SHALE	4.0	215.0	
203.0	CARBONDALE	HERRIN	COAL	5.5	219.0	

MAPID: 05901105000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.184591 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739033 **DATE COLLECTED:** 10 / 26 / 1951

SURFACE ELEVATION (FT.): 470.6 **LOGGED (FT.):** 426.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
470.6	PLEISTOCENE		UNCONSOLIDATED	86.0	0.0	
384.6	MODESTO		SANDSTONE	22.5	86.0	SILTY BANDS
362.1	MODESTO		GRAY SHALE	6.0	108.5	
356.1	MODESTO		LIMESTONE	2.7	114.5	TAN
353.4	MODESTO		SILTSTONE	4.8	117.2	CARBONACEOUS
348.6	MODESTO		GRAY SHALE	1.2	122.0	
347.4	MODESTO		SANDSTONE	1.8	123.2	
345.6	MODESTO		GRAY SHALE	29.2	125.0	
316.4	MODESTO		SILTSTONE	6.1	154.2	
310.3	MODESTO		SHALE	6.3	160.3	GREENISH-GRAY
304.1	MODESTO		GRAY SHALE	0.9	166.5	
303.2	MODESTO		COAL	0.4	167.4	
302.8	MODESTO		UNDERCLAY	0.5	167.8	
302.3	MODESTO		SHALE	4.8	168.3	GREENISH-GRAY
297.5	MODESTO		SANDSTONE	1.1	173.1	
296.4	MODESTO	WEST FRANKLIN	LIMESTONE	14.3	174.2	
282.2	MODESTO		SHALE	3.4	188.4	GREENISH-GRAY
278.8	MODESTO		GRAY SHALE	6.0	191.8	
272.8	MODESTO		BLACK SHALE	4.3	197.8	
268.4	MODESTO		GRAY SHALE	37.3	202.2	
231.1	CARBONDALE	DANVILLE	COAL	2.2	239.5	
228.9	CARBONDALE		UNDERCLAY	0.3	241.7	
228.7	CARBONDALE		GRAY SHALE	0.8	241.9	
227.8	CARBONDALE		SANDSTONE	6.7	242.8	
221.2	CARBONDALE		SILTSTONE	4.3	249.4	
216.8	CARBONDALE		GRAY SHALE	1.3	253.8	
215.5	CARBONDALE		BLACK SHALE	0.5	255.1	
215.1	CARBONDALE		SHALE	7.3	255.5	
207.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	262.8	
206.3	CARBONDALE	BANKSTON FORK	ARGILACEOUS SHALE	0.6	264.3	CALCAREOUS
205.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.4	264.9	
203.3	CARBONDALE		ARGILACEOUS SHALE	0.6	267.3	
202.7	CARBONDALE	ANVIL ROCK	SANDSTONE	14.2	267.9	
188.5	CARBONDALE		GRAY SHALE	9.5	282.1	
179.0	CARBONDALE	BRERETON	LIMESTONE	2.7	291.6	
176.3	CARBONDALE	ANNA	BLACK SHALE	6.3	294.3	
170.0	CARBONDALE	HERRIN	COAL	2.9	300.6	
167.1	CARBONDALE		UNDERCLAY	1.7	303.5	
165.4	CARBONDALE		SILTSTONE	7.3	305.2	GREENISH-GRAY, CLAYEY

158.2	CARBONDALE		SANDSTONE	15.0	312.4	
143.2	CARBONDALE		GRAY SHALE	17.4	327.4	
125.8	CARBONDALE		BLACK SHALE	3.9	344.8	
121.8	CARBONDALE	BRIAR HILL	COAL	1.6	348.8	
120.3	CARBONDALE		SILTY SANDSTONE	3.1	350.3	
117.2	CARBONDALE		GRAY SHALE	2.0	353.4	
115.2	CARBONDALE		SANDSTONE	4.3	355.4	
110.8	CARBONDALE		SILTSTONE	7.7	359.8	SANDSTONE BANDS
103.2	CARBONDALE		GRAY SHALE	47.8	367.4	
55.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	415.3	
52.3	CARBONDALE	SPRINGFIELD	COAL	5.5	418.3	
46.8	CARBONDALE		GRAY SHALE	2.2	423.8	

MAPID: 05901117000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.188259 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.736312 **DATE COLLECTED:** 3 / 11 / 1952

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 378.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 17 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	PLEISTOCENE		UNCONSOLIDATED	96.5	0.0	
303.5	MODESTO		GRAY SHALE	26.7	96.5	
276.8	MODESTO		BLACK SHALE	0.8	123.2	
276.0	MODESTO		GRAY SHALE	3.8	124.0	
272.2	MODESTO		BLACK SHALE	1.1	127.8	
271.2	MODESTO		GRAY SHALE	1.8	128.8	
269.4	MODESTO		COAL	0.9	130.6	
268.5	MODESTO		NO RECORD	2.5	131.5	ADJUST FOR MARKER
266.0	MODESTO		UNDERCLAY	0.8	134.0	
265.2	MODESTO		SILTSTONE	2.1	134.8	
263.1	MODESTO		SANDSTONE	16.4	136.9	
246.7	MODESTO		GRAY SHALE	13.0	153.3	
233.7	MODESTO		BLACK SHALE	1.3	166.3	
232.3	MODESTO		GRAY SHALE	38.0	167.7	
194.3	CARBONDALE	DANVILLE	COAL	1.8	205.7	
192.5	CARBONDALE		UNDERCLAY	0.8	207.5	
191.7	CARBONDALE		SILTSTONE	13.2	208.3	
178.6	CARBONDALE		GRAY SHALE	1.6	221.4	
177.0	CARBONDALE		GRAY SHALE	0.8	223.0	COAL PARTINGS (ALLENBY)
176.2	CARBONDALE		GRAY SHALE	1.2	223.8	
175.1	CARBONDALE		SHALE & CLAYSTONE	4.3	224.9	
170.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	229.3	
164.9	CARBONDALE		SHALE & CLAYSTONE	1.2	235.1	
163.7	CARBONDALE	ANVIL ROCK	SILTSTONE	2.1	236.3	
161.7	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	238.3	
158.2	CARBONDALE	ANVIL ROCK	SILTSTONE	3.9	241.8	
154.2	CARBONDALE	ANVIL ROCK	SANDSTONE	2.8	245.8	
151.4	CARBONDALE		GRAY SHALE	10.3	248.6	
141.1	CARBONDALE	BRERETON	LIMESTONE	2.0	258.9	
139.1	CARBONDALE	ANNA	BLACK SHALE	3.6	260.9	
135.5	CARBONDALE	HERRIN	COAL	2.4	264.5	
133.1	CARBONDALE	HERRIN	GRAY SHALE	0.2	266.9	
132.9	CARBONDALE	HERRIN	COAL	0.9	267.1	
132.0	CARBONDALE		UNDERCLAY	1.3	268.0	
130.7	CARBONDALE		SHALE & CLAYSTONE	4.1	269.3	
126.7	CARBONDALE		SILTSTONE	1.3	273.3	
125.4	CARBONDALE		SANDSTONE	8.1	274.6	
117.3	CARBONDALE		SILTSTONE	1.5	282.7	
115.8	CARBONDALE		GRAY SHALE	26.3	284.2	

89.5	CARBONDALE		BLACK SHALE	0.6	310.5	COAL STREAKS
88.9	CARBONDALE	BRIAR HILL	COAL	1.4	311.1	
87.5	CARBONDALE		UNDERCLAY	0.3	312.5	
87.2	CARBONDALE		SILTSTONE	2.3	312.8	
84.9	CARBONDALE		GRAY SHALE	2.5	315.1	
82.4	CARBONDALE		SANDSTONE	8.9	317.6	
73.5	CARBONDALE		SHALY SILTSTONE	4.8	326.5	
68.7	CARBONDALE		SILTY SANDSTONE	6.9	331.3	
61.8	CARBONDALE		SHALY SILTSTONE	11.1	338.2	
50.7	CARBONDALE		GRAY SHALE	19.9	349.3	
30.8	CARBONDALE	ST. DAVID	GRAY SHALE	0.8	369.2	CALCAREOUS, FOSSILIFEROUS, LS NODS
30.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	370.0	
28.6	CARBONDALE	SPRINGFIELD	COAL	4.4	371.4	
24.2	CARBONDALE		UNDERCLAY	2.2	375.8	

MAPID: 05901117000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.188259 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.736312 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 268.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 17 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
195.5	CARBONDALE	DANVILLE	COAL	1.9	204.5	
193.6	CARBONDALE		SHALE & SILTSTONE	15.5	206.4	
178.2	CARBONDALE	ALLENBY	BONE COAL	0.8	221.8	
177.4	CARBONDALE		GRAY SHALE	5.5	222.6	
171.9	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	5.8	228.1	
166.1	CARBONDALE	LAWSON	CLAYSTONE	1.2	233.9	
164.9	CARBONDALE	LAWSON	SILTSTONE	9.5	235.1	
155.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	2.8	244.6	
152.6	CARBONDALE	LAWSON	GRAY SHALE	10.3	247.4	
142.2	CARBONDALE	BRERETON	LIMESTONE	1.4	257.8	
140.8	CARBONDALE	ANNA	BLACK SHALE	5.8	259.2	
135.0	CARBONDALE	HERRIN	COAL	3.5	265.0	

MAPID: 05901148000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.192816 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739973 **DATE COLLECTED:** 11 / 18 / 1952

SURFACE ELEVATION (FT.): 383.7 **LOGGED (FT.):** 344.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 48 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.7	PLEISTOCENE		UNCONSOLIDATED	92.0	0.0	
291.7	MODESTO		SANDSTONE	5.8	92.0	
285.9	MODESTO		SILTSTONE	6.5	97.8	
279.4	MODESTO	WEST FRANKLIN	LIMESTONE	6.6	104.3	
272.8	MODESTO		SANDSTONE	4.1	110.9	
268.7	MODESTO		SHALE	6.1	115.0	
262.6	MODESTO		NO RECORD	1.9	121.1	ADJUST FOR MARKER
260.7	MODESTO		GRAY SHALE	37.3	123.0	
223.4	CARBONDALE	DANVILLE	COAL	1.2	160.3	
222.3			NO RECORD	0.6	161.4	ADJUST FOR MARKER
221.7	CARBONDALE	DANVILLE	COAL	0.3	162.0	
221.4	CARBONDALE		SILTSTONE	5.8	162.3	
215.5	CARBONDALE		SANDSTONE	5.3	168.2	
210.3	CARBONDALE		GRAY SHALE	3.7	173.4	
206.6	CARBONDALE		BLACK SHALE	0.6	177.1	
206.0	CARBONDALE		GRAY SHALE	4.3	177.7	
201.7	CARBONDALE	BANKSTON FORK	LIMESTONE	3.9	182.0	
197.8	CARBONDALE	ANVIL ROCK	SILTY SHALE	3.7	185.9	
194.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.4	189.6	
184.7	CARBONDALE		GRAY SHALE	10.2	199.0	SOME GREENISH-GRAY
174.5	CARBONDALE	BRERETON	LIMESTONE	1.2	209.2	
173.4	CARBONDALE	ANNA	BLACK SHALE	7.8	210.3	
165.6	CARBONDALE	HERRIN	COAL	2.2	218.1	
163.4	CARBONDALE	HERRIN	GRAY SHALE	1.0	220.3	
162.4	CARBONDALE	HERRIN	COAL	0.9	221.3	
161.5	CARBONDALE		UNDERCLAY	2.5	222.2	
159.0	CARBONDALE		SHALE	6.1	224.7	GREENISH-GRAY
152.9	CARBONDALE		SANDSTONE	11.1	230.8	
141.8	CARBONDALE		GRAY SHALE	24.9	241.9	
116.9	CARBONDALE	BRIAR HILL	COAL	2.0	266.8	
114.9	CARBONDALE		SILTY SHALE	5.4	268.8	
109.5	CARBONDALE		SANDSTONE	3.2	274.2	
106.4	CARBONDALE		SILTY SHALE	31.4	277.3	
74.9	CARBONDALE		GRAY SHALE	22.5	308.8	
52.4	CARBONDALE	ST. DAVID	LIMESTONE	0.8	331.3	
51.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	332.0	
48.7	CARBONDALE	SPRINGFIELD	COAL	5.0	335.0	
43.7	CARBONDALE		UNDERCLAY	4.0	340.0	

MAPID: 05903646000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 660' N line, 1' W line of NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.183422 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738117 **DATE COLLECTED:** 12 / 17 / 1968

SURFACE ELEVATION (FT.): 468.9 **LOGGED (FT.):** 421.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 48-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
468.9	PLEISTOCENE		UNCONSOLIDATED	73.6	0.0	
395.3	MODESTO		SANDSTONE	38.4	73.6	
356.9	MODESTO		LIMESTONE	2.4	112.0	
354.5	MODESTO		SANDSTONE	55.4	114.4	WITH SHALE
299.1	MODESTO	WEST FRANKLIN	LIMESTONE	6.4	169.8	
292.7	MODESTO	WEST FRANKLIN	GRAY SHALE	0.6	176.2	
292.1	MODESTO	WEST FRANKLIN	LIMESTONE	5.4	176.8	
286.7	MODESTO	WEST FRANKLIN	GRAY SHALE	14.3	182.2	
272.4	MODESTO	WEST FRANKLIN	LIMESTONE	0.5	196.5	
271.9	MODESTO		BLACK SHALE	2.6	197.0	
269.3	MODESTO		GRAY SHALE	38.5	199.6	
230.9	CARBONDALE	DANVILLE	COAL	1.9	238.0	
229.0	CARBONDALE		UNDERCLAY	1.2	239.9	
227.9	CARBONDALE		SANDSTONE	14.0	241.0	
213.9	CARBONDALE		GRAY SHALE	4.0	255.0	
209.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	259.0	
204.3	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	10.5	264.6	
193.8	CARBONDALE	BRERETON	LIMESTONE	13.0	275.1	
180.8	CARBONDALE		GRAY SHALE	3.1	288.1	
177.7	CARBONDALE	ANNA	BLACK SHALE	5.8	291.2	
171.9	CARBONDALE	HERRIN	COAL	2.6	297.0	
169.3	CARBONDALE		UNDERCLAY	1.5	299.6	
167.8	CARBONDALE		SHALE	44.5	301.1	
123.4	CARBONDALE	BRIAR HILL	COAL	2.1	345.5	
121.3	CARBONDALE		SHALE	64.1	347.6	
57.3	CARBONDALE	ST. DAVID	LIMESTONE	0.7	411.6	
56.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	412.3	
54.0	CARBONDALE	SPRINGFIELD	COAL	5.3	414.9	
48.8	CARBONDALE		UNDERCLAY	1.1	420.1	

MAPID: 05903647000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 660' N line, 1' W line of NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.183328 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.745388 **DATE COLLECTED:** 11 / 2 / 1972

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 373.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 107-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.6	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0	
332.6	MODESTO		GRAY SHALE	21.0	43.0	
311.6	MODESTO		SANDSTONE	6.0	64.0	
305.6	MODESTO		SHALE	32.0	70.0	
273.6	MODESTO		SANDSTONE	5.0	102.0	
268.6	MODESTO		SHALE	2.5	107.0	
266.1	MODESTO		CALCAREOUS SANDSTONE	9.5	109.5	
256.6	MODESTO		SANDY SHALE	11.0	119.0	
245.6	MODESTO		GRAY SHALE	2.0	130.0	
243.6	MODESTO		DARK SHALE	6.0	132.0	
237.6	MODESTO		GRAY SHALE	39.0	138.0	
198.6	CARBONDALE	DANVILLE	COAL	1.5	177.0	
197.1	CARBONDALE		UNDERCLAY	1.0	178.5	
196.1	CARBONDALE		SANDSTONE	11.5	179.5	
184.6	CARBONDALE		SHALE	5.5	191.0	
179.1	CARBONDALE		SANDSTONE	1.0	196.5	
178.1	CARBONDALE		GRAY SHALE	2.5	197.5	
175.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	200.0	
171.1	CARBONDALE		GRAY SHALE	2.0	204.5	
169.1	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	206.5	
157.1	CARBONDALE		GRAY SHALE	10.5	218.5	
146.6	CARBONDALE	BRERETON	LIMESTONE	3.3	229.0	
143.3	CARBONDALE	ANNA	BLACK SHALE	5.0	232.3	
138.3	CARBONDALE		GRAY SHALE	1.7	237.3	
136.6	CARBONDALE	HERRIN	COAL	3.3	239.0	
133.3	CARBONDALE		UNDERCLAY	2.7	242.3	
130.6	CARBONDALE		SANDSTONE	18.5	245.0	
112.1	CARBONDALE		SANDY SHALE	27.5	263.5	
84.6	CARBONDALE	BRIAR HILL	COAL	2.0	291.0	
82.6	CARBONDALE		SANDY SHALE	6.5	293.0	
76.1	CARBONDALE		SANDSTONE	5.0	299.5	
71.1	CARBONDALE		SANDY SHALE	47.5	304.5	
23.6	CARBONDALE		GRAY SHALE	8.3	352.0	
15.3	CARBONDALE	ST. DAVID	LIMESTONE	1.4	360.3	
13.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	361.7	
10.6	CARBONDALE	SPRINGFIELD	COAL	5.7	365.0	
4.9	CARBONDALE		UNDERCLAY	2.5	370.7	

MAPID: 05900341000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 3560.0 **LOG TYPE:**

SOURCE: PHILLIPS, FORD WL N 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
194.0	CARBONDALE	HERRIN	COAL	-	162.0	
94.0	CARBONDALE	SPRINGFIELD	COAL	-	262.0	

MAPID: 05900341000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:** 7 / 0 / 1944

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1506.0 **LOG TYPE:** Survey Core Study

SOURCE: PHILLIPS PET-COAL DIVISION **WELL TYPE:** Oil and Gas Test

COMMENT: CONTROL WELL #193

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.0			UNKNOWN	159.0	0.0	
197.0			COAL	2.0	159.0	L-CORE BEGINS
195.0			ROCK	43.0	161.0	
152.0			COAL	1.0	204.0	
151.0			ROCK	58.0	205.0	
93.0			COAL	5.0	263.0	
88.0			ROCK	80.0	268.0	
8.0			COAL	1.0	348.0	
7.0			ROCK	159.0	349.0	
-152.0			COAL	3.0	508.0	
-155.0			ROCK	66.0	511.0	
-221.0			COAL	1.0	577.0	
-222.0			ROCK	23.0	578.0	
-245.0			COAL	3.0	601.0	
-248.0			ROCK	16.0	604.0	
-264.0			COAL	1.0	620.0	
-265.0			ROCK	58.0	621.0	
-323.0			COAL	1.0	679.0	
-324.0			ROCK	14.0	680.0	
-338.0			COAL	2.0	694.0	
-340.0			ROCK	811.0	696.0	

MAPID: 05900341000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
200.0	CARBONDALE	HERRIN	COAL	4.0	156.0	
156.0	CARBONDALE	BRIAR HILL	COAL	-	200.0	
96.0	CARBONDALE	SPRINGFIELD	COAL	5.0	260.0	BLACK SHALE ROOF
16.0	CARBONDALE	HOUCHIN CREEK	COAL	-	340.0	

MAPID: 05900341000C **VERSION:** 4 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:** 8 / 0 / 1944
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 1520.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-110.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	466.0	
-182.0	SPOON	DAVIS	UNCLASSIFIED	-	538.0	
-1164.0	BASE OF PENN.		UNCLASSIFIED	-	1520.0	

MAPID: 05900341000C **VERSION:** 5 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:** 8 / 0 / 1944
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2807.0 **LOG TYPE:** Electric Log
SOURCE: PHILLIPS PETROLEUM CO., FORD W L & NEVA **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
16.0	CARBONDALE	HOUCHIN CREEK	COAL	4.0	340.0	
-44.0	CARBONDALE	SURVANT	COAL	2.0	400.0	
-112.0	CARBONDALE	COLCHESTER	COAL	0.5	468.0	
-152.0	CARBONDALE	DEKOVEN	COAL	3.0	508.0	
-152.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	508.0	
-179.0	CARBONDALE	DAVIS	COAL	4.0	535.0	
-216.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	572.0	33% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-241.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	597.0	

MAPID: 05900341000C **VERSION:** 6 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** HINES

CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2807.0 **LOG TYPE:** Survey Sample Study

SOURCE: PHILLIPS PETROLEUM CO. **WELL TYPE:** Oil and Gas 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: 05900341000C **VERSION:** 7 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 990' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205305 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.740664 **DATE COLLECTED:** 7 / 0 / 1944

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 890.0 **LOG TYPE:** Survey Sample Study

SOURCE: PHILLIPS PETROLEUM CO. 1 **WELL TYPE:** Unsuccessful or Unknown Results

COMMENT: COAL DIVISION CONTROL WELL #193

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.0			NO RECORD	159.0	0.0	
197.0	CARBONDALE	HERRIN	COAL	2.0	159.0	THICKNESS ESTIMATED
195.0	CARBONDALE		SILTSTONE	35.0	161.0	
160.0	CARBONDALE		SHALE	4.0	196.0	
156.0	CARBONDALE		BLACK SHALE	4.0	200.0	
152.0	CARBONDALE	BRIAR HILL	COAL	1.0	204.0	THICKNESS ESTIMATED
151.0	CARBONDALE		DARK SHALE	5.0	205.0	
146.0	CARBONDALE		NO RECORD	5.0	210.0	
141.0	CARBONDALE		SILTSTONE	7.0	215.0	
134.0	CARBONDALE		SANDSTONE	23.0	222.0	
111.0	CARBONDALE		SILTSTONE	5.0	245.0	
106.0	CARBONDALE		SHALE	6.0	250.0	
100.0	CARBONDALE	TURNER MINE	BLACK SHALE	7.0	256.0	
93.0	CARBONDALE	SPRINGFIELD	COAL	5.0	263.0	THICKNESS ESTIMATED
88.0	CARBONDALE		CLAYSTONE & SHALE	3.0	268.0	
85.0	CARBONDALE		SANDSTONE	15.0	271.0	
70.0	CARBONDALE		SILTSTONE	19.0	286.0	
51.0	CARBONDALE		SHALE	35.0	305.0	
16.0	CARBONDALE	EXCELLO	BLACK SHALE	8.0	340.0	
8.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	348.0	THICKNESS ESTIMATED
7.0	CARBONDALE		CLAYSTONE & SILTSTONE	1.0	349.0	
6.0	CARBONDALE		SILTSTONE	20.0	350.0	
-14.0	CARBONDALE		SHALE	2.0	370.0	WITH BLACK SHALE
-16.0	CARBONDALE		SANDSTONE	8.0	372.0	
-24.0	CARBONDALE	SURVANT	BLACK SHALE & COAL	2.0	380.0	WITH COAL
-26.0	CARBONDALE		SANDSTONE	20.0	382.0	
-46.0	CARBONDALE	COLCHESTER	BLACK SHALE & COAL	3.0	402.0	WITH COAL
-49.0	SPOON		SILTSTONE	15.0	405.0	
-64.0	SPOON		SHALE	10.0	420.0	
-74.0	SPOON		SANDSTONE	5.0	430.0	
-79.0	SPOON		SHALE	28.0	435.0	
-107.0	SPOON		BLACK SHALE	3.0	463.0	
-110.0	SPOON		CLAYSTONE & SHALE	7.0	466.0	
-117.0	SPOON		SANDSTONE	34.0	473.0	
-151.0	SPOON		BLACK SHALE	1.0	507.0	
-152.0	SPOON	DEKOVEN	COAL	3.0	508.0	THICKNESS ESTIMATED
-155.0	SPOON		UNDERCLAY	1.0	511.0	
-156.0	SPOON		SANDSTONE	10.0	512.0	
-166.0	SPOON		SHALE	16.0	522.0	

-182.0	SPOON	DAVIS	BLACK SHALE & COAL	3.0	538.0	WITH COAL
-185.0	SPOON		CLAYSTONE & SHALE	6.0	541.0	
-191.0	SPOON		SILTSTONE	4.0	547.0	
-195.0	SPOON		SANDSTONE	5.0	551.0	
-200.0	SPOON		SHALE	19.0	556.0	
-219.0	SPOON		BLACK SHALE	2.0	575.0	
-221.0	SPOON		COAL	1.0	577.0	THICKNESS ESTIMATED
-222.0	SPOON		CLAYSTONE & SHALE	12.0	578.0	
-234.0	SPOON		SHALE	7.0	590.0	
-241.0	SPOON		LIMESTONE	3.0	597.0	
-244.0	SPOON		BLACK SHALE	1.0	600.0	
-245.0	SPOON		COAL	3.0	601.0	WITH UNDERCLAY
-248.0			CLAYSTONE & SHALE	11.0	604.0	
-259.0			SHALE	5.0	615.0	
-264.0			BLACK SHALE	1.0	620.0	
-265.0			COAL	1.0	621.0	THICKNESS ESTIMATED
-266.0			UNDERCLAY	1.0	622.0	
-267.0			CLAYSTONE & SHALE	11.0	623.0	
-278.0			SILTSTONE	4.0	634.0	
-282.0			SANDSTONE	8.0	638.0	
-290.0			SHALE	10.0	646.0	
-300.0			BLACK LIMESTONE	2.0	656.0	
-302.0			BLACK SHALE	2.0	658.0	
-304.0			CLAYSTONE & SHALE	14.0	660.0	
-318.0			SILTSTONE	4.0	674.0	
-322.0			BLACK SHALE	2.0	678.0	
-324.0			COAL	1.0	680.0	THICKNESS ESTIMATED
-325.0			UNDERCLAY	1.0	681.0	
-326.0			SILTSTONE	10.0	682.0	
-336.0			SHALE	2.0	692.0	
-338.0			BLACK SHALE	1.0	694.0	
-339.0			COAL	2.0	695.0	THICKNESS ESTIMATED
-341.0			UNDERCLAY	1.0	697.0	
-342.0			SHALE	5.0	698.0	
-347.0			LIMESTONE	1.0	703.0	
-348.0			CLAYSTONE & SHALE	6.0	704.0	
-354.0			SILTSTONE	5.0	710.0	
-359.0			SHALE	35.0	715.0	
-394.0			BLACK SHALE & COAL	2.0	750.0	THIN COAL
-396.0			CLAYSTONE & SHALE	4.0	752.0	
-400.0			SILTSTONE	21.0	756.0	
-421.0			SHALE	23.0	777.0	
-444.0			SANDSTONE	16.0	800.0	
-460.0			SHALE	13.0	816.0	
-473.0			SANDSTONE	39.0	829.0	
-512.0			SHALE	9.0	868.0	
-521.0			BLACK SHALE & COAL	1.0	877.0	WITH COAL

-522.0	CLAYSTONE & SHALE	6.0	878.0	
-528.0	SANDSTONE	6.0	884.0	NO SIGN. COAL LOWER

MAPID: 05901119000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.210939 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.732415 **DATE COLLECTED:** 2 / 20 / 1952

SURFACE ELEVATION (FT.): 397.7 **LOGGED (FT.):** 237.8 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
397.7	PLEISTOCENE		UNCONSOLIDATED	79.5	0.0	
318.2	CARBONDALE		SANDSTONE	23.7	79.5	
294.5	CARBONDALE		SILTSTONE	2.0	103.2	
292.5	CARBONDALE		GRAY SHALE	7.6	105.2	
284.9	CARBONDALE	BRERETON	LIMESTONE	4.2	112.8	
280.8	CARBONDALE	ANNA	BLACK SHALE	4.1	116.9	
276.7	CARBONDALE	HERRIN	COAL	2.8	121.0	
273.9	CARBONDALE		UNDERCLAY	2.2	123.8	
271.8	CARBONDALE		SILTY SHALE	16.1	125.9	
255.7	CARBONDALE		GRAY SHALE	24.8	142.0	
230.9	CARBONDALE	BRIAR HILL	COAL	2.0	166.8	
228.9	CARBONDALE		UNDERCLAY	2.0	168.8	
226.9	CARBONDALE		SILTSTONE	0.7	170.8	
226.3	CARBONDALE		GRAY SHALE	2.4	171.4	
223.9	CARBONDALE		SANDSTONE	16.0	173.8	
207.9	CARBONDALE		SILTSTONE	27.1	189.8	
180.8	CARBONDALE		GRAY SHALE	9.8	216.9	
170.9	CARBONDALE	TURNER MINE	BLACK SHALE	4.7	226.8	
166.3	CARBONDALE	SPRINGFIELD	COAL	4.3	231.4	
162.0	CARBONDALE		UNDERCLAY	2.2	235.7	

MAPID: 05901129000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.210908 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743284 **DATE COLLECTED:** 11 / 20 / 1952

SURFACE ELEVATION (FT.): 358.5 **LOGGED (FT.):** 207.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 29 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
358.5	PLEISTOCENE		UNCONSOLIDATED	140.5	0.0	
218.0	CARBONDALE		SILTSTONE	18.3	140.5	
199.7	CARBONDALE		GRAY SHALE	7.8	158.8	
191.9	CARBONDALE		SILTSTONE	4.5	166.6	
187.4	CARBONDALE		GRAY SHALE	5.1	171.1	
182.3	CARBONDALE		SILTSTONE	10.2	176.2	
172.2	CARBONDALE		GRAY SHALE	8.4	186.3	
163.7	CARBONDALE	ST. DAVID	LIMESTONE	0.6	194.8	
163.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	195.3	
161.1	CARBONDALE	SPRINGFIELD	COAL	4.5	197.4	
156.6	CARBONDALE		SILTSTONE	5.1	201.9	

MAPID: 05901132000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.203005 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738885 **DATE COLLECTED:** 2 / 19 / 1952

SURFACE ELEVATION (FT.): 398.6 **LOGGED (FT.):** 292.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 32 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.6	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0	
363.6	MODESTO		LIMESTONE	0.2	35.0	
363.4	MODESTO		COAL	0.0	35.2	
363.3	MODESTO		UNDERCLAY	0.8	35.3	
362.6	MODESTO		SILTSTONE	5.1	36.0	
357.5	MODESTO		SANDSTONE	1.3	41.1	
356.2	MODESTO		SHALE	3.3	42.4	GREENISH-GRAY CLAYEY
352.8	MODESTO		SILTSTONE & SHALE	21.1	45.8	
331.8	MODESTO		GRAY SHALE	5.3	66.8	
326.5	MODESTO		BLACK SHALE	7.9	72.1	
318.6	MODESTO		GRAY SHALE	32.4	80.0	
286.2	CARBONDALE	DANVILLE	COAL	1.8	112.4	
284.3	CARBONDALE		SILTSTONE	6.0	114.3	
278.3	CARBONDALE		GRAY SHALE	4.2	120.3	
274.2	CARBONDALE		BLACK SHALE	0.4	124.4	CARBONIFEROUS, BONE COAL
273.8	CARBONDALE		UNDERCLAY	3.3	124.8	SILTY BAND
270.5	CARBONDALE		SILTY SHALE	12.9	128.1	
257.6	CARBONDALE	ANVIL ROCK	SANDSTONE	29.8	141.0	SHALE BAND
227.8	CARBONDALE	ANNA	BLACK SHALE	7.0	170.8	SOME GREEN-GRAY SHALE
220.8	CARBONDALE	HERRIN	COAL	3.3	177.8	
217.5	CARBONDALE		UNDERCLAY	1.8	181.1	
215.8	CARBONDALE		SILTY SHALE	18.4	182.8	
197.3	CARBONDALE		GRAY SHALE	19.6	201.3	
177.8	CARBONDALE	BRIAR HILL	COAL	2.3	220.8	SHALE STREAKS
175.4	CARBONDALE		UNDERCLAY	0.8	223.2	
174.6	CARBONDALE		SILTSTONE	6.8	224.0	SHALE BAND
167.8	CARBONDALE		SANDSTONE	21.8	230.8	
146.0	CARBONDALE		SILTSTONE	17.8	252.6	SHALE BAND
128.3	CARBONDALE		GRAY SHALE	12.3	270.3	
116.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	282.6	
113.6	CARBONDALE	SPRINGFIELD	COAL	4.2	285.0	
109.4	CARBONDALE		UNDERCLAY	2.3	289.2	
107.1	CARBONDALE		LIMESTONE	0.5	291.5	

MAPID: 05901145000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.197348 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739895 **DATE COLLECTED:** 10 / 7 / 1952

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 315.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 45 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
382.0	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
312.0	MODESTO		SANDSTONE	5.0	70.0	
307.0	MODESTO		CLAYSTONE	4.0	75.0	CARBONACEOUS
303.0	MODESTO		SHALE	0.4	79.0	GREENISH-GRAY
302.6	MODESTO		SANDSTONE	1.2	79.4	
301.4	MODESTO		NO RECORD	1.4	80.6	ADJUST FOR MARKER
300.0	MODESTO		SANDSTONE	1.1	82.0	
298.9	MODESTO	WEST FRANKLIN	LIMESTONE	2.6	83.1	
296.3	MODESTO		SILTSTONE	5.3	85.7	
291.0	MODESTO		GRAY SHALE	5.8	91.0	
285.2	MODESTO		SANDSTONE	2.4	96.8	
282.8	MODESTO		GRAY SHALE	40.5	99.2	
242.3	MODESTO		BLACK SHALE	1.5	139.7	
240.8	CARBONDALE	DANVILLE	COAL	1.7	141.2	
239.2	CARBONDALE		NO RECORD	0.2	142.8	ADJUST FOR MARKER
239.0	CARBONDALE		GRAY SHALE	1.0	143.0	
238.0	CARBONDALE		SILTSTONE	2.5	144.0	
235.5	CARBONDALE		SANDSTONE	9.0	146.5	
226.5	CARBONDALE		GRAY SHALE	4.3	155.5	
222.2	CARBONDALE		BLACK SHALE	0.8	159.8	COAL STREAK AT BOTTOM
221.5	CARBONDALE		UNDERCLAY	0.1	160.5	
221.4	CARBONDALE		SANDSTONE	0.8	160.6	
220.6	CARBONDALE		GRAY SHALE	3.5	161.4	
217.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	164.9	
211.5	CARBONDALE		SHALE	2.3	170.5	GRAY-GREEN-BROWN
209.2	CARBONDALE		CLAYSTONE	0.3	172.8	CARBONACEOUS LAMINATIONS
208.9	CARBONDALE		SILTY SHALE	1.8	173.1	
207.2	CARBONDALE		NO RECORD	1.2	174.8	ADJUST FOR MARKER
206.0	CARBONDALE	ANVIL ROCK	SILTSTONE	3.2	176.0	
202.8	CARBONDALE	ANVIL ROCK	SANDSTONE	12.2	179.2	
190.7	CARBONDALE		GRAY SHALE	8.5	191.3	
182.2	CARBONDALE	BRERETON	LIMESTONE	1.8	199.8	
180.3	CARBONDALE	ANNA	BLACK SHALE	5.3	201.7	
175.0	CARBONDALE	HERRIN	COAL	3.6	207.0	
171.4	CARBONDALE		UNDERCLAY	1.8	210.6	
169.7	CARBONDALE		SILTSTONE	4.6	212.3	
165.1	CARBONDALE		SANDSTONE	8.8	216.9	
156.3	CARBONDALE		GRAY SHALE	27.3	225.7	

129.0	CARBONDALE	BRIAR HILL	COAL	2.0	253.0
127.0	CARBONDALE		GRAY SHALE	5.9	255.0
121.1	CARBONDALE		SANDSTONE	11.4	260.9
109.7	CARBONDALE		GRAY SHALE	35.7	272.3
74.0	CARBONDALE	ST. DAVID	LIMESTONE	0.3	308.0
73.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	308.3
72.2	CARBONDALE	SPRINGFIELD	COAL	4.3	309.8
67.8	CARBONDALE		UNDERCLAY	1.2	314.2

MAPID: 05901146000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2640' S line, 330' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193964 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739942 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 423.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 46 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
460.0	PLEISTOCENE		UNCONSOLIDATED	101.0	0.0	
359.0	MODESTO		LIMESTONE	2.0	101.0	
357.0	MODESTO		GRAY SHALE	13.3	103.0	
343.7	MODESTO		SILTSTONE	6.8	116.3	
336.8	MODESTO		GRAY SHALE	25.6	123.2	
311.2	MODESTO		BLACK SHALE	0.9	148.8	
310.3	MODESTO		COAL	0.3	149.7	
310.1	MODESTO		UNDERCLAY	0.8	149.9	
309.3	MODESTO		SHALE & CLAYSTONE	2.3	150.7	
307.1	MODESTO		SILTSTONE	2.2	152.9	
304.9	MODESTO		SANDSTONE	4.5	155.1	
300.4	MODESTO		SILTSTONE	1.1	159.6	
299.3	MODESTO		GRAY SHALE	2.3	160.7	GREENISH
297.1	MODESTO		SHALE & CLAYSTONE	5.6	162.9	
291.5	MODESTO		SILTSTONE	11.3	168.5	
280.2	MODESTO	WEST FRANKLIN	LIMESTONE	3.8	179.8	
276.3	MODESTO		SILTSTONE	6.1	183.7	
270.2	MODESTO		BLACK SHALE	8.9	189.8	
261.3	MODESTO		GRAY SHALE	34.0	198.7	
227.3	CARBONDALE	DANVILLE	COAL	1.9	232.7	
225.4	CARBONDALE		UNDERCLAY	0.6	234.6	
224.8	CARBONDALE		SILTSTONE	4.6	235.2	
220.2	CARBONDALE		SANDSTONE	7.0	239.8	
213.2	CARBONDALE		SILTSTONE	4.3	246.8	
208.9	CARBONDALE		GRAY SHALE	1.7	251.1	
207.2	CARBONDALE		BLACK SHALE	0.8	252.8	
206.4	CARBONDALE		SHALE & CLAYSTONE	0.3	253.6	UNDER CLAY STRUCTURE
206.2	CARBONDALE		GRAY SHALE	3.8	253.8	
202.4	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	257.6	
196.3	CARBONDALE		GRAY SHALE	2.0	263.7	GREENISH
194.3	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	265.7	
182.8	CARBONDALE		GRAY SHALE	9.2	277.2	
173.7	CARBONDALE	BRERETON	LIMESTONE	2.9	286.3	
170.7	CARBONDALE	ANNA	BLACK SHALE	6.8	289.3	
164.0	CARBONDALE	HERRIN	COAL	2.7	296.0	
161.3	CARBONDALE		UNDERCLAY	1.5	298.7	
159.8	CARBONDALE		SHALE & CLAYSTONE	2.6	300.2	
157.2	CARBONDALE		SILTSTONE	5.6	302.8	
151.7	CARBONDALE		SANDSTONE	3.5	308.3	

148.2	CARBONDALE		SILTSTONE	10.1	311.8
138.1	CARBONDALE		GRAY SHALE	23.3	321.9
114.8	CARBONDALE	BRIAR HILL	COAL	1.8	345.2
113.0	CARBONDALE		UNDERCLAY	1.0	347.0
112.0	CARBONDALE		SILTSTONE	1.3	348.0
110.7	CARBONDALE		GRAY SHALE	4.2	349.3
106.6	CARBONDALE		SANDSTONE	10.0	353.4
96.6	CARBONDALE		SILTSTONE	25.8	363.4
70.8	CARBONDALE		GRAY SHALE	20.6	389.2
50.2	CARBONDALE	ST. DAVID	LIMESTONE	0.3	409.8
50.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	410.0
46.8	CARBONDALE	SPRINGFIELD	COAL	5.3	413.2
41.6	CARBONDALE		SILTSTONE	4.6	418.4

MAPID: 05901146000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2640' S line, 330' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193964 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.739942 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 298.9 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 46 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
226.3	CARBONDALE	DANVILLE	COAL	1.8	233.7	
224.5	CARBONDALE		ROCK	18.2	235.5	
206.3	CARBONDALE	ALLENBY	BLACK SHALE	0.8	253.7	
205.5	CARBONDALE		GRAY SHALE	3.7	254.5	
201.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	258.2	
195.7	CARBONDALE	LAWSON	GRAY SHALE	2.0	264.3	
193.7	CARBONDALE	LAWSON	SILTSTONE	1.0	266.3	
192.7	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	10.6	267.3	
182.2	CARBONDALE	LAWSON	GRAY SHALE	9.2	277.8	
173.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.9	287.0	
170.1	CARBONDALE	ANNA	BLACK SHALE	6.1	289.9	
164.0	CARBONDALE	HERRIN	COAL	2.9	296.0	

MAPID: 05901147000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' N line, 330' E line of NW NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.20528 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739753 **DATE COLLECTED:** 11 / 4 / 1952

SURFACE ELEVATION (FT.): 477.2 **LOGGED (FT.):** 427.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 47 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
477.2	PLEISTOCENE		UNCONSOLIDATED	86.5	0.0	
390.7	MODESTO		SANDSTONE	21.8	86.5	
368.9	MODESTO		GRAY SHALE	4.2	108.3	
364.7	MODESTO		LIMESTONE	2.2	112.5	
362.5	MODESTO		GRAY SHALE	14.2	114.7	
348.4	MODESTO		SANDSTONE	5.0	128.8	
343.4	MODESTO		GRAY SHALE	28.0	133.8	
315.4	MODESTO		COAL	0.3	161.8	
315.0	MODESTO		UNDERCLAY	2.8	162.2	
312.2	MODESTO		SANDSTONE	5.8	165.0	
306.4	MODESTO		GRAY SHALE	9.0	170.8	
297.4	MODESTO		SANDSTONE	10.1	179.8	
287.3	MODESTO		SHALE	4.5	189.9	GREENISH-GRAY
282.8	MODESTO	WEST FRANKLIN	LIMESTONE	6.1	194.4	
276.7	MODESTO		GRAY SHALE	4.4	200.5	
272.3	MODESTO		BLACK SHALE	3.0	204.9	
269.3	MODESTO		GRAY SHALE	35.7	207.9	
233.6	CARBONDALE	DANVILLE	COAL	1.6	243.6	
232.0	CARBONDALE		GRAY SHALE	0.8	245.2	
231.3	CARBONDALE		SILTSTONE	1.8	245.9	
229.5	CARBONDALE		SANDSTONE	9.4	247.7	
220.0	CARBONDALE		GRAY SHALE	4.8	257.2	
215.2	CARBONDALE		BLACK SHALE	0.3	262.0	
214.9	CARBONDALE	ALLENBY	COAL	0.1	262.3	
214.9	CARBONDALE		GRAY SHALE	5.8	262.3	
209.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	268.2	
204.1	CARBONDALE		GRAY SHALE	3.2	273.1	
200.9	CARBONDALE	ANVIL ROCK	SANDSTONE	11.3	276.3	
189.6	CARBONDALE		GRAY SHALE	10.1	287.6	
179.5	CARBONDALE	BRERETON	LIMESTONE	4.2	297.7	
175.4	CARBONDALE	ANNA	BLACK SHALE	4.0	301.8	
171.4	CARBONDALE	HERRIN	COAL	3.7	305.8	
167.7	CARBONDALE		UNDERCLAY	2.8	309.5	
164.9	CARBONDALE		SILTSTONE	5.9	312.3	
159.0	CARBONDALE		SANDSTONE	12.0	318.2	
147.0	CARBONDALE		GRAY SHALE	24.4	330.2	
122.6	CARBONDALE	BRIAR HILL	COAL	2.2	354.6	
120.4	CARBONDALE		SILTY SHALE	4.8	356.8	
115.7	CARBONDALE		SANDSTONE	26.3	361.5	SILTSTONE BANDS

89.4	CARBONDALE		GRAY SHALE	27.9	387.8	
61.5	CARBONDALE	ST. DAVID	LIMESTONE	0.9	415.7	
60.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	416.6	
58.0	CARBONDALE	SPRINGFIELD	COAL	4.5	419.2	
53.5	CARBONDALE		GRAY SHALE	0.5	423.7	
53.0	CARBONDALE		SHALE	0.9	424.2	GREENISH-GRAY
52.1	CARBONDALE		SHALE	0.5	425.1	GREENISH-GRAY
51.6	CARBONDALE		SHALE	1.9	425.6	GREENISH-GRAY

MAPID: 05923830000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.20417 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738862 **DATE COLLECTED:** 1 / 11 / 1972

SURFACE ELEVATION (FT.): 363.8 **LOGGED (FT.):** 268.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 79-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.8	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0	
310.8	MODESTO		GRAY SHALE	9.8	53.0	
301.0	MODESTO		SANDY SHALE	17.2	62.8	
283.8	MODESTO		DARK SHALE	6.0	80.0	
277.8	CARBONDALE	DANVILLE	COAL	1.9	86.0	
275.9	CARBONDALE		SANDY SHALE	1.1	87.9	
274.8	CARBONDALE		SANDSTONE	1.2	89.0	
273.6	CARBONDALE		SANDY SHALE	9.8	90.2	
263.8	CARBONDALE		GRAY SHALE	1.8	100.0	
262.0	CARBONDALE		CALCAREOUS SHALE	3.5	101.8	
258.6	CARBONDALE		SANDSTONE	2.8	105.2	
255.8	CARBONDALE		GRAY SHALE	3.7	108.0	
252.1	CARBONDALE	ANVIL ROCK	SANDSTONE	3.2	111.7	
249.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.4	114.8	
244.6	CARBONDALE	ANVIL ROCK	SANDSTONE	28.4	119.2	
216.3	CARBONDALE		DARK SHALE	0.6	147.5	
215.7	CARBONDALE	ANNA	BLACK SHALE	4.5	148.1	
211.3	CARBONDALE	HERRIN	COAL	3.4	152.5	
207.9	CARBONDALE		SHALE	4.1	155.9	
203.8	CARBONDALE		SANDY SHALE	2.9	160.0	
200.9	CARBONDALE		SANDSTONE	7.2	162.9	
193.8	CARBONDALE		SANDY SHALE	11.7	170.0	
182.1	CARBONDALE		GRAY SHALE	16.3	181.7	
165.8	CARBONDALE	BRIAR HILL	COAL	2.0	198.0	
163.8	CARBONDALE		SANDY SHALE	15.5	200.0	
148.3	CARBONDALE		SANDSTONE	19.2	215.5	
129.1	CARBONDALE		SANDY SHALE	9.5	234.7	
119.7	CARBONDALE		DARK SHALE	10.8	244.1	
108.9	CARBONDALE		SHALE	1.6	254.9	
107.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	256.5	
105.7	CARBONDALE	SPRINGFIELD	COAL	4.4	258.1	
101.3	CARBONDALE		UNDERCLAY	4.0	262.5	
97.3	CARBONDALE		SANDSTONE	2.1	266.5	

MAPID: 05924161000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.210896 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746903 **DATE COLLECTED:** 12 / 3 / 1981

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 251.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 287-G-C **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
210.0	CARBONDALE		GRAY SHALE	14.4	150.0	
195.6	CARBONDALE	BRIAR HILL	COAL	1.9	164.4	
193.6	CARBONDALE		SILTY CLAYSTONE	1.1	166.4	
192.6	CARBONDALE		SANDY SHALE	3.9	167.4	
188.7	CARBONDALE		SANDY SHALE	2.3	171.3	WITH SANDSTONE
186.4	CARBONDALE		SANDSTONE	5.3	173.6	
181.2	CARBONDALE		SANDSTONE	0.3	178.8	WITH SANDY SHALE
180.9	CARBONDALE		SANDSTONE	0.0	179.1	
180.8	CARBONDALE		SANDY SHALE	43.1	179.2	WITH SANDSTONE
137.7	CARBONDALE		SHALE	5.0	222.3	
132.8	CARBONDALE	ST. DAVID	SHALE	0.4	227.2	WITH LIMESTONE
132.4	CARBONDALE	ST. DAVID	LIMESTONE	0.2	227.6	
132.3	CARBONDALE	ST. DAVID	SHALE	0.6	227.7	WITH LIMESTONE
131.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	228.3	
127.8	CARBONDALE		SHALE	1.3	232.2	
126.6	CARBONDALE	SPRINGFIELD	COAL	5.0	233.4	
121.6	CARBONDALE		SANDSTONE	0.4	238.4	WITH COAL
121.3	CARBONDALE		SILTY CLAYSTONE	7.4	238.7	
113.9	CARBONDALE		SANDY SHALE	5.3	246.1	

MAPID: 05900298000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** SW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227974 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.732885 **DATE COLLECTED:** 0 / 0 / 1939

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 3520.0 **LOG TYPE:**

SOURCE: COATES ETL, GREENE 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
293.0	CARBONDALE	HERRIN	COAL	-	59.0	
183.0	CARBONDALE	SPRINGFIELD	COAL	4.0	169.0	DEPTH UNCERTAIN

MAPID: 05900300000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 675' N line, 3250' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.222203 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.744877 **DATE COLLECTED:** 4 / 0 / 1929

SURFACE ELEVATION (FT.): 413.8 **LOGGED (FT.):** 532.0 **LOG TYPE:** Drillers Log

SOURCE: FRANKLIN COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
413.8			UNCONSOLIDATED	33.0	0.0	
380.8			SHALE & SANDSTONE	169.0	33.0	
211.8			DARK SHALE	10.0	202.0	
201.8			BLACK SHALE	4.0	212.0	
197.8			COAL	1.5	216.0	
196.3			UNDERCLAY	5.5	217.5	
190.8			SANDSTONE/SHALE	152.0	223.0	
38.8			DARK SHALE	8.0	375.0	
30.8			COAL	1.5	383.0	
29.3			UNDERCLAY	17.5	384.5	
11.8			SANDSTONE	8.0	402.0	
3.8			DARK SHALE	7.8	410.0	
-4.0			COAL	0.6	417.8	
-4.5			UNDERCLAY	3.2	418.3	
-7.7			DARK SHALE	5.5	421.5	
-13.2			COAL	1.9	427.0	
-15.1			UNDERCLAY	1.6	428.9	
-16.7			SANDSTONE	4.5	430.5	
-21.2			SHALE	28.0	435.0	
-49.2			LIMESTONE	1.0	463.0	
-50.2			SHALE	26.0	464.0	
-76.2			LIMESTONE	4.0	490.0	UNCERTAIN CORRELATION
-80.2			SHALE	5.0	494.0	
-85.2			GRAY SHALE	6.0	499.0	
-91.2			DARK SHALE	14.5	505.0	
-105.7			GRAY SHALE	4.0	519.5	
-109.7			COAL	8.5	523.5	

MAPID: 05901130000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.224588 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739382 **DATE COLLECTED:** 1 / 0 / 1952

SURFACE ELEVATION (FT.): 357.8 **LOGGED (FT.):** 289.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 30 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.8	PLEISTOCENE		UNCONSOLIDATED	147.0	0.0	
210.8	CARBONDALE		SANDY SHALE	28.0	147.0	
182.8	CARBONDALE		GRAY SHALE	8.0	175.0	
174.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	183.0	
172.5	CARBONDALE	SPRINGFIELD	COAL	4.3	185.3	
168.3	CARBONDALE		GRAY SHALE	1.5	189.5	
166.8	CARBONDALE		SHALE	5.0	191.0	WHITE
161.8	CARBONDALE		SANDY SHALE	39.0	196.0	
122.8	CARBONDALE		GRAY SHALE	31.0	235.0	
91.8	CARBONDALE	EXCELLO	BLACK SHALE	5.0	266.0	
86.8	CARBONDALE	HOUCHIN CREEK	COAL	1.3	271.0	
85.5	CARBONDALE		GRAY SHALE	4.0	272.3	
81.5	CARBONDALE		SANDSTONE	12.7	276.3	

MAPID: 05901828000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.218882 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.740406 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 1363.0 **LOG TYPE:** Electric Log

SOURCE: RUTHERFORD, HOMER **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1008.0	BASE OF PENN.		UNCLASSIFIED	-	1363.0	

MAPID: 05902469000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22343 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.736655 **DATE COLLECTED:** 7 / 0 / 1959

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: UNIVERSAL OPERATING, INC, SCHOOL TRUSTEE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
111.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	244.0	
61.0	CARBONDALE	SURVANT	COAL	2.0	294.0	
0.0	CARBONDALE	COLCHESTER	COAL	0.5	355.0	
-54.0	CARBONDALE	DEKOVEN	COAL	2.0	409.0	
-54.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	409.0	
-83.0	CARBONDALE	DAVIS	COAL	4.0	438.0	
-120.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	475.0	80% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-145.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	500.0	
-169.0	TRADEWATER	MT. RORAH	COAL	3.0	524.0	

MAPID: 05903369000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 280' S line, 150' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.21146 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.733169 **DATE COLLECTED:** 6 / 22 / 1967

SURFACE ELEVATION (FT.): 390.9 **LOGGED (FT.):** 237.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-4 **WELL TYPE:** Coal Test

COMMENT: SHAWNEETOWN HILLS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.9	PLEISTOCENE		UNCONSOLIDATED	72.0	0.0	
318.9	CARBONDALE	ANVIL ROCK	SANDSTONE	9.5	72.0	SOFT
309.4	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	81.5	
292.9	CARBONDALE		GRAY SHALE	4.9	98.0	
288.0	CARBONDALE	BRERETON	LIMESTONE	4.0	102.9	
284.0	CARBONDALE	ANNA	BLACK SHALE	1.4	106.9	
282.6	CARBONDALE	ANNA	LIMESTONE	0.6	108.3	
282.0	CARBONDALE	ANNA	BLACK SHALE	0.7	108.9	
281.4	CARBONDALE	HERRIN	COAL	3.6	109.5	
277.8	CARBONDALE		UNDERCLAY	3.3	113.1	
274.5	CARBONDALE		SANDSTONE	10.0	116.4	SHALE STREAKS
264.5	CARBONDALE		SANDSTONE	3.7	126.4	
260.9	CARBONDALE		SANDY SHALE	19.2	130.0	
241.7	CARBONDALE		GRAY SHALE	5.1	149.2	
236.6	CARBONDALE	BRIAR HILL	COAL	2.2	154.3	
234.4	CARBONDALE		GRAY SHALE	5.0	156.5	
229.4	CARBONDALE		SANDSTONE	18.0	161.5	
211.4	CARBONDALE		SANDY SHALE	27.3	179.5	
184.1	CARBONDALE		GRAY SHALE	10.1	206.8	
174.0	CARBONDALE	ST. DAVID	LIMESTONE	0.7	216.9	
173.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	217.6	
171.0	CARBONDALE	SPRINGFIELD	COAL	4.2	219.9	
166.8	CARBONDALE		UNDERCLAY	2.6	224.1	
164.2	CARBONDALE		SANDSTONE	1.3	226.7	SHALE STREAKS
162.9	CARBONDALE		SANDSTONE	9.6	228.0	

MAPID: 05903650000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220032 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739469 **DATE COLLECTED:** 1 / 19 / 1968

SURFACE ELEVATION (FT.): 356.7 **LOGGED (FT.):** 175.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-23 **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
356.7	PLEISTOCENE		UNCONSOLIDATED	132.0	0.0	
224.7	CARBONDALE		SANDY SHALE	24.0	132.0	
200.7	CARBONDALE		GRAY SHALE	10.8	156.0	
189.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	166.8	
187.4	CARBONDALE	SPRINGFIELD	COAL	4.6	169.3	
182.8	CARBONDALE		UNDERCLAY	2.0	173.9	

MAPID: 05903651000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 660' E line of NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213216 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.739608 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 258.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
-	MODESTO		SHALE	8.8	60.0	
-	CARBONDALE	DANVILLE	COAL	1.5	68.8	
-	CARBONDALE		UNDERCLAY	1.2	70.3	
-	CARBONDALE		GRAY SHALE	15.5	71.5	
-	CARBONDALE		SANDSTONE	41.6	87.0	
-	CARBONDALE		LIMESTONE	1.7	128.6	
-	CARBONDALE		DARK SHALE	11.7	130.3	
-	CARBONDALE	HERRIN	COAL	3.8	142.0	
-	CARBONDALE		UNDERCLAY	2.9	145.8	
-	CARBONDALE		SANDSTONE	26.3	148.7	
-	CARBONDALE		GRAY SHALE	13.3	175.0	
-	CARBONDALE	BRIAR HILL	COAL	2.2	188.3	
-	CARBONDALE		SHALE	5.5	190.5	
-	CARBONDALE		SANDY SHALE	40.5	196.0	
-	CARBONDALE		GRAY SHALE	12.4	236.5	
-	CARBONDALE		SHALE	0.8	248.9	WITH LIME FOSSILS
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	249.7	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	251.8	
-	CARBONDALE		UNDERCLAY	2.5	256.3	

MAPID: 05903652000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 0' S line, 1320' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.224519 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732057 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 200.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-31 **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
225.0	CARBONDALE	LAWSON	SANDSTONE	14.0	132.0	
211.0	CARBONDALE	LAWSON	SILTY SHALE	46.4	146.0	
164.6	CARBONDALE	BRERETON	LIMESTONE	1.4	192.4	
163.2	CARBONDALE	ANNA	BLACK SHALE	4.2	193.8	
159.0	CARBONDALE	HERRIN	COAL	2.3	198.0	

MAPID: 05903653000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220026 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.732178 **DATE COLLECTED:** 8 / 15 / 1968

SURFACE ELEVATION (FT.): 360.5 **LOGGED (FT.):** 208.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-32 **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.5	PLEISTOCENE		UNCONSOLIDATED	127.5	0.0	
233.0	CARBONDALE		SHALE	1.5	127.5	
231.5	CARBONDALE		LIMESTONE	2.4	129.0	
229.1	CARBONDALE		SANDSTONE	18.1	131.4	
211.0	CARBONDALE		SANDY SHALE	44.5	149.5	
166.5	CARBONDALE		BLACK SHALE	1.4	194.0	
165.1	CARBONDALE	ST. DAVID	LIMESTONE	1.1	195.4	
164.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	196.5	
161.8	CARBONDALE	SPRINGFIELD	COAL	2.1	198.7	
159.7	CARBONDALE		SANDY SHALE	7.7	200.8	

MAPID: 05903654000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220031 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.735822 **DATE COLLECTED:** 8 / 20 / 1968

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 146.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. G-33 **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	129.0	0.0	
226.0	CARBONDALE		SHALE	5.3	129.0	
220.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	134.3	
219.2	CARBONDALE	SPRINGFIELD	COAL	4.4	135.8	
214.8	CARBONDALE		UNDERCLAY	3.0	140.2	
211.8	CARBONDALE		SANDSTONE	3.0	143.2	

MAPID: 05903655000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.224576 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.735715 **DATE COLLECTED:** 8 / 28 / 1968

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 154.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 35-G **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
225.0	CARBONDALE		GRAY SHALE	10.5	135.0	
214.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	145.5	
212.5	CARBONDALE	SPRINGFIELD	COAL	5.0	147.5	
207.5	CARBONDALE		UNDERCLAY	2.0	152.5	

MAPID: 05903656000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 1' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215478 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.733203 **DATE COLLECTED:** 2 / 2 / 1973

SURFACE ELEVATION (FT.): 378.6 **LOGGED (FT.):** 214.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 117-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.6	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0	
314.6	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	64.0	
296.6	CARBONDALE		GRAY SHALE	10.0	82.0	
286.6	CARBONDALE	BRERETON	LIMESTONE	5.0	92.0	
281.6	CARBONDALE	ANNA	BLACK SHALE	1.5	97.0	
280.1	CARBONDALE	HERRIN	COAL	3.7	98.5	
276.4	CARBONDALE		UNDERCLAY	3.0	102.2	
273.4	CARBONDALE		SANDY SHALE	30.0	105.2	
243.4	CARBONDALE		GRAY SHALE	12.3	135.2	
231.1	CARBONDALE	BRIAR HILL	COAL	1.9	147.5	
229.2	CARBONDALE		GRAY SHALE	3.0	149.4	
226.2	CARBONDALE		SANDY SHALE	5.0	152.4	
221.2	CARBONDALE		SANDSTONE	13.6	157.4	
207.6	CARBONDALE		SANDY SHALE	34.4	171.0	
173.2	CARBONDALE		GRAY SHALE	0.5	205.4	
172.7	CARBONDALE		CALCAREOUS SHALE	1.2	205.9	
171.5	CARBONDALE	ST. DAVID	LIMESTONE	0.4	207.1	
171.1	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	207.5	
169.3	CARBONDALE	SPRINGFIELD	COAL	4.4	209.3	
164.9	CARBONDALE		UNDERCLAY	1.0	213.7	

MAPID: 05903658000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 660' E line of SW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217774 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.733143 **DATE COLLECTED:** 3 / 30 / 1973
SURFACE ELEVATION (FT.): 380.2 **LOGGED (FT.):** 237.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 128-G **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
235.2	CARBONDALE		SANDSTONE	13.0	145.0	
222.2	CARBONDALE		LIMESTONE	4.0	158.0	
218.2	CARBONDALE		SANDSTONE	11.0	162.0	
207.2	CARBONDALE		SANDY SHALE	15.0	173.0	
192.2	CARBONDALE		SHALE	29.0	188.0	SOFT
163.2	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	217.0	
158.2	CARBONDALE	SPRINGFIELD	COAL	2.0	222.0	
156.2	CARBONDALE		UNDERCLAY	3.0	224.0	
153.2	CARBONDALE		SANDY SHALE	10.0	227.0	

MAPID: 05923114000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 1' W line of SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229138 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.740197 **DATE COLLECTED:** 7 / 21 / 1981
SURFACE ELEVATION (FT.): 355.8 **LOGGED (FT.):** 215.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 05924114 **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.8	PLEISTOCENE		UNCONSOLIDATED	133.5	0.0	
222.3	CARBONDALE	BRIAR HILL	COAL	2.0	133.5	SOFT
220.3	CARBONDALE		SHALE	7.0	135.5	SOFT
213.3	CARBONDALE		SANDY SHALE	49.7	142.5	
163.6	CARBONDALE		GRAY SHALE	4.3	192.2	
159.3	CARBONDALE		SHALE	1.6	196.5	LIME FOSSILS
157.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	198.1	
155.1	CARBONDALE	SPRINGFIELD	COAL	4.4	200.7	
150.6	CARBONDALE		UNDERCLAY	3.1	205.2	
147.5	CARBONDALE		LIMESTONE	1.6	208.3	
146.0	CARBONDALE		SANDSTONE	5.3	209.8	

MAPID: 05923796000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220039 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746768 **DATE COLLECTED:** 11 / 20 / 1974

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 241.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 233-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.0	PLEISTOCENE		UNCONSOLIDATED	131.5	0.0	
229.5	CARBONDALE		GRAY SHALE	24.5	131.5	
205.0	CARBONDALE	BRIAR HILL	COAL	2.0	156.0	
203.0	CARBONDALE		UNDERCLAY	2.0	158.0	
201.0	CARBONDALE		GRAY SHALE	4.5	160.0	
196.5	CARBONDALE		SANDSTONE	9.0	164.5	
187.5	CARBONDALE		SANDY SHALE	45.0	173.5	
142.5	CARBONDALE		GRAY SHALE	2.5	218.5	
140.0	CARBONDALE	ST. DAVID	LIMESTONE	1.5	221.0	
138.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	222.5	
135.7	CARBONDALE	SPRINGFIELD	COAL	5.2	225.3	
130.5	CARBONDALE		SHALE	2.7	230.5	
127.8	CARBONDALE		SANDSTONE	8.3	233.2	

MAPID: 05924099000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1840' S line, 50' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22021 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744545 **DATE COLLECTED:** 5 / 5 / 1981

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 225.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 270-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
207.0	CARBONDALE		SANDSTONE	2.0	150.0	
205.0	CARBONDALE		SANDSTONE	6.7	152.0	WITH SHALE STREAKS
198.3	CARBONDALE		SANDY SHALE	3.2	158.7	WITH SANDSTONE STREAKS
195.1	CARBONDALE		SANDY SHALE	10.1	161.9	
185.1	CARBONDALE		SANDY SHALE	28.7	171.9	WITH SANDSTONE STREAKS
156.4	CARBONDALE		SHALE	0.7	200.6	WITH LIME FOSSILS
155.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	201.4	
152.6	CARBONDALE	TURNER MINE	SHALE	1.0	204.4	
151.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.1	205.3	
151.7	CARBONDALE	SPRINGFIELD	COAL	4.6	205.3	
147.1	CARBONDALE		UNDERCLAY	3.3	209.9	
143.8	CARBONDALE		SANDSTONE	12.4	213.2	

MAPID: 05924099000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1840' S line, 50' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22021 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.744545 **DATE COLLECTED:** 6 / 24 / 1981

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 225.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY C C,PLUG AFFD **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNKNOWN	0.0	0.0	

MAPID: 05924100000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' S line, 660' W line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.222301 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743086 **DATE COLLECTED:** 5 / 29 / 1981

SURFACE ELEVATION (FT.): 346.3 **LOGGED (FT.):** 209.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 271-G-C **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
346.3	PLEISTOCENE		UNCONSOLIDATED	149.0	0.0	
197.3	CARBONDALE		SANDSTONE	1.3	149.0	
196.0	CARBONDALE		SANDY SHALE	43.5	150.3	WITH SANDSTONE STREAKS
152.5	CARBONDALE	ST. DAVID	SHALE	1.1	193.8	WITH LIME FOSSILS
151.4	CARBONDALE	ST. DAVID	LIMESTONE	0.6	194.9	WITH SHALE
150.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	195.5	
148.2	CARBONDALE	SPRINGFIELD	COAL	4.6	198.1	
143.6	CARBONDALE		UNDERCLAY	3.9	202.7	
139.7	CARBONDALE		SANDSTONE	2.6	206.6	

MAPID: 05924106000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229152 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742966 **DATE COLLECTED:** 5 / 29 / 1981

SURFACE ELEVATION (FT.): 353.9 **LOGGED (FT.):** 243.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 272GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
353.9	PLEISTOCENE		UNCONSOLIDATED	126.0	0.0	
227.9	CARBONDALE		SANDSTONE	10.4	126.0	
217.5	CARBONDALE		SANDY SHALE	18.0	136.4	
199.5	CARBONDALE		GRAY SHALE	5.5	154.4	
194.1	CARBONDALE		SHALE	0.1	159.8	WITH PYRITE
194.0	CARBONDALE	BRIAR HILL	COAL	2.1	159.9	
191.9	CARBONDALE		UNDERCLAY	1.5	162.0	
190.4	CARBONDALE		SHALE	4.1	163.5	
186.3	CARBONDALE		SANDY SHALE	50.7	167.6	
135.5	CARBONDALE		GRAY SHALE	3.2	218.4	
132.3	CARBONDALE		SHALE	0.5	221.6	WITH LIME FOSSILS
131.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	222.1	
129.8	CARBONDALE	SPRINGFIELD	COAL	4.5	224.1	
125.3	CARBONDALE		UNDERCLAY	2.6	228.6	
122.7	CARBONDALE		LIMESTONE	2.0	231.2	
120.7	CARBONDALE		SANDY SHALE	1.3	233.2	
119.4	CARBONDALE		SANDSTONE	9.4	234.5	WITH SHALE STREAKS

MAPID: 05924107000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 1' W line of SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229147 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742052 **DATE COLLECTED:** 7 / 8 / 1981

SURFACE ELEVATION (FT.): 354.4 **LOGGED (FT.):** 231.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 273GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.4	PLEISTOCENE		UNCONSOLIDATED	126.5	0.0	
227.9	CARBONDALE		SANDSTONE	12.1	126.5	
215.8	CARBONDALE		SANDY SHALE	6.1	138.6	
209.7	CARBONDALE		GRAY SHALE	8.0	144.7	
201.7	CARBONDALE	BRIAR HILL	COAL	2.0	152.7	
199.7	CARBONDALE		GRAY SHALE	6.2	154.7	
193.5	CARBONDALE		SANDY SHALE	29.5	160.9	
164.0	CARBONDALE		GRAY SHALE	1.2	190.4	
162.8	CARBONDALE		SANDY SHALE	18.0	191.6	
144.7	CARBONDALE		GRAY SHALE	3.3	209.7	
141.4	CARBONDALE	ST. DAVID	LIMESTONE	1.4	213.0	
140.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	214.4	
137.7	CARBONDALE		SHALE	1.2	216.7	
136.6	CARBONDALE	SPRINGFIELD	COAL	4.8	217.8	
131.8	CARBONDALE		UNDERCLAY	2.5	222.6	
129.4	CARBONDALE		LIMESTONE	1.4	225.0	
128.0	CARBONDALE		SANDSTONE	4.8	226.4	

MAPID: 05924108000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 660' N line, 1' W line of SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229142 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.741141 **DATE COLLECTED:** 7 / 15 / 1981
SURFACE ELEVATION (FT.): 355.8 **LOGGED (FT.):** 221.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 274GC **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.8	PLEISTOCENE		UNCONSOLIDATED	127.0	0.0	
228.8	CARBONDALE		SANDSTONE	2.2	127.0	
226.6	CARBONDALE		GRAY SHALE	12.5	129.2	
214.1	CARBONDALE	BRIAR HILL	COAL	2.0	141.7	
212.1	CARBONDALE		GRAY SHALE	5.1	143.7	
207.0	CARBONDALE		SANDY SHALE	1.2	148.8	
205.8	CARBONDALE		SANDSTONE	4.2	150.0	
201.6	CARBONDALE		SANDSTONE	3.5	154.2	SHALE STREAKS
198.1	CARBONDALE		SANDY SHALE	42.2	157.7	SANDSTONE STREAKS
155.9	CARBONDALE		GRAY SHALE	3.5	199.9	
152.4	CARBONDALE		SHALE	0.7	203.4	LIME FOSSILS
151.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	204.0	
148.9	CARBONDALE	SPRINGFIELD	COAL	4.8	206.9	
144.1	CARBONDALE		UNDERCLAY	3.9	211.7	
140.2	CARBONDALE		SANDY DARK SHALE	5.8	215.6	

MAPID: 05924115000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229137 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.739292 **DATE COLLECTED:** 9 / 3 / 1981
SURFACE ELEVATION (FT.): 357.3 **LOGGED (FT.):** 208.1 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 276GC **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.3	PLEISTOCENE		UNCONSOLIDATED	138.1	0.0	
219.2	CARBONDALE		GRAY SHALE	2.8	138.1	
216.4	CARBONDALE		SANDY SHALE	44.8	140.9	SANDSTONE BANDS
171.6	CARBONDALE		GRAY SHALE	5.0	185.7	
166.6	CARBONDALE	ST. DAVID	LIMESTONE	0.5	190.7	
166.0	CARBONDALE	TURNER MINE	DARK SHALE	2.1	191.3	
163.9	CARBONDALE	SPRINGFIELD	COAL	4.6	193.4	
159.3	CARBONDALE		UNDERCLAY	2.5	198.0	
156.8	CARBONDALE		SANDSTONE	7.6	200.5	

MAPID: 05924135000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 1' W line of NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229132 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738378 **DATE COLLECTED:** 9 / 5 / 1981

SURFACE ELEVATION (FT.): 361.4 **LOGGED (FT.):** 208.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 277GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
361.4	PLEISTOCENE		UNCONSOLIDATED	154.0	0.0	
207.4	CARBONDALE		GRAY SHALE	1.3	154.0	
206.1	CARBONDALE		SANDSTONE	2.4	155.3	
203.7	CARBONDALE		SANDY SHALE	26.8	157.7	SANDSTONE BANDS
177.0	CARBONDALE		GRAY SHALE	1.0	184.4	
176.0	CARBONDALE	ST. DAVID	GRAY SHALE	1.1	185.4	LIMESTONE
174.9	CARBONDALE	TURNER MINE	DARK SHALE	2.2	186.5	
172.7	CARBONDALE	SPRINGFIELD	COAL	5.0	188.7	
167.8	CARBONDALE		GRAY SHALE	3.9	193.6	
163.8	CARBONDALE		SANDY SHALE	10.5	197.6	

MAPID: 05924136000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 660' N line, 1' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220039 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744949 **DATE COLLECTED:** 9 / 17 / 1981

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 227.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 278GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.0	PLEISTOCENE		UNCONSOLIDATED	141.0	0.0	
218.0	CARBONDALE		GRAY SHALE	6.3	141.0	
211.7	CARBONDALE	BRIAR HILL	COAL	0.1	147.3	
211.6	CARBONDALE	BRIAR HILL	GRAY SHALE	0.1	147.4	
211.5	CARBONDALE	BRIAR HILL	COAL	1.9	147.5	
209.6	CARBONDALE		GRAY SHALE	2.9	149.4	
206.7	CARBONDALE		SANDY SHALE	3.1	152.3	
203.6	CARBONDALE		SANDSTONE	0.7	155.4	
202.9	CARBONDALE		SANDY SHALE	0.3	156.1	
202.7	CARBONDALE		SANDSTONE	1.0	156.3	
201.7	CARBONDALE		SANDY SHALE	1.3	157.3	
200.4	CARBONDALE		SANDSTONE	4.5	158.6	SHALE BANDS
195.9	CARBONDALE		SANDY SHALE	45.0	163.1	SANDSTONE BANDS
150.9	CARBONDALE		GRAY SHALE	1.8	208.1	
149.1	CARBONDALE		DARK SHALE	1.0	209.9	
148.0	CARBONDALE		CALCAREOUS BLACK SHALE	0.6	211.0	
147.5	CARBONDALE		DARK SHALE	2.0	211.5	
145.5	CARBONDALE		GRAY SHALE	0.7	213.5	
144.8	CARBONDALE	SPRINGFIELD	COAL	4.7	214.2	
140.0	CARBONDALE		SANDY SHALE	8.8	219.0	

MAPID: 05924137000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 1' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220041 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74586 **DATE COLLECTED:** 9 / 25 / 1981

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 236.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 279GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.0	PLEISTOCENE		UNCONSOLIDATED	133.8	0.0	
224.2	CARBONDALE		GRAY SHALE	1.2	133.8	
223.0	CARBONDALE		SANDY SHALE	8.6	135.0	SANDSTONE STREAKS
214.4	CARBONDALE		GRAY SHALE	7.7	143.6	
206.8	CARBONDALE	BRIAR HILL	COAL	1.5	151.2	
205.3	CARBONDALE		GRAY SHALE	6.1	152.7	
199.2	CARBONDALE		SANDSTONE	13.6	158.8	
185.6	CARBONDALE		SANDY SHALE	6.1	172.4	
179.6	CARBONDALE		SANDSTONE	0.3	178.4	
179.3	CARBONDALE		SANDY SHALE	10.1	178.7	
169.2	CARBONDALE		SHALE	10.0	188.8	SANDSTONE BANDS
159.2	CARBONDALE		SANDY SHALE	16.3	198.8	
142.9	CARBONDALE	ST. DAVID	LIMESTONE	0.2	215.1	
142.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.3	215.3	
138.4	CARBONDALE		GRAY SHALE	1.2	219.6	
137.2	CARBONDALE	SPRINGFIELD	COAL	5.0	220.8	
132.3	CARBONDALE		GRAY SHALE	2.2	225.7	
130.1	CARBONDALE		SANDY SHALE	0.7	227.9	
129.3	CARBONDALE		CALCAREOUS SHALE	0.9	228.7	
128.4	CARBONDALE		LIMESTONE	2.4	229.6	
126.1	CARBONDALE		SANDY SHALE	4.1	231.9	SANDSTONE

MAPID: 05924138000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 0' S line, 660' W line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22686 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743002 **DATE COLLECTED:** 9 / 16 / 1981

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 237.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 280GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	128.4	0.0	
231.6	CARBONDALE		GRAY SHALE	2.1	128.4	
229.5	CARBONDALE		SANDY SHALE	25.9	130.5	
203.6	CARBONDALE		GRAY SHALE	1.4	156.4	
202.2	CARBONDALE		DARK SHALE	1.7	157.8	
200.5	CARBONDALE	BRIAR HILL	COAL	2.0	159.5	
198.5	CARBONDALE		GRAY SHALE	4.9	161.5	
193.6	CARBONDALE		SANDSTONE	3.2	166.4	
190.4	CARBONDALE		SANDY SHALE	20.6	169.6	
169.8	CARBONDALE		GRAY SHALE	0.5	190.2	
169.3	CARBONDALE		SANDY SHALE	24.5	190.7	
144.8	CARBONDALE		GRAY SHALE	3.0	215.2	LIMESTONE
141.8	CARBONDALE		SHALE	1.5	218.2	LIMESTONE
140.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	219.7	
137.4	CARBONDALE	SPRINGFIELD	COAL	4.4	222.6	
133.0	CARBONDALE		GRAY SHALE	2.4	227.0	
130.6	CARBONDALE		LIMESTONE	1.3	229.4	
129.4	CARBONDALE		GRAY SHALE	1.9	230.6	
127.5	CARBONDALE		SANDY SHALE	4.7	232.5	

MAPID: 05924162000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215472 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746836 **DATE COLLECTED:** 11 / 20 / 1981

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 237.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 286GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	150.0	0.0	
210.0	CARBONDALE	BRIAR HILL	COAL	1.2	150.0	SOFT
208.8	CARBONDALE		GRAY SHALE	3.5	151.2	
205.3	CARBONDALE		SHALE	1.0	154.7	
204.3	CARBONDALE		SANDSTONE	9.3	155.7	
195.0	CARBONDALE		SANDY SHALE	44.6	165.0	
150.4	CARBONDALE		GRAY SHALE	5.8	209.6	
144.7	CARBONDALE		SHALE	1.1	215.3	LIMESTONE
143.6	CARBONDALE	ST. DAVID	LIMESTONE	0.4	216.4	
143.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	216.8	
142.2	CARBONDALE	TURNER MINE	LIMESTONE	1.1	217.8	
141.1	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	218.9	
140.5	CARBONDALE	SPRINGFIELD	COAL	5.3	219.5	
135.2	CARBONDALE		UNDERCLAY	4.0	224.8	
131.2	CARBONDALE		SHALE	2.0	228.8	LIMESTONE
129.2	CARBONDALE		SHALE	2.1	230.8	
127.1	CARBONDALE		SANDSTONE	4.1	232.9	

MAPID: 05924506000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.218885 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.742231 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:**

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	275.0	
48.0	CARBONDALE	SURVANT	COAL	1.2	320.0	
-12.0	CARBONDALE	COLCHESTER	COAL	0.5	380.0	
-76.0	CARBONDALE	DEKOVEN	COAL	4.0	444.0	
-76.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	444.0	
-102.0	CARBONDALE	DAVIS	COAL	4.5	470.0	
-142.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	510.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-164.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	532.0	
-185.0	TRADEWATER	MT. RORAH	COAL	3.0	553.0	

MAPID: 05925019000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215473 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.739564 **DATE COLLECTED:** 1 / 17 / 1968
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 173.2 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. G-22 **WELL TYPE:** Coal Test
COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0	
339.0	CARBONDALE	ANVIL ROCK	SANDSTONE	17.0	21.0	
322.0	CARBONDALE		GRAY SHALE	6.5	38.0	
315.5	CARBONDALE	BRERETON	LIMESTONE	3.5	44.5	
312.0	CARBONDALE	ANNA	BLACK SHALE	2.9	48.0	
309.1	CARBONDALE	HERRIN	COAL	3.8	50.9	
305.3	CARBONDALE		UNDERCLAY	6.9	54.7	
298.5	CARBONDALE		SANDSTONE	23.0	61.5	
275.5	CARBONDALE		GRAY SHALE	14.8	84.5	
260.7	CARBONDALE		BLACK SHALE	1.5	99.3	
259.2	CARBONDALE	BRIAR HILL	COAL	2.3	100.8	
256.9	CARBONDALE		SHALE	4.9	103.1	
252.0	CARBONDALE		SANDSTONE	22.0	108.0	WITH SHALE STREAKS
230.0	CARBONDALE		SANDY SHALE	26.0	130.0	
204.0	CARBONDALE		GRAY SHALE	7.4	156.0	
196.6	CARBONDALE		SHALE	0.8	163.4	WITH LIME FOSSILS
195.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	164.2	
193.5	CARBONDALE	SPRINGFIELD	COAL	4.5	166.5	
189.0	CARBONDALE		UNDERCLAY	2.2	171.0	

MAPID: 05900305000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232637 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.732757 **DATE COLLECTED:** 8 / 0 / 1940
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 1819.0 **LOG TYPE:** Electric Log
SOURCE: FIELDS, BERT, ETAL, GREEN **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
73.0	CARBONDALE	COLCHESTER	COAL	0.5	280.0	
18.0	CARBONDALE	DEKOVEN	COAL	3.5	335.0	
18.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	335.0	
-7.0	CARBONDALE	DAVIS	COAL	4.0	360.0	
-52.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	405.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-71.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	424.0	
-102.0	TRADEWATER	MT. RORAH	COAL	1.2	455.0	

MAPID: 05900305000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232637 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.732757 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 3530.0 **LOG TYPE:**

SOURCE: FIELDS&ZEP, GREEN 0010 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
299.0	CARBONDALE	HERRIN	COAL	-	54.0	
189.0	CARBONDALE	SPRINGFIELD	COAL	-	164.0	DEPTH UNCERTAIN

MAPID: 05900307000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23734 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.732621 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 3620.0 **LOG TYPE:**

SOURCE: FIELDS B, LOGAN C H 0002 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
292.0	CARBONDALE	HERRIN	COAL	-	70.0	
182.0	CARBONDALE	SPRINGFIELD	COAL	-	180.0	DEPTH UNCERTAIN

MAPID: 05901112000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229168 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.744802 **DATE COLLECTED:** 1 / 4 / 1952

SURFACE ELEVATION (FT.): 354.7 **LOGGED (FT.):** 244.9 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 12 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
354.7	PLEISTOCENE		UNCONSOLIDATED	127.0	0.0	
227.7	CARBONDALE		ROCK	1.3	127.0	BROKEN PIECES, SS, LS ,BKSH, COAL
226.4	CARBONDALE	HERRIN	COAL	2.1	128.3	
224.3	CARBONDALE		UNDERCLAY	3.7	130.4	
220.6	CARBONDALE		NO RECORD	1.4	134.1	ADJUST FOR MARKER
219.2	CARBONDALE		SHALE	2.3	135.5	GREENISH-GRAY
216.9	CARBONDALE		SANDSTONE	10.1	137.8	
206.9	CARBONDALE		GRAY SHALE	28.6	147.8	
178.3	CARBONDALE	BRIAR HILL	COAL	1.6	176.4	
176.7	CARBONDALE		GRAY SHALE	5.4	178.0	
171.3	CARBONDALE		SANDSTONE	4.3	183.4	
167.0	CARBONDALE		SILTY SHALE	37.3	187.7	
129.7	CARBONDALE		GRAY SHALE	12.1	225.0	
117.6	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	237.1	
115.7	CARBONDALE	SPRINGFIELD	COAL	4.3	239.0	
111.4	CARBONDALE		UNDERCLAY	1.6	243.3	

MAPID: 05901122000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.238493 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742642 **DATE COLLECTED:** 7 / 15 / 1952

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 294.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 22 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
220.0	CARBONDALE		SANDSTONE	5.7	135.0	
214.3	CARBONDALE		GRAY SHALE	27.3	140.7	
187.0	CARBONDALE		BLACK SHALE	0.4	168.0	
186.6	CARBONDALE	BRIAR HILL	COAL	1.8	168.4	
184.8	CARBONDALE		GRAY SHALE	6.1	170.2	
178.8	CARBONDALE		SILTY SHALE	32.8	176.2	
146.0	CARBONDALE		GRAY SHALE	18.8	209.0	
127.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	227.8	
126.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	228.3	
124.7	CARBONDALE	SPRINGFIELD	COAL	4.4	230.3	
120.2	CARBONDALE		UNDERCLAY	1.3	234.8	
119.0	CARBONDALE		SHALE	3.8	236.0	GREENISH-GRAY
115.2	CARBONDALE		GRAY SHALE	12.3	239.8	
102.9	CARBONDALE		SANDSTONE	7.9	252.1	
95.0	CARBONDALE		SILTSTONE	21.1	260.0	
73.9	CARBONDALE		GRAY SHALE	13.3	281.1	

MAPID: 05901123000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.247836 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.742308 **DATE COLLECTED:** 3 / 31 / 1952

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 23 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	129.3	0.0	
220.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	129.3	
218.9	CARBONDALE	ANVIL ROCK	SANDSTONE	19.1	131.1	SHALE BANDS
199.8	CARBONDALE		GRAY SHALE	10.3	150.2	
189.6	CARBONDALE	BRERETON	LIMESTONE	3.0	160.4	
186.6	CARBONDALE	BRERETON	LIMESTONE	0.5	163.4	
186.1	CARBONDALE	HERRIN	COAL	3.2	163.9	
182.9	CARBONDALE	HERRIN	GRAY SHALE	0.2	167.1	
182.7	CARBONDALE	HERRIN	COAL	0.9	167.3	
181.8	CARBONDALE		UNDERCLAY	5.1	168.2	
176.7	CARBONDALE		SHALE & CLAYSTONE	1.3	173.3	
175.5	CARBONDALE		SILTY SANDSTONE	6.8	174.5	
168.7	CARBONDALE		SANDY SHALE	7.0	181.3	
161.7	CARBONDALE		SANDSTONE	4.7	188.3	
157.0	CARBONDALE		SILTSTONE	2.7	193.0	
154.3	CARBONDALE		GRAY SHALE	20.9	195.7	
133.4	CARBONDALE		BLACK SHALE	0.9	216.6	
132.5	CARBONDALE	BRIAR HILL	COAL	2.2	217.5	
130.3	CARBONDALE		GRAY SHALE	6.0	219.7	
124.3	CARBONDALE		SILTSTONE	1.6	225.7	
122.7	CARBONDALE		SILTY SHALE	49.5	227.3	
73.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	276.8	
72.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	277.3	
70.5	CARBONDALE	SPRINGFIELD	COAL	4.5	279.5	
66.0	CARBONDALE		UNDERCLAY	2.0	284.0	

MAPID: 05901123000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.247836 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.742308 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 168.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 23 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
224.7	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	130.3	
222.9	CARBONDALE	LAWSON	SHALE & SILTSTONE	0.8	132.1	
222.2	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	15.8	132.8	
206.3	CARBONDALE	LAWSON	GRAY SHALE	1.8	148.7	
204.6	CARBONDALE	LAWSON	SHALE & SANDSTONE	6.8	150.4	
197.7	CARBONDALE	LAWSON	GRAY SHALE	3.4	157.3	
194.3	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.0	160.7	
191.3	CARBONDALE	ANNA	BLACK SHALE	0.3	163.7	
191.0	CARBONDALE	HERRIN	COAL	4.4	164.0	

MAPID: 05901257000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 530' S line, 125' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229547 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.733388 **DATE COLLECTED:** 6 / 0 / 1953

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 1325.0 **LOG TYPE:** Electric Log

SOURCE: RAINBOW OIL CORP **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-966.0	BASE OF PENN.		UNCLASSIFIED	-	1325.0	

MAPID: 05901759000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.230274 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.736488 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1858.0 **LOG TYPE:** Electric Log

SOURCE: THUNDERBIRD OIL, LOGAN **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
117.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	243.0	
65.0	CARBONDALE	SURVANT	COAL	2.5	295.0	
-5.0	CARBONDALE	COLCHESTER	COAL	1.2	365.0	
-43.0	CARBONDALE	DEKOVEN	COAL	3.0	403.0	
-43.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	403.0	
-70.0	CARBONDALE	DAVIS	COAL	4.0	430.0	
-109.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	469.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-137.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	497.0	
-183.0	TRADEWATER	MT. RORAH	COAL	4.0	543.0	

MAPID: 05901780000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 660' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.240885 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.739816 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2266.0 **LOG TYPE:** Electric Log

SOURCE: REYNOLDS METALS CO, ZEPPA & DALES CONS **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
55.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	305.0	
7.0	CARBONDALE	SURVANT	COAL	3.0	353.0	
-60.0	CARBONDALE	COLCHESTER	COAL	0.5	420.0	
-95.0	CARBONDALE	DEKOVEN	COAL	3.0	455.0	
-95.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	455.0	
-128.0	CARBONDALE	DAVIS	COAL	5.0	488.0	
-159.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	519.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-182.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	542.0	

MAPID: 05901780000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 660' W line of SE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.240885 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.739816 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 2266.0 **LOG TYPE:** Electric Log
SOURCE: REYNOLDS METALS CO **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
204.0	CARBONDALE	BRIAR HILL	COAL	-	156.0	
138.0	CARBONDALE	SPRINGFIELD	COAL	4.0	222.0	BLACK SHALE ROOF
60.0	CARBONDALE	HOUCHIN CREEK	COAL	-	300.0	

MAPID: 05903604000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' N line, 660' E line of SE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.240805 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.735257 **DATE COLLECTED:** 5 / 11 / 1972
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 172.7 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 88GC **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	123.5	0.0	
231.5	CARBONDALE		GRAY SHALE	25.5	123.5	
206.0	CARBONDALE		SANDSTONE	3.0	149.0	
203.0	CARBONDALE		SANDY SHALE	6.0	152.0	
197.0	CARBONDALE		GRAY SHALE	3.0	158.0	
194.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	161.0	
193.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	162.0	
190.7	CARBONDALE	SPRINGFIELD	COAL	4.5	164.3	
186.2	CARBONDALE		UNDERCLAY	3.1	168.8	
183.1	CARBONDALE		LIMESTONE	0.8	171.9	

MAPID: 05903605000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' N line, 660' W line of NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245572 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.738753 **DATE COLLECTED:** 5 / 15 / 1972

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 232.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 89GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	120.0	0.0	
235.0	CARBONDALE		SANDSTONE	16.5	120.0	
218.5	CARBONDALE		GRAY SHALE	3.5	136.5	
215.0	CARBONDALE		SANDSTONE	4.0	140.0	
211.0	CARBONDALE		GRAY SHALE	16.5	144.0	
194.5	CARBONDALE	BRIAR HILL	COAL	2.2	160.5	
192.3	CARBONDALE		UNDERCLAY	3.0	162.7	
189.3	CARBONDALE		GRAY SHALE	3.8	165.7	
185.5	CARBONDALE		SANDSTONE	4.5	169.5	
181.0	CARBONDALE		SHALY SANDSTONE	14.0	174.0	
167.0	CARBONDALE		SANDY SHALE	20.0	188.0	
147.0	CARBONDALE		GRAY SHALE	15.0	208.0	
132.0	CARBONDALE	ST. DAVID	LIMESTONE	0.7	223.0	
131.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	223.7	
129.5	CARBONDALE	SPRINGFIELD	COAL	4.8	225.5	
124.7	CARBONDALE		UNDERCLAY	2.5	230.3	

MAPID: 05903606000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.238491 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.746292 **DATE COLLECTED:** 5 / 18 / 1972

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 275.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 90GC **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		UNCONSOLIDATED	123.5	0.0	
231.5	CARBONDALE	ANVIL ROCK	SANDSTONE	19.5	123.5	
212.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.5	143.0	
206.5	CARBONDALE	BRERETON	LIMESTONE	5.8	148.5	
200.7	CARBONDALE	ANNA	BLACK SHALE	0.4	154.3	
200.3	CARBONDALE	HERRIN	COAL	0.7	154.7	
199.6	CARBONDALE	HERRIN	LIMESTONE	1.7	155.4	COALBALLS?
197.9	CARBONDALE	HERRIN	COAL	3.0	157.1	
194.9	CARBONDALE		UNDERCLAY	3.4	160.1	
191.5	CARBONDALE		CALCAREOUS SANDSTONE	13.5	163.5	
178.0	CARBONDALE		SANDY SHALE	29.8	177.0	
148.2	CARBONDALE	BRIAR HILL	COAL	2.2	206.8	
146.0	CARBONDALE		SHALE	4.0	209.0	
142.0	CARBONDALE		SANDSTONE	23.0	213.0	
119.0	CARBONDALE		SANDSTONE	26.0	236.0	SANDY SHALE
93.0	CARBONDALE		GRAY SHALE	1.8	262.0	
91.2	CARBONDALE		SHALE	0.8	263.8	LIME FOSSILS
90.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	264.6	
87.7	CARBONDALE	SPRINGFIELD	COAL	4.4	267.3	
83.3	CARBONDALE		UNDERCLAY	2.3	271.7	
81.0	CARBONDALE		SILTY CLAYSTONE	1.3	274.0	

MAPID: 05990301000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.243164 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.742475 **DATE COLLECTED:** 5 / 6 / 1949

SURFACE ELEVATION (FT.): 352.5 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE E353 **WELL TYPE:** Coal Test

COMMENT: EQUALITY BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.5	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
334.5	PLEISTOCENE		CLAY	28.0	18.0	
306.5	PLEISTOCENE		SAND	50.0	46.0	

MAPID: 05900019000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.255842 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.721362 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 298.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MINING 4 **WELL TYPE:** Coal Test
COMMENT: GORDON QUESTIONS ACCURACY OF V. RECORDS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	113.0	0.0	
247.0			SHALE	27.0	113.0	
220.0			BLACK SHALE	2.0	140.0	
218.0			SHALE	114.0	142.0	
104.0			SANDSTONE	30.0	256.0	
74.0			SHALE	7.5	286.0	
66.5			UNDERCLAY	2.5	293.5	
64.0			UNDERCLAY	2.0	296.0	
62.0			SHALE	-	298.0	

MAPID: 05900019000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.255842 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.721362 **DATE COLLECTED:** 0 / 0 / 1900
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 3600.0 **LOG TYPE:** Drillers Log
SOURCE: VANDELL MC0004 **WELL TYPE:** Oil and Gas Test
COMMENT: LOCATION AND SURFACE ELEVATION UNCERTAIN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
-	CARBONDALE	SPRINGFIELD	COAL	-		UNIT ERODED OR ABSENT

MAPID: 05901259000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248984 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.723225 **DATE COLLECTED:** 10 / 0 / 1953
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1233.0 **LOG TYPE:** Electric Log
SOURCE: RUDY JOHN W EST **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-882.0	BASE OF PENN.		UNCLASSIFIED	-	1233.0	

MAPID: 05900308000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.237347 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.730805 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 3580.0 **LOG TYPE:**
SOURCE: ZEPPA J, EASLEY B H0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
257.0	CARBONDALE	SPRINGFIELD	COAL	-	101.0	DEPTH UNCERTAIN

MAPID: 05900309000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.235 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.730873 **DATE COLLECTED:** 0 / 0 / 1940
SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 3560.0 **LOG TYPE:**
SOURCE: ZEPPA J, LOGAN C H 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
306.0	CARBONDALE	HERRIN	COAL	-	50.0	
196.0	CARBONDALE	SPRINGFIELD	COAL	-	160.0	DEPTH UNCERTAIN

MAPID: 05901827000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232733 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.727328 **DATE COLLECTED:** 11 / 0 / 1955
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log
SOURCE: S. EASTERN IL OIL PROD., MCDERMOTT J M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
128.0	CARBONDALE	COLCHESTER	COAL	1.2	230.0	
68.0	CARBONDALE	DEKOVEN	COAL	3.0	290.0	
68.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	290.0	
38.0	CARBONDALE	DAVIS	COAL	4.0	320.0	
3.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	355.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-14.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	372.0	

MAPID: 05902470000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1329' N line, 889' E line of W2 NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.236961 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.728051 **DATE COLLECTED:** 7 / 0 / 1959
SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 1295.0 **LOG TYPE:** Survey Sample Study
SOURCE: UNIVERSAL OPERATING, INC **WELL TYPE:** Producer-Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-942.0	BASE OF PENN.		UNCLASSIFIED	-	1295.0	

MAPID: 05902932000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239717 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.723498 **DATE COLLECTED:** 1 / 0 / 1964
SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 1717.0 **LOG TYPE:** Electric Log
SOURCE: MIKE BEELER OIL CO, CROSLEY **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
168.0	CARBONDALE	COLCHESTER	COAL	1.4	190.0	
118.0	CARBONDALE	DEKOVEN	COAL	3.0	240.0	
118.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	240.0	
89.0	CARBONDALE	DAVIS	COAL	3.5	269.0	
55.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	303.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
28.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	330.0	

MAPID: 05900089806M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.211517 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.731938 **DATE COLLECTED:** 0 / 0 / 1968
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 7.2 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-HOPKINS,PEABODY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	2.7	0.0	
397.3	CARBONDALE	ALLENBY	COAL	0.2	2.7	
397.2	CARBONDALE		ROCK	4.4	2.8	

MAPID: 05900312000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.228164 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.723876 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 1315.0 **LOG TYPE:** Electric Log
SOURCE: DELTA DRILLING CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-948.0	BASE OF PENN.		UNCLASSIFIED	-	1315.0	

MAPID: 05900312000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.228164 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.723876 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 3670.0 **LOG TYPE:**
SOURCE: DELTA DRC, WINTERBRGR0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
271.0	CARBONDALE	SPRINGFIELD	COAL	-	96.0	DEPTH UNCERTAIN

MAPID: 05900312000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.228164 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.723876 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 2701.0 **LOG TYPE:** Electric Log
SOURCE: DELTA DRILLING CO., WINTERBERGER **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
157.0	CARBONDALE	COLCHESTER	COAL	0.5	210.0	
102.0	CARBONDALE	DEKOVEN	COAL	3.0	265.0	
102.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	265.0	
72.0	CARBONDALE	DAVIS	COAL	3.0	295.0	
32.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	335.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
17.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	350.0	
-13.0	TRADEWATER	MT. RORAH	COAL	4.0	380.0	

MAPID: 05900313000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227992 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.731068 **DATE COLLECTED:** 0 / 0 / 1940

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 3590.0 **LOG TYPE:**

SOURCE: FIELDS&ZEP, GREEN 0009 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
301.0	CARBONDALE	HERRIN	COAL	-	58.0	
191.0	CARBONDALE	SPRINGFIELD	COAL	-	168.0	DEPTH UNCERTAIN

MAPID: 05901111000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220172 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.724932 **DATE COLLECTED:** 1 / 10 / 1952

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 296.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 11 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	140.0	0.0	
225.0	CARBONDALE		GRAY SHALE	34.5	140.0	
190.5	CARBONDALE	EXCELLO	BLACK SHALE	4.9	174.5	
185.6	CARBONDALE		NO RECORD	0.6	179.4	ADJUST FOR MARKER
185.0	CARBONDALE	HOUCHIN CREEK	COAL	1.4	180.0	
183.6	CARBONDALE		SANDSTONE	43.3	181.4	SHALE BANDS
140.3	CARBONDALE		GRAY SHALE	9.5	224.7	
130.8	CARBONDALE		NO RECORD	1.3	234.2	ADJUST FOR MARKER
129.6	CARBONDALE	SURVANT	COAL	1.8	235.4	
127.8	CARBONDALE		GRAY SHALE	0.8	237.2	PLANT IMPRESSIONS
127.1	CARBONDALE		SILTSTONE & SHALE	7.8	237.9	
119.3	CARBONDALE		GRAY SHALE	6.2	245.7	
113.2	CARBONDALE		SANDSTONE	15.3	251.8	SILTSTONE BANDS
97.9	CARBONDALE		GRAY SHALE	20.8	267.1	
77.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	8.4	287.9	

MAPID: 05903247000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 96' N line, 764' W line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212828 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.732097 **DATE COLLECTED:** 4 / 10 / 1967

SURFACE ELEVATION (FT.): 383.4 **LOGGED (FT.):** 206.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1915Q **WELL TYPE:** Coal Test

COMMENT: SHAWNEETOWN HILLS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
383.4	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0	
333.4	CARBONDALE		SANDSTONE	25.9	50.0	
307.5	CARBONDALE		GRAY SHALE	5.7	75.9	
301.9	CARBONDALE	BRERETON	LIMESTONE	4.8	81.5	
297.1	CARBONDALE	ANNA	DARK SHALE	1.9	86.3	
295.2	CARBONDALE	HERRIN	COAL	4.1	88.2	
291.1	CARBONDALE		UNDERCLAY	3.1	92.3	
288.0	CARBONDALE		SANDSTONE	16.6	95.4	
271.4	CARBONDALE		SANDY SHALE	12.1	112.0	
259.3	CARBONDALE		GRAY SHALE	10.5	124.1	
248.8	CARBONDALE	BRIAR HILL	COAL	2.3	134.6	
246.6	CARBONDALE		GRAY SHALE	4.8	136.8	
241.8	CARBONDALE		SANDY SHALE	0.8	141.6	
241.0	CARBONDALE		SANDSTONE	1.8	142.4	
239.2	CARBONDALE		SANDY SHALE	8.1	144.2	
231.1	CARBONDALE		LIMESTONE	1.2	152.3	
229.9	CARBONDALE		SANDY SHALE	31.2	153.5	
198.8	CARBONDALE		GRAY SHALE	10.3	184.6	
188.5	CARBONDALE		SHALE	1.3	194.9	FOSSILIFEROUS
187.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	196.2	
186.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	196.7	
184.7	CARBONDALE	SPRINGFIELD	COAL	4.5	198.7	
180.2	CARBONDALE		UNDERCLAY	3.5	203.2	

MAPID: 05903370000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 90' N line, 560' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212894 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732111 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 93.1 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY COAL CO. 1915QC **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
332.9	CARBONDALE	LAWSON	SANDSTONE	26.3	50.1	
306.6	CARBONDALE	LAWSON	GRAY SHALE	6.5	76.4	
300.1	CARBONDALE	BRERETON	LIMESTONE	4.1	82.9	
296.0	CARBONDALE	ANNA	BLACK SHALE	2.0	87.0	
294.0	CARBONDALE	HERRIN	COAL	4.1	89.0	

MAPID: 05903660000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' S line, 330' E line of SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.21222 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725083 **DATE COLLECTED:** 12 / 28 / 1967

SURFACE ELEVATION (FT.): 427.9 **LOGGED (FT.):** 285.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 19-G **WELL TYPE:** Coal Test

COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
427.9	PLEISTOCENE		UNCONSOLIDATED	110.0	0.0	
317.9	CARBONDALE		SHALE	10.0	110.0	SOFT
307.9	CARBONDALE		GRAY SHALE	17.5	120.0	
290.4	CARBONDALE	BRIAR HILL	COAL	2.2	137.5	
288.2	CARBONDALE		GRAY SHALE	5.0	139.7	
283.2	CARBONDALE		SANDSTONE	19.3	144.7	
263.9	CARBONDALE		SANDY SHALE	20.0	164.0	
243.9	CARBONDALE		GRAY SHALE	15.3	184.0	
228.6	CARBONDALE		SHALE	1.6	199.3	LIME FOSSILS
227.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	200.9	
224.9	CARBONDALE	SPRINGFIELD	COAL	4.6	203.0	
220.3	CARBONDALE		UNDERCLAY	3.2	207.6	
217.1	CARBONDALE		SANDSTONE	18.2	210.8	
198.9	CARBONDALE		SANDY SHALE	19.0	229.0	
179.9	CARBONDALE		GRAY SHALE	28.9	248.0	
151.0	CARBONDALE	HANOVER	LIMESTONE	1.7	276.9	
149.3	CARBONDALE	EXCELLO	BLACK SHALE	2.0	278.6	
147.3	CARBONDALE	HOUCHIN CREEK	COAL	1.8	280.6	
145.5	CARBONDALE		SANDSTONE	3.0	282.4	

MAPID: 05903661000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215556 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.728652 **DATE COLLECTED:** 9 / 4 / 1968
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 161.0 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 36-G **WELL TYPE:** Coal Test
COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	90.0	0.0	
290.0	CARBONDALE		SHALE	16.0	90.0	
274.0	CARBONDALE		SANDSTONE	13.5	106.0	
260.5	CARBONDALE		SANDY SHALE	22.5	119.5	
238.0	CARBONDALE		GRAY SHALE	9.0	142.0	
229.0	CARBONDALE		SHALE	1.0	151.0	LIME FOSSILS
228.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	152.0	
226.0	CARBONDALE	SPRINGFIELD	COAL	4.5	154.0	
221.5	CARBONDALE		UNDERCLAY	2.5	158.5	

MAPID: 05903662000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220104 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.728548 **DATE COLLECTED:** 9 / 6 / 1968
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 153.1 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 37-G **WELL TYPE:** Coal Test
COMMENT: GOLD HILL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	134.0	0.0	
231.0	CARBONDALE		GRAY SHALE	8.6	134.0	
222.4	CARBONDALE	ST. DAVID	LIMESTONE	0.4	142.6	
222.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	143.0	
220.4	CARBONDALE		LIMESTONE	0.6	144.6	
219.8	CARBONDALE	SPRINGFIELD	COAL	4.9	145.2	
214.9	CARBONDALE		UNDERCLAY	3.0	150.1	

MAPID: 05903664000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217791 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.730419 **DATE COLLECTED:** 3 / 13 / 1973
SURFACE ELEVATION (FT.): 362.5 **LOGGED (FT.):** 175.4 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 123GC **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.5	PLEISTOCENE		UNCONSOLIDATED	132.0	0.0	
230.5	CARBONDALE		SANDY SHALE	23.0	132.0	
207.5	CARBONDALE		GRAY SHALE	4.7	155.0	
202.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	159.7	
202.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	160.2	
200.0	CARBONDALE		GRAY SHALE	0.5	162.5	
199.5	CARBONDALE	SPRINGFIELD	COAL	4.8	163.0	
194.7	CARBONDALE		UNDERCLAY	3.2	167.8	
191.5	CARBONDALE		SANDSTONE	4.4	171.0	

MAPID: 05923831000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 660' N line, 660' E line of NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.2134 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.723238 **DATE COLLECTED:** 4 / 20 / 1972
SURFACE ELEVATION (FT.): 418.2 **LOGGED (FT.):** 194.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 83G-C **WELL TYPE:** Coal Test
COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
418.2	PLEISTOCENE		UNCONSOLIDATED	143.0	0.0	
275.2	CARBONDALE		SANDSTONE	21.0	143.0	
254.2	CARBONDALE		SANDY SHALE	11.3	164.0	
242.9	CARBONDALE		GRAY SHALE	10.0	175.3	
232.9	CARBONDALE		SHALE	0.5	185.3	LIME FOSSILS
232.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	185.8	
230.2	CARBONDALE	SPRINGFIELD	COAL	4.5	188.0	
225.7	CARBONDALE		UNDERCLAY	2.0	192.5	

MAPID: 05923860000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 330' N line, 660' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213448 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.720503 **DATE COLLECTED:** 7 / 14 / 1969

SURFACE ELEVATION (FT.): 409.1 **LOGGED (FT.):** 225.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
409.1	PLEISTOCENE		UNCONSOLIDATED	180.0	0.0	
229.1	CARBONDALE		GRAY SHALE	36.5	180.0	
192.6	CARBONDALE		BLACK SHALE	1.3	216.5	
191.3	CARBONDALE	ST. DAVID	LIMESTONE	1.7	217.8	
189.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	219.5	
187.3	CARBONDALE	SPRINGFIELD	COAL	1.7	221.8	
185.6	CARBONDALE		SANDY SHALE	2.0	223.5	

MAPID: 05993663000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 660' N line, 1' E line of SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.215592 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.726833 **DATE COLLECTED:** 4 / 18 / 1972

SURFACE ELEVATION (FT.): 388.2 **LOGGED (FT.):** 157.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 82-G **WELL TYPE:** Coal Test

COMMENT: EAGLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.2	PLEISTOCENE		UNCONSOLIDATED	149.0	0.0	
239.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	149.0	
237.7	CARBONDALE	SPRINGFIELD	COAL	4.3	150.5	
233.4	CARBONDALE		UNDERCLAY	2.0	154.8	
231.4	CARBONDALE		SANDSTONE	1.0	156.8	

MAPID: 05901110000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2640' N line, 2310' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.203041 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725242 **DATE COLLECTED:** 1 / 4 / 1952

SURFACE ELEVATION (FT.): 493.5 **LOGGED (FT.):** 338.1 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 10 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
493.5	PLEISTOCENE		UNCONSOLIDATED	82.5	0.0	
411.0	MODESTO		GRAY SHALE	2.7	82.5	
408.3	MODESTO		BLACK SHALE	2.3	85.2	
406.0	MODESTO		COAL	0.1	87.5	
405.9	MODESTO		UNDERCLAY	0.2	87.6	
405.7	MODESTO		SILTSTONE	2.7	87.8	
403.1	MODESTO		NO RECORD	10.1	90.4	ADJUST TO MARKER
393.0	MODESTO		GRAY SHALE	15.3	100.5	
377.7	MODESTO		BLACK SHALE	3.4	115.8	
374.3	MODESTO		NO RECORD	1.3	119.2	ADJUST FOR MARKER
373.0	MODESTO		GRAY SHALE	30.8	120.5	
342.2	CARBONDALE	DANVILLE	COAL	1.8	151.3	
340.4	CARBONDALE		GRAY SHALE	9.7	153.1	
330.7	CARBONDALE		BLACK SHALE	0.3	162.8	
330.4	CARBONDALE		GRAY SHALE	3.4	163.1	
327.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.8	166.5	
326.2	CARBONDALE		NO RECORD	2.3	167.3	ADJUST FOR MARKER
323.9	CARBONDALE	BANKSTON FORK	LIMESTONE	1.3	169.6	
322.6	CARBONDALE	ANVIL ROCK	SILTSTONE	24.1	170.9	
298.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.3	195.0	
286.2	CARBONDALE		GRAY SHALE	3.8	207.3	
282.4	CARBONDALE	BRERETON	LIMESTONE	3.3	211.1	
279.1	CARBONDALE	ANNA	BLACK SHALE	2.0	214.4	
277.1	CARBONDALE	HERRIN	COAL	3.5	216.4	
273.6	CARBONDALE		UNDERCLAY	0.3	219.9	
273.4	CARBONDALE		GRAY SHALE	3.0	220.1	
270.4	CARBONDALE		SANDY SHALE	2.5	223.1	GREENISH GRAY
267.9	CARBONDALE		SANDSTONE	3.9	225.6	GREEN SHALE BONDS
264.0	CARBONDALE		SHALE	2.6	229.5	GREENISH-GRAY
261.4	CARBONDALE		SILTSTONE	2.3	232.1	
259.2	CARBONDALE		GRAY SHALE	20.1	234.3	
239.1	CARBONDALE		SILTSTONE	5.0	254.4	
234.1	CARBONDALE		GRAY SHALE	4.8	259.4	
229.2	CARBONDALE	BRIAR HILL	COAL	1.6	264.3	
227.7	CARBONDALE		GRAY SHALE	1.6	265.8	
226.1	CARBONDALE		SILTSTONE	3.6	267.4	
222.5	CARBONDALE		SANDSTONE	13.4	271.0	
209.1	CARBONDALE		GRAY SHALE	2.8	284.4	
206.2	CARBONDALE		SILTSTONE	5.0	287.3	

201.2	CARBONDALE		GRAY SHALE	36.2	292.3	
165.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	328.4	
162.3	CARBONDALE		NO RECORD	0.6	331.2	ADJUST FOR MARKER
161.7	CARBONDALE	SPRINGFIELD	COAL	4.9	331.8	
156.7	CARBONDALE		UNDERCLAY	1.3	336.8	

MAPID: 05901110000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 2640' N line, 2310' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.203041 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.725242 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 494.0 **LOGGED (FT.):** 219.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 10 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.9	CARBONDALE	DANVILLE	COAL	1.8	153.1	
339.1	CARBONDALE		GRAY SHALE	9.7	154.9	
329.4	CARBONDALE	ALLENBY	BONE COAL	0.3	164.6	
329.1	CARBONDALE		GRAY SHALE	3.4	164.9	
325.7	CARBONDALE	BANKSTON FORK	LIMESTONE AND SANDSTONE	2.1	168.3	
323.6	CARBONDALE	LAWSON	SILTSTONE	24.1	170.4	
299.5	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	4.7	194.5	
294.9	CARBONDALE	LAWSON	SILTSTONE	0.5	199.1	
294.4	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	7.3	199.6	
287.1	CARBONDALE	LAWSON	GRAY SHALE	3.8	206.9	
283.3	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.3	210.7	
280.0	CARBONDALE	ANNA	BLACK SHALE	2.0	214.0	
278.0	CARBONDALE	HERRIN	COAL	3.4	216.0	

MAPID: 05901059000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17556 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.71906 **DATE COLLECTED:** 4 / 0 / 1951

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1450.0 **LOG TYPE:** Electric Log

SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1073.0	BASE OF PENN.		UNCLASSIFIED	-	1450.0	

MAPID: 05901059000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17556 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.71906 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2755.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
180.0	CARBONDALE	SPRINGFIELD	COAL	5.0	197.0	BLACK SHALE ROOF
127.0	CARBONDALE	HOUCHIN CREEK	COAL	-	250.0	

MAPID: 05901059000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17556 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.71906 **DATE COLLECTED:** 4 / 0 / 1951
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 2755.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO., WISEHART A **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
122.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	255.0	
69.0	CARBONDALE	SURVANT	COAL	3.0	308.0	
11.0	CARBONDALE	COLCHESTER	COAL	0.5	366.0	
-45.0	CARBONDALE	DEKOVEN	COAL	2.5	422.0	
-45.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	422.0	
-76.0	CARBONDALE	DAVIS	COAL	4.0	453.0	
-103.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	480.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-129.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	506.0	
-153.0	TRADEWATER	MT. RORAH	COAL	1.2	530.0	

MAPID: 05901101000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.18356 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.729017 **DATE COLLECTED:** 9 / 1 / 1951

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 309.6 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
397.0	PLEISTOCENE		UNCONSOLIDATED	105.8	0.0	
291.2	MODESTO		GRAY SHALE	10.3	105.8	
281.0	CARBONDALE	DANVILLE	COAL	1.7	116.0	
279.3	CARBONDALE		SILTY SHALE	0.9	117.7	
278.4	CARBONDALE		SANDSTONE	8.3	118.6	
270.1	CARBONDALE		GRAY SHALE	5.5	126.9	
264.6	CARBONDALE		SANDSTONE	3.0	132.4	
261.6	CARBONDALE		GRAY SHALE	1.5	135.4	
260.1	CARBONDALE		BLACK SHALE	0.3	136.9	COAL STREAKS
259.8	CARBONDALE		UNDERCLAY	2.6	137.2	
257.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	139.8	TAN
252.1	CARBONDALE		GRAY SHALE	5.4	144.9	
246.7	CARBONDALE	ANVIL ROCK	SANDSTONE	2.2	150.3	
244.5	CARBONDALE		GRAY SHALE	16.0	152.5	SANDSTONE BANDS
228.6	CARBONDALE	BRERETON	LIMESTONE	3.9	168.4	
224.7	CARBONDALE	ANNA	BLACK SHALE	4.2	172.3	
220.5	CARBONDALE	HERRIN	COAL	3.4	176.5	
217.1	CARBONDALE		UNDERCLAY	0.3	179.9	
216.7	CARBONDALE		GRAY SHALE	2.3	180.3	
214.4	CARBONDALE		SILTSTONE	3.4	182.6	
211.0	CARBONDALE		GRAY SHALE	2.2	186.0	
208.8	CARBONDALE		SANDSTONE	9.2	188.2	
199.7	CARBONDALE		GRAY SHALE	4.2	197.3	
195.5	CARBONDALE		SANDSTONE	3.6	201.5	
191.9	CARBONDALE		NO RECORD	0.9	205.1	ADJUST FOR MARKER
191.0	CARBONDALE		SILTSTONE	0.9	206.0	
190.1	CARBONDALE		GRAY SHALE	20.1	206.9	
170.0	CARBONDALE	BRIAR HILL	COAL	2.5	227.0	
167.5	CARBONDALE		GRAY SHALE & SANDSTONE	6.5	229.5	SILTSTONE
161.0	CARBONDALE		SANDSTONE	21.3	236.0	SILTSTONE BANDS
139.7	CARBONDALE		GRAY SHALE	38.9	257.3	
100.8	CARBONDALE	ST. DAVID	LIMESTONE	0.6	296.2	
100.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	296.8	
96.5	CARBONDALE	SPRINGFIELD	COAL	5.7	300.5	
90.8	CARBONDALE		UNDERCLAY	3.1	306.2	
87.7	CARBONDALE		GRAY SHALE	0.3	309.3	

MAPID: 05901108000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.186015 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.721693 **DATE COLLECTED:** 12 / 4 / 1951

SURFACE ELEVATION (FT.): 394.9 **LOGGED (FT.):** 293.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 8 **WELL TYPE:** Coal Test

COMMENT: HOLE MAY INTERSECT FAULT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
394.9	PLEISTOCENE		UNCONSOLIDATED	132.3	0.0	
262.6	MODESTO		GRAY SHALE	3.9	132.3	
258.6	CARBONDALE	DANVILLE	COAL	1.3	136.3	CORRELATION UNCERTAIN
257.4	CARBONDALE		UNDERCLAY	0.1	137.5	
257.3	CARBONDALE		SANDY SHALE	103.6	137.6	FAULT IN THIS INTERVAL?
153.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.8	241.3	CORRELATION UNCERTAIN
149.9	CARBONDALE	COLCHESTER	COAL	1.4	245.0	CORRELATION UNCERTAIN
148.5	CARBONDALE		UNDERCLAY	0.3	246.4	
148.2	CARBONDALE		SANDY SHALE	7.8	246.7	GREENISH-GRAY
140.4	CARBONDALE		GRAY SHALE	7.5	254.5	
132.9	CARBONDALE		SILTY SANDSTONE	28.8	262.0	
104.1	CARBONDALE		NO RECORD	2.3	290.8	ADJUST FOR MARKER

MAPID: 05901109000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193006 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.721629 **DATE COLLECTED:** 12 / 7 / 1951

SURFACE ELEVATION (FT.): 413.6 **LOGGED (FT.):** 267.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
413.6	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0	
349.6	MODESTO		SANDSTONE	10.8	64.0	
338.8	CARBONDALE	DANVILLE	COAL	1.3	74.8	
337.5	CARBONDALE		UNDERCLAY	1.6	76.1	
335.9	CARBONDALE		SANDY SHALE	11.8	77.7	
324.2	CARBONDALE		BLACK SHALE	0.7	89.4	PLANT MATERIAL
323.5	CARBONDALE		CLAYSTONE	0.7	90.1	UNDER CLAY STRUCTURE
322.8	CARBONDALE		GRAY SHALE	4.0	90.8	
318.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	94.8	TAN
313.9	CARBONDALE		SHALE & CLAYSTONE	0.6	99.7	GREEN
313.3	CARBONDALE		NO RECORD	3.8	100.3	ADJUST FOR MARKER
309.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.2	104.0	
298.4	CARBONDALE	ANVIL ROCK	SANDSTONE	17.2	115.2	
281.3	CARBONDALE		GRAY SHALE	2.2	132.3	
279.1	CARBONDALE	BRERETON	LIMESTONE	2.4	134.5	
276.7	CARBONDALE	ANNA	BLACK SHALE	4.6	136.9	
272.1	CARBONDALE		NO RECORD	2.5	141.5	ADJUST FOR MARKER
269.6	CARBONDALE	HERRIN	COAL	2.5	144.0	
267.1	CARBONDALE	HERRIN	GRAY SHALE	0.2	146.5	
266.9	CARBONDALE	HERRIN	COAL	1.0	146.7	
266.0	CARBONDALE		UNDERCLAY	0.4	147.6	
265.6	CARBONDALE		SILTY SHALE	20.1	148.0	GREENISH-GRAY
245.5	CARBONDALE		GRAY SHALE	29.3	168.1	
216.2	CARBONDALE	BRIAR HILL	COAL	1.9	197.4	
214.3	CARBONDALE		SILTY SANDSTONE	13.6	199.3	
200.7	CARBONDALE		GRAY SHALE	45.6	212.9	
155.1	CARBONDALE	ST. DAVID	LIMESTONE	0.4	258.5	
154.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	258.9	
152.0	CARBONDALE	SPRINGFIELD	COAL	4.6	261.6	
147.4	CARBONDALE		UNDERCLAY	1.2	266.2	

MAPID: 05901128000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.192917 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.72903 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 236.9 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 28 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
267.0	CARBONDALE	ALLENBY	BONE COAL	0.5	188.0	
266.6	CARBONDALE		CLAYSTONE	3.7	188.4	
262.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	192.1	UPPER BENCH
257.6	CARBONDALE	BANKSTON FORK	GRAY SHALE	0.1	197.4	SHALE PARTING
257.5	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	0.5	197.5	LOWER BENCH
257.0	CARBONDALE	LAWSON	SANDSTONE	0.8	198.0	
256.2	CARBONDALE	LAWSON	SILTSTONE	2.4	198.8	
253.7	CARBONDALE	LAWSON	SANDSTONE	23.4	201.3	
230.3	CARBONDALE	LAWSON	GRAY SHALE	0.5	224.7	
229.8	CARBONDALE	BRERETON	LIMESTONE	2.6	225.2	
227.2	CARBONDALE	ANNA	BLACK SHALE	5.3	227.8	
222.0	CARBONDALE	HERRIN	COAL	3.9	233.0	

MAPID: 05901128000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.192917 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.72903 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 455.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 28 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
24.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	431.0	
-27.0	CARBONDALE	SURVANT	COAL	2.5	482.0	
-90.0	CARBONDALE	COLCHESTER	COAL	2.0	545.0	
-152.0	CARBONDALE	DEKOVEN	COAL	4.0	607.0	
-152.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	607.0	
-185.0	CARBONDALE	DAVIS	COAL	5.0	640.0	24% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901128000C **VERSION:** 3 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 1320' N line, 0' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.192917 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.72903 **DATE COLLECTED:** 2 / 20 / 1952

SURFACE ELEVATION (FT.): 455.5 **LOGGED (FT.):** 644.7 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 28 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.5	PLEISTOCENE		UNCONSOLIDATED	100.0	0.0	
355.5	MODESTO		SILTY SHALE	10.1	100.0	GREENISH-GRAY
345.4	MODESTO		GRAY SHALE	2.3	110.1	
343.2	MODESTO		NO RECORD	3.7	112.3	ADJUST FOR MARKER
339.5	MODESTO		GRAY SHALE	6.4	116.0	
333.1	MODESTO		SHALE	4.8	122.4	GREENISH-GRAY
328.2	MODESTO		GRAY SHALE	4.8	127.3	
323.5	MODESTO		BLACK SHALE	4.7	132.0	
318.8	MODESTO		GRAY SHALE	29.8	136.7	
289.1	MODESTO		NO RECORD	7.6	166.4	ADJUST FOR MARKER
281.5			SILTSTONE	7.8	174.0	
273.7	CARBONDALE		GRAY SHALE	5.4	181.8	
268.2	CARBONDALE		BLACK SHALE	0.3	187.3	
268.0	CARBONDALE		GRAY SHALE	0.4	187.5	
267.6	CARBONDALE	ALLENBY	COAL	0.0	187.9	
267.6	CARBONDALE		UNDERCLAY	0.3	187.9	
267.2	CARBONDALE		SHALE & CLAYSTONE	3.3	188.3	
263.9	CARBONDALE	BANKSTON FORK	LIMESTONE	6.1	191.6	
257.8	CARBONDALE	ANVIL ROCK	SHALY SILTSTONE	3.3	197.7	
254.6	CARBONDALE	ANVIL ROCK	SANDSTONE	23.7	200.9	
230.9	CARBONDALE		GRAY SHALE	0.5	224.6	
230.4	CARBONDALE	BRERETON	LIMESTONE	2.7	225.1	
227.7	CARBONDALE	ANNA	BLACK SHALE	5.3	227.8	
222.5	CARBONDALE	HERRIN	COAL	2.9	233.0	
219.6	CARBONDALE	HERRIN	GRAY SHALE	0.1	235.9	BLUE BAND
219.5	CARBONDALE	HERRIN	COAL	0.9	236.0	
218.6	CARBONDALE		UNDERCLAY	2.7	236.9	
215.9	CARBONDALE		SHALE & CLAYSTONE	1.5	239.6	
214.4	CARBONDALE		SHALE	1.8	241.1	GREENISH-GRAY
212.7	CARBONDALE		SANDY SILTSTONE	11.2	242.8	
201.5	CARBONDALE		GRAY SHALE	25.6	254.0	
175.9	CARBONDALE	BRIAR HILL	COAL	1.9	279.6	
174.0	CARBONDALE		UNDERCLAY	0.3	281.5	
173.7	CARBONDALE		SILTY SHALE	3.7	281.8	
170.1	CARBONDALE		SANDSTONE	15.8	285.4	
154.2	CARBONDALE		SILTSTONE	16.0	301.3	
138.2	CARBONDALE		GRAY SHALE	23.8	317.3	
114.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	341.1	
112.0	CARBONDALE	SPRINGFIELD	COAL	4.5	343.5	

107.5	CARBONDALE		UNDERCLAY	2.1	348.0	
105.3	CARBONDALE		SHALE & CLAYSTONE	2.2	350.2	
103.2	CARBONDALE		SILTSTONE	27.7	352.3	
75.5	CARBONDALE		GRAY SHALE	43.6	380.0	
31.9	CARBONDALE	EXCELLO	BLACK SHALE	4.5	423.6	
27.4	CARBONDALE	EXCELLO	LIMESTONE	0.6	428.1	
26.8	CARBONDALE	EXCELLO	BLACK SHALE	0.3	428.7	
26.5	CARBONDALE	HOUCHIN CREEK	COAL	1.8	429.0	
24.7	CARBONDALE		SILTSTONE	24.2	430.8	
0.5	CARBONDALE		GRAY SHALE	18.5	455.0	
-18.0	CARBONDALE		SILTY SHALE	7.1	473.5	
-25.1	CARBONDALE		SANDSTONE	2.0	480.6	
-27.1	CARBONDALE	SURVANT	COAL	2.2	482.6	
-29.3	CARBONDALE		GRAY SHALE	0.4	484.8	
-29.7	CARBONDALE		SILTSTONE	11.9	485.2	
-41.6	CARBONDALE		GRAY SHALE	7.9	497.1	
-49.5	CARBONDALE		SILTY SHALE	16.0	505.0	
-65.5	CARBONDALE		GRAY SHALE	13.2	521.0	
-78.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	8.6	534.2	
-87.3	CARBONDALE	COLCHESTER	COAL	0.4	542.8	
-87.7	CARBONDALE		UNDERCLAY	1.3	543.2	
-89.0	CARBONDALE		SILTSTONE	2.7	544.5	
-91.7	CARBONDALE		SANDSTONE	56.2	547.2	
-147.8	CARBONDALE		GRAY SHALE	3.3	603.3	
-151.2	CARBONDALE	DEKOVEN	COAL	4.0	606.7	UPPER
-155.2	CARBONDALE		UNDERCLAY	0.7	610.7	
-155.8	CARBONDALE		SILTSTONE	4.0	611.3	
-159.8	CARBONDALE		GRAY SHALE	0.9	615.3	CARBONIZED PLANT IMPRESSIONS
-160.8	CARBONDALE		SANDSTONE	8.7	616.3	
-169.4	CARBONDALE		SILTSTONE	4.3	624.9	
-173.8	CARBONDALE		GRAY SHALE	5.3	629.3	
-179.1	CARBONDALE		BLACK SHALE	4.4	634.6	
-183.5	CARBONDALE	DAVIS	COAL	4.5	639.0	
-188.0	TRADEWATER		UNDERCLAY	1.2	643.5	

MAPID: 05903258000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 23 **QUARTERS/FOOTAGES:** 478' N line, 234' W line of NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.192167 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.723997 **DATE COLLECTED:** 4 / 4 / 1967

SURFACE ELEVATION (FT.): 420.5 **LOGGED (FT.):** 285.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1913Q **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.5	PLEISTOCENE		UNCONSOLIDATED	71.5	0.0	
349.0	MODESTO		SANDY SHALE	25.0	71.5	
324.0	MODESTO		GRAY SHALE	6.2	96.5	
317.8	CARBONDALE	DANVILLE	COAL	0.5	102.7	
317.3	CARBONDALE		GRAY SHALE	7.8	103.2	
309.5	CARBONDALE		SANDSTONE	5.1	111.0	
304.4	CARBONDALE		GRAY SHALE	2.6	116.1	
301.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	118.7	
296.4	CARBONDALE	ANVIL ROCK	SANDSTONE	38.0	124.1	
258.4	CARBONDALE	ANNA	BLACK SHALE	2.1	162.1	
256.3	CARBONDALE		GRAY SHALE	1.7	164.2	
254.6	CARBONDALE	HERRIN	COAL	2.2	165.9	
252.4	CARBONDALE	HERRIN	SHALE	0.2	168.1	BLUE BAND
252.2	CARBONDALE	HERRIN	COAL	0.9	168.3	
251.3	CARBONDALE		UNDERCLAY	3.1	169.2	
248.2	CARBONDALE		SANDY SHALE	1.4	172.3	
246.8	CARBONDALE		SANDSTONE	2.3	173.7	
244.5	CARBONDALE		SANDY SHALE	6.4	176.0	
238.1	CARBONDALE		LIMESTONE	1.4	182.4	
236.7	CARBONDALE		SANDY SHALE	13.2	183.8	
223.5	CARBONDALE		GRAY SHALE	18.4	197.0	
205.1	CARBONDALE	BRIAR HILL	COAL	2.2	215.4	
202.9	CARBONDALE		GRAY SHALE	5.2	217.6	
197.7	CARBONDALE		SANDY SHALE	42.8	222.8	
154.9	CARBONDALE		GRAY SHALE	10.5	265.6	
144.4	CARBONDALE	ST. DAVID	LIMESTONE	0.6	276.1	FOSSILIFEROUS
143.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	276.7	
141.0	CARBONDALE	SPRINGFIELD	COAL	4.5	279.5	
136.5	CARBONDALE		UNDERCLAY	1.3	284.0	

MAPID: 05900361000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.1661 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.731862 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 4010.0 **LOG TYPE:**
SOURCE: BREHM C E, OLDHAM C 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
233.0	CARBONDALE	HERRIN	COAL	6.0	168.0	
115.0	CARBONDALE	SPRINGFIELD	COAL	4.0	286.0	

MAPID: 05900361000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.1661 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.731862 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 173.5 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Oil and Gas Test
COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
269.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	32.0	132.0	
237.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	164.0	
235.0	CARBONDALE	ANNA	BLACK SHALE	2.0	166.0	
233.0	CARBONDALE	HERRIN	COAL	5.5	168.0	

MAPID: 05900361000C **VERSION:** 3 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.1661 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.731862 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 2837.0 **LOG TYPE:** Electric Log
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
231.0	CARBONDALE	HERRIN	COAL	4.0	170.0	
187.0	CARBONDALE	BRIAR HILL	COAL	-	214.0	
111.0	CARBONDALE	SPRINGFIELD	COAL	5.0	290.0	BLACK SHALE ROOF
35.0	CARBONDALE	HOUCHIN CREEK	COAL	-	366.0	

MAPID: 05900361000C **VERSION:** 4 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' W line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.1661 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.731862 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2837.0 **LOG TYPE:** Survey Sample Study
SOURCE: BREHM, C. E. DRLG.&PROD. **WELL TYPE:** Oil and Gas 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: 05901061000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.166837 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.728246 **DATE COLLECTED:** 7 / 0 / 1946
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2775.0 **LOG TYPE:** Electric Log
SOURCE: FERRALL & MOORE, OLDHAM C I **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
57.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	328.0	
5.0	CARBONDALE	SURVANT	COAL	4.0	380.0	
-54.0	CARBONDALE	COLCHESTER	COAL	0.5	439.0	
-105.0	CARBONDALE	DEKOVEN	COAL	4.0	490.0	
-105.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	490.0	
-140.0	CARBONDALE	DAVIS	COAL	5.0	525.0	
-175.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	560.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-200.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	585.0	

MAPID: 05901061000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.166837 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.728246 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 2775.0 **LOG TYPE:** Electric Log
SOURCE: FERRALL & MOORE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
257.0	CARBONDALE	HERRIN	COAL	3.0	128.0	
211.0	CARBONDALE	BRIAR HILL	COAL	-	174.0	
135.0	CARBONDALE	SPRINGFIELD	COAL	5.0	250.0	BLACK SHALE & LIMESTONE ROOF
59.0	CARBONDALE	HOUCHIN CREEK	COAL	-	326.0	

MAPID: 05901855000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.16876 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.731824 **DATE COLLECTED:** 12 / 0 / 1955

SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 2691.0 **LOG TYPE:** Electric Log

SOURCE: ATHA, H. D., OLDHAM C I 4 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
34.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	385.0	
-16.0	CARBONDALE	SURVANT	COAL	1.8	435.0	
-71.0	CARBONDALE	COLCHESTER	COAL	0.5	490.0	
-128.0	CARBONDALE	DEKOVEN	COAL	3.0	547.0	
-128.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	547.0	
-160.0	CARBONDALE	DAVIS	COAL	4.0	579.0	
-193.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	612.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-223.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	642.0	

MAPID: 05901940000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.171073 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.729996 **DATE COLLECTED:** 2 / 0 / 1956

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 1580.0 **LOG TYPE:** Electric Log

SOURCE: ATHA, H. D. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1159.0	BASE OF PENN.		UNCLASSIFIED	-	1580.0	

MAPID: 05903567000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 0' N line, 0' E line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.157234 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.732898 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 264.6 **LOG TYPE:** Survey Core Study
SOURCE: PEABODY COAL CO. P1063-C **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
202.2	CARBONDALE	DANVILLE	COAL	1.7	217.8	
200.5	CARBONDALE		GRAY SHALE	6.3	219.5	
194.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.4	225.8	
190.8	CARBONDALE	LAWSON	GRAY SHALE	10.0	229.2	
180.8	CARBONDALE	LAWSON	SANDSTONE	12.6	239.2	
168.2	CARBONDALE	LAWSON	SILTY SHALE	5.0	251.8	
163.2	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	0.8	256.8	
162.4	CARBONDALE	ANNA	GRAY SHALE	4.4	257.6	
158.0	CARBONDALE	HERRIN	COAL	2.6	262.0	

MAPID: 05901062000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' S line, 330' W line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.174008 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.704575 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2692.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO., WIEDERHOLD M E **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	230.0	
85.0	CARBONDALE	SURVANT	COAL	0.5	280.0	
31.0	CARBONDALE	COLCHESTER	COAL	0.5	334.0	
-30.0	CARBONDALE	DEKOVEN	COAL	4.0	395.0	
-30.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	395.0	
-59.0	CARBONDALE	DAVIS	COAL	4.0	424.0	
-95.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	460.0	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-115.0	TRADEWATER	STONEFORT	LIMESTONE	1.2	480.0	
-141.0	TRADEWATER	MT. RORAH	COAL	1.2	506.0	

MAPID: 05901152000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NW SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.164352 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.706973 **DATE COLLECTED:** 12 / 16 / 1952

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 413.4 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 52 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.0	PLEISTOCENE		UNCONSOLIDATED	131.0	0.0	
240.0	CARBONDALE		GRAY SHALE	21.3	131.0	
218.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	152.3	
217.0	CARBONDALE	SPRINGFIELD	COAL	4.0	154.0	
213.0	CARBONDALE		UNDERCLAY	0.3	158.0	
212.7	CARBONDALE		IGNEOUS INTRUSION	2.2	158.3	
210.5	CARBONDALE		GRAY SHALE	0.6	160.5	
209.9	CARBONDALE		SANDSTONE	0.3	161.1	
209.6	CARBONDALE		NO RECORD	8.6	161.4	ADJUST FOR MARKER
201.0	CARBONDALE		SANDSTONE	5.5	170.0	
195.5	CARBONDALE		GRAY SHALE	44.0	175.5	
151.5	CARBONDALE	EXCELLO	BLACK SHALE	6.4	219.5	
145.1	CARBONDALE	HOUCHIN CREEK	COAL	1.7	225.9	
143.4	CARBONDALE		SANDSTONE	9.1	227.6	
134.3	CARBONDALE		SILTSTONE	16.2	236.7	
118.2	CARBONDALE		GRAY SHALE	16.1	252.8	
102.0	CARBONDALE	SURVANT	COAL	1.4	269.0	
100.6	CARBONDALE	SURVANT	GRAY SHALE	0.1	270.4	
100.5	CARBONDALE	SURVANT	COAL	0.6	270.5	
100.0	CARBONDALE		SILTSTONE	3.9	271.0	
96.1	CARBONDALE		NO RECORD	4.1	274.9	ADJUST FOR MARKER
92.0	CARBONDALE		SILTSTONE	1.2	279.0	
90.8	CARBONDALE		GRAY SHALE	8.7	280.2	
82.2	CARBONDALE		SANDSTONE	1.5	288.8	
80.7	CARBONDALE		SILTSTONE	4.3	290.3	
76.3	CARBONDALE		GRAY SHALE	20.8	294.7	
55.5	CARBONDALE		SILTSTONE	4.8	315.5	
50.7	CARBONDALE		GRAY SHALE	4.6	320.3	
46.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.6	324.9	
43.5	CARBONDALE	COLCHESTER	COAL	0.3	327.5	
43.2	CARBONDALE		SILTSTONE	6.3	327.8	
36.9	CARBONDALE		SANDSTONE	24.5	334.1	
12.4	CARBONDALE		SILTSTONE	1.3	358.6	
11.1	CARBONDALE		GRAY SHALE	14.1	359.9	
-3.0	CARBONDALE		SILTSTONE	7.8	374.0	
-10.8	CARBONDALE		GRAY SHALE	5.0	381.8	
-15.8	CARBONDALE	DEKOVEN	COAL	4.3	386.8	
-20.0	CARBONDALE		SHALE	2.8	391.0	SILTSTONE, SANDSTONE PEBBLES
-22.8	CARBONDALE		SANDSTONE	0.8	393.8	

-23.7	CARBONDALE		GRAY SHALE	5.3	394.7
-29.0	CARBONDALE		BLACK SHALE	5.5	400.0
-34.5	CARBONDALE	DAVIS	COAL	5.0	405.5
-39.5	CARBONDALE		UNDERCLAY	2.4	410.5
-41.9	TRADEWATER		SHALE & CLAYSTONE	0.5	412.9

MAPID: 05901152000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NW SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.164352 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.706973 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: UNION COLLIERY CO 52 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
155.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	225.0	
111.0	CARBONDALE	SURVANT	COAL	1.0	269.0	
53.0	CARBONDALE	COLCHESTER	COAL	0.5	327.0	
-2.0	CARBONDALE	DEKOVEN	COAL	4.0	382.0	
-2.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	382.0	
-24.0	CARBONDALE	DAVIS	COAL	5.0	404.0	28% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901918000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.167095 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.71013 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 2522.0 **LOG TYPE:** Electric Log

SOURCE: LABROT LEE, WIEDERHOLD M E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
173.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	195.0	
123.0	CARBONDALE	SURVANT	COAL	2.0	245.0	
66.0	CARBONDALE	COLCHESTER	COAL	0.5	302.0	
13.0	CARBONDALE	DEKOVEN	COAL	3.0	355.0	
13.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	355.0	
-12.0	CARBONDALE	DAVIS	COAL	4.0	380.0	
-48.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	416.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-64.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	432.0	
-97.0	TRADEWATER	MT. RORAH	COAL	1.2	465.0	

MAPID: 05901918000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.167095 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.71013 **DATE COLLECTED:** 11 / 0 / 1955

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 1322.0 **LOG TYPE:** Electric Log

SOURCE: LABROT LEE **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-954.0	BASE OF PENN.		UNCLASSIFIED	-	1322.0	

MAPID: 05902591000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.158134 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.712115 **DATE COLLECTED:** 12 / 15 / 1961

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 234.2 **LOG TYPE:** Drillers Log

SOURCE: REPUBLIC COAL AND COKE 1-K2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	
367.0	MODESTO		GRAY SHALE	12.0	33.0	
355.0	CARBONDALE	DANVILLE	COAL	2.0	45.0	
353.0	CARBONDALE		GRAY SHALE	1.0	47.0	
352.0	CARBONDALE		SANDY SHALE	14.0	48.0	
338.0	CARBONDALE		BLACK SHALE	1.5	62.0	
336.5	CARBONDALE		GRAY SHALE	4.0	63.5	
332.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	67.5	
328.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.3	71.5	
307.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	92.8	
300.2	CARBONDALE	BRERETON	LIMESTONE	2.3	99.8	
297.8	CARBONDALE	ANNA	BLACK SHALE	1.6	102.2	
296.2	CARBONDALE	ANNA	LIMESTONE	3.0	103.8	
293.2	CARBONDALE	HERRIN	COAL	2.3	106.8	PARTINGS PRESENT
290.9	CARBONDALE		GRAY SHALE	4.6	109.1	
286.3	CARBONDALE		SANDSTONE	25.0	113.7	
261.3	CARBONDALE		SANDY SHALE	16.7	138.7	
244.7	CARBONDALE	BRIAR HILL	COAL	1.5	155.3	
243.2	CARBONDALE		SANDY SHALE	3.0	156.8	
240.2	CARBONDALE		SANDSTONE/SHALE	34.0	159.8	
206.2	CARBONDALE		SANDY SHALE	29.4	193.8	
176.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	223.3	
173.9	CARBONDALE	TURNER MINE	DARK GRAY SHALE	0.8	226.1	
173.2	CARBONDALE	SPRINGFIELD	COAL	5.0	226.8	
168.2	CARBONDALE		UNDERCLAY	2.3	231.8	

MAPID: 05900105000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.1874 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.711646 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 4050.0 **LOG TYPE:**

SOURCE: HIGHSCHOOL **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
185.0	CARBONDALE	HERRIN	COAL	-	220.0	

MAPID: 05901063000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17853 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.704509 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L, WIEDERHOLD M E 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
129.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	237.0	
108.0	CARBONDALE	SURVANT	COAL	2.5	258.0	
56.0	CARBONDALE	COLCHESTER	COAL	0.5	310.0	
4.0	CARBONDALE	DEKOVEN	COAL	3.0	362.0	
4.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	362.0	
-24.0	CARBONDALE	DAVIS	COAL	5.0	390.0	
-60.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	426.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-62.0	TRADEWATER	STONEFORT	LIMESTONE	5.0	428.0	
-112.0	TRADEWATER	MT. RORAH	COAL	2.0	478.0	

MAPID: 05901063000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17853 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.704509 **DATE COLLECTED:** 10 / 0 / 1950

SURFACE ELEVATION (FT.): 366.0 **LOGGED (FT.):** 1384.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
58.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	308.0	
-24.0	SPOON	DAVIS	UNCLASSIFIED	-	390.0	
-1018.0	BASE OF PENN.		UNCLASSIFIED	-	1384.0	

MAPID: 05901064000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.198932 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.704227 **DATE COLLECTED:** 10 / 0 / 1950
SURFACE ELEVATION (FT.): 403.0 **LOGGED (FT.):** 1390.0 **LOG TYPE:** Electric Log
SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-987.0	BASE OF PENN.		UNCLASSIFIED	-	1390.0	

MAPID: 05901994000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.237614 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.703609 **DATE COLLECTED:** 5 / 0 / 1956
SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 1070.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
169.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	195.0	
80.0	SPOON	DAVIS	UNCLASSIFIED	-	284.0	
-706.0	BASE OF PENN.		UNCLASSIFIED	-	1070.0	

MAPID: 05901650000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.253528 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.715909 **DATE COLLECTED:** 10 / 0 / 1953
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1090.0 **LOG TYPE:** Drillers Log
SOURCE: REDWINE NASH ETAL **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-742.0	BASE OF PENN.		UNCLASSIFIED	-	1090.0	

MAPID: 05900020000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1750' S line, 950' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254233 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.692522 **DATE COLLECTED:** 0 / 0 / 1919

SURFACE ELEVATION (FT.): 347.9 **LOGGED (FT.):** 3479.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE OG 3, DRONE 0003 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
-	CARBONDALE	SPRINGFIELD	COAL	-		UNIT ERODED OR ABSENT

MAPID: 05900020000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1750' S line, 950' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254233 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.692522 **DATE COLLECTED:** 0 / 0 / 1919

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1500.0 **LOG TYPE:** Drillers Log

SOURCE: FLD NOTES-PIERCE,EAGLE OIL & GAS CO. **WELL TYPE:** Oil and Gas Test

COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	7.0	0.0	
353.0			ROCK	93.0	7.0	
260.0			COAL	4.0	100.0	
256.0			ROCK	3508.0	104.0	

MAPID: 05900020000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1750' S line, 950' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254233 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.692522 **DATE COLLECTED:** 0 / 0 / 1920

SURFACE ELEVATION (FT.): 347.9 **LOGGED (FT.):** 122.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE OIL& GAS 3 **WELL TYPE:** Coal Test

COMMENT: MAY HAVE PASSED THROUGH FAULT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
347.9	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
307.9			SHALE	15.0	40.0	
292.9			SANDSTONE	11.0	55.0	
281.9			COAL WITH SHALE	4.0	66.0	
277.9			SANDSTONE	6.0	70.0	
271.9			SHALE	9.0	76.0	
262.9			SHALE	15.0	85.0	BLUE; WITH TRACE OF COAL
247.9			COAL	4.0	100.0	
243.9			UNDERCLAY	6.0	104.0	
237.9			BLACK SHALE	8.0	110.0	
229.9			LIMESTONE	4.0	118.0	NO SIGN. COAL DEEPER

MAPID: 05900021000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.249467 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.695899 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 361.3 **LOGGED (FT.):** 3613.0 **LOG TYPE:** Drillers Log

SOURCE: DRONE LOU **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
-	CARBONDALE	SPRINGFIELD	COAL	-		UNIT ERODED OR ABSENT

MAPID: 05900092000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 31 **QUARTERS/FOOTAGES:** NW NW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.256936 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.694564 **DATE COLLECTED:** 4 / 19 / 1919
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 460.0 **LOG TYPE:** Drillers Log
SOURCE: E. L. PIERCE CO-CADY **WELL TYPE:** Oil and Gas Test
COMMENT: QUESTIONABLE THICKNESS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	50.0	0.0	
310.0			ROCK	65.0	50.0	
245.0			COAL	4.0	115.0	
241.0			ROCK	341.0	119.0	

MAPID: 05901066000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23994 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.701694 **DATE COLLECTED:** 4 / 0 / 1950
SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 1050.0 **LOG TYPE:** Electric Log
SOURCE: ASHLAND OIL&REF. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-688.0	BASE OF PENN.		UNCLASSIFIED	-	1050.0	

MAPID: 05923770000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW SW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.238442 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.691211 **DATE COLLECTED:** 8 / 20 / 1974
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 125.0 **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	68.0	0.0	
312.0			ROCK	44.0	68.0	
268.0			COAL	3.0	112.0	
265.0			ROCK	10.0	115.0	

MAPID: 05923976000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 32 **QUARTERS/FOOTAGES:** SW SW NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23374 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.692286 **DATE COLLECTED:** 8 / 12 / 1978
SURFACE ELEVATION (FT.): 510.0 **LOGGED (FT.):** 83.0 **LOG TYPE:** Drillers Log
SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
510.0			UNCONSOLIDATED	16.2	0.0	
493.8			ROCK	43.9	16.2	
450.0			COAL	1.6	60.0	
448.4			ROCK	21.4	61.6	

MAPID: 05900087603M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 237' S line, 815' E line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214362 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.689253 **DATE COLLECTED:** 8 / 25 / 1966
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-F. N. MURRAY,WENZEL C C **WELL TYPE:** Underground mine
COMMENT: SAMPLE # 2

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

MAPID: 05901067000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214789 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.70045 **DATE COLLECTED:** 1 / 0 / 1951
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 1230.0 **LOG TYPE:** Electric Log
SOURCE: NAT'L. ASSOC. PETRO. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-847.0	BASE OF PENN.		UNCLASSIFIED	-	1230.0	

MAPID: 059275B0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 33 **QUARTERS/FOOTAGES:** NW NE NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217696 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.695384 **DATE COLLECTED:** 7 / 0 / 1961

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 152.1 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-W. E. PARHAM **WELL TYPE:** Roadcut

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	26.0	0.0	
424.0			ROCK	91.6	26.0	
332.4			COAL	0.1	117.6	STREAK
332.3			ROCK	34.5	117.7	(STREAK)

MAPID: 05924172000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.183139 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.700791 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 1155.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-778.0	BASE OF PENN.		UNCLASSIFIED	-	1155.0	

MAPID: 05900022000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.172953 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.70186 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 472.5 **LOG TYPE:** Drillers Log

SOURCE: BYRD-PITTSBURG #18 **WELL TYPE:** Coal Test

COMMENT: NEAR NUMEROUS FAULTS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	137.0	0.0	
233.0			SANDSTONE	28.0	137.0	
205.0			DARK SHALE	11.2	165.0	
193.8			COAL	1.2	176.2	
192.7			GRAY SHALE	0.7	177.3	
192.0			SANDSTONE	13.0	178.0	
179.0			DARK SHALE	4.0	191.0	
175.0			GRAY SHALE	7.0	195.0	
168.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	202.0	UNCERTAIN CORRELATION
164.0	CARBONDALE	SPRINGFIELD	COAL	4.7	206.0	UNCERTAIN CORRELATION
159.3			UNDERCLAY	3.3	210.7	
156.0			SHALE	59.0	214.0	
97.0			BLACK SHALE	4.2	273.0	
92.8			COAL	1.8	277.2	
91.0			UNDERCLAY	1.0	279.0	
90.0			SHALE	45.3	280.0	
44.7			COAL	1.4	325.3	
43.2			BLACK SHALE	0.3	326.8	
43.0			BONE COAL	0.4	327.0	
42.6			SHALE	15.6	327.4	
27.0			SANDSTONE	4.0	343.0	
23.0			SHALE	32.0	347.0	
-9.0			BLACK SHALE	4.5	379.0	
-13.5			COAL	0.3	383.5	
-13.8			SHALE	52.2	383.8	
-66.0			COAL	4.0	436.0	
-70.0			UNDERCLAY	3.0	440.0	
-73.0			SANDSTONE	12.0	443.0	
-85.0			SHALE	9.0	455.0	
-94.0			BLACK SHALE	3.8	464.0	
-97.8			COAL	4.1	467.8	
-101.8			UNDERCLAY	0.7	471.8	

MAPID: 05900022000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.172953 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.70186 **DATE COLLECTED:** 0 / 0 / 1970

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 472.5 **LOG TYPE:** Survey Core Study

SOURCE: BYRD-PITTSBURG CO **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0			ROCK	176.2	0.0	
188.8			COAL	1.2	176.2	
187.7			ROCK	28.7	177.3	
159.0	CARBONDALE	SPRINGFIELD	COAL	4.7	206.0	
154.3	CARBONDALE		ROCK	66.3	210.7	
88.0	CARBONDALE		COAL	1.8	277.0	
86.2	CARBONDALE		ROCK	46.3	278.8	
39.9	CARBONDALE		COAL	1.8	325.1	
38.2	CARBONDALE		ROCK	51.6	326.8	
-13.4	CARBONDALE		COAL	0.3	378.4	
-13.7	CARBONDALE		ROCK	52.2	378.7	
-65.9	CARBONDALE	DEKOVEN	COAL	4.0	430.9	
-69.9	CARBONDALE		ROCK	27.8	434.9	
-97.6	CARBONDALE	DAVIS	COAL	4.1	462.6	
-101.7			ROCK	0.7	466.7	

MAPID: 05900022000C **VERSION:** 3 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.172953 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.70186 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 3700.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD PITTS 018 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		UNIT ERODED OR ABSENT
164.0	CARBONDALE	SPRINGFIELD	COAL	4.7	206.0	

MAPID: 05900022000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.172953 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.70186 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 473.0 **LOG TYPE:** Other Core Study

SOURCE: BYRD & PITTSBURG, **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
93.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	277.0	
45.0	CARBONDALE	SURVANT	COAL	1.4	325.0	
-13.0	CARBONDALE	COLCHESTER	COAL	0.3	383.0	
-66.0	CARBONDALE	DEKOVEN	COAL	4.0	436.0	
-66.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	436.0	
-98.0	CARBONDALE	DAVIS	COAL	4.0	468.0	43% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900022000C **VERSION:** 5 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.172953 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.70186 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 472.5 **LOG TYPE:** Drillers Log

SOURCE: BYRD-PITTSBURG 18 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	13.0	0.0	
357.0	PLEISTOCENE		SAND/CLAY	22.0	13.0	
335.0	PLEISTOCENE		SAND	30.0	35.0	
305.0	PLEISTOCENE		SAND	19.0	65.0	
286.0	PLEISTOCENE		CLAY	24.0	84.0	
262.0	PLEISTOCENE		SAND	24.0	108.0	
238.0	PLEISTOCENE		SAND	5.0	132.0	
233.0	CARBONDALE		SANDSTONE	28.0	137.0	
205.0	CARBONDALE		DARK SHALE	11.2	165.0	
193.8	CARBONDALE	BRIAR HILL	COAL	1.2	176.2	
192.7	CARBONDALE		SHALE	0.7	177.3	
192.0	CARBONDALE		SHALY SANDSTONE	13.0	178.0	
179.0	CARBONDALE		DARK SHALE	4.0	191.0	
175.0	CARBONDALE		SHALE	7.0	195.0	
168.0	CARBONDALE	TURNER MINE	SHALE	4.0	202.0	
164.0	CARBONDALE	SPRINGFIELD	COAL	4.7	206.0	
159.3	CARBONDALE		UNDERCLAY	3.3	210.7	
156.0	CARBONDALE		SHALE	12.0	214.0	
144.0	CARBONDALE		SHALE	10.0	226.0	
134.0	CARBONDALE		BROWN SHALE	32.0	236.0	
102.0	CARBONDALE		SHALE	5.0	268.0	
97.0	CARBONDALE	EXCELLO	SHALE	4.2	273.0	
92.8	CARBONDALE	HOUCHIN CREEK	COAL	1.8	277.2	
91.0	CARBONDALE		UNDERCLAY	1.0	279.0	
90.0	CARBONDALE		SHALE	28.0	280.0	
62.0	CARBONDALE		SHALE	10.0	308.0	
52.0	CARBONDALE		SHALE	7.3	318.0	
44.7	CARBONDALE	SURVANT	COAL	1.4	325.3	
43.2	CARBONDALE	SURVANT	SHALE	0.3	326.8	
43.0	CARBONDALE	SURVANT	COAL	0.4	327.0	SHALE NOTED
42.6	CARBONDALE		SHALE	0.6	327.4	COAL PARTINGS
42.0	CARBONDALE		SHALE	15.0	328.0	
27.0	CARBONDALE		SHALY SANDSTONE	4.0	343.0	
23.0	CARBONDALE		SHALE	28.0	347.0	
-5.0	CARBONDALE		DARK SHALE	4.0	375.0	
-9.0	CARBONDALE	MECCA QUARRY	SHALE	4.5	379.0	
-13.5	CARBONDALE	COLCHESTER	COAL	0.3	383.5	
-13.8	CARBONDALE		SHALE	50.2	383.8	
-64.0	CARBONDALE		DARK SHALE	2.0	434.0	

-66.0	CARBONDALE	DEKOVEN	COAL	4.0	436.0
-70.0	CARBONDALE		UNDERCLAY	3.0	440.0
-73.0	CARBONDALE		SANDSTONE	12.0	443.0
-85.0	CARBONDALE		SHALE	3.0	455.0
-88.0	CARBONDALE		DARK SHALE	6.0	458.0
-94.0	CARBONDALE		SHALE	3.8	464.0
-97.8	CARBONDALE	DAVIS	COAL	2.3	467.8
-100.0	CARBONDALE	DAVIS	PYRITE	0.1	470.0
-100.1	CARBONDALE	DAVIS	COAL	1.8	470.1
-101.8	TRADEWATER		UNDERCLAY	0.7	471.8

MAPID: 05902564000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.170668 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.703697 **DATE COLLECTED:** 9 / 5 / 1961

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 194.0 **LOG TYPE:** Drillers Log

SOURCE: REPUBLIC COAL AND COKE K1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	146.0	0.0	
219.0	CARBONDALE		SANDSTONE/SHALE	19.0	146.0	
200.0	CARBONDALE		GRAY SHALE	20.3	165.0	
179.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	185.3	
178.4	CARBONDALE	SPRINGFIELD	COAL	5.4	186.6	
173.0	CARBONDALE		UNDERCLAY	2.0	192.0	

MAPID: 059275B0006F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.170736 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.692793 **DATE COLLECTED:** 0 / 0 / 1865

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 204.0 **LOG TYPE:** Measured section

SOURCE: GEOL OF ILL VOL.6 A WORTHEN (BAKER MINE) **WELL TYPE:** Underground mine

COMMENT: THINSEAM-EAST.TERM. GOLDHILL LIST ON MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	10.0	0.0	
-			ROCK	162.0	10.0	
-			COAL	2.0	172.0	
-			ROCK	30.0	174.0	

MAPID: 05900314000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.055001 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.763855 **DATE COLLECTED:** 7 / 0 / 1943
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2860.0 **LOG TYPE:** Electric Log
SOURCE: MAGNOLIA PETROLEUM, LOGSDON M **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HOUCHIN CREEK	COAL	4.0	496.0	
-	CARBONDALE	SURVANT	COAL	2.0	449.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	606.0	
-	CARBONDALE	DEKOVEN	COAL	4.0	674.0	
-	CARBONDALE	LOWER DEKOVEN	COAL	0.0	674.0	
-	CARBONDALE	DAVIS	COAL	1.0	696.0	
-	TRADEWATER	SEAHORNE LS	LIMESTONE	1.0	738.0	
-	TRADEWATER	STONEFORT	LIMESTONE	2.0	766.0	
-	TRADEWATER	MT. RORAH	COAL	1.2	789.0	

MAPID: 05900314000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.055001 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.763855 **DATE COLLECTED:** 0 / 0 / 1943
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: MAGNOLIA, LOGSDON M 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
49.0	CARBONDALE	HERRIN	COAL	3.0	302.0	
-79.0	CARBONDALE	SPRINGFIELD	COAL	5.0	430.0	

MAPID: 05900314000C **VERSION:** 3 **PROJECT:** CONTROL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.055001 **GEOLOGIST:** HINES
CONFIDENTIAL: N **LATITUDE:** 37.763855 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2860.0 **LOG TYPE:** Survey Sample Study
SOURCE: MAGNOLIA PETROLEUM **WELL TYPE:** Oil and Gas 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: 05901176000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.065362 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766611 **DATE COLLECTED:** 7 / 0 / 1953

SURFACE ELEVATION (FT.): 351.8 **LOGGED (FT.):** 449.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 76 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.8	PLEISTOCENE		UNCONSOLIDATED	74.0	0.0	
277.8	MODESTO		GRAY SHALE	6.0	74.0	
271.8	MODESTO		SHALE	12.0	80.0	
259.8	MODESTO		SHALE	62.0	92.0	
197.8	MODESTO		BLACK SHALE	5.0	154.0	
192.8	MODESTO		SANDY SHALE	27.0	159.0	
165.8	MODESTO		GRAY SHALE	44.0	186.0	
121.8	MODESTO		SANDY SHALE	32.0	230.0	
89.8	CARBONDALE	DANVILLE	COAL	1.0	262.0	
88.8	CARBONDALE		SHALE	25.0	263.0	
63.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	288.0	START CORE DESC.
62.8	CARBONDALE	BANKSTON FORK	SHALE & CLAYSTONE	0.3	289.0	
62.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.7	289.3	
58.9	CARBONDALE		SHALE & CLAYSTONE	0.3	292.9	
58.5	CARBONDALE	ANVIL ROCK	SILTSTONE	1.1	293.3	
57.5	CARBONDALE	ANVIL ROCK	SANDSTONE	17.4	294.3	
40.0	CARBONDALE	ANVIL ROCK	SILTSTONE	2.9	311.8	
37.1	CARBONDALE		GRAY SHALE	0.5	314.7	
36.6	CARBONDALE		LIMESTONE	1.5	315.2	
35.1	CARBONDALE		GRAY SHALE	1.3	316.7	
33.8	CARBONDALE	BRERETON	LIMESTONE	5.2	318.0	
28.6	CARBONDALE		GRAY SHALE	0.3	323.2	
28.4	CARBONDALE	HERRIN	COAL	3.8	323.4	
24.5	CARBONDALE		UNDERCLAY	3.3	327.3	
21.3	CARBONDALE		SANDSTONE	1.5	330.5	
19.8	CARBONDALE		NO RECORD	3.0	332.0	ADJUST FOR MARKER
16.8	CARBONDALE		SANDSTONE	8.3	335.0	SILT AND SHALE BANDS
8.5	CARBONDALE		SHALE	7.3	343.3	GREEN-GRAY
1.2	CARBONDALE		SILTSTONE	6.2	350.6	
-5.0	CARBONDALE		GRAY SHALE	23.6	356.8	
-28.6	CARBONDALE		NO RECORD	4.6	380.4	ADJUST FOR MARKER
-33.2	CARBONDALE	BRIAR HILL	COAL	2.9	385.0	
-36.1	CARBONDALE		UNDERCLAY	0.3	387.9	
-36.4	CARBONDALE		SILTY SANDSTONE	2.8	388.2	
-39.2	CARBONDALE		GRAY SHALE	49.1	391.0	
-88.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	440.1	
-89.7	CARBONDALE	TURNER MINE	LIMESTONE	0.4	441.5	
-90.1	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	441.9	
-90.4	CARBONDALE		NO RECORD	0.5	442.2	ADJUST FOR AMRKER

-90.9	CARBONDALE	SPRINGFIELD	COAL	5.3	442.7
-96.1	CARBONDALE		UNDERCLAY	1.1	447.9

MAPID: 05901176000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' S line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.065362 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.766611 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 326.8 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 76 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
89.7	CARBONDALE	DANVILLE	COAL	1.0	262.3	
88.7	CARBONDALE		LIMESTONE W/ SHALE	25.0	263.3	
63.7	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	1.0	288.3	UPPER BENCH
62.7	CARBONDALE	BANKSTON FORK	CALCAREOUS SHALE	0.3	289.3	SHALE PARTING
62.4	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	3.7	289.6	LOWER BENCH
58.7	CARBONDALE	LAWSON	CLAYSTONE	0.3	293.3	
58.4	CARBONDALE	LAWSON	SILTSTONE	1.1	293.6	
57.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	17.4	294.7	
39.9	CARBONDALE	LAWSON	SILTSTONE	2.9	312.1	
37.0	CARBONDALE	LAWSON	GRAY SHALE	0.5	315.0	
36.5	CARBONDALE	BRERETON	LIMESTONE W/ SHALE	7.5	315.5	
29.0	CARBONDALE	HERRIN	COAL	3.8	323.0	

MAPID: 05901179000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of NE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.046906 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.766571 **DATE COLLECTED:** 8 / 5 / 1953

SURFACE ELEVATION (FT.): 339.5 **LOGGED (FT.):** 410.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 79 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
339.5	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
269.5	MODESTO		GRAY SHALE	130.0	70.0	
139.5	MODESTO		SHALE	20.0	200.0	SOME LS
119.5	MODESTO		SHALE	3.0	220.0	
116.5	CARBONDALE	DANVILLE	COAL	1.0	223.0	
115.5	CARBONDALE		UNDERCLAY	2.0	224.0	
113.5	CARBONDALE		SANDY SHALE	20.5	226.0	
93.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	246.5	
88.0	CARBONDALE		GRAY SHALE	1.5	251.5	
86.5	CARBONDALE		BLACK SHALE	0.5	253.0	
86.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.5	253.5	
82.5	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	257.0	
77.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	262.0	
66.5	CARBONDALE	BRERETON	LIMESTONE	0.7	273.0	
65.8	CARBONDALE	ANNA	BLACK SHALE	3.0	273.7	
62.8	CARBONDALE	HERRIN	COAL	4.0	276.7	
58.8	CARBONDALE		UNDERCLAY	3.3	280.7	
55.5	CARBONDALE		SHALE	6.0	284.0	
49.5	CARBONDALE		SANDSTONE	3.0	290.0	
46.5	CARBONDALE		SANDY SHALE	6.0	293.0	
40.5	CARBONDALE		SHALY SANDSTONE	6.0	299.0	
34.5	CARBONDALE		SANDY SHALE	27.0	305.0	
7.5	CARBONDALE	BRIAR HILL	COAL	1.5	332.0	
6.0	CARBONDALE		SANDSTONE	5.5	333.5	LAMINATED
0.5	CARBONDALE		SANDSTONE	36.5	339.0	
-36.0	CARBONDALE		SHALE	24.5	375.5	
-60.5	CARBONDALE	ST. DAVID	LIMESTONE	0.7	400.0	
-61.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	400.7	
-64.2	CARBONDALE	SPRINGFIELD	COAL	5.8	403.7	
-69.9	CARBONDALE		UNDERCLAY	0.6	409.4	

MAPID: 05901699000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.052605 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.774921 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1639.0 **LOG TYPE:** Electric Log
SOURCE: BAINES, DON DRLG. CO. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1289.0	BASE OF PENN.		UNCLASSIFIED	-	1639.0	

MAPID: 05901699000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.052605 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.774921 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2839.0 **LOG TYPE:** Electric Log
SOURCE: BAINES, DON DRLG. CO. **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
25.0	CARBONDALE	HERRIN	COAL	4.0	325.0	
-27.0	CARBONDALE	BRIAR HILL	COAL	-	377.0	
-100.0	CARBONDALE	SPRINGFIELD	COAL	6.0	450.0	BLACK SHALE ROOF
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	-	515.0	

MAPID: 05901699000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.052605 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.774921 **DATE COLLECTED:** 5 / 0 / 1955
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2839.0 **LOG TYPE:** Electric Log
SOURCE: BAINES, DON DRLG. CO., ROLLMAN PETERS **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-170.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-215.0	CARBONDALE	SURVANT	COAL	1.2	565.0	
-275.0	CARBONDALE	COLCHESTER	COAL	0.5	625.0	
-340.0	CARBONDALE	DEKOVEN	COAL	3.0	690.0	
-340.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	690.0	
-360.0	CARBONDALE	DAVIS	COAL	4.0	710.0	
-397.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	747.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-375.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	725.0	
-440.0	TRADEWATER	MT. RORAH	COAL	1.2	790.0	

MAPID: 05903530000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' S line, 1' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.065358 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.766611 **DATE COLLECTED:** 8 / 18 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 448.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1047C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	15.0	0.0	
325.0	PLEISTOCENE		SAND & GRAVEL	62.5	15.0	
262.5	MODESTO		GRAY SHALE	3.5	77.5	
259.0	MODESTO		SANDSTONE	1.8	81.0	
257.2	MODESTO		GRAY SHALE	17.5	82.8	
239.7	MODESTO		LIMESTONE	0.5	100.3	
239.2	MODESTO		GRAY SHALE	27.0	100.8	
212.2	MODESTO		SANDY SHALE	33.7	127.8	
178.5	MODESTO		LIMESTONE	0.5	161.5	
178.0	MODESTO		SANDY SHALE	22.5	162.0	
155.5	MODESTO		SANDSTONE	2.5	184.5	
153.0	MODESTO		GRAY SHALE	67.5	187.0	
85.5	MODESTO		ROCK	3.5	254.5	
82.0	MODESTO		GRAY SHALE	5.0	258.0	
77.0	CARBONDALE	DANVILLE	COAL	1.0	263.0	
76.0	CARBONDALE		SANDSTONE	21.0	264.0	
55.0	CARBONDALE	ALLENBY	COAL	1.0	285.0	
54.0	CARBONDALE		SHALE	1.8	286.0	
52.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.4	287.8	
47.8	CARBONDALE		GRAY SHALE	1.3	292.2	
46.5	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	293.5	
30.0	CARBONDALE		SANDY SHALE	6.5	310.0	
23.5	CARBONDALE	BRERETON	LIMESTONE	4.3	316.5	
19.2	CARBONDALE	ANNA	BLACK SHALE	0.5	320.8	
18.7	CARBONDALE	HERRIN	COAL	4.3	321.3	
14.4	CARBONDALE		UNDERCLAY	3.9	325.6	
10.5	CARBONDALE		CALCAREOUS SANDSTONE	3.0	329.5	
7.5	CARBONDALE		SANDSTONE	17.5	332.5	
-10.0	CARBONDALE		SANDY SHALE	32.0	350.0	
-42.0	CARBONDALE	BRIAR HILL	COAL	3.0	382.0	
-45.0	CARBONDALE		UNDERCLAY	1.0	385.0	
-46.0	CARBONDALE		SANDSTONE	29.0	386.0	
-75.0	CARBONDALE		SANDY SHALE	11.0	415.0	
-86.0	CARBONDALE		FOSSILIFEROUS SHALE	10.7	426.0	
-96.7	CARBONDALE		SHALE	1.2	436.7	
-97.9	CARBONDALE	ST. DAVID	LIMESTONE	0.5	437.9	
-98.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	438.3	
-100.5	CARBONDALE	SPRINGFIELD	COAL	5.2	440.5	

-105.7	CARBONDALE	UNDERCLAY	1.9	445.7
-107.6	CARBONDALE	SANDY SHALE	1.1	447.6

MAPID: 05923805000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1' S line, 1980' E line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.053802 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762945 **DATE COLLECTED:** 9 / 23 / 1972

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 438.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1074-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION K-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	10.0	0.0	
330.0	PLEISTOCENE		SAND & GRAVEL	70.0	10.0	
260.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	80.0	
257.0	MODESTO		GRAY SHALE	18.0	83.0	
239.0	MODESTO		SANDY SHALE	39.0	101.0	
200.0	MODESTO		LIMESTONE	0.8	140.0	
199.2	MODESTO		SANDY SHALE	94.0	140.8	
105.2	MODESTO		GRAY SHALE	11.0	234.8	
94.2	CARBONDALE	DANVILLE	COAL	1.0	245.8	
93.2	CARBONDALE		SANDY SHALE	14.2	246.8	
79.0	CARBONDALE		LIMESTONE	2.8	261.0	
76.2	CARBONDALE		SANDY SHALE	6.0	263.8	
70.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	269.8	
64.2	CARBONDALE		SANDY SHALE	3.2	275.8	
61.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	279.0	
53.0	CARBONDALE		SANDY SHALE	7.8	287.0	
45.2	CARBONDALE	BRERETON	LIMESTONE	5.2	294.8	
40.0	CARBONDALE	ANNA	BLACK SHALE	2.0	300.0	
38.0	CARBONDALE	HERRIN	COAL	4.1	302.0	
33.9	CARBONDALE		UNDERCLAY	3.9	306.1	
30.0	CARBONDALE		LIMESTONE	2.0	310.0	
28.0	CARBONDALE		SANDY SHALE	43.8	312.0	
-15.8	CARBONDALE	BRIAR HILL	COAL	1.8	355.8	
-17.6	CARBONDALE		GRAY SHALE	6.0	357.6	
-23.6	CARBONDALE		SANDSTONE	20.0	363.6	
-43.6	CARBONDALE		SANDY SHALE	43.4	383.6	
-87.0	CARBONDALE		GRAY SHALE & LIMESTONE	1.0	427.0	
-88.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	428.0	
-90.5	CARBONDALE	TURNER MINE	GRAY SHALE	0.5	430.5	
-91.0	CARBONDALE	SPRINGFIELD	COAL	5.7	431.0	
-96.7	CARBONDALE		UNDERCLAY	2.0	436.7	

MAPID: 05923851000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 1 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.060771 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.766603 **DATE COLLECTED:** 10 / 8 / 1974

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 437.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1080C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	13.0	0.0	
332.0	PLEISTOCENE		SAND & GRAVEL	62.0	13.0	
270.0	MODESTO		GRAY SHALE	10.0	75.0	
260.0	MODESTO		SANDY SHALE	15.0	85.0	
245.0	MODESTO		COAL	1.0	100.0	W. KY. #24
244.0	MODESTO		UNDERCLAY	3.0	101.0	
241.0	MODESTO		GRAY SHALE	32.0	104.0	
209.0	MODESTO		SANDY SHALE	47.0	136.0	
162.0	MODESTO		SANDSTONE	39.0	183.0	
123.0	MODESTO		SANDY SHALE	20.0	222.0	
103.0	CARBONDALE	DANVILLE	COAL	2.0	242.0	
101.0	CARBONDALE		GRAY SHALE	24.5	244.0	
76.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	268.5	
72.5	CARBONDALE		GRAY SHALE	2.0	272.5	
70.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	274.5	
49.5	CARBONDALE	BRERETON	LIMESTONE	2.2	295.5	
47.3	CARBONDALE	ANNA	SOFT SHALE	0.8	297.7	
46.5	CARBONDALE	ANNA	BLACK SHALE	1.2	298.5	
45.3	CARBONDALE	HERRIN	COAL	3.5	299.7	
41.8	CARBONDALE		UNDERCLAY	3.8	303.2	
38.0	CARBONDALE		SANDSTONE	14.0	307.0	
24.0	CARBONDALE		SANDY SHALE	31.0	321.0	
-7.0	CARBONDALE	BRIAR HILL	COAL	1.7	352.0	
-8.7	CARBONDALE		SANDY SHALE	2.3	353.7	
-11.0	CARBONDALE		SANDSTONE	18.0	356.0	
-29.0	CARBONDALE		GRAY SHALE	33.0	374.0	
-62.0	CARBONDALE		GRAY SHALE & LIMESTONE	13.0	407.0	
-75.0	CARBONDALE	ST. DAVID	LIMESTONE	0.7	420.0	
-75.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	420.7	
-78.5	CARBONDALE	SPRINGFIELD	COAL	5.3	423.5	
-83.8	CARBONDALE		SANDSTONE	2.7	428.8	
-86.5	CARBONDALE		SANDY SHALE	3.7	431.5	
-90.2	CARBONDALE		SANDSTONE	2.2	435.2	

MAPID: 05902926000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 405' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.066807 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.763871 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log

SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
23.0	CARBONDALE	HERRIN	COAL	3.0	323.0	
-38.0	CARBONDALE	BRIAR HILL	COAL	-	384.0	
-87.0	CARBONDALE	SPRINGFIELD	COAL	5.0	433.0	BLACK SHALE ROOF
-152.0	CARBONDALE	HOUCHIN CREEK	COAL	-	498.0	

MAPID: 05902926000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 405' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.066807 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763871 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 328.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Oil and Gas Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
75.0	CARBONDALE	DANVILLE	COAL	2.0	271.0	
73.0	CARBONDALE		SHALE & SANDSTONE	15.0	273.0	
58.0	CARBONDALE	ALLENBY	COAL	1.0	288.0	
57.0	CARBONDALE		CLAYSTONE & SHALE	3.0	289.0	
54.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	292.0	
51.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	18.0	295.0	
33.0	CARBONDALE	LAWSON	GRAY SHALE	5.0	313.0	
28.0	CARBONDALE	BRERETON	LIMESTONE	5.0	318.0	
23.0	CARBONDALE	ANNA	BLACK SHALE	1.0	323.0	
22.0	CARBONDALE	HERRIN	COAL	4.0	324.0	

MAPID: 05902926000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 405' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.066807 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.763871 **DATE COLLECTED:** 11 / 0 / 1963

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1625.0 **LOG TYPE:** Electric Log

SOURCE: WAUSAU PETRO. CORP. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1279.0	BASE OF PENN.		UNCLASSIFIED	-	1625.0	

MAPID: 05902926000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' S line, 405' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.066807 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.763871 **DATE COLLECTED:** 11 / 0 / 1963

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2700.0 **LOG TYPE:** Electric Log

SOURCE: WAUSAU PETRO. CORP., LOGSDON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	502.0	
-203.0	CARBONDALE	SURVANT	COAL	1.8	549.0	
-304.0	CARBONDALE	COLCHESTER	COAL	0.5	650.0	
-324.0	CARBONDALE	DEKOVEN	COAL	4.0	670.0	
-324.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	670.0	
-347.0	CARBONDALE	DAVIS	COAL	4.0	693.0	
-384.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	730.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-389.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	735.0	

MAPID: 05900364000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.093663 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.771162 **DATE COLLECTED:** 12 / 0 / 1944
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3002.0 **LOG TYPE:** Electric Log
SOURCE: SINCLAIR WYOMING OIL, HINES EDWARD **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	614.0	
-309.0	CARBONDALE	SURVANT	COAL	0.8	660.0	
-371.0	CARBONDALE	COLCHESTER	COAL	0.5	722.0	
-443.0	CARBONDALE	DEKOVEN	COAL	4.0	794.0	
-443.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	794.0	
-464.0	CARBONDALE	DAVIS	COAL	4.0	815.0	
-499.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	850.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900364000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.093663 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.771162 **DATE COLLECTED:** 0 / 0 / 1944
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**
SOURCE: SNCLR WYOM, HINES E 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-71.0	CARBONDALE	HERRIN	COAL	3.0	422.0	
-195.0	CARBONDALE	SPRINGFIELD	COAL	4.0	546.0	

MAPID: 05902461000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 380' S line, 280' W line
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100868 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.764074 **DATE COLLECTED:** 6 / 0 / 1959
SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 1660.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1309.0	BASE OF PENN.		UNCLASSIFIED	-	1660.0	

MAPID: 05902461000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 380' S line, 280' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100868 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.764074 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2974.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-59.0	CARBONDALE	HERRIN	COAL	-	410.0	
-106.0	CARBONDALE	BRIAR HILL	COAL	-	457.0	
-186.0	CARBONDALE	SPRINGFIELD	COAL	5.0	537.0	BLACK SHALE ROOF
-259.0	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0	

MAPID: 05902461000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 380' S line, 280' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.100868 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.764074 **DATE COLLECTED:** 6 / 0 / 1959

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 2974.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-264.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	615.0	
-322.0	CARBONDALE	SURVANT	COAL	2.0	673.0	
-381.0	CARBONDALE	COLCHESTER	COAL	0.5	732.0	
-439.0	CARBONDALE	DEKOVEN	COAL	3.0	790.0	
-439.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	790.0	
-465.0	CARBONDALE	DAVIS	COAL	4.0	816.0	
-539.0	TRADEWATER	SEAHORNE LS	LIMESTONE	1.4	890.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-574.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	925.0	

MAPID: 05902476000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 230' S line, 330' W line of SE SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.096091 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.763618 **DATE COLLECTED:** 10 / 0 / 1959

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2930.0 **LOG TYPE:** Electric Log

SOURCE: V S & S DRLG CO, INC, WIEDERHOLD M E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-224.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	574.0	
-272.0	CARBONDALE	SURVANT	COAL	1.2	622.0	
-340.0	CARBONDALE	COLCHESTER	COAL	0.5	690.0	
-395.0	CARBONDALE	DEKOVEN	COAL	3.0	745.0	
-395.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	745.0	
-420.0	CARBONDALE	DAVIS	COAL	3.0	770.0	
-450.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	800.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-455.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	805.0	
-505.0	TRADEWATER	MT. RORAH	COAL	1.2	855.0	

MAPID: 05903518000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083426 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762874 **DATE COLLECTED:** 6 / 8 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 449.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1037C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION Q-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	12.0	0.0	
338.0	PLEISTOCENE		SAND & GRAVEL	62.0	12.0	
276.0	MODESTO		GRAY SHALE	9.0	74.0	
267.0	MODESTO		LIMESTONE	4.0	83.0	
263.0	MODESTO		SANDSTONE	23.0	87.0	
240.0	MODESTO		GRAY SHALE & LIMESTONE	47.0	110.0	
193.0	MODESTO		SANDY SHALE	20.0	157.0	
173.0	MODESTO	WEST FRANKLIN	LIMESTONE	7.0	177.0	
166.0	MODESTO		SANDSTONE	15.0	184.0	
151.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	199.0	
149.0	MODESTO		SANDY SHALE	5.0	201.0	
144.0	MODESTO		SANDSTONE	25.0	206.0	
119.0	MODESTO		SANDY SHALE	9.0	231.0	
110.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	240.0	
107.0	MODESTO		SANDSTONE	21.0	243.0	
86.0	MODESTO		SHALE	23.0	264.0	
63.0	CARBONDALE	DANVILLE	COAL	2.3	287.0	
60.7	CARBONDALE		SHALE	4.7	289.3	
56.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	294.0	
53.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	297.0	
40.0	CARBONDALE		SANDY SHALE	9.0	310.0	
31.0	CARBONDALE	BRERETON	LIMESTONE	2.2	319.0	
28.8	CARBONDALE	ANNA	BLACK SHALE	2.7	321.2	
26.1	CARBONDALE	HERRIN	COAL	3.5	323.9	
22.6	CARBONDALE		UNDERCLAY	2.6	327.4	
20.0	CARBONDALE		SANDSTONE	17.0	330.0	
3.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	5.0	347.0	
-2.0	CARBONDALE		SANDSTONE	6.0	352.0	
-8.0	CARBONDALE		SANDSTONE/LIMESTONE	24.5	358.0	
-32.5	CARBONDALE	BRIAR HILL	COAL	2.6	382.5	
-35.1	CARBONDALE		SANDY SHALE	20.0	385.1	
-55.1	CARBONDALE		SHALE	34.9	405.1	
-90.0	CARBONDALE	ST. DAVID	LIMESTONE	1.8	440.0	
-91.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	441.8	
-93.8	CARBONDALE	SPRINGFIELD	COAL	5.0	443.8	
-98.8	CARBONDALE		UNDERCLAY	1.1	448.8	

MAPID: 05903607000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092602 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762952 **DATE COLLECTED:** 4 / 9 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 513.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1024C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	12.0	0.0	
328.0	PLEISTOCENE		SAND & GRAVEL	62.0	12.0	
266.0	MODESTO		GRAY SHALE	22.0	74.0	
244.0	MODESTO	CHAPEL	COAL	2.0	96.0	
242.0	MODESTO		GRAY SHALE	12.0	98.0	
230.0	MODESTO		SANDY SHALE	15.0	110.0	
215.0	MODESTO		SANDSTONE	25.0	125.0	
190.0	MODESTO		SANDY SHALE	19.0	150.0	
171.0	MODESTO		LIMESTONE	1.0	169.0	
170.0	MODESTO		GRAY SHALE	13.0	170.0	
157.0	MODESTO		SANDY SHALE	21.0	183.0	
136.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	204.0	
133.5	MODESTO		GRAY SHALE	13.5	206.5	
120.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	220.0	
114.0	MODESTO		SANDSTONE	4.0	226.0	
110.0	MODESTO		GRAY SHALE	70.0	230.0	
40.0	MODESTO		SANDY SHALE	12.4	300.0	
27.6	CARBONDALE	DANVILLE	COAL	2.6	312.4	
25.0	CARBONDALE		UNDERCLAY	1.0	315.0	
24.0	CARBONDALE		GRAY SHALE	7.0	316.0	
17.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	323.0	
12.3	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	327.7	
-5.7	CARBONDALE		GRAY SHALE	23.3	345.7	
-29.0	CARBONDALE	BRERETON	LIMESTONE	3.0	369.0	
-32.0	CARBONDALE	ANNA	BLACK SHALE	5.0	372.0	
-37.0	CARBONDALE	HERRIN	COAL	3.0	377.0	
-40.0	CARBONDALE		UNDERCLAY	2.7	380.0	
-42.7	CARBONDALE		GRAY SHALE	10.3	382.7	
-53.0	CARBONDALE		SANDSTONE	32.0	393.0	
-85.0	CARBONDALE		GRAY SHALE	8.6	425.0	
-93.6	CARBONDALE	BRIAR HILL	COAL	2.2	433.6	
-95.8	CARBONDALE		GRAY SHALE	62.6	435.8	
-158.4	CARBONDALE	ST. DAVID	LIMESTONE	1.4	498.4	
-159.8	CARBONDALE	TURNER MINE	BLACK SHALE & LIMESTONE	4.6	499.8	
-164.4	CARBONDALE	SPRINGFIELD	COAL	6.3	504.4	
-170.6	CARBONDALE		UNDERCLAY	2.4	510.6	

MAPID: 05903607000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 3 **QUARTERS/FOOTAGES:** 0' S line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092602 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.762952 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1024-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
32.6	CARBONDALE	DANVILLE	COAL	2.6	312.4	
30.0	CARBONDALE		GRAY SHALE	8.0	315.0	
22.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	323.0	
17.3	CARBONDALE	LAWSON	SANDSTONE	18.0	327.7	
-0.7	CARBONDALE	LAWSON	GRAY SHALE	23.3	345.7	
-24.0	CARBONDALE	BRERETON	LIMESTONE	3.0	369.0	
-27.0	CARBONDALE	ANNA	BLACK SHALE	5.0	372.0	
-32.0	CARBONDALE	HERRIN	COAL	3.0	377.0	

MAPID: 05901159000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120348 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.76311 **DATE COLLECTED:** 3 / 6 / 1953

SURFACE ELEVATION (FT.): 378.8 **LOGGED (FT.):** 685.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 59 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.8	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0	
248.8	MODESTO		GRAY SHALE	32.3	130.0	
216.5	MODESTO		LIMESTONE	1.0	162.3	
215.5	MODESTO		BLACK SHALE	3.3	163.3	
212.3	MODESTO		LIMESTONE	0.8	166.5	
211.5	MODESTO		GRAY SHALE	0.3	167.3	
211.2	MODESTO		COAL	0.1	167.6	
211.1	MODESTO		UNDERCLAY	0.9	167.7	
210.2	MODESTO		SHALE	5.4	168.6	GREENISH-GRAY
204.8	MODESTO		GRAY SHALE	13.1	174.0	
191.7	MODESTO		SILTSTONE	8.3	187.1	
183.4	MODESTO		GRAY SHALE	99.3	195.4	
84.1	MODESTO		BLACK SHALE	0.4	294.7	
83.7	MODESTO		LIMESTONE	0.8	295.1	
83.0	MODESTO		BLACK SHALE	0.5	295.8	
82.4	MODESTO	CHAPEL	COAL	1.0	296.4	
81.4	MODESTO		UNDERCLAY	2.4	297.4	
79.0	MODESTO		SILTY SHALE	8.8	299.8	GREENISH-GRAY
70.3	MODESTO		GRAY SHALE	18.8	308.5	
51.5	MODESTO		SANDSTONE	17.6	327.3	
33.9	MODESTO		SILTSTONE	12.5	344.9	
21.4	MODESTO		GRAY SHALE	38.4	357.4	
-17.0	MODESTO		SILTY SHALE	5.9	395.8	GREENISH-GRAY
-23.0	MODESTO		CLAYSTONE	1.5	401.8	UCLY STRUCTURE
-24.5	MODESTO		SHALE & CLAYSTONE	8.1	403.3	GREENISH-GRAY
-32.5	MODESTO		LIMESTONE	0.5	411.3	
-33.0	MODESTO		GREEN SHALE	8.6	411.8	
-41.6	MODESTO	WEST FRANKLIN	LIMESTONE	2.1	420.4	
-43.7	MODESTO		SILTSTONE	7.3	422.5	
-51.0	MODESTO		GRAY SHALE	72.0	429.8	
-123.0	CARBONDALE	DANVILLE	COAL	1.8	501.8	
-124.8	CARBONDALE		SILTY SANDSTONE	5.8	503.6	SHALE BAND
-130.6	CARBONDALE		GRAY SHALE	1.9	509.4	
-132.5	CARBONDALE	ALLENBY	COAL	0.8	511.3	
-133.3	CARBONDALE		UNDERCLAY	0.5	512.1	
-133.8	CARBONDALE		CARBONACEOUS SANDSTONE	4.0	512.6	SILTY
-137.8	CARBONDALE		CARBONACEOUS SHALE	0.3	516.6	
-138.0	CARBONDALE		BONE COAL	0.2	516.8	

-138.2	CARBONDALE		CARBONACEOUS SHALE	3.0	517.0	
-141.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.1	520.0	
-146.3	CARBONDALE		SHALE	1.3	525.1	
-147.6	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	526.4	
-155.1	CARBONDALE		GRAY SHALE	13.3	533.9	
-168.4	CARBONDALE	BRERETON	LIMESTONE	2.1	547.2	
-170.5	CARBONDALE	ANNA	BLACK SHALE	6.6	549.3	
-177.0	CARBONDALE	HERRIN	COAL	1.0	555.8	
-178.0	CARBONDALE	HERRIN	SHALE	0.4	556.8	
-178.4	CARBONDALE	HERRIN	COAL	1.0	557.2	
-179.5	CARBONDALE		UNDERCLAY	0.7	558.3	
-180.1	CARBONDALE		SHALE	1.3	558.9	GREEN-GRAY
-181.5	CARBONDALE		SANDSTONE	3.0	560.3	
-184.5	CARBONDALE		SANDY SHALE	8.6	563.3	GREENISH-GRAY
-193.0	CARBONDALE		SILTSTONE	9.2	571.8	
-202.2	CARBONDALE		SHALE	3.6	581.0	GREEN-GRAY
-205.8	CARBONDALE		SILTSTONE	3.5	584.6	
-209.3	CARBONDALE		GRAY SHALE	16.5	588.1	
-225.8	CARBONDALE	BRIAR HILL	COAL	2.0	604.6	
-227.8	CARBONDALE		GRAY SHALE	0.8	606.6	
-228.6	CARBONDALE		SILTSTONE	1.4	607.4	
-230.0	CARBONDALE		GRAY SHALE	2.2	608.8	
-232.2	CARBONDALE		SANDSTONE	18.3	611.0	
-250.5	CARBONDALE		SILTSTONE	14.9	629.3	
-265.4	CARBONDALE		GRAY SHALE	7.3	644.2	
-272.7	CARBONDALE		SILTSTONE	2.2	651.5	
-274.9	CARBONDALE		GRAY SHALE	19.3	653.7	
-294.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	673.0	
-295.7	CARBONDALE	SPRINGFIELD	COAL	4.7	674.5	
-300.4	CARBONDALE		SHALE	0.8	679.2	GREEN-GRAY, BLACK TOP
-301.2	CARBONDALE		SILTSTONE	4.1	680.0	GREENISH-GRAY
-305.3	CARBONDALE		SANDSTONE	1.4	684.1	SILT LAMINATIONS

MAPID: 05901169000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' N line, 0' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101674 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.775964 **DATE COLLECTED:** 5 / 25 / 1953

SURFACE ELEVATION (FT.): 348.4 **LOGGED (FT.):** 662.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 69 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.4	PLEISTOCENE		UNCONSOLIDATED	96.0	0.0	
252.4	MODESTO		GRAY SHALE	36.0	96.0	
216.4	MODESTO		LIMESTONE	0.9	132.0	
215.5	MODESTO		BLACK SHALE	3.4	132.9	
212.1	MODESTO		LIMESTONE	0.2	136.3	
211.9	MODESTO		GRAY SHALE	1.6	136.5	
210.3	MODESTO		COAL	0.0	138.1	
210.3	MODESTO		UNDERCLAY	0.2	138.1	
210.1	MODESTO		SHALE & CLAYSTONE	5.3	138.3	
204.8	MODESTO		SHALE	6.8	143.6	GREEN-GRAY
198.1	MODESTO		LIMESTONE	0.3	150.3	
197.8	MODESTO		NO RECORD	2.4	150.6	ADJUST FOR MARKER
195.4	MODESTO		SHALE & CLAYSTONE	1.0	153.0	
194.4	MODESTO		SILTY SHALE	18.0	154.0	
176.4	MODESTO		GRAY SHALE	92.0	172.0	
84.4	MODESTO		LIMESTONE	0.5	264.0	
83.9	MODESTO		GRAY SHALE	1.3	264.5	
82.6	MODESTO	CHAPEL	COAL	1.0	265.8	
81.6	MODESTO		SHALE & CLAYSTONE	3.4	266.8	
78.2	MODESTO		GRAY SHALE	6.7	270.2	LS NODULE AT BASE
71.6	MODESTO		SILTSTONE	8.7	276.8	
62.9	MODESTO		GRAY SHALE	3.8	285.5	
59.1	MODESTO		SILTSTONE	4.8	289.3	
54.3	MODESTO		SANDSTONE	22.0	294.1	
32.3	MODESTO		SILTSTONE	9.7	316.1	
22.6	MODESTO		GRAY SHALE	6.8	325.8	
15.9	MODESTO		LIMESTONE	3.8	332.5	
12.1	MODESTO		SILTSTONE	1.8	336.3	
10.2	MODESTO		GRAY SHALE	12.8	338.2	
-2.6	MODESTO		SILTSTONE	9.5	351.0	
-12.1	MODESTO		GRAY SHALE	35.2	360.5	
-47.3	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	395.7	
-48.5	MODESTO		GRAY SHALE	16.5	396.9	
-65.0	MODESTO		SANDY SILTSTONE	29.6	413.4	SHALE BANDS
-94.6	MODESTO		GRAY SHALE	29.7	443.0	
-124.3	MODESTO		BLACK SHALE	0.6	472.7	
-124.9	CARBONDALE	DANVILLE	COAL	2.2	473.3	
-127.0	CARBONDALE		GRAY SHALE	3.8	475.4	
-130.9	CARBONDALE		BLACK SHALE & COAL	0.1	479.3	

-131.0	CARBONDALE		SANDSTONE	11.1	479.4	
-142.0	CARBONDALE	ALLENBY	COAL	0.1	490.4	
-142.1	CARBONDALE		UNDERCLAY	0.7	490.5	
-142.9	CARBONDALE		SHALE & CLAYSTONE	1.8	491.3	
-144.6	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	493.0	
-148.4	CARBONDALE	BANKSTON FORK	SHALE & CLAYSTONE	0.3	496.8	
-148.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.4	497.2	
-150.2	CARBONDALE	ANVIL ROCK	SILTY SANDSTONE	8.8	498.6	
-158.9	CARBONDALE	ANVIL ROCK	SILTSTONE & SHALE	3.9	507.3	
-162.9	CARBONDALE	ANVIL ROCK	SILTY SHALE	2.8	511.3	
-165.6	CARBONDALE	ANVIL ROCK	SANDSTONE	9.4	514.0	SILTSTONE BANDS
-175.0	CARBONDALE		GRAY SHALE	0.8	523.4	
-175.9	CARBONDALE	BRERETON	LIMESTONE	2.3	524.3	
-178.1	CARBONDALE	ANNA	BLACK SHALE	5.8	526.5	
-183.9	CARBONDALE	HERRIN	COAL	1.3	532.3	
-185.1	CARBONDALE	HERRIN	SHALE	0.2	533.5	
-185.4	CARBONDALE	HERRIN	COAL	1.0	533.8	
-186.4	CARBONDALE		NO RECORD	1.0	534.8	ADJUST FOR MARKER
-187.4	CARBONDALE		UNDERCLAY	2.9	535.8	
-190.4	CARBONDALE		SILTSTONE	1.5	538.8	
-191.9	CARBONDALE		SANDSTONE	8.0	540.3	
-199.9	CARBONDALE		SILTSTONE	4.9	548.3	
-204.8	CARBONDALE		GRAY SHALE	3.0	553.2	
-207.8	CARBONDALE		SILTSTONE	3.8	556.2	
-211.6	CARBONDALE		SANDSTONE	2.7	560.0	
-214.3	CARBONDALE		GRAY SHALE	13.3	562.7	
-227.5	CARBONDALE		SILTSTONE	3.8	575.9	
-231.3	CARBONDALE		GRAY SHALE	0.8	579.7	
-232.1	CARBONDALE	BRIAR HILL	COAL	1.8	580.5	
-233.9	CARBONDALE		SILTY SANDSTONE	28.6	582.3	
-262.5	CARBONDALE		SILTSTONE	17.1	610.9	
-279.6	CARBONDALE		GRAY SHALE	23.1	628.0	
-302.7	CARBONDALE	ST. DAVID	LIMESTONE	0.5	651.1	
-303.2	CARBONDALE	TURNER MINE	CALCAREOUS BLACK SHALE	2.0	651.6	
-305.2	CARBONDALE	TURNER MINE	LIMESTONE	1.0	653.6	
-306.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	654.6	
-307.7	CARBONDALE	SPRINGFIELD	COAL	4.9	656.1	
-312.6	CARBONDALE		UNDERCLAY	1.0	661.0	

MAPID: 05901169000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 0' N line, 0' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101674 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.775964 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 534.5 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 69 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-118.0	CARBONDALE	DANVILLE	COAL	2.2	473.0	
-120.2	CARBONDALE		CARBONACEOUS SHALE	15.0	475.2	
-135.2	CARBONDALE	ALLENBY	BONE COAL	0.1	490.2	
-135.3	CARBONDALE		CLAYSTONE	2.5	490.3	
-137.8	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	3.8	492.8	UPPER BENCH
-141.6	CARBONDALE	BANKSTON FORK	CLAYSTONE	0.3	496.6	SHALE PARTING
-141.9	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	1.4	496.9	LOWER BENCH
-143.3	CARBONDALE	LAWSON	ROCK	25.7	498.3	
-169.0	CARBONDALE	BRERETON	LIMESTONE	2.3	524.0	
-171.3	CARBONDALE	ANNA	BLACK SHALE	5.8	526.3	
-177.0	CARBONDALE	HERRIN	COAL	2.5	532.0	

MAPID: 05901183000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.120205 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.770392 **DATE COLLECTED:** 8 / 22 / 1953

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 775.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 83 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0	PLEISTOCENE		UNCONSOLIDATED	105.0	0.0	
258.0	BOND		SHALE	5.7	105.0	
252.3	BOND	CARTHAGE	LIMESTONE	8.3	110.7	
244.0	MODESTO		SOFT SHALE	1.0	119.0	
243.0	MODESTO	NEW HAVEN	COAL	1.5	120.0	
241.5	MODESTO	NEW HAVEN	SHALE	1.0	121.5	
240.5	MODESTO	NEW HAVEN	COAL	0.5	122.5	
240.0	MODESTO		SOFT SHALE	10.0	123.0	
230.0	MODESTO		SANDY LIMESTONE	0.8	133.0	
229.2	MODESTO		SANDY SHALE	4.3	133.8	
225.0	MODESTO		SHALE	7.0	138.0	
218.0	MODESTO		GRAY SHALE	9.0	145.0	
209.0	MODESTO		SANDY SHALE	11.0	154.0	
198.0	MODESTO		SOFT SHALE	14.0	165.0	
184.0	MODESTO		SHALE	66.5	179.0	
117.5	MODESTO		DARK SHALE	3.5	245.5	
114.0	MODESTO	WOMAC	COAL	1.0	249.0	
113.0	MODESTO		UNDERCLAY	3.0	250.0	
110.0	MODESTO		GREEN SHALE	10.0	253.0	
100.0	MODESTO		SHALE	12.0	263.0	
88.0	MODESTO		SHALE	15.0	275.0	
73.0	MODESTO		SOFT SHALE	6.0	290.0	
67.0	MODESTO		SHALE	54.0	296.0	
13.0	MODESTO		SHALE W/ LIME NODULES	42.0	350.0	
-29.0	MODESTO	CHAPEL	COAL	2.0	392.0	
-31.0	MODESTO		UNDERCLAY	3.0	394.0	
-34.0	MODESTO		SHALE	9.0	397.0	
-43.0	MODESTO		SHALE W/ LIME NODULES	8.0	406.0	
-51.0	MODESTO		SANDSTONE	12.0	414.0	
-63.0	MODESTO		SHALE	22.0	426.0	
-85.0	MODESTO		SHALY SANDSTONE	4.0	448.0	
-89.0	MODESTO		SHALE	3.0	452.0	
-92.0	MODESTO		LIMESTONE	2.5	455.0	
-94.5	MODESTO		SOFT SHALE	2.5	457.5	
-97.0	MODESTO		SHALE	22.0	460.0	
-119.0	MODESTO		SOFT SHALE	11.0	482.0	
-130.0	MODESTO		SANDY SHALE	5.0	493.0	
-135.0	MODESTO		SOFT SHALE	6.0	498.0	
-141.0	MODESTO		SHALE	31.0	504.0	

-172.0	MODESTO		SANDY SHALE	5.0	535.0	
-177.0	MODESTO		SHALE	21.0	540.0	
-198.0	MODESTO		SANDY DARK SHALE	5.0	561.0	
-203.0	MODESTO		SHALE	7.0	566.0	
-210.0	MODESTO		SOFT SHALE	8.0	573.0	
-218.0	MODESTO		SHALE	15.0	581.0	
-233.0	CARBONDALE	DANVILLE	COAL	1.3	596.0	
-234.3	CARBONDALE		UNDERCLAY	1.7	597.3	
-236.0	CARBONDALE		SANDSTONE	2.4	599.0	
-238.4	CARBONDALE		SANDY SHALE	1.6	601.4	
-240.0	CARBONDALE		DARK SHALE	1.3	603.0	
-241.3	CARBONDALE		GREEN SHALE	3.5	604.3	
-244.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	607.8	
-249.0	CARBONDALE		SHALE	0.2	612.0	
-249.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.8	612.2	
-261.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	624.0	
-273.0	CARBONDALE	BRERETON	FOSSILIFEROUS SHALE	0.5	636.0	
-273.5	CARBONDALE	BRERETON	LIMESTONE	1.0	636.5	
-274.5	CARBONDALE	BRERETON	FOSSILIFEROUS SHALE	0.5	637.5	
-275.0	CARBONDALE	ANNA	BLACK SHALE	8.2	638.0	
-283.2	CARBONDALE	HERRIN	COAL	1.2	646.2	
-284.3	CARBONDALE		UNDERCLAY	3.8	647.3	
-288.0	CARBONDALE		SANDSTONE	5.0	651.0	GREEN SHALE SEAMS
-293.0	CARBONDALE		SILTSTONE	14.0	656.0	
-307.0	CARBONDALE		SANDY SHALE	20.5	670.0	
-327.5	CARBONDALE		SHALE	4.2	690.5	
-331.7	CARBONDALE	BRIAR HILL	COAL	2.1	694.7	
-333.8	CARBONDALE		SHALE	1.3	696.8	
-335.0	CARBONDALE		SANDSTONE	31.5	698.0	
-366.5	CARBONDALE		SHALE	30.5	729.5	
-397.0	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	1.5	760.0	
-398.5	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	0.5	761.5	
-399.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	762.0	
-402.0	CARBONDALE	TURNER MINE	LIMESTONE	0.8	765.0	
-402.8	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	765.8	
-403.0	CARBONDALE	SPRINGFIELD	COAL	5.3	766.0	
-408.3	CARBONDALE		UNDERCLAY	3.8	771.3	

MAPID: 05925152000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 1320' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.106265 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.775985 **DATE COLLECTED:** 3 / 11 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 723.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1020-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	13.0	0.0	
337.0	PLEISTOCENE		SAND/CLAY	7.0	13.0	
330.0	PLEISTOCENE		SAND & GRAVEL	65.0	20.0	
265.0	BOND		GRAY SHALE	29.0	85.0	
236.0	BOND		SANDY SHALE	46.0	114.0	
190.0	BOND	CARTHAGE	LIMESTONE	3.0	160.0	
187.0	MODESTO		SANDY SHALE	8.0	163.0	
179.0	MODESTO		GRAY SHALE	29.4	171.0	
149.6	MODESTO		BLACK SHALE	3.6	200.4	
146.0	MODESTO		GRAY SHALE	10.0	204.0	
136.0	MODESTO		SANDY SHALE	9.0	214.0	
127.0	MODESTO		SANDSTONE	13.0	223.0	
114.0	MODESTO		SANDY SHALE	14.0	236.0	
100.0	MODESTO		GRAY SHALE	81.0	250.0	
19.0	MODESTO	CHAPEL	COAL	1.7	331.0	
17.3	MODESTO		UNDERCLAY	0.8	332.7	
16.5	MODESTO		SANDY SHALE	17.0	333.5	
-0.5	MODESTO		LIMESTONE	3.5	350.5	
-4.0	MODESTO		SANDSTONE	23.0	354.0	
-27.0	MODESTO		SANDY SHALE	25.0	377.0	
-52.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.5	402.0	
-57.5	MODESTO		GRAY SHALE	3.4	407.5	
-60.9	MODESTO		SANDY SHALE	52.1	410.9	
-113.0	MODESTO		LIMESTONE	1.6	463.0	
-114.6	MODESTO		BLACK SHALE & LIMESTONE	3.4	464.6	
-118.0	MODESTO		GRAY SHALE	6.0	468.0	
-124.0	MODESTO		SANDSTONE	55.0	474.0	
-179.0	MODESTO		SANDY SHALE	1.5	529.0	
-180.5	MODESTO		GRAY SHALE	5.4	530.5	
-185.9	CARBONDALE	DANVILLE	COAL	1.5	535.9	
-187.4	CARBONDALE		UNDERCLAY	1.6	537.4	
-189.0	CARBONDALE		SANDY SHALE	6.0	539.0	
-195.0	CARBONDALE		SANDSTONE	14.0	545.0	
-209.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.6	559.0	
-212.6	CARBONDALE		SANDY SHALE	10.4	562.6	
-223.0	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	573.0	
-238.0	CARBONDALE	BRERETON	LIMESTONE	1.2	588.0	
-239.2	CARBONDALE	ANNA	BLACK SHALE	2.2	589.2	

-241.4	CARBONDALE	ANNA	LIMESTONE	0.5	591.4
-241.9	CARBONDALE	ANNA	BLACK SHALE	3.1	591.9
-245.0	CARBONDALE	HERRIN	COAL	2.6	595.0
-247.6	CARBONDALE		UNDERCLAY	1.4	597.6
-249.0	CARBONDALE		SANDY SHALE	16.0	599.0
-265.0	CARBONDALE		SANDSTONE	9.0	615.0
-274.0	CARBONDALE		GRAY SHALE	4.0	624.0
-278.0	CARBONDALE		SANDY SHALE	18.0	628.0
-296.0	CARBONDALE	BRIAR HILL	COAL	1.6	646.0
-297.6	CARBONDALE		UNDERCLAY	1.4	647.6
-299.0	CARBONDALE		GRAY SHALE	13.0	649.0
-312.0	CARBONDALE		SANDY SHALE	27.0	662.0
-339.0	CARBONDALE		SANDSTONE	7.0	689.0
-346.0	CARBONDALE		SANDY SHALE	9.0	696.0
-355.0	CARBONDALE		GRAY SHALE	6.0	705.0
-361.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	711.0
-363.8	CARBONDALE	SPRINGFIELD	COAL	5.5	713.8
-369.3	CARBONDALE		UNDERCLAY	2.7	719.3
-372.0	CARBONDALE		ROCK	1.9	722.0

MAPID: 05901068000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.130341 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.773818 **DATE COLLECTED:** 10 / 0 / 1947

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2944.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, LOGSDON MARGARET 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-196.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	558.0	
-248.0	CARBONDALE	SURVANT	COAL	3.0	610.0	
-290.0	CARBONDALE	COLCHESTER	COAL	0.5	652.0	
-348.0	CARBONDALE	DEKOVEN	COAL	4.0	710.0	
-348.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	710.0	
-376.0	CARBONDALE	DAVIS	COAL	4.0	738.0	
-412.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	774.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-456.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	818.0	

MAPID: 05901068000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.130341 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.773818 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 2944.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
16.0	CARBONDALE	DANVILLE	COAL	-	346.0	
4.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	358.0	
-2.0	CARBONDALE	ANVIL ROCK	SILTSTONE	6.0	364.0	
-30.0	CARBONDALE	HERRIN	COAL	4.0	392.0	
-33.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	8.0	395.0	
-62.0	CARBONDALE	BRIAR HILL	COAL	-	424.0	
-128.0	CARBONDALE	SPRINGFIELD	COAL	5.0	490.0	BLACK SHALE ROOF
-162.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	26.0	524.0	
-190.0	CARBONDALE	HOUCHIN CREEK	COAL	-	552.0	

MAPID: 05901069000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' N line, 990' W line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.125759 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.773153 **DATE COLLECTED:** 12 / 0 / 1947

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 3067.0 **LOG TYPE:** Electric Log

SOURCE: VALTER ARNOLD, MALONEY D J 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-455.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	824.0	
-501.0	CARBONDALE	SURVANT	COAL	1.2	870.0	
-571.0	CARBONDALE	COLCHESTER	COAL	0.5	940.0	
-635.0	CARBONDALE	DEKOVEN	COAL	4.0	1004.0	
-635.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	1004.0	
-661.0	CARBONDALE	DAVIS	COAL	4.0	1030.0	
-695.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	1064.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902291000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.132585 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.771366 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 1625.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1262.0	BASE OF PENN.		UNCLASSIFIED	-	1625.0	

MAPID: 05902291000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.132585 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.771366 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log

SOURCE: CALVERT DRILLING, INC. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-90.0	CARBONDALE	HERRIN	COAL	3.0	453.0	
-156.0	CARBONDALE	SPRINGFIELD	COAL	5.0	519.0	BLACK SHALE ROOF
-222.0	CARBONDALE	HOUCHIN CREEK	COAL	-	585.0	

MAPID: 05903586000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1980' S line, 1320' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13366 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.768637 **DATE COLLECTED:** 4 / 9 / 1971

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 728.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1023C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-11

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	10.0	0.0	
355.0	PLEISTOCENE		SAND & GRAVEL	45.0	10.0	
310.0	PLEISTOCENE		CLAY	71.5	55.0	
238.5	MODESTO		GRAY SHALE	20.5	126.5	
218.0	MODESTO		SANDSTONE	20.0	147.0	
198.0	MODESTO		GRAY SHALE	67.0	167.0	
131.0	MODESTO		BLACK SHALE	2.5	234.0	
128.5	MODESTO		GRAY SHALE	11.0	236.5	
117.5	MODESTO		SANDY SHALE	12.5	247.5	
105.0	MODESTO		SANDSTONE	10.5	260.0	
94.5	MODESTO		SHALE	105.5	270.5	
-11.0	MODESTO		BLACK SHALE	1.0	376.0	
-12.0	MODESTO	CHAPEL	COAL	1.5	377.0	
-13.5	MODESTO		UNDERCLAY	2.5	378.5	
-16.0	MODESTO		SHALE	22.5	381.0	
-38.5	MODESTO		SANDSTONE	24.5	403.5	
-63.0	MODESTO		GRAY SHALE	19.5	428.0	
-82.5	MODESTO		SANDSTONE	11.0	447.5	
-93.5	MODESTO		BLACK SHALE	1.0	458.5	
-94.5	MODESTO		GRAY SHALE	6.5	459.5	
-101.0	MODESTO		SANDSTONE	36.0	466.0	
-137.0	MODESTO		GRAY SHALE	62.5	502.0	
-199.5	CARBONDALE	DANVILLE	COAL	2.0	564.5	
-201.5	CARBONDALE		GRAY SHALE	8.0	566.5	
-209.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	574.5	
-215.2	CARBONDALE		GRAY SHALE	5.8	580.2	
-221.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	586.0	
-225.3	CARBONDALE		GRAY SHALE	10.0	590.3	
-235.3	CARBONDALE	BRERETON	LIMESTONE	1.8	600.3	
-237.1	CARBONDALE	ANNA	BLACK SHALE	6.4	602.1	
-243.5	CARBONDALE	HERRIN	COAL	2.5	608.5	
-246.0	CARBONDALE		UNDERCLAY	3.0	611.0	
-249.0	CARBONDALE		GRAY SHALE	39.7	614.0	
-288.7	CARBONDALE	BRIAR HILL	COAL	1.3	653.7	
-290.0	CARBONDALE		UNDERCLAY	0.5	655.0	
-290.5	CARBONDALE		SANDY SHALE	37.5	655.5	
-328.0	CARBONDALE		SANDSTONE	5.0	693.0	
-333.0	CARBONDALE		GRAY SHALE	20.6	698.0	
-353.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	718.6	

-356.2	CARBONDALE	SPRINGFIELD	COAL	5.4	721.2
-361.6	CARBONDALE		GRAY SHALE	2.0	726.6

MAPID: 05903586000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1980' S line, 1320' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13366 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.768637 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 611.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1023-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-199.9	CARBONDALE	DANVILLE	COAL	2.0	564.9	
-201.9	CARBONDALE		GRAY SHALE	8.0	566.9	
-209.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	574.9	
-215.6	CARBONDALE	LAWSON	GRAY SHALE	5.8	580.6	
-221.4	CARBONDALE	LAWSON	SANDSTONE	4.3	586.4	
-225.7	CARBONDALE	LAWSON	GRAY SHALE	10.0	590.7	
-235.7	CARBONDALE	BRERETON	LIMESTONE	1.9	600.7	
-237.6	CARBONDALE	ANNA	BLACK SHALE	6.4	602.6	
-244.0	CARBONDALE	HERRIN	COAL	2.5	609.0	

MAPID: 05901070000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.771364 **DATE COLLECTED:** 8 / 0 / 1949

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2980.0 **LOG TYPE:** Electric Log

SOURCE: MORGAN F C COAL, LOGSDON MARGARET **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-208.0	CARBONDALE	SURVANT	COAL	1.2	565.0	
-273.0	CARBONDALE	COLCHESTER	COAL	2.0	630.0	
-329.0	CARBONDALE	DEKOVEN	COAL	3.0	686.0	
-329.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	686.0	
-358.0	CARBONDALE	DAVIS	COAL	4.0	715.0	
-397.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	754.0	42% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-429.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	786.0	
-458.0	TRADEWATER	MT. RORAH	COAL	1.2	815.0	

MAPID: 05901070000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.771364 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 2980.0 **LOG TYPE:** Electric Log

SOURCE: MORGAN F C COAL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
89.0	CARBONDALE	DANVILLE	COAL	-	268.0	
71.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	286.0	
35.0	CARBONDALE	HERRIN	COAL	3.0	322.0	
25.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	4.0	332.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	-	366.0	
-35.0	CARBONDALE	CANTON	SILTSTONE	8.0	392.0	
-81.0	CARBONDALE	SPRINGFIELD	COAL	5.0	438.0	BLACK SHALE ROOF
-115.0	CARBONDALE	SS BELOW NO. 5	CALCAREOUS SANDSTONE	14.0	472.0	
-149.0	CARBONDALE	HOUCHIN CREEK	COAL	-	506.0	

MAPID: 05902286000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.155469 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.775585 **DATE COLLECTED:** 9 / 0 / 1958

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: KAPP, LOUIS H., JR., CRANE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-156.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-191.0	CARBONDALE	SURVANT	COAL	2.5	555.0	
-254.0	CARBONDALE	COLCHESTER	COAL	0.5	618.0	
-310.0	CARBONDALE	DEKOVEN	COAL	3.0	674.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	674.0	
-341.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-371.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	735.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-396.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	760.0	

MAPID: 05902447000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.139398 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.767742 **DATE COLLECTED:** 4 / 0 / 1959

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 2910.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-137.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	500.0	
-199.0	CARBONDALE	SURVANT	COAL	3.0	562.0	
-247.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-311.0	CARBONDALE	DEKOVEN	COAL	3.5	674.0	
-311.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	674.0	
-337.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-367.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	730.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05903587000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 0' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13939 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.776262 **DATE COLLECTED:** 10 / 7 / 1971

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 435.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1058C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION P-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	8.0	0.0	
352.0	PLEISTOCENE		SAND & GRAVEL	123.0	8.0	
229.0	MODESTO		GRAY SHALE	5.0	131.0	
224.0	MODESTO		SANDSTONE/SHALE	12.0	136.0	
212.0	MODESTO		BLACK SHALE	1.0	148.0	
211.0	MODESTO		GRAY SHALE	6.0	149.0	
205.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	155.0	
202.0	MODESTO		SANDY SHALE	12.0	158.0	
190.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	170.0	
186.0	MODESTO		GRAY SHALE	40.0	174.0	
146.0	MODESTO		SANDY SHALE	40.0	214.0	
106.0	MODESTO		SHALE	10.0	254.0	
96.0	CARBONDALE	DANVILLE	COAL	2.0	264.0	
94.0	CARBONDALE		UNDERCLAY	1.6	266.0	
92.4	CARBONDALE		SANDY SHALE	8.4	267.6	
84.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	276.0	
78.0	CARBONDALE		GRAY SHALE	3.5	282.0	
74.5	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	285.5	
64.5	CARBONDALE		GRAY SHALE	9.0	295.5	
55.5	CARBONDALE	BRERETON	LIMESTONE	1.7	304.5	
53.8	CARBONDALE	ANNA	BLACK SHALE	2.6	306.2	
51.2	CARBONDALE	HERRIN	COAL	2.9	308.8	
48.3	CARBONDALE		UNDERCLAY	2.0	311.7	
46.3	CARBONDALE		GRAY SHALE	4.8	313.7	
41.5	CARBONDALE		LIMESTONE	3.0	318.5	
38.5	CARBONDALE		SANDSTONE	12.0	321.5	
26.5	CARBONDALE		GRAY SHALE	27.0	333.5	
-0.5	CARBONDALE	BRIAR HILL	COAL	2.0	360.5	
-2.5	CARBONDALE		SANDY SHALE	25.5	362.5	
-28.0	CARBONDALE		GRAY SHALE	35.3	388.0	
-63.3	CARBONDALE	ST. DAVID	GRAY SHALE & LIMESTONE	0.6	423.3	
-63.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	423.9	
-67.8	CARBONDALE		GRAY SHALE	0.7	427.8	
-68.5	CARBONDALE	SPRINGFIELD	COAL	5.6	428.5	
-74.0	CARBONDALE		UNDERCLAY	1.5	434.0	

MAPID: 05903587000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 0' N line, 330' E line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.13939 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.776262 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 311.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1058-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
97.8	CARBONDALE	DANVILLE	COAL	2.0	264.2	
95.8	CARBONDALE		SILTY SHALE	10.0	266.2	
85.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	276.2	
79.8	CARBONDALE	LAWSON	GRAY SHALE	3.5	282.2	
76.3	CARBONDALE	LAWSON	SANDSTONE	10.0	285.7	
66.3	CARBONDALE	LAWSON	GRAY SHALE	9.0	295.7	
57.3	CARBONDALE	BRERETON	LIMESTONE	1.7	304.7	
55.6	CARBONDALE	ANNA	BLACK SHALE	2.6	306.4	
53.0	CARBONDALE	HERRIN	COAL	2.9	309.0	

MAPID: 05901141000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.156818 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.759348 **DATE COLLECTED:** 8 / 19 / 1952

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 407.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 41 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.0	PLEISTOCENE		UNCONSOLIDATED	140.0	0.0	
262.0	MODESTO		SHALE & CLAYSTONE	1.1	140.0	
260.9	MODESTO		SANDSTONE	2.8	141.1	
258.2	MODESTO		GRAY SHALE	5.7	143.8	
252.5	MODESTO		SHALE & CLAYSTONE	4.7	149.5	
247.8	MODESTO	WEST FRANKLIN	LIMESTONE	0.2	154.2	
247.7	MODESTO		NO RECORD	2.7	154.3	ADJUST FOR MARKER
245.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.5	157.0	
240.5	MODESTO		GRAY SHALE	68.8	161.5	
171.7	MODESTO		LIMESTONE	0.3	230.3	
171.4	CARBONDALE	DANVILLE	COAL	1.8	230.6	
169.7	CARBONDALE		UNDERCLAY	0.7	232.3	
169.0	CARBONDALE		UNDERCLAY	9.3	233.0	
159.7	CARBONDALE		GRAY SHALE	4.8	242.3	
154.8	CARBONDALE		SHALE & CLAYSTONE	2.5	247.2	
152.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	249.7	
146.7	CARBONDALE		GREEN SHALE	0.9	255.3	
145.7	CARBONDALE	ANVIL ROCK	SILTSTONE	1.2	256.3	
144.6	CARBONDALE	ANVIL ROCK	SANDSTONE	4.3	257.4	
140.3	CARBONDALE		GRAY SHALE	14.6	261.7	
125.7	CARBONDALE	BRERETON	LIMESTONE	2.8	276.3	
122.9	CARBONDALE	ANNA	BLACK SHALE	7.7	279.1	
115.2	CARBONDALE	HERRIN	COAL	1.5	286.8	
113.7	CARBONDALE		NO RECORD	1.9	288.3	ADJUST FOR MARKER
111.8	CARBONDALE		UNDERCLAY	1.8	290.2	
110.0	CARBONDALE		SILTSTONE	5.7	292.0	
104.3	CARBONDALE		SANDY SHALE	30.3	297.7	
74.0	CARBONDALE	BRIAR HILL	COAL	2.0	328.0	
72.0	CARBONDALE		SANDSTONE	1.5	330.0	
70.5	CARBONDALE		SANDY SHALE	9.0	331.5	
61.5	CARBONDALE		SANDSTONE	12.0	340.5	
49.5	CARBONDALE		SANDY SHALE	32.2	352.5	
17.3	CARBONDALE		GRAY SHALE	9.8	384.7	
7.5	CARBONDALE	ST. DAVID	LIMESTONE	0.6	394.5	
6.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	395.1	
5.2	CARBONDALE	SPRINGFIELD	COAL	5.3	396.8	
0.0	CARBONDALE		SHALE & CLAYSTONE	1.0	402.0	
-1.0	CARBONDALE		GRAY SHALE	4.0	403.0	

MAPID: 05901142000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE/c NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145247 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.761265 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 366.9 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 42 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.5	CARBONDALE	DANVILLE	COAL	1.7	311.5	
63.8	CARBONDALE		ROCK	12.8	313.2	
51.1	CARBONDALE	ALLENBY	BONE COAL	0.2	325.9	
50.9	CARBONDALE		CLAYSTONE	4.8	326.1	
46.2	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	5.4	330.8	
40.7	CARBONDALE	LAWSON	CLAYSTONE	1.8	336.3	
39.0	CARBONDALE	LAWSON	SILTSTONE	9.8	338.0	
29.2	CARBONDALE	LAWSON	GRAY SHALE	7.3	347.8	
21.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.2	355.2	
19.7	CARBONDALE	ANNA	BLACK SHALE	8.7	357.3	
11.0	CARBONDALE	HERRIN	COAL	0.9	366.0	

MAPID: 05901142000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE/c NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145247 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.761265 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 367.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERY CO **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
65.0	CARBONDALE	DANVILLE	COAL	1.7	312.0	
61.0	CARBONDALE	SS BELOW NO. 7		4.5	316.0	
46.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	331.0	
11.0	CARBONDALE	HERRIN	COAL	10.0	366.0	

MAPID: 05901142000C **VERSION:** 3 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE/c NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.145247 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.761265 **DATE COLLECTED:** 8 / 20 / 1952

SURFACE ELEVATION (FT.): 377.4 **LOGGED (FT.):** 367.5 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 42 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.4	PLEISTOCENE		UNCONSOLIDATED	96.0	0.0	
281.4	MODESTO		GRAY SHALE	5.6	96.0	
275.8	MODESTO		LIMESTONE	0.4	101.6	
275.4	MODESTO		NO RECORD	3.0	102.0	ADJUST FOR MARKER
272.4	MODESTO		LIMESTONE	1.0	105.0	
271.4	MODESTO		BLACK SHALE	0.1	106.0	
271.3	MODESTO	CHAPEL	COAL	1.2	106.1	
270.1	MODESTO		SHALE & CLAYSTONE	2.2	107.3	
267.9	MODESTO		NO RECORD	2.5	109.5	ADJUST FOR MARKER
265.4	MODESTO		GRAY SHALE	17.8	112.0	
247.6	MODESTO		SILTSTONE	4.9	129.8	
242.6	MODESTO		SANDSTONE	13.3	134.8	
229.3	MODESTO		NO RECORD	3.9	148.1	ADJUST FOR MARKER
225.4	MODESTO		SILTSTONE	17.5	152.0	
207.9	MODESTO		GRAY SHALE	23.6	169.5	
184.3	MODESTO		SILTSTONE	0.8	193.1	
183.5	MODESTO		SHALE & CLAYSTONE	3.5	193.9	
180.0	MODESTO		NO RECORD	2.6	197.4	ADJUST FOR MARKER
177.4	MODESTO		GRAY SHALE	10.8	200.0	
166.6	MODESTO		SHALE & CLAYSTONE	7.5	210.8	
159.1	MODESTO		SILTSTONE	11.1	218.3	
148.0	MODESTO		SHALE & CLAYSTONE	2.8	229.4	
145.1	MODESTO	WEST FRANKLIN	LIMESTONE	2.3	232.3	
142.9	MODESTO	WEST FRANKLIN	SHALE & CLAYSTONE	0.8	234.5	
142.1	MODESTO	WEST FRANKLIN	LIMESTONE	0.7	235.3	
141.4	MODESTO		SHALE & CLAYSTONE	3.3	236.0	
138.1	MODESTO		LIMESTONE	0.4	239.3	NODULE
137.6	MODESTO		CLAYSTONE	11.4	239.8	
126.2	MODESTO		GRAY SHALE	58.1	251.2	THIN COAL STREAK AT BASE
68.1	MODESTO		BLACK SHALE	2.4	309.3	
65.7	CARBONDALE	DANVILLE	COAL	1.7	311.7	
64.1	CARBONDALE		SHALE & CLAYSTONE	1.1	313.3	
63.0	CARBONDALE		SILTSTONE	2.0	314.4	
61.0	CARBONDALE		SANDSTONE	4.5	316.4	
56.5	CARBONDALE		GRAY SHALE	3.3	320.9	
53.2	CARBONDALE		BLACK SHALE	0.8	324.2	
52.4	CARBONDALE	ALLENBY	COAL	0.0	325.0	
52.4	CARBONDALE		BLACK SHALE	0.2	325.0	
52.1	CARBONDALE		SHALE & CLAYSTONE	5.8	325.3	

46.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	331.0
41.0	CARBONDALE		SHALE & CLAYSTONE	1.8	336.4
39.2	CARBONDALE	ANVIL ROCK	SILTSTONE	9.8	338.2
29.4	CARBONDALE		GRAY SHALE	7.5	348.0
21.9	CARBONDALE	BRERETON	LIMESTONE	0.6	355.5
21.3	CARBONDALE	BRERETON	SHALE & CLAYSTONE	0.3	356.1
21.1	CARBONDALE	BRERETON	LIMESTONE	1.3	356.3
19.7	CARBONDALE	ANNA	BLACK SHALE	8.3	357.7
11.4	CARBONDALE	HERRIN	COAL	0.8	366.0
10.6	CARBONDALE		UNDERCLAY	0.7	366.8

MAPID: 05901703000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW NE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144057 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.762253 **DATE COLLECTED:** 5 / 0 / 1955

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 2914.0 **LOG TYPE:** Electric Log

SOURCE: MORAN, E. F., INC., MILLER LUCY L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-134.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	499.0	
-185.0	CARBONDALE	SURVANT	COAL	1.6	550.0	
-245.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-310.0	CARBONDALE	DEKOVEN	COAL	3.0	675.0	
-310.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	675.0	
-340.0	CARBONDALE	DAVIS	COAL	4.0	705.0	
-369.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	734.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-378.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	743.0	

MAPID: 05901760000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.146618 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.752704 **DATE COLLECTED:** 7 / 0 / 1955

SURFACE ELEVATION (FT.): 516.0 **LOGGED (FT.):** 1755.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1239.0	BASE OF PENN.		UNCLASSIFIED	-	1755.0	

MAPID: 05901782000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.144272 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.754666 **DATE COLLECTED:** 8 / 0 / 1955

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 2850.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY, MILLER LUCY L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-355.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	830.0	
-400.0	CARBONDALE	SURVANT	COAL	3.0	875.0	
-460.0	CARBONDALE	COLCHESTER	COAL	0.5	935.0	
-520.0	CARBONDALE	DEKOVEN	COAL	4.0	995.0	
-520.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	995.0	
-545.0	CARBONDALE	DAVIS	COAL	4.0	1020.0	
-575.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	1050.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-581.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1056.0	

MAPID: 05902202000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.153495 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.752732 **DATE COLLECTED:** 5 / 0 / 1958

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2931.0 **LOG TYPE:** Electric Log

SOURCE: THOMPSON RICHARD S, BLUFORD-LOGSDON **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-108.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	494.0	
-364.0	CARBONDALE	SURVANT	COAL	2.0	750.0	
-227.0	CARBONDALE	COLCHESTER	COAL	0.5	613.0	
-274.0	CARBONDALE	DEKOVEN	COAL	4.0	660.0	
-274.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	660.0	
-309.0	CARBONDALE	DAVIS	COAL	4.0	695.0	
-344.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	730.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-354.0	TRADEWATER	STONEFORT	LIMESTONE	8.0	740.0	

MAPID: 05902202000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 7 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NW SW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.153495 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.752732 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 2931.0 **LOG TYPE:** Electric Log
SOURCE: THOMPSON RICHARD S **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
82.0	CARBONDALE	HERRIN	COAL	2.0	304.0	
38.0	CARBONDALE	BRIAR HILL	COAL	-	348.0	
-38.0	CARBONDALE	SPRINGFIELD	COAL	6.0	424.0	BLACK SHALE ROOF
-104.0	CARBONDALE	HOUCHIN CREEK	COAL	-	490.0	

MAPID: 05900315000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.137168 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.762235 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2904.0 **LOG TYPE:** Electric Log
SOURCE: JARVIS BROS-MARCELL **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-264.0	CARBONDALE	HERRIN	COAL	4.0	640.0	
-308.0	CARBONDALE	BRIAR HILL	COAL	-	684.0	
-379.0	CARBONDALE	SPRINGFIELD	COAL	5.0	755.0	BLACK SHALE ROOF
-449.0	CARBONDALE	HOUCHIN CREEK	COAL	-	825.0	

MAPID: 05900315000C **VERSION:** 2 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.137168 **GEOLOGIST:** MW PULLEN
CONFIDENTIAL: N **LATITUDE:** 37.762235 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 3760.0 **LOG TYPE:**
SOURCE: JARVISMARC, DRONE JIM 0001 **WELL TYPE:** Oil and Gas Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-266.0	CARBONDALE	HERRIN	COAL	3.0	642.0	
-378.0	CARBONDALE	SPRINGFIELD	COAL	4.0	754.0	

MAPID: 05900315000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW NW NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.137168 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.762235 **DATE COLLECTED:** 4 / 0 / 1942

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 2904.0 **LOG TYPE:** Electric Log

SOURCE: JARVIS BROS-MARCELL, DRONE JIM **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-450.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	826.0	
-504.0	CARBONDALE	SURVANT	COAL	1.2	880.0	
-574.0	CARBONDALE	COLCHESTER	COAL	2.0	950.0	
-620.0	CARBONDALE	DEKOVEN	COAL	4.0	996.0	
-620.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	996.0	
-649.0	CARBONDALE	DAVIS	COAL	4.0	1025.0	
-680.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	1056.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-688.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	1064.0	

MAPID: 05901172000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SE

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.129477 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.755545 **DATE COLLECTED:** 6 / 13 / 1953

SURFACE ELEVATION (FT.): 412.7 **LOGGED (FT.):** 627.8 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 72 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.7	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0	
355.7	MODESTO		SHALE	6.0	57.0	
349.7	MODESTO	WOMAC	COAL	0.5	63.0	
349.2	MODESTO		SOFT SHALE	3.5	63.5	
345.7	MODESTO		SHALE	9.0	67.0	
336.7	MODESTO		SHALE	24.0	76.0	
312.7	MODESTO		SANDY SHALE	53.0	100.0	
259.7	MODESTO		SOFT SHALE	8.0	153.0	
251.7	MODESTO		SANDY SHALE	29.0	161.0	HARD
222.7	MODESTO		FOSSILIFEROUS LIMESTONE	0.3	190.0	
222.4	MODESTO		SOFT SHALE	10.8	190.3	
211.7	MODESTO		SANDY SHALE	27.0	201.0	
184.7	MODESTO		SANDSTONE	16.0	228.0	
168.7	MODESTO		SOFT SHALE	11.5	244.0	
157.2	MODESTO		SHALE	73.5	255.5	
83.7	MODESTO		BLACK SHALE	1.5	329.0	
82.2	MODESTO	CHAPEL	COAL	1.5	330.5	
80.7	MODESTO		UNDERCLAY	5.0	332.0	
75.7	MODESTO		SANDY SHALE	3.0	337.0	
72.7	MODESTO		SOFT SHALE	17.0	340.0	
55.7	MODESTO		SANDY SHALE	17.5	357.0	
38.2	MODESTO		SOFT SHALE	23.5	374.5	
14.7	MODESTO		SANDY SHALE	22.0	398.0	
-7.3	MODESTO		SOFT SHALE	12.0	420.0	
-19.3	MODESTO		SOFT SHALE	7.0	432.0	
-26.3	MODESTO		SANDY SHALE	10.0	439.0	
-36.3	MODESTO		SOFT SHALE	8.0	449.0	
-44.3	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	457.0	START CORE DESCRIPTION
-45.6	MODESTO		GRAY SHALE	57.8	458.3	
-103.3	MODESTO		BLACK SHALE	6.3	516.0	
-109.6	CARBONDALE	DANVILLE	COAL	1.8	522.3	
-111.5	CARBONDALE		SHALY SILTSTONE	1.1	524.2	
-112.6	CARBONDALE		SHALY SILTSTONE	2.3	525.3	
-114.8	CARBONDALE		SANDSTONE	2.3	527.5	
-117.1	CARBONDALE		SILTY SHALE	3.3	529.8	
-120.5	CARBONDALE		BLACK SHALE	0.8	533.2	
-121.3	CARBONDALE	ALLENBY	COAL	0.4	534.0	
-121.7	CARBONDALE		CLAYSTONE	1.8	534.4	

-123.6	CARBONDALE		GRAY SHALE	2.2	536.3	
-125.7	CARBONDALE		BLACK SHALE	0.3	538.4	
-126.0	CARBONDALE		SHALE & CLAYSTONE	5.2	538.7	
-131.1	CARBONDALE	BANKSTON FORK	LIMESTONE	6.9	543.8	
-138.1	CARBONDALE		SHALE	0.9	550.8	GREEN-GRAY
-139.0	CARBONDALE		GRAY SHALE	4.9	551.7	
-143.9	CARBONDALE	ANVIL ROCK	SANDSTONE	0.4	556.6	
-144.3	CARBONDALE	ANVIL ROCK	SHALE	10.5	557.0	
-154.8	CARBONDALE		SHALE	2.0	567.5	
-156.8	CARBONDALE	BRERETON	LIMESTONE	0.5	569.5	
-157.3	CARBONDALE	ANNA	BLACK SHALE	5.5	570.0	
-162.8	CARBONDALE	HERRIN	SHALY COAL	2.0	575.5	
-164.8	CARBONDALE	HERRIN	BLUE BAND	0.5	577.5	
-165.3	CARBONDALE	HERRIN	COAL	1.3	578.0	
-166.6	CARBONDALE		UNDERCLAY	3.5	579.3	
-170.1	CARBONDALE		SHALE	14.2	582.8	
-184.3	CARBONDALE		SANDSTONE	3.0	597.0	
-187.3	CARBONDALE		SHALE	26.0	600.0	
-213.3	CARBONDALE	BRIAR HILL	COAL	1.8	626.0	LOST HOLE

MAPID: 05901174000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.135309 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.7489 **DATE COLLECTED:** 6 / 27 / 1953

SURFACE ELEVATION (FT.): 412.3 **LOGGED (FT.):** 655.5 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 74 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
412.3	PLEISTOCENE		UNCONSOLIDATED	27.5	0.0	
384.8	MODESTO		SHALE	25.5	27.5	
359.3	MODESTO		SANDY SHALE	8.0	53.0	
351.3	MODESTO		SHALE	59.0	61.0	SANDY SHALE SEAMS
292.3	MODESTO		SHALE	40.0	120.0	
252.3	MODESTO		SHALE	14.0	160.0	
238.3	MODESTO		SHALE	24.0	174.0	
214.3	MODESTO		SANDY SHALE	32.0	198.0	
182.3	MODESTO		SHALE	24.0	230.0	
158.3	MODESTO		SOFT SHALE	6.0	254.0	
152.3	MODESTO		SHALE	43.0	260.0	
109.3	MODESTO		SANDSTONE	2.5	303.0	
106.8	MODESTO		SHALE	37.4	305.5	
69.4	MODESTO		LIMESTONE	1.6	342.9	
67.8	MODESTO		SANDY SHALE	35.5	344.5	
32.3	MODESTO		GRAY SHALE	4.0	380.0	
28.3	MODESTO		GREEN SHALE	10.0	384.0	
18.3	MODESTO		GRAY SHALE	4.0	394.0	
14.3	MODESTO		SHALE	4.5	398.0	RED
9.8	MODESTO		CALCAREOUS SHALE	6.5	402.5	CONGLOMERATE
3.3	MODESTO		GREEN SHALE	8.0	409.0	RED-GRAY
-4.7	MODESTO		LIMESTONE	0.7	417.0	
-5.4	MODESTO		GRAY SHALE	9.3	417.7	
-14.7	MODESTO		SHALE	50.0	427.0	
-64.7	CARBONDALE	DANVILLE	COAL	2.5	477.0	
-67.2	CARBONDALE		UNDERCLAY	1.5	479.5	
-68.7	CARBONDALE		SHALE	3.0	481.0	
-71.7	CARBONDALE	ALLENBY	SHALY COAL	0.5	484.0	
-72.2	CARBONDALE		SOFT SHALE	5.0	484.5	
-77.2	CARBONDALE		SHALE W/ LIME NODULES	3.0	489.5	
-80.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.9	492.5	
-85.1	CARBONDALE		GRAY SHALE	2.6	497.4	
-87.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	17.0	500.0	
-104.7	CARBONDALE	BRERETON	LIMESTONE	2.0	517.0	
-106.7	CARBONDALE	ANNA	BLACK SHALE	6.5	519.0	
-113.2	CARBONDALE	HERRIN	COAL	1.0	525.5	
-114.2	CARBONDALE		UNDERCLAY	2.0	526.5	
-116.2	CARBONDALE		SHALE W/ LIME NODULES	3.0	528.5	
-119.2	CARBONDALE		SANDY SHALE	3.2	531.5	

-122.4	CARBONDALE		SANDSTONE	26.0	534.7	
-148.4	CARBONDALE		SANDY SHALE	15.8	560.7	
-164.2	CARBONDALE	BRIAR HILL	COAL	1.7	576.5	
-165.9	CARBONDALE		SHALY SANDSTONE	31.8	578.2	
-197.7	CARBONDALE		SANDY SHALE	15.0	610.0	
-212.7	CARBONDALE		SHALE	20.9	625.0	
-233.6	CARBONDALE	ST. DAVID	LIMESTONE	0.6	645.9	
-234.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	646.5	
-236.5	CARBONDALE	SPRINGFIELD	COAL	5.2	648.8	3.62% SULFUR
-241.6	CARBONDALE		UNDERCLAY	1.6	653.9	

MAPID: 05901178000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.133905 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.755885 **DATE COLLECTED:** 8 / 3 / 1953

SURFACE ELEVATION (FT.): 391.3 **LOGGED (FT.):** 688.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 78 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
391.3	PLEISTOCENE		UNCONSOLIDATED	55.5	0.0	
335.8	MODESTO		SANDY SHALE	114.5	55.5	
221.3	MODESTO		SHALE	8.0	170.0	HARD
213.3	MODESTO		LIMESTONE	0.3	178.0	
213.0	MODESTO		SOFT SHALE	6.7	178.3	
206.3	MODESTO		SHALE W/ LIME NODULES	47.0	185.0	LIMESTONE NODULES
159.3	MODESTO		SHALE	88.0	232.0	
71.3	MODESTO		SHALE	20.5	320.0	SHALE SEAMS
50.8	MODESTO		SHALE	99.5	340.5	
-48.7	MODESTO		SHALE W/ LIME NODULES	12.0	440.0	
-60.7	MODESTO		LIMESTONE	0.7	452.0	START CORE DESCRIPTION
-61.4	MODESTO		GRAY SHALE	64.8	452.7	
-126.1	MODESTO		DARK SHALE	0.2	517.4	
-126.3	CARBONDALE	DANVILLE	COAL	2.1	517.6	
-128.4	CARBONDALE		UNDERCLAY	1.0	519.7	
-129.4	CARBONDALE		SILTY SHALE	1.5	520.7	THIN COAL STREAKS AT BASE
-130.9	CARBONDALE		CARBONACEOUS SHALE	1.2	522.2	
-132.1	CARBONDALE	ALLENBY	COAL	0.0	523.4	
-132.2	CARBONDALE		BLACK SHALE & COAL	0.9	523.5	
-133.0	CARBONDALE		SHALE	2.8	524.3	
-135.9	CARBONDALE		CARBONACEOUS SHALE	0.6	527.2	
-136.5	CARBONDALE		CLAYSTONE	2.6	527.8	UNDER CLAY STRUCTURE
-139.0	CARBONDALE		SHALE W/ LIME NODULES	0.9	530.3	
-140.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.1	531.3	
-145.0	CARBONDALE		GREEN SHALE	0.7	536.3	
-145.7	CARBONDALE		SILTSTONE/LIMESTONE	1.5	537.0	
-147.2	CARBONDALE	ANVIL ROCK	SANDSTONE	7.6	538.5	
-154.8	CARBONDALE		SHALE W/ LIME NODULES	11.6	546.1	
-166.4	CARBONDALE	BRERETON	LIMESTONE	2.8	557.7	
-169.2	CARBONDALE	ANNA	GRAY SHALE	0.5	560.5	
-169.7	CARBONDALE	ANNA	BLACK SHALE	1.9	561.0	
-171.6	CARBONDALE	ANNA	NODULAR LIMESTONE	0.6	562.9	
-172.2	CARBONDALE	ANNA	BLACK SHALE	4.3	563.5	
-176.5	CARBONDALE	HERRIN	COAL	1.0	567.8	
-177.5	CARBONDALE		UNDERCLAY	2.8	568.8	
-180.3	CARBONDALE		SILTSTONE	2.3	571.6	
-182.5	CARBONDALE		SHALE & CLAYSTONE	1.8	573.8	
-184.4	CARBONDALE		SILTSTONE	36.1	575.7	
-220.5	CARBONDALE		GRAY SHALE	2.9	611.8	

-223.4	CARBONDALE	BRIAR HILL	COAL	2.3	614.7
-225.6	CARBONDALE		UNDERCLAY	1.3	616.9
-226.9	CARBONDALE		SILTSTONE	0.6	618.2
-227.5	CARBONDALE		GRAY SHALE	3.3	618.8
-230.7	CARBONDALE		SANDY SHALE	2.0	622.0
-232.7	CARBONDALE		SANDSTONE/SILTSTONE	14.6	624.0
-247.3	CARBONDALE		GRAY SHALE	1.4	638.6
-248.7	CARBONDALE		SILTSTONE	23.0	640.0
-271.7	CARBONDALE		GRAY SHALE	12.4	663.0
-284.1	CARBONDALE	TURNER MINE	BLACK SHALE	4.8	675.4
-289.0	CARBONDALE	SPRINGFIELD	COAL	5.3	680.3
-294.2	CARBONDALE		UNDERCLAY	2.5	685.5

MAPID: 05901178000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2640' N line, 1320' W line

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.133905 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.755885 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 569.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 78 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-127.2	CARBONDALE	DANVILLE	COAL	2.1	518.2	
-129.2	CARBONDALE		CARBONACEOUS SHALE	3.7	520.2	
-132.9	CARBONDALE	ALLENBY	BONE COAL	0.9	523.9	
-133.9	CARBONDALE		CLAYSTONE	6.8	524.9	
-140.6	CARBONDALE	BANKSTON FORK	LIMESTONE/UNDERCLAY	5.1	531.6	
-145.7	CARBONDALE	LAWSON	GRAY SHALE	0.7	536.7	
-146.4	CARBONDALE	LAWSON	SILTSTONE	1.5	537.4	
-147.9	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	7.6	538.9	
-155.5	CARBONDALE	LAWSON	GRAY SHALE	11.6	546.5	
-167.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.8	558.0	
-169.9	CARBONDALE	ANNA	BLACK SHALE	7.1	560.9	
-177.0	CARBONDALE	HERRIN	COAL	1.0	568.0	

MAPID: 05901180000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE NW

QUADRANGLE: NEW HAVEN SW **LONGITUDE:** -88.133777 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.763169 **DATE COLLECTED:** 8 / 20 / 1953

SURFACE ELEVATION (FT.): 377.1 **LOGGED (FT.):** 765.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 80 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.1	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0	
290.1	BOND		SHALE	18.5	87.0	
271.6	BOND	CARTHAGE	LIMESTONE	9.5	105.5	
262.1	MODESTO		SHALE	1.0	115.0	
261.1	MODESTO	NEW HAVEN	COAL	1.0	116.0	
260.1	MODESTO		SHALE	10.0	117.0	
250.1	MODESTO		SANDY LIMESTONE	1.0	127.0	
249.1	MODESTO		SANDSTONE/SHALE	4.0	128.0	
245.1	MODESTO		SANDY SHALE	18.0	132.0	
227.1	MODESTO		DARK SHALE	5.0	150.0	
222.1	MODESTO		GREEN SHALE	10.0	155.0	
212.1	MODESTO		SANDY SHALE	38.0	165.0	
174.1	MODESTO		GRAY SHALE	9.0	203.0	
165.1	MODESTO		SHALE W/ LIME NODULES	6.0	212.0	
159.1	MODESTO		SANDY SHALE	6.0	218.0	
153.1	MODESTO		SHALE	14.0	224.0	
139.1	MODESTO	WOMAC	COAL WITH SHALE	1.2	238.0	GREEN SHALE
137.9	MODESTO		SHALE W/ LIME NODULES	1.8	239.2	
136.1	MODESTO		GREEN SHALE	9.0	241.0	
127.1	MODESTO		SHALE W/ LIME NODULES	15.0	250.0	
112.1	MODESTO		SANDY SHALE	14.0	265.0	
98.1	MODESTO		SOFT SHALE	3.0	279.0	SOFT
95.1	MODESTO		GREEN SHALE	10.0	282.0	
85.1	MODESTO		SANDY SHALE	81.0	292.0	
4.1	MODESTO		DARK SHALE	8.0	373.0	
-3.9	MODESTO	CHAPEL	COAL	1.0	381.0	
-4.9	MODESTO		UNDERCLAY	1.5	382.0	
-6.4	MODESTO		SHALE	3.5	383.5	
-9.9	MODESTO		SANDSTONE	9.0	387.0	
-18.9	MODESTO		SHALE	24.0	396.0	
-42.9	MODESTO		GREEN SHALE	14.0	420.0	
-56.9	MODESTO		SANDY SHALE	3.0	434.0	
-59.9	MODESTO		GREEN SHALE	4.0	437.0	
-63.9	MODESTO		SHALE	11.0	441.0	
-74.9	MODESTO		LIMESTONE	1.0	452.0	
-75.9	MODESTO		SHALE	7.0	453.0	
-82.9	MODESTO		SANDY SHALE	20.0	460.0	
-102.9	MODESTO		COAL	0.5	480.0	
-103.4	MODESTO		SHALE WITH LIMESTONE	6.5	480.5	

-109.9	MODESTO		SANDY SHALE	24.2	487.0
-134.1	MODESTO	WEST FRANKLIN	LIMESTONE	0.8	511.2
-134.9	MODESTO		SHALE	2.5	512.0
-137.4	MODESTO		SHALE	68.5	514.5
-205.9	CARBONDALE	DANVILLE	COAL	1.8	583.0
-207.7	CARBONDALE		SHALE & CLAYSTONE	9.2	584.8
-216.9	CARBONDALE	ALLENBY	COAL	1.0	594.0
-217.9	CARBONDALE		SANDY SHALE	4.0	595.0
-221.9	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	599.0
-227.1	CARBONDALE		BLACK SHALE & COAL	0.2	604.2
-227.2	CARBONDALE		GREEN SHALE	0.8	604.3
-228.1	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	605.2
-233.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.8	610.2
-246.9	CARBONDALE		FOSSILIFEROUS SHALE	1.0	624.0
-247.9	CARBONDALE		DARK SHALE	3.5	625.0
-251.4	CARBONDALE	BRERETON	LIMESTONE	0.5	628.5
-251.9	CARBONDALE	ANNA	BLACK SHALE	8.8	629.0
-260.7	CARBONDALE	HERRIN	COAL	1.3	637.8
-261.9	CARBONDALE		UNDERCLAY & LIMESTONE	7.5	639.0
-269.4	CARBONDALE		SANDSTONE	19.0	646.5
-288.4	CARBONDALE		SANDY SHALE	13.8	665.5
-302.2	CARBONDALE		BLACK SHALE	0.3	679.3
-302.6	CARBONDALE	BRIAR HILL	COAL	2.0	679.7
-304.6	CARBONDALE		SANDY SHALE	28.3	681.7
-332.9	CARBONDALE		SILTSTONE	25.0	710.0
-357.9	CARBONDALE		SHALE	15.5	735.0
-373.4	CARBONDALE		FOSSILIFEROUS SHALE	1.0	750.5
-374.4	CARBONDALE	ST. DAVID	LIMESTONE	1.3	751.5
-375.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	752.8
-378.7	CARBONDALE	SPRINGFIELD	COAL	5.5	755.8
-384.2	CARBONDALE		SANDY CLAYSTONE	3.8	761.3

MAPID: 05903588000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' N line, 660' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.122646 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.763116 **DATE COLLECTED:** 1 / 27 / 1972

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 701.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1067 **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	28.0	0.0	
337.0	PLEISTOCENE		SAND	19.0	28.0	
318.0	MODESTO		SOFT SHALE	33.0	47.0	
285.0	MODESTO		GRAY SHALE	20.4	80.0	
264.6	MODESTO		SANDY SHALE	76.1	100.4	
188.5	MODESTO		BLACK SHALE	3.5	176.5	
185.0	MODESTO		GRAY SHALE	19.7	180.0	
165.3	MODESTO		SANDSTONE/SHALE	8.0	199.7	
157.3	MODESTO		SANDY SHALE	77.3	207.7	
80.0	MODESTO		GRAY SHALE	25.0	285.0	
55.0	MODESTO	CHAPEL	COAL	1.3	310.0	
53.7	MODESTO		MICACEOUS SHALE	11.7	311.3	
42.0	MODESTO		SANDY SHALE	15.0	323.0	
27.0	MODESTO		SANDSTONE	20.0	338.0	
7.0	MODESTO		SANDY SHALE	20.0	358.0	
-13.0	MODESTO		UNCLASSIFIED	1.0	378.0	
-14.0	MODESTO		DARK SHALE	7.2	379.0	
-21.2	MODESTO		LIMESTONE	0.6	386.2	
-21.8	MODESTO		SANDY SHALE	11.7	386.8	
-33.5	MODESTO		DARK SHALE	1.2	398.5	
-34.7	MODESTO		GRAY SHALE & SANDSTONE	17.5	399.7	
-52.2	MODESTO		COAL	1.0	417.2	W. KY. #24
-53.2	MODESTO		LIGHT SHALE	1.5	418.2	
-54.7	MODESTO		SANDY SHALE	7.1	419.7	
-61.8	MODESTO	WEST FRANKLIN	SHALY LIMESTONE	14.0	426.8	
-75.8	MODESTO		SANDY SHALE	75.1	440.8	
-150.9	CARBONDALE	DANVILLE	COAL	2.2	515.9	
-153.1	CARBONDALE		GRAY SHALE	6.0	518.1	
-159.1	CARBONDALE		SANDSTONE	12.7	524.1	
-171.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.4	536.8	
-177.2	CARBONDALE		GRAY SHALE	23.2	542.2	
-200.4	CARBONDALE	ANNA	BLACK SHALE	6.4	565.4	
-206.8	CARBONDALE	HERRIN	COAL	3.0	571.8	
-209.8	CARBONDALE		UNDERCLAY	3.2	574.8	
-213.0	CARBONDALE		SANDSTONE/LIMESTONE	8.5	578.0	
-221.5	CARBONDALE		SANDSTONE	23.5	586.5	
-245.0	CARBONDALE		SANDY SHALE	12.6	610.0	
-257.6	CARBONDALE	BRIAR HILL	COAL	1.2	622.6	

-258.8	CARBONDALE		SANDY SHALE	6.7	623.8
-265.5	CARBONDALE		SANDSTONE	18.0	630.5
-283.5	CARBONDALE		SANDY SHALE	22.0	648.5
-305.5	CARBONDALE		SANDSTONE	9.5	670.5
-315.0	CARBONDALE		SHALE	10.0	680.0
-325.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	690.0
-327.8	CARBONDALE	TURNER MINE	SANDY SHALE	0.7	692.8
-328.5	CARBONDALE	SPRINGFIELD	COAL	5.3	693.5
-333.8	CARBONDALE		SANDY SHALE	2.8	698.8

MAPID: 05900089000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.103161 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.754652 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 5400.0 **LOG TYPE:** Measured section

SOURCE: **WELL TYPE:** Outcrop

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
40.0	CARBONDALE	HERRIN	COAL	-	500.0	

MAPID: 05901071000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 990' N line, 330' W line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.109999 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.760332 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 3020.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-49.0	CARBONDALE	HERRIN	COAL	4.0	446.0	
-103.0	CARBONDALE	BRIAR HILL	COAL	-	500.0	
-171.0	CARBONDALE	SPRINGFIELD	COAL	5.0	568.0	BLACK SHALE ROOF
-241.0	CARBONDALE	HOUCHIN CREEK	COAL	-	638.0	

MAPID: 05901160000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NE NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.104164 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.763041 **DATE COLLECTED:** 3 / 18 / 1953

SURFACE ELEVATION (FT.): 354.9 **LOGGED (FT.):** 542.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 60 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
339.9	MODESTO		GRAY SHALE	27.0	15.0	
312.9	MODESTO		SANDY SHALE	58.5	42.0	
254.4	MODESTO		SHALE	53.5	100.5	
200.9	MODESTO		FOSSILIFEROUS SHALE	0.3	154.0	
200.6	MODESTO		BLACK SHALE	1.8	154.3	
198.8	MODESTO	CHAPEL	COAL	0.8	156.1	
198.1	MODESTO		UNDERCLAY	3.0	156.8	
195.1	MODESTO		SHALE W/ LIME NODULES	6.2	159.8	
188.9	MODESTO		SHALE	12.0	166.0	
176.9	MODESTO		SHALE	4.0	178.0	
172.9	MODESTO		LIMESTONE	0.3	182.0	
172.6	MODESTO		SANDY SHALE	2.3	182.3	
170.2	MODESTO		SANDSTONE	1.8	184.7	
168.4	MODESTO		SANDY SHALE	32.0	186.5	
136.4	MODESTO		SHALE	21.0	218.5	
115.4	MODESTO		FOSSILIFEROUS SHALE	0.5	239.5	
114.9	MODESTO		SHALE	119.0	240.0	
-4.1	MODESTO		FOSSILIFEROUS SHALE	1.4	359.0	
-5.5	CARBONDALE	DANVILLE	COAL	2.3	360.4	
-7.8	CARBONDALE		SANDY SHALE	2.3	362.7	
-10.1	CARBONDALE		SHALE	2.0	365.0	
-12.1	CARBONDALE	ALLENBY	COAL	0.2	367.0	
-12.3	CARBONDALE		SILTSTONE	0.3	367.2	
-12.6	CARBONDALE		SHALE/SANDSTONE/LIMESTONE	5.3	367.5	
-17.9	CARBONDALE		DARK SHALE	1.7	372.8	
-19.5	CARBONDALE		BLUE BAND	1.3	374.4	
-20.8	CARBONDALE	BANKSTON FORK	LIMESTONE & SHALE	2.8	375.7	
-23.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.2	378.4	
-26.7	CARBONDALE		BLACK SHALE	0.2	381.6	
-26.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	381.8	
-28.9	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	8.3	383.8	
-37.1	CARBONDALE		HARD SHALE	11.8	392.0	
-48.9	CARBONDALE		FOSSILIFEROUS SHALE	1.2	403.8	
-50.0	CARBONDALE	ANNA	BLACK SHALE	5.3	404.9	
-55.3	CARBONDALE	HERRIN	COAL	1.7	410.2	
-57.0	CARBONDALE	HERRIN	BLUE BAND	0.1	411.9	
-57.1	CARBONDALE	HERRIN	COAL	0.9	412.0	

-58.0	CARBONDALE		UNDERCLAY	2.1	412.9
-60.1	CARBONDALE		SHALE W/ LIME NODULES	2.8	415.0
-62.9	CARBONDALE		SANDY SHALE	7.0	417.8
-69.9	CARBONDALE		SANDSTONE	38.2	424.8
-108.1	CARBONDALE		SHALE	7.0	463.0
-115.1	CARBONDALE	BRIAR HILL	COAL	2.4	470.0
-117.5	CARBONDALE		UNDERCLAY	0.5	472.4
-118.0	CARBONDALE		SANDY SHALE	2.4	472.9
-120.4	CARBONDALE		SANDSTONE	2.7	475.3
-123.1	CARBONDALE		SHALE	5.0	478.0
-128.1	CARBONDALE		SHALE & SANDSTONE	1.3	483.0
-129.4	CARBONDALE		SANDSTONE	4.7	484.3
-134.1	CARBONDALE		SANDSTONE/SHALE	5.2	489.0
-139.3	CARBONDALE		SILTSTONE	17.4	494.2
-156.7	CARBONDALE		SHALE	10.9	511.6
-167.6	CARBONDALE		FOSSILIFEROUS SHALE	9.0	522.5
-176.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	531.5
-179.1	CARBONDALE	SPRINGFIELD	COAL	5.3	534.0
-184.4	CARBONDALE		UNDERCLAY	2.7	539.3

MAPID: 05901161000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 330' S line, 165' W line of SW SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.11987 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.756437 **DATE COLLECTED:** 3 / 18 / 1953

SURFACE ELEVATION (FT.): 400.5 **LOGGED (FT.):** 620.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 61 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.5	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	
320.5	MODESTO		SOFT SHALE	18.0	80.0	
302.5	MODESTO		DARK SHALE & BLACK SHALE	2.8	98.0	SOME BLACK SHALE
299.7	MODESTO		FOSSILIFEROUS LIMESTONE	0.8	100.8	
299.0	MODESTO		DARK SHALE	1.0	101.5	
298.0	MODESTO		GRAY SHALE	4.0	102.5	
294.0	MODESTO		SHALE W/ LIME NODULES	4.0	106.5	
290.0	MODESTO		GRAY SHALE	14.5	110.5	
275.5	MODESTO		SANDSTONE/SHALE	11.0	125.0	
264.5	MODESTO		SHALE W/ LIME NODULES	17.0	136.0	
247.5	MODESTO		FOSSILIFEROUS SHALE	0.8	153.0	
246.7	MODESTO		SHALE	75.8	153.8	
171.0	MODESTO		FOSSILIFEROUS SHALE	0.5	229.5	
170.5	MODESTO		DARK SHALE	1.0	230.0	
169.5	MODESTO	CHAPEL	COAL	0.8	231.0	
168.7	MODESTO		GRAY SHALE	3.3	231.8	
165.5	MODESTO		SHALE W/ LIME NODULES	6.0	235.0	
159.5	MODESTO		SANDY SHALE	15.0	241.0	
144.5	MODESTO		FOSSILIFEROUS SHALE	0.7	256.0	
143.8	MODESTO		SANDSTONE	28.3	256.7	
115.5	MODESTO		SANDY DARK SHALE	19.5	285.0	
96.0	MODESTO		SANDSTONE	8.5	304.5	
87.5	MODESTO		SANDY SHALE	7.0	313.0	
80.5	MODESTO		DARK SHALE	13.5	320.0	
67.0	MODESTO		VARRIGATED SHALE	7.5	333.5	
59.5	MODESTO		SANDY SHALE	7.0	341.0	
52.5	MODESTO		SANDSTONE	9.0	348.0	
43.5	MODESTO		SHALE	4.0	357.0	
39.5	MODESTO		VARRIGATED SHALE	1.0	361.0	
38.5	MODESTO		SHALE W/ LIME NODULES	4.0	362.0	
34.5	MODESTO		SANDY SHALE	42.0	366.0	
-7.5	MODESTO		DARK SHALE	28.0	408.0	
-35.5	CARBONDALE	DANVILLE	COAL	1.5	436.0	
-37.0	CARBONDALE		SHALE	6.5	437.5	
-43.5	CARBONDALE		SANDSTONE	5.0	444.0	
-48.5	CARBONDALE		SHALE	4.0	449.0	
-52.5	CARBONDALE	BANKSTON FORK	LIMESTONE	0.4	453.0	
-52.9	CARBONDALE	BANKSTON FORK	SHALE	0.6	453.4	

-53.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	454.0	
-57.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.2	457.5	
-61.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	461.7	
-63.2	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.3	463.7	
-63.5	CARBONDALE		DARK SHALE	11.8	464.0	
-75.3	CARBONDALE	BRERETON	LIMESTONE	0.5	475.8	
-75.8	CARBONDALE	ANNA	BLACK SHALE	6.2	476.3	
-81.9	CARBONDALE	HERRIN	CANNEL COAL	1.7	482.4	
-83.6	CARBONDALE	HERRIN	COAL WITH SHALE	0.1	484.1	
-83.7	CARBONDALE	HERRIN	BLACK SHALE	0.1	484.2	
-83.8	CARBONDALE	HERRIN	COAL W/ PYRITE	0.2	484.3	IMPURE
-84.0	CARBONDALE	HERRIN	COAL	1.6	484.5	GAP, UNCERTAIN THICKNESS
-85.6	CARBONDALE		NO RECORD	2.9	486.1	ADJUST FOR MARKER
-88.5	CARBONDALE		SOFT SHALE	1.0	489.0	
-89.5	CARBONDALE		SHALE	20.0	490.0	
-109.5	CARBONDALE		SANDY SHALE	25.0	510.0	
-134.5	CARBONDALE		DARK SHALE	3.0	535.0	
-137.5	CARBONDALE		BLACK SHALE	2.0	538.0	
-139.5	CARBONDALE	BRIAR HILL	COAL	1.3	540.0	
-140.8	CARBONDALE		UNDERCLAY	1.7	541.3	
-142.5	CARBONDALE		DARK SHALE	2.0	543.0	
-144.5	CARBONDALE		SHALE	35.0	545.0	
-179.5	CARBONDALE		DARK SHALE	6.0	580.0	
-185.5	CARBONDALE		GRAY SHALE	14.0	586.0	
-199.5	CARBONDALE		SHALE	6.2	600.0	
-205.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	606.2	
-206.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.2	607.2	
-210.8	CARBONDALE	TURNER MINE	NODULAR LIMESTONE	0.7	611.3	
-211.5	CARBONDALE	SPRINGFIELD	COAL	5.0	612.0	
-216.5	CARBONDALE		UNDERCLAY	3.0	617.0	

MAPID: 05901162000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.101992 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.75559 **DATE COLLECTED:** 3 / 31 / 1953

SURFACE ELEVATION (FT.): 373.6 **LOGGED (FT.):** 494.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 62 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
373.6	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0	
342.6	MODESTO		SOFT SHALE	2.0	31.0	
340.6	MODESTO		SANDY SHALE	5.0	33.0	
335.6	MODESTO		SHALE	78.9	38.0	
256.7	MODESTO		BLACK SHALE	1.6	116.9	
255.1	MODESTO	CHAPEL	COAL	1.0	118.5	
254.1	MODESTO		UNDERCLAY	3.2	119.5	
250.9	MODESTO		SHALE W/ LIME NODULES	1.5	122.7	
249.4	MODESTO		SHALE	4.4	124.2	
245.0	MODESTO		LIMESTONE	0.4	128.6	
244.6	MODESTO		SHALE	6.0	129.0	
238.6	MODESTO		SHALE	10.0	135.0	
228.6	MODESTO		SHALE	1.5	145.0	
227.1	MODESTO		SHALY SANDSTONE	16.5	146.5	
210.6	MODESTO		SHALE	15.7	163.0	
194.9	MODESTO		SHALE	12.0	178.7	
182.9	MODESTO		LIMESTONE	0.3	190.7	
182.6	MODESTO		SHALE	10.0	191.0	
172.6	MODESTO		SHALE	47.3	201.0	
125.3	MODESTO	WEST FRANKLIN	LIMESTONE	2.4	248.3	
122.8	MODESTO		BLACK SHALE	0.3	250.8	
122.6	MODESTO		COAL	0.2	251.0	
122.4	MODESTO		SANDY SHALE	37.3	251.2	
85.2	MODESTO		SANDSTONE/LIMESTONE	5.7	288.4	
79.5	MODESTO		SHALE	23.9	294.1	
55.6	CARBONDALE	DANVILLE	COAL	1.7	318.0	
53.9	CARBONDALE		SHALE	3.0	319.7	
50.9	CARBONDALE	ALLENBY	COAL	0.2	322.7	
50.8	CARBONDALE		SHALE	0.4	322.8	
50.3	CARBONDALE		SHALE	4.3	323.3	
46.1	CARBONDALE		SHALE	4.8	327.5	
41.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	332.3	
37.9	CARBONDALE		SHALE	3.9	335.7	
34.0	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	10.4	339.6	
23.6	CARBONDALE		SHALE	8.3	350.0	
15.3	CARBONDALE		FOSSILIFEROUS SHALE	0.8	358.3	
14.6	CARBONDALE	BRERETON	LIMESTONE	1.4	359.0	
13.2	CARBONDALE	ANNA	BLACK SHALE	5.3	360.4	
7.9	CARBONDALE	HERRIN	COAL	0.5	365.7	

7.4	CARBONDALE	HERRIN	SHALE	0.1	366.2
7.3	CARBONDALE	HERRIN	COAL	0.4	366.3
6.9	CARBONDALE	HERRIN	SHALE	0.1	366.7
6.8	CARBONDALE	HERRIN	COAL	0.8	366.8
6.0	CARBONDALE	HERRIN	SHALE	0.2	367.6
5.8	CARBONDALE	HERRIN	COAL	0.8	367.8
5.0	CARBONDALE		UNDERCLAY	4.3	368.6
0.8	CARBONDALE		SHALE	8.5	372.8
-7.7	CARBONDALE		SANDY SHALE	6.0	381.3
-13.7	CARBONDALE		SHALE	15.7	387.3
-29.4	CARBONDALE		SANDY SHALE	14.0	403.0
-43.4	CARBONDALE	BRIAR HILL	COAL	2.0	417.0
-45.4	CARBONDALE		SANDY SHALE	19.0	419.0
-64.4	CARBONDALE		SANDSTONE	3.0	438.0
-67.4	CARBONDALE		SANDY SHALE	18.3	441.0
-85.7	CARBONDALE		GRAY SHALE	16.7	459.3
-102.4	CARBONDALE		SHALE	6.3	476.0
-108.7	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	0.7	482.3
-109.4	CARBONDALE	TURNER MINE	BLACK SHALE	4.8	483.0
-114.2	CARBONDALE	SPRINGFIELD	COAL	5.3	487.8
-119.4	CARBONDALE		UNDERCLAY	1.0	493.0

MAPID: 05901163000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.110003 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.75669 **DATE COLLECTED:** 4 / 8 / 1953

SURFACE ELEVATION (FT.): 424.2 **LOGGED (FT.):** 587.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 63 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.2	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
354.2	MODESTO		SHALE	2.0	70.0	
352.2	MODESTO		SOFT SHALE	16.0	72.0	
336.2	MODESTO		COAL	0.5	88.0	
335.7	MODESTO		SOFT SHALE	12.8	88.5	
322.9	MODESTO		SHALE	19.0	101.3	
303.9	MODESTO		FOSSILIFEROUS SHALE	0.2	120.3	
303.8	MODESTO		SILTSTONE	3.3	120.4	
300.4	MODESTO		SANDY SHALE	8.0	123.8	
292.4	MODESTO		SHALE	70.3	131.8	
222.2	MODESTO		FOSSILIFEROUS SHALE	0.3	202.0	
221.9	MODESTO		BLACK SHALE	1.2	202.3	
220.7	MODESTO	CHAPEL	COAL	1.0	203.5	
219.7	MODESTO		UNDERCLAY	3.0	204.5	
216.7	MODESTO		SHALE W/ LIME NODULES	4.0	207.5	
212.7	MODESTO		SANDY SHALE	12.5	211.5	
200.2	MODESTO		SHALE	6.0	224.0	
194.2	MODESTO		FOSSILIFEROUS SHALE	1.7	230.0	
192.5	MODESTO		SILTSTONE	1.3	231.7	
191.2	MODESTO		SANDSTONE/SHALE	1.7	233.0	
189.5	MODESTO		SHALE	28.8	234.7	
160.7	MODESTO		SHALE	7.0	263.5	
153.7	MODESTO		BLACK SHALE	3.0	270.5	
150.7	MODESTO		LIMESTONE	0.3	273.5	
150.4	MODESTO		SANDY SHALE	1.2	273.8	
149.2	MODESTO		SHALE	34.5	275.0	
114.7	MODESTO		SILTSTONE	4.3	309.5	
110.4	MODESTO		SHALE & CLAYSTONE	1.8	313.8	
108.6	MODESTO		SHALE W/ LIME NODULES	9.4	315.6	
99.2	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	325.0	
97.7	MODESTO		GREEN SHALE	8.0	326.5	
89.7	MODESTO		SHALE	71.8	334.5	
17.9	CARBONDALE	DANVILLE	COAL	2.2	406.3	
15.7	CARBONDALE		UNDERCLAY	3.0	408.5	
12.7	CARBONDALE		COAL	0.1	411.5	
12.6	CARBONDALE		SANDSTONE	6.1	411.6	
6.5	CARBONDALE		SANDSTONE/SHALE	1.5	417.7	
5.0	CARBONDALE		SHALE	1.3	419.2	
3.7	CARBONDALE	ALLENBY	COAL	0.2	420.5	

3.5	CARBONDALE		UNDERCLAY	3.8	420.7
-0.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	424.5
-5.1	CARBONDALE		FOSSILIFEROUS SHALE	1.8	429.3
-6.8	CARBONDALE	ANVIL ROCK	SANDSTONE	8.6	431.0
-15.4	CARBONDALE	ANVIL ROCK	SHALE	3.9	439.6
-19.3	CARBONDALE		SHALE	8.5	443.5
-27.8	CARBONDALE		FOSSILIFEROUS SHALE	0.7	452.0
-28.5	CARBONDALE	BRERETON	LIMESTONE	0.8	452.7
-29.3	CARBONDALE	ANNA	BLACK SHALE	4.0	453.5
-33.3	CARBONDALE	HERRIN	CANNEL COAL	0.8	457.5
-34.1	CARBONDALE	HERRIN	COAL	0.7	458.3
-34.8	CARBONDALE	HERRIN	SHALE	0.1	459.0
-34.9	CARBONDALE	HERRIN	COAL	0.8	459.1
-35.6	CARBONDALE		UNDERCLAY	5.4	459.8
-41.1	CARBONDALE		SHALE	7.5	465.3
-48.6	CARBONDALE		SANDSTONE	23.8	472.8
-72.3	CARBONDALE		SILTSTONE	9.5	496.5
-81.8	CARBONDALE		SHALE	1.8	506.0
-83.6	CARBONDALE	BRIAR HILL	COAL	2.3	507.8
-85.8	CARBONDALE		UNDERCLAY	1.0	510.0
-86.8	CARBONDALE		SHALE	26.5	511.0
-113.3	CARBONDALE		SILTSTONE	14.0	537.5
-127.3	CARBONDALE		SHALE	22.0	551.5
-149.3	CARBONDALE		FOSSILIFEROUS SHALE	1.3	573.5
-150.6	CARBONDALE	ST. DAVID	LIMESTONE	0.2	574.8
-150.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	575.0
-153.5	CARBONDALE	SPRINGFIELD	COAL	5.3	577.7
-158.8	CARBONDALE		UNDERCLAY	4.0	583.0

MAPID: 05901163000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2310' N line, 2310' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.110003 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.75669 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 460.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 63 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
18.9	CARBONDALE	DANVILLE	COAL	2.1	405.1	
16.7	CARBONDALE		SHALE & SANDSTONE	12.3	407.3	
4.5	CARBONDALE	ALLENBY	COAL	0.2	419.5	
4.2	CARBONDALE		CLAYSTONE	4.5	419.8	
-0.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	424.2	
-4.9	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.7	428.9	
-5.6	CARBONDALE	LAWSON	SILTSTONE	0.4	429.6	
-6.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	11.8	430.0	
-17.8	CARBONDALE	LAWSON	SILTY SHALE	10.1	441.8	
-27.9	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	0.8	451.9	
-28.7	CARBONDALE	ANNA	BLACK SHALE	5.3	452.7	
-34.0	CARBONDALE	HERRIN	COAL	2.0	458.0	

MAPID: 05902493000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 365' S line, 357' E line of NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.103145 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.760317 **DATE COLLECTED:** 5 / 0 / 1960

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 2980.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-231.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	585.0	
-281.0	CARBONDALE	SURVANT	COAL	1.2	635.0	
-346.0	CARBONDALE	COLCHESTER	COAL	0.5	700.0	
-401.0	CARBONDALE	DEKOVEN	COAL	3.8	755.0	
-401.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	755.0	
-426.0	CARBONDALE	DAVIS	COAL	4.0	780.0	
-456.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	810.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-496.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	850.0	
-511.0	TRADEWATER	MT. RORAH	COAL	2.0	865.0	

MAPID: 05902493000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 365' S line, 357' E line of NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.103145 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.760317 **DATE COLLECTED:** 5 / 0 / 1960

SURFACE ELEVATION (FT.): 354.0 **LOGGED (FT.):** 1700.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-344.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	698.0	
-426.0	SPOON	DAVIS	UNCLASSIFIED	-	780.0	
-1346.0	BASE OF PENN.		UNCLASSIFIED	-	1700.0	

MAPID: 05903280000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1550' S line, 990' E line of SE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10549 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.752383 **DATE COLLECTED:** 4 / 24 / 1967

SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 466.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1918-Q **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION N-0-12

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
500.0	PLEISTOCENE		UNCONSOLIDATED	27.7	0.0	
472.3	MODESTO		GRAY SHALE	65.5	27.7	
406.8	MODESTO		BLACK SHALE	1.3	93.2	
405.5	MODESTO	CHAPEL	COAL	0.6	94.5	W.KY. #24
404.9	MODESTO		GRAY SHALE	26.1	95.1	
378.8	MODESTO		SANDY SHALE	3.3	121.2	
375.5	MODESTO		SANDSTONE	5.6	124.5	
369.9	MODESTO		SANDY SHALE	30.2	130.1	
339.7	MODESTO		GRAY SHALE	72.0	160.3	
267.7	MODESTO	WEST FRANKLIN	LIMESTONE	1.7	232.3	
266.0	MODESTO		BLACK SHALE	3.0	234.0	
263.0	MODESTO		GRAY SHALE	2.3	237.0	
260.7	MODESTO		SANDY SHALE	13.2	239.3	
247.5	MODESTO		SANDSTONE	23.0	252.5	
224.5	MODESTO		GRAY SHALE	18.4	275.5	
206.1	MODESTO		COAL	1.3	293.9	PROBABLY BLACK SHALE
204.8	MODESTO		GRAY SHALE	2.3	295.2	
202.5	CARBONDALE	DANVILLE	COAL	1.0	297.5	
201.5	CARBONDALE		SANDY SHALE	6.8	298.5	
194.7	CARBONDALE		GRAY SHALE	2.0	305.3	
192.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.4	307.3	
188.3	CARBONDALE	ANVIL ROCK	SANDSTONE	18.6	311.7	
169.7	CARBONDALE		SANDY SHALE	4.0	330.3	
165.7	CARBONDALE	BRERETON	LIMESTONE	4.3	334.3	
161.4	CARBONDALE	ANNA	BLACK SHALE	0.9	338.6	
160.5	CARBONDALE	HERRIN	COAL	4.0	339.5	
156.5	CARBONDALE		GRAY SHALE	2.7	343.5	
153.8	CARBONDALE		SANDY SHALE	42.8	346.2	
111.0	CARBONDALE	BRIAR HILL	COAL	1.7	389.0	
109.3	CARBONDALE		SANDY SHALE	58.3	390.7	
51.0	CARBONDALE		GRAY SHALE	8.7	449.0	
42.3	CARBONDALE		FOSSILIFEROUS SHALE	0.9	457.7	
41.5	CARBONDALE		DARK SHALE	1.0	458.5	
40.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	459.5	
39.5	CARBONDALE	TURNER MINE	SHALE	0.1	460.5	
39.4	CARBONDALE	SPRINGFIELD	COAL	5.5	460.6	
34.0	CARBONDALE		UNDERCLAY	0.4	466.0	

MAPID: 05903568000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' N line, 660' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.10415 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.763041 **DATE COLLECTED:** 3 / 21 / 1971

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 543.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1021-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		CLAY	10.0	0.0	
345.0	PLEISTOCENE		SAND & GRAVEL	17.0	10.0	
328.0	MODESTO		GRAY SHALE	21.0	27.0	
307.0	MODESTO		SANDSTONE	15.0	48.0	
292.0	MODESTO		GRAY SHALE	95.0	63.0	
197.0	MODESTO		BLACK SHALE	1.0	158.0	
196.0	MODESTO	CHAPEL	COAL	0.8	159.0	W.KY. #24
195.2	MODESTO		UNDERCLAY	3.2	159.8	
192.0	MODESTO		SHALY SANDSTONE	24.8	163.0	
167.2	MODESTO		CALCAREOUS SANDSTONE	3.0	187.8	
164.2	MODESTO		SANDSTONE	33.2	190.8	
131.0	MODESTO		SHALE	67.0	224.0	
64.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	291.0	
61.5	MODESTO		GRAY SHALE	69.5	293.5	
-8.0	CARBONDALE	DANVILLE	COAL	1.7	363.0	
-9.7	CARBONDALE		SHALE	13.3	364.7	
-23.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	378.0	
-28.5	CARBONDALE		LIGHT SHALE	4.0	383.5	
-32.5	CARBONDALE	ANVIL ROCK	SANDSTONE	9.5	387.5	
-42.0	CARBONDALE	BRERETON	GRAY SHALE	11.7	397.0	
-53.7	CARBONDALE	ANNA	BLACK SHALE	4.1	408.7	
-57.8	CARBONDALE	HERRIN	COAL	2.5	412.8	
-60.3	CARBONDALE		UNDERCLAY	3.7	415.3	
-64.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	3.0	419.0	
-67.0	CARBONDALE		SANDSTONE	45.5	422.0	
-112.5	CARBONDALE		GRAY SHALE	4.0	467.5	
-116.5	CARBONDALE	BRIAR HILL	COAL	2.0	471.5	
-118.5	CARBONDALE		SANDY SHALE	35.0	473.5	
-153.5	CARBONDALE		GRAY SHALE	25.1	508.5	
-178.6	CARBONDALE		SHALE	1.0	533.6	
-179.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	534.6	
-181.9	CARBONDALE	TURNER MINE	GRAY SHALE	0.4	536.9	
-182.3	CARBONDALE	SPRINGFIELD	COAL	5.5	537.3	
-187.8	CARBONDALE		SHALE	0.5	542.8	

MAPID: 05901165000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092778 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.755549 **DATE COLLECTED:** 4 / 22 / 1953

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 457.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 65 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.0	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
292.0	MODESTO		GRAY SHALE	14.0	60.0	
278.0	MODESTO		SANDSTONE	58.0	74.0	
220.0	MODESTO		GRAY SHALE	10.0	132.0	
210.0	MODESTO	WEST FRANKLIN	FOSSILIFEROUS LIMESTONE	1.0	142.0	
209.0	MODESTO		SANDY SHALE	52.0	143.0	
157.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	195.0	
155.0	MODESTO		DARK SHALE	44.0	197.0	
111.0	MODESTO		SANDSTONE	14.0	241.0	
97.0	MODESTO		SHALE W/ LIME NODULES	6.0	255.0	
91.0	MODESTO		SHALE	11.0	261.0	
80.0	CARBONDALE	DANVILLE	COAL	2.0	272.0	
78.0	CARBONDALE		SOFT SHALE	2.6	274.0	
75.4	CARBONDALE	ALLENBY	COAL	0.4	276.6	
75.0	CARBONDALE		SHALE	8.0	277.0	
67.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	285.0	
61.4	CARBONDALE		GRAY SHALE	1.0	290.6	
60.4	CARBONDALE	ANVIL ROCK	SANDSTONE	16.7	291.6	
43.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.0	308.3	
37.7	CARBONDALE		FOSSILIFEROUS SHALE	0.4	314.3	
37.3	CARBONDALE	BRERETON	LIMESTONE	3.0	314.7	
34.3	CARBONDALE	ANNA	BLACK SHALE	4.8	317.7	
29.6	CARBONDALE	HERRIN	COAL	4.0	322.4	
25.6	CARBONDALE		UNDERCLAY	2.6	326.4	
23.0	CARBONDALE		SANDSTONE	2.0	329.0	
21.0	CARBONDALE		SHALE	8.0	331.0	
13.0	CARBONDALE		SANDSTONE	35.6	339.0	
-22.6	CARBONDALE		SHALE	2.0	374.6	
-24.6	CARBONDALE	BRIAR HILL	COAL	2.1	376.6	
-26.7	CARBONDALE		SANDSTONE	18.0	378.7	
-44.7	CARBONDALE		SHALE	38.3	396.7	
-83.0	CARBONDALE		SHALE W/ LIME NODULES	8.8	435.0	
-91.8	CARBONDALE		FOSSILIFEROUS LIMESTONE	1.0	443.8	
-92.8	CARBONDALE		BLACK SHALE	2.3	444.8	
-95.0	CARBONDALE	SPRINGFIELD	COAL	5.5	447.0	
-100.5	CARBONDALE		UNDERCLAY	4.5	452.5	

MAPID: 05901166000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.083426 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.762869 **DATE COLLECTED:** 5 / 25 / 1953

SURFACE ELEVATION (FT.): 352.4 **LOGGED (FT.):** 457.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 66 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.4	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	
272.4	MODESTO		SANDSTONE	42.0	80.0	
230.4	MODESTO		SHALE	50.0	122.0	
180.4	MODESTO		SANDY SHALE	7.0	172.0	
173.4	MODESTO	WEST FRANKLIN	FOSSILIFEROUS LIMESTONE	1.0	179.0	
172.4	MODESTO		GRAY SHALE	3.0	180.0	
169.4	MODESTO		SHALE & CLAYSTONE	16.0	183.0	
153.4	MODESTO		SANDY SHALE	13.0	199.0	
140.4	MODESTO		SANDSTONE	16.5	212.0	
123.9	MODESTO		SHALE	53.5	228.5	
70.4	CARBONDALE	DANVILLE	COAL	2.0	282.0	
68.4	CARBONDALE		UNDERCLAY	1.5	284.0	
66.9	CARBONDALE		SANDY SHALE	3.0	285.5	
63.9	CARBONDALE	ALLENBY	COAL	0.5	288.5	
63.4	CARBONDALE		SHALE & CLAYSTONE	5.0	289.0	
58.4	CARBONDALE		SHALE WITH LIMESTONE	2.2	294.0	
56.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	296.2	
52.2	CARBONDALE	ANVIL ROCK	SANDSTONE	21.8	300.2	
30.4	CARBONDALE		FOSSILIFEROUS SHALE	0.4	322.0	
30.0	CARBONDALE		SOFT SHALE	1.0	322.4	
29.0	CARBONDALE	BRERETON	LIMESTONE	2.3	323.4	
26.7	CARBONDALE	ANNA	BLACK SHALE	2.3	325.7	
24.4	CARBONDALE	HERRIN	COAL	0.9	328.0	
23.5	CARBONDALE	HERRIN	BLUE BAND	0.1	328.9	
23.4	CARBONDALE	HERRIN	COAL	3.0	329.0	
20.4	CARBONDALE		UNDERCLAY	5.0	332.0	
15.4	CARBONDALE		SANDSTONE	9.0	337.0	
6.4	CARBONDALE		SANDY SHALE	2.0	346.0	
4.4	CARBONDALE		SANDSTONE	11.0	348.0	
-6.6	CARBONDALE		SANDY SHALE	16.0	359.0	
-22.6	CARBONDALE		SHALE	9.0	375.0	
-31.6	CARBONDALE	BRIAR HILL	COAL	2.0	384.0	
-33.6	CARBONDALE		SHALE	24.0	386.0	
-57.6	CARBONDALE		SHALE	33.3	410.0	
-90.9	CARBONDALE	ST. DAVID	LIMESTONE	1.0	443.3	
-91.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	444.3	
-95.6	CARBONDALE	SPRINGFIELD	COAL	5.0	448.0	
-100.6	CARBONDALE		UNDERCLAY	2.0	453.0	

-102.6	CARBONDALE	SANDSTONE	2.0	455.0

MAPID: 05901652000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.084657 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.75829 **DATE COLLECTED:** 8 / 0 / 1963

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1630.0 **LOG TYPE:** Electric Log

SOURCE: RUDY JOHN W EST **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1270.0	BASE OF PENN.		UNCLASSIFIED	-	1630.0	

MAPID: 05901652000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.084657 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.75829 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1962.0 **LOG TYPE:** Electric Log

SOURCE: RUDY JOHN W EST **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
43.0	CARBONDALE	HERRIN	COAL	3.0	317.0	
-15.0	CARBONDALE	BRIAR HILL	COAL	-	375.0	
-77.0	CARBONDALE	SPRINGFIELD	COAL	5.0	437.0	BLACK SHALE ROOF
-143.0	CARBONDALE	HOUCHIN CREEK	COAL	-	503.0	

MAPID: 05901652000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SE NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.084657 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.75829 **DATE COLLECTED:** 8 / 0 / 1963

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1962.0 **LOG TYPE:** Electric Log

SOURCE: RUDY JOHN W EST, MATHIAS LOUISA 1- **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-148.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	508.0	
-195.0	CARBONDALE	SURVANT	COAL	1.8	555.0	
-260.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-315.0	CARBONDALE	DEKOVEN	COAL	3.0	675.0	
-315.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	675.0	
-340.0	CARBONDALE	DAVIS	COAL	4.0	700.0	
-378.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	738.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-383.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	743.0	
-430.0	TRADEWATER	MT. RORAH	COAL	1.6	790.0	

MAPID: 05903576000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092741 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.755664 **DATE COLLECTED:** 8 / 30 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 448.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1051-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	10.0	0.0	
340.0	PLEISTOCENE		SAND & GRAVEL	60.5	10.0	
279.5	MODESTO		GRAY SHALE	21.5	70.5	
258.0	MODESTO		SANDSTONE	23.0	92.0	
235.0	MODESTO		SHALY SANDSTONE	25.0	115.0	
210.0	MODESTO		GRAY SHALE	47.0	140.0	
163.0	MODESTO		SANDY SHALE	6.0	187.0	
157.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.7	193.0	
154.3	MODESTO		SANDSTONE	33.3	195.7	
121.0	MODESTO		SANDSTONE	16.0	229.0	
105.0	MODESTO		GRAY SHALE	27.0	245.0	
78.0	CARBONDALE	DANVILLE	COAL	1.5	272.0	
76.5	CARBONDALE		SHALE	8.5	273.5	
68.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	282.0	
63.5	CARBONDALE		SHALE	2.5	286.5	
61.0	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	289.0	
46.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.5	304.0	
39.5	CARBONDALE	BRERETON	LIMESTONE	3.8	310.5	
35.7	CARBONDALE	ANNA	BLACK SHALE	3.0	314.3	
32.7	CARBONDALE		SHALE	1.0	317.3	
31.7	CARBONDALE	HERRIN	COAL	3.7	318.3	
28.0	CARBONDALE		UNDERCLAY	3.0	322.0	
25.0	CARBONDALE		SANDSTONE	41.0	325.0	
-16.0	CARBONDALE		SANDY SHALE	7.0	366.0	
-23.0	CARBONDALE	BRIAR HILL	COAL	2.0	373.0	
-25.0	CARBONDALE		GRAY SHALE	11.5	375.0	
-36.5	CARBONDALE		SANDSTONE	13.5	386.5	
-50.0	CARBONDALE		SANDY SHALE	18.0	400.0	
-68.0	CARBONDALE		GRAY SHALE	20.2	418.0	
-88.2	CARBONDALE		SHALE	1.0	438.2	
-89.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	439.1	
-91.5	CARBONDALE	SPRINGFIELD	COAL	5.1	441.5	
-96.6	CARBONDALE		GRAY SHALE	2.0	446.6	

MAPID: 05903576000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.092741 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.755664 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 321.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1051-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
80.8	CARBONDALE	DANVILLE	COAL	1.5	274.2	
79.3	CARBONDALE		SHALE	8.5	275.7	
70.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	284.2	
66.3	CARBONDALE	LAWSON	SANDSTONE	15.0	288.7	
51.3	CARBONDALE	LAWSON	SILTY SHALE	6.5	303.7	
44.8	CARBONDALE	BRERETON	LIMESTONE	3.8	310.2	
41.0	CARBONDALE	ANNA	BLACK SHALE	4.0	314.0	
37.0	CARBONDALE	HERRIN	COAL	3.7	318.0	

MAPID: 05903589000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' S line, 1320' W line of SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.097536 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.74815 **DATE COLLECTED:** 10 / 1 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 435.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1056C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	17.0	0.0	
323.0	PLEISTOCENE		SAND & GRAVEL	43.0	17.0	
280.0	MODESTO		GRAY SHALE	12.0	60.0	
268.0	MODESTO		SANDSTONE	21.0	72.0	
247.0	MODESTO		SANDY SHALE	20.0	93.0	
227.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	113.0	
223.0	MODESTO		GRAY SHALE	129.0	117.0	
94.0	MODESTO		BLACK SHALE	1.0	246.0	
93.0	CARBONDALE	DANVILLE	COAL	3.1	247.0	
89.9	CARBONDALE		GRAY SHALE	18.9	250.1	
71.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	269.0	
67.0	CARBONDALE		GRAY SHALE	23.0	273.0	
44.0	CARBONDALE	BRERETON	LIMESTONE	0.5	296.0	
43.5	CARBONDALE	ANNA	BLACK SHALE	4.0	296.5	
39.5	CARBONDALE	HERRIN	COAL	5.3	300.5	
34.2	CARBONDALE		UNDERCLAY	2.2	305.8	
32.0	CARBONDALE		SANDY SHALE	50.0	308.0	
-18.0	CARBONDALE	BRIAR HILL	COAL	1.6	358.0	
-19.6	CARBONDALE		SANDY SHALE	30.4	359.6	
-50.0	CARBONDALE		GRAY SHALE	33.5	390.0	
-83.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	423.5	
-86.5	CARBONDALE	SPRINGFIELD	COAL	5.5	426.5	
-92.0	CARBONDALE		UNDERCLAY	3.0	432.0	

MAPID: 05923777000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1320' E line of NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.088013 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762909 **DATE COLLECTED:** 9 / 26 / 1973

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 460.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1075C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	12.0	0.0	
333.0	PLEISTOCENE		SAND & GRAVEL	61.0	12.0	
272.0	MODESTO		GRAY SHALE	20.0	73.0	
252.0	MODESTO		SANDY SHALE	94.0	93.0	
158.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	187.0	
155.5	MODESTO		SANDY SHALE	10.5	189.5	
145.0	MODESTO	WEST FRANKLIN	LIMESTONE	0.5	200.0	
144.5	MODESTO		SANDY SHALE	28.0	200.5	
116.5	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	228.5	
110.5	MODESTO		SANDY SHALE	49.5	234.5	
61.0	CARBONDALE	DANVILLE	COAL	2.5	284.0	
58.5	CARBONDALE		UNDERCLAY	2.5	286.5	
56.0	CARBONDALE		GRAY SHALE	2.5	289.0	
53.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	291.5	
48.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.5	296.5	
36.0	CARBONDALE		SANDY SHALE	11.0	309.0	
25.0	CARBONDALE	BRERETON	LIMESTONE	4.0	320.0	
21.0	CARBONDALE	ANNA	BLACK SHALE	2.0	324.0	
19.0	CARBONDALE	HERRIN	COAL	3.7	326.0	
15.3	CARBONDALE		UNDERCLAY	3.3	329.7	
12.0	CARBONDALE		GRAY SHALE	17.0	333.0	
-5.0	CARBONDALE		SANDY SHALE	36.0	350.0	
-41.0	CARBONDALE	BRIAR HILL	COAL	1.6	386.0	
-42.6	CARBONDALE		SANDY SHALE	32.4	387.6	
-75.0	CARBONDALE		GRAY SHALE	22.0	420.0	
-97.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	442.0	
-97.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	442.5	
-99.9	CARBONDALE	SPRINGFIELD	COAL	5.3	444.9	
-105.2	CARBONDALE		UNDERCLAY	10.0	450.2	

MAPID: 05923852000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 1320' W line of NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.097269 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.76299 **DATE COLLECTED:** 10 / 9 / 1974

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 532.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1081C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.0	PLEISTOCENE		CLAY	10.0	0.0	
338.0	PLEISTOCENE		SAND & GRAVEL	51.0	10.0	
287.0	MODESTO		GRAY SHALE	18.0	61.0	
269.0	MODESTO		SANDY SHALE	46.0	79.0	
223.0	MODESTO	CHAPEL	COAL	1.5	125.0	
221.5	MODESTO		UNDERCLAY	3.5	126.5	
218.0	MODESTO		SANDY SHALE	24.0	130.0	
194.0	MODESTO		SANDSTONE	11.0	154.0	
183.0	MODESTO		GRAY SHALE	34.0	165.0	
149.0	MODESTO		LIMESTONE	1.5	199.0	
147.5	MODESTO		GRAY SHALE	12.5	200.5	
135.0	MODESTO		SANDSTONE	10.0	213.0	
125.0	MODESTO		SANDY SHALE	11.0	223.0	
114.0	MODESTO		LIMESTONE	1.0	234.0	
113.0	MODESTO		GRAY SHALE	4.0	235.0	
109.0	MODESTO		BLACK SHALE	4.0	239.0	
105.0	MODESTO		GRAY SHALE	5.5	243.0	
99.5	MODESTO		COAL	1.5	248.5	W.KY. #24
98.0	MODESTO		UNDERCLAY	3.0	250.0	
95.0	MODESTO		GRAY SHALE	42.0	253.0	
53.0	MODESTO		SANDY SHALE	43.0	295.0	
10.0	CARBONDALE	DANVILLE	COAL	2.0	338.0	
8.0	CARBONDALE		UNDERCLAY	2.0	340.0	
6.0	CARBONDALE		SANDY SHALE	11.0	342.0	
-5.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	353.0	
-11.0	CARBONDALE		GRAY SHALE	4.0	359.0	
-15.0	CARBONDALE		SANDY SHALE	16.0	363.0	
-31.0	CARBONDALE	BRERETON	LIMESTONE	3.4	379.0	
-34.4	CARBONDALE	ANNA	BLACK SHALE	4.3	382.4	
-38.7	CARBONDALE	HERRIN	COAL	3.7	386.7	
-42.4	CARBONDALE		UNDERCLAY	2.6	390.4	
-45.0	CARBONDALE		LIMESTONE	2.0	393.0	
-47.0	CARBONDALE		SANDSTONE	36.0	395.0	
-83.0	CARBONDALE		SANDY SHALE	14.0	431.0	
-97.0	CARBONDALE	BRIAR HILL	COAL	1.8	445.0	
-98.8	CARBONDALE		UNDERCLAY	1.2	446.8	
-100.0	CARBONDALE		GRAY SHALE	12.0	448.0	
-112.0	CARBONDALE		SANDSTONE	21.0	460.0	
-133.0	CARBONDALE		GRAY SHALE	27.0	481.0	

-160.0	CARBONDALE		GRAY SHALE	6.5	508.0
-166.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	514.5
-167.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	515.5
-170.3	CARBONDALE	SPRINGFIELD	COAL	5.7	518.3
-175.9	CARBONDALE		SANDSTONE	8.6	523.9

MAPID: 05902319000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.075695 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.754631 **DATE COLLECTED:** 10 / 0 / 1958

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 1594.0 **LOG TYPE:** Electric Log

SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-263.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	608.0	
-355.0	SPOON	DAVIS	UNCLASSIFIED	-	700.0	
-1249.0	BASE OF PENN.		UNCLASSIFIED	-	1594.0	

MAPID: 05902319000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.075695 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.754631 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: R. K. PETROLEUM CORP. **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	3.0	310.0	
-15.0	CARBONDALE	BRIAR HILL	COAL	-	360.0	
-81.0	CARBONDALE	SPRINGFIELD	COAL	4.0	426.0	BLACK SHALE ROOF
-155.0	CARBONDALE	HOUCHIN CREEK	COAL	-	500.0	

MAPID: 05902319000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.075695 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.754631 **DATE COLLECTED:** 10 / 0 / 1958

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: R. K. PETROLEUM CORP., LOGSDON EMELINE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-158.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	503.0	
-204.0	CARBONDALE	SURVANT	COAL	1.2	549.0	
-265.0	CARBONDALE	COLCHESTER	COAL	0.5	610.0	
-328.0	CARBONDALE	DEKOVEN	COAL	3.0	673.0	
-328.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	673.0	
-354.0	CARBONDALE	DAVIS	COAL	4.0	699.0	
-390.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	735.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-395.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-450.0	TRADEWATER	MT. RORAH	COAL	1.2	795.0	

MAPID: 05903279000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074592 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762919 **DATE COLLECTED:** 5 / 9 / 1967

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 436.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1920-Q **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	102.0	0.0	
248.0	MODESTO		SANDY SHALE	148.7	102.0	
99.3	MODESTO		GRAY SHALE	15.0	250.7	
84.3	CARBONDALE	DANVILLE	COAL	0.6	265.7	
83.7	CARBONDALE		SHALE	8.0	266.3	
75.7	CARBONDALE		SANDSTONE	2.3	274.3	
73.4	CARBONDALE		SANDY SHALE	4.7	276.6	
68.7	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	281.3	
60.7	CARBONDALE		GRAY SHALE	2.3	289.3	
58.4	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	291.6	
50.9	CARBONDALE		SANDY SHALE	3.7	299.1	
47.2	CARBONDALE	BRERETON	LIMESTONE	0.3	302.8	
46.9	CARBONDALE	BRERETON	SHALE	0.2	303.1	
46.7	CARBONDALE	BRERETON	LIMESTONE	1.2	303.3	
45.5	CARBONDALE	BRERETON	SHALE	0.7	304.5	
44.8	CARBONDALE	BRERETON	LIMESTONE	5.1	305.2	
39.7	CARBONDALE	ANNA	DARK SHALE	0.6	310.3	
39.2	CARBONDALE	HERRIN	COAL	4.2	310.8	
34.9	CARBONDALE		SHALE	0.4	315.1	
34.5	CARBONDALE		SANDY SHALE	41.5	315.5	
-7.0	CARBONDALE		GRAY SHALE	9.5	357.0	
-16.5	CARBONDALE	BRIAR HILL	COAL	2.1	366.5	
-18.6	CARBONDALE		SANDY SHALE	46.5	368.6	
-65.0	CARBONDALE		GRAY SHALE	9.8	415.0	
-74.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	424.8	
-75.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	425.3	
-77.8	CARBONDALE	SPRINGFIELD	COAL	4.8	427.8	
-82.6	CARBONDALE		GRAY SHALE	1.6	432.6	
-84.1	CARBONDALE		LIMESTONE	2.5	434.1	

MAPID: 05903279000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.074592 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.762919 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 315.2 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY COAL CO. 1920Q **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
85.1	CARBONDALE	DANVILLE	COAL	0.6	264.9	
84.5	CARBONDALE		SHALE & SANDSTONE	15.0	265.5	
69.5	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	280.5	
61.5	CARBONDALE	LAWSON	GRAY SHALE	2.3	288.5	
59.2	CARBONDALE	LAWSON	SANDSTONE	7.5	290.8	
51.7	CARBONDALE	LAWSON	SILTY SHALE	3.7	298.3	
48.0	CARBONDALE	BRERETON	LIMESTONE W/ SHALE	8.5	302.0	
39.5	CARBONDALE	ANNA	BLACK SHALE	0.6	310.5	
39.0	CARBONDALE	HERRIN	COAL	4.2	311.0	

MAPID: 05923896000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NE

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.073344 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.758329 **DATE COLLECTED:** 12 / 0 / 1976

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 2862.0 **LOG TYPE:** Electric Log

SOURCE: BEESON, RICHARD W., AGRARIAN ENTERP **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-154.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-199.0	CARBONDALE	SURVANT	COAL	1.0	555.0	
-264.0	CARBONDALE	COLCHESTER	COAL	0.5	620.0	
-330.0	CARBONDALE	DEKOVEN	COAL	3.0	686.0	
-330.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	686.0	
-352.0	CARBONDALE	DAVIS	COAL	3.0	708.0	
-389.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.0	745.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-394.0	TRADEWATER	STONEFORT	LIMESTONE	4.0	750.0	

MAPID: 05923936000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' N line, 1320' W line of NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.078835 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.762895 **DATE COLLECTED:** 9 / 27 / 1974

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 442.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1079C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
337.0	PLEISTOCENE		SAND & GRAVEL	65.0	13.0	
272.0	MODESTO		GRAY SHALE	14.0	78.0	
258.0	MODESTO		SANDSTONE	11.0	92.0	
247.0	MODESTO		GRAY SHALE	37.0	103.0	
210.0	MODESTO		SANDY SHALE	21.0	140.0	
189.0	MODESTO		GRAY SHALE	41.0	161.0	
148.0	MODESTO		SANDSTONE	28.0	202.0	
120.0	MODESTO		GRAY SHALE	45.0	230.0	
75.0	CARBONDALE	DANVILLE	COAL	2.0	275.0	
73.0	CARBONDALE		GRAY SHALE	13.0	277.0	
60.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	290.0	
53.5	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	296.5	
46.5	CARBONDALE	BRERETON	LIMESTONE	4.0	303.5	
42.5	CARBONDALE	ANNA	GRAY SHALE	0.5	307.5	
42.0	CARBONDALE	ANNA	BLACK SHALE	0.8	308.0	
41.2	CARBONDALE	HERRIN	COAL	3.5	308.8	
37.7	CARBONDALE		UNDERCLAY	5.7	312.3	
32.0	CARBONDALE		SANDSTONE	35.0	318.0	
-3.0	CARBONDALE		SANDY SHALE	12.0	353.0	
-15.0	CARBONDALE	BRIAR HILL	COAL	1.5	365.0	
-16.5	CARBONDALE		GRAY SHALE	2.0	366.5	
-18.5	CARBONDALE		SANDSTONE	21.5	368.5	
-40.0	CARBONDALE		GRAY SHALE	33.5	390.0	
-73.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	423.5	
-74.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	424.5	
-76.6	CARBONDALE		GRAY SHALE	0.6	426.6	
-77.3	CARBONDALE	SPRINGFIELD	COAL	5.1	427.3	
-82.4	CARBONDALE		UNDERCLAY	2.0	432.4	
-84.4	CARBONDALE		SANDSTONE	8.0	434.4	

MAPID: 05901155000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.060905 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.755564 **DATE COLLECTED:** 1 / 13 / 1953

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 446.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 55 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0	
265.0	MODESTO		SANDY SHALE	5.0	75.0	
260.0	MODESTO		LIMESTONE	4.0	80.0	
256.0	MODESTO		SOFT SHALE	9.5	84.0	
246.5	MODESTO		SANDY SHALE	16.5	93.5	
230.0	MODESTO		SHALE	12.0	110.0	
218.0	MODESTO		BLACK SHALE	0.8	122.0	
217.2	MODESTO		SHALE & CLAYSTONE	2.7	122.8	UCLY STRUCTURE
214.5	MODESTO		SANDY SHALE	16.5	125.5	
198.0	MODESTO		GRAY SHALE	118.3	142.0	
79.7	CARBONDALE	DANVILLE	COAL	1.8	260.3	
77.9	CARBONDALE		SHALE	14.9	262.1	
63.0	CARBONDALE		SHALY SANDSTONE	5.2	277.0	
57.8	CARBONDALE	ALLENBY	COAL	0.5	282.2	
57.3	CARBONDALE		UNDERCLAY	2.0	282.7	
55.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.3	284.7	
50.0	CARBONDALE		DARK SHALE	0.5	290.0	
49.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	8.0	290.5	
41.5	CARBONDALE		SHALE	7.5	298.5	
34.0	CARBONDALE		FOSSILIFEROUS SHALE	3.0	306.0	
31.0	CARBONDALE	BRERETON	LIMESTONE	3.6	309.0	
27.4	CARBONDALE	ANNA	BLACK SHALE	0.5	312.6	
26.9	CARBONDALE	HERRIN	COAL	3.4	313.1	
23.5	CARBONDALE	HERRIN	BLUE BAND	0.2	316.5	
23.2	CARBONDALE	HERRIN	COAL	0.7	316.8	
22.6	CARBONDALE		UNDERCLAY	3.0	317.4	
19.6	CARBONDALE		SANDSTONE	2.6	320.4	
17.0	CARBONDALE		SANDY SHALE	38.5	323.0	
-21.5	CARBONDALE		DARK SHALE	6.0	361.5	
-27.5	CARBONDALE	BRIAR HILL	COAL	2.2	367.5	
-29.7	CARBONDALE		UNDERCLAY	2.0	369.7	
-31.7	CARBONDALE		SANDY SHALE	6.8	371.7	
-38.5	CARBONDALE		SANDSTONE	34.5	378.5	
-73.0	CARBONDALE		DARK SHALE	22.0	413.0	
-95.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	435.0	
-98.0	CARBONDALE	TURNER MINE	LIMESTONE	0.3	438.0	
-98.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	438.3	
-100.8	CARBONDALE	SPRINGFIELD	COAL	5.2	440.8	

MAPID: 05901224000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' S line, 330' W line of SE SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.059852 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.749068 **DATE COLLECTED:** 7 / 0 / 1952

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2728.0 **LOG TYPE:** Electric Log

SOURCE: ASHOFF, J. F., JR., GRAY ALLEN EST **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-155.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	498.0	
-197.0	CARBONDALE	SURVANT	COAL	2.0	540.0	
-257.0	CARBONDALE	COLCHESTER	COAL	0.5	600.0	
-327.0	CARBONDALE	DEKOVEN	COAL	4.0	670.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	670.0	
-347.0	CARBONDALE	DAVIS	COAL	3.5	690.0	
-387.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	730.0	15% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-393.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	736.0	

MAPID: 05902060000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.062117 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.750902 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 2838.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK JAMES H, LOGSDON ISABELL **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-164.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	510.0	
-204.0	CARBONDALE	SURVANT	COAL	1.6	550.0	
-268.0	CARBONDALE	COLCHESTER	COAL	0.5	614.0	
-334.0	CARBONDALE	DEKOVEN	COAL	4.0	680.0	
-334.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	680.0	
-357.0	CARBONDALE	DAVIS	COAL	3.0	703.0	
-388.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	734.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-394.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	740.0	
-457.0	TRADEWATER	MT. RORAH	COAL	1.2	803.0	

MAPID: 05902060000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 990' S line, 330' E line of SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.062117 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.750902 **DATE COLLECTED:** 11 / 0 / 1956

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 1622.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK JAMES H **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1276.0	BASE OF PENN.		UNCLASSIFIED	-	1622.0	

MAPID: 05902927000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW NW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.064323 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.758359 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 2710.0 **LOG TYPE:** Electric Log

SOURCE: HANSEN OIL CO **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
35.0	CARBONDALE	HERRIN	COAL	3.0	310.0	
-25.0	CARBONDALE	BRIAR HILL	COAL	-	370.0	
-98.0	CARBONDALE	SPRINGFIELD	COAL	5.0	443.0	BLACK SHALE ROOF
-153.0	CARBONDALE	HOUCHIN CREEK	COAL	-	498.0	

MAPID: 05903590000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.058378 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.759309 **DATE COLLECTED:** 8 / 19 / 1971

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 451.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1049C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	20.0	0.0	
325.0	PLEISTOCENE		SAND & GRAVEL	58.0	20.0	
267.0	MODESTO		LIMESTONE	5.0	78.0	
262.0	MODESTO		SHALE	52.0	83.0	
210.0	MODESTO		SANDY SHALE	73.0	135.0	
137.0	MODESTO		GRAY SHALE	52.0	208.0	
85.0	CARBONDALE	DANVILLE	COAL	2.2	260.0	
82.8	CARBONDALE		SHALE	17.4	262.2	
65.4	CARBONDALE		SANDY SHALE	8.4	279.6	
57.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	288.0	
53.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	292.0	
35.0	CARBONDALE	BRERETON	LIMESTONE	5.5	310.0	
29.5	CARBONDALE	ANNA	BLACK SHALE	0.5	315.5	
29.0	CARBONDALE	HERRIN	COAL	4.0	316.0	
25.0	CARBONDALE		UNDERCLAY	3.0	320.0	
22.0	CARBONDALE		SANDSTONE	3.0	323.0	
19.0	CARBONDALE		LIMESTONE	3.6	326.0	
15.4	CARBONDALE		SANDY SHALE	41.0	329.6	
-25.6	CARBONDALE	BRIAR HILL	COAL	2.4	370.6	
-28.0	CARBONDALE		SANDY SHALE	20.0	373.0	
-48.0	CARBONDALE		GRAY SHALE	46.4	393.0	
-94.4	CARBONDALE		SANDSTONE	3.7	439.4	
-98.1	CARBONDALE	SPRINGFIELD	COAL	5.7	443.1	
-103.8	CARBONDALE		UNDERCLAY	2.2	448.8	

MAPID: 05903590000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.058378 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.759309 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 320.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1049-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
85.0	CARBONDALE	DANVILLE	COAL	2.2	260.0	
82.8	CARBONDALE		SILTY SHALE	25.8	262.2	
57.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	288.0	
53.0	CARBONDALE	LAWSON	SILTY SHALE	18.0	292.0	
35.0	CARBONDALE	BRERETON	LIMESTONE	5.5	310.0	
29.5	CARBONDALE	ANNA	BLACK SHALE	0.5	315.5	
29.0	CARBONDALE	HERRIN	COAL	4.0	316.0	

MAPID: 05901154000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.071256 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743626 **DATE COLLECTED:** 1 / 6 / 1953

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 411.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 54 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
270.0	MODESTO		SHALE	42.8	70.0	
227.2	MODESTO		BLACK SHALE	2.2	112.8	
225.0	MODESTO		COAL	0.5	115.0	
224.5	MODESTO		SANDSTONE	89.0	115.5	
135.5	MODESTO		SHALE	25.5	204.5	
110.0	CARBONDALE	DANVILLE	COAL	2.3	230.0	
107.7	CARBONDALE		SHALE	5.2	232.3	
102.5	CARBONDALE		SANDSTONE	5.0	237.5	
97.5	CARBONDALE		SHALE	0.8	242.5	
96.7	CARBONDALE	ALLENBY	COAL	0.5	243.3	
96.2	CARBONDALE		UNDERCLAY	2.7	243.8	
93.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	246.5	
87.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.5	253.0	
85.5	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	254.5	
78.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.3	262.0	
67.7	CARBONDALE		BLACK SHALE	2.8	272.3	
65.0	CARBONDALE	BRERETON	LIMESTONE	1.0	275.0	
64.0	CARBONDALE	HERRIN	COAL	3.3	276.0	
60.7	CARBONDALE	HERRIN	BLUE BAND	0.2	279.3	
60.5	CARBONDALE	HERRIN	COAL	0.7	279.5	
59.8	CARBONDALE		UNDERCLAY	5.5	280.2	
54.3	CARBONDALE		SHALY SANDSTONE	19.3	285.7	
35.0	CARBONDALE		SANDY SHALE	21.0	305.0	
14.0	CARBONDALE	BRIAR HILL	COAL	1.0	326.0	
13.0	CARBONDALE		SANDY SHALE	4.0	327.0	
9.0	CARBONDALE		SHALE	3.0	331.0	
6.0	CARBONDALE		SANDY SHALE	9.5	334.0	
-3.5	CARBONDALE		SANDSTONE	24.5	343.5	
-28.0	CARBONDALE		SANDY SHALE	5.0	368.0	
-33.0	CARBONDALE		GRAY SHALE	26.4	373.0	
-59.4	CARBONDALE	ST. DAVID	LIMESTONE	0.7	399.4	
-60.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	400.1	
-64.0	CARBONDALE	SPRINGFIELD	BONE COAL	0.2	404.0	
-64.2	CARBONDALE	SPRINGFIELD	COAL	5.2	404.2	
-69.3	CARBONDALE		UNDERCLAY	1.7	409.3	

MAPID: 05901154000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.071256 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.743626 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 279.7 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERY CO 54 **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
108.8	CARBONDALE	DANVILLE	COAL	2.2	231.2	
106.6	CARBONDALE		SHALE & SANDSTONE	11.2	233.4	
95.4	CARBONDALE	ALLENBY	COAL	0.4	244.6	
95.1	CARBONDALE		CLAYSTONE	3.1	244.9	
92.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	248.0	
87.0	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.3	253.0	
86.7	CARBONDALE	LAWSON	CLAYSTONE	0.5	253.3	
86.2	CARBONDALE	LAWSON	GRAY SHALE	0.9	253.8	
85.2	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	7.1	254.8	
78.2	CARBONDALE	LAWSON	GRAY SHALE	11.7	261.8	
66.5	CARBONDALE	JAMESTOWN	BONE COAL	0.5	273.5	
66.0	CARBONDALE		BLACK SHALE	1.4	274.0	
64.6	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	0.6	275.4	
64.0	CARBONDALE	HERRIN	COAL	3.7	276.0	

MAPID: 05903531000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 660' N line, 1320' E line of NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.070156 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.746359 **DATE COLLECTED:** 7 / 1 / 1971

SURFACE ELEVATION (FT.): 335.0 **LOGGED (FT.):** 423.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1043C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
335.0	PLEISTOCENE		CLAY	10.0	0.0	
325.0	PLEISTOCENE		SAND & GRAVEL	61.5	10.0	
263.5	MODESTO		LIMESTONE	3.5	71.5	
260.0	MODESTO		GRAY SHALE	47.0	75.0	
213.0	MODESTO		BLACK SHALE	3.0	122.0	
210.0	MODESTO		LIMESTONE	2.0	125.0	
208.0	MODESTO		COAL	1.2	127.0	W.KY. #24
206.8	MODESTO		UNDERCLAY	2.8	128.2	
204.0	MODESTO		SANDSTONE	52.0	131.0	
152.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.6	183.0	
150.4	MODESTO		SANDSTONE	25.4	184.6	
125.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	210.0	
122.0	MODESTO		GRAY SHALE	4.0	213.0	
118.0	MODESTO		SANDY SHALE	26.0	217.0	
92.0	CARBONDALE	DANVILLE	COAL	1.5	243.0	
90.5	CARBONDALE		SANDY SHALE	14.5	244.5	
76.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	259.0	
72.0	CARBONDALE		SANDY SHALE	19.0	263.0	
53.0	CARBONDALE	BRERETON	LIMESTONE	3.0	282.0	
50.0	CARBONDALE	ANNA	BLACK LIMESTONE	1.4	285.0	PROBABLY BKSH
48.6	CARBONDALE	ANNA	LIMESTONE	0.7	286.4	
47.9	CARBONDALE	HERRIN	COAL	2.9	287.1	
45.0	CARBONDALE		UNDERCLAY	3.0	290.0	
42.0	CARBONDALE		SANDSTONE	24.0	293.0	
18.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.0	317.0	
17.0	CARBONDALE		SANDSTONE	26.0	318.0	
-9.0	CARBONDALE	BRIAR HILL	COAL	1.8	344.0	
-10.8	CARBONDALE		SANDY SHALE	10.2	345.8	
-21.0	CARBONDALE		GRAY SHALE	44.0	356.0	
-65.0	CARBONDALE		GRAY SHALE & LIMESTONE	11.8	400.0	
-76.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.4	411.8	
-80.2	CARBONDALE		GRAY SHALE	0.4	415.2	
-80.6	CARBONDALE	SPRINGFIELD	COAL	5.3	415.6	
-85.9	CARBONDALE		UNDERCLAY	2.2	420.9	

MAPID: 05903532000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1650' S line, 1' W line of SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.083656 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.73806 **DATE COLLECTED:** 7 / 23 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 393.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1045C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-12

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	15.0	0.0	
325.0	PLEISTOCENE		SAND & GRAVEL	56.0	15.0	
269.0	MODESTO		SHALE	43.0	71.0	
226.0	MODESTO		BLACK SHALE	2.0	114.0	
224.0	MODESTO		COAL	0.8	116.0	W.KY. #24
223.2	MODESTO		UNDERCLAY	2.2	116.8	
221.0	MODESTO		SANDSTONE	11.0	119.0	
210.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	130.0	
206.5	MODESTO		SANDSTONE	60.5	133.5	
146.0	MODESTO		SANDY SHALE	25.0	194.0	
121.0	CARBONDALE	DANVILLE	COAL	1.7	219.0	
119.3	CARBONDALE		GRAY SHALE	10.3	220.7	
109.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	231.0	
104.5	CARBONDALE		SANDY SHALE	20.0	235.5	
84.5	CARBONDALE	BRERETON	LIMESTONE	5.0	255.5	
79.5	CARBONDALE	ANNA	BLACK SHALE	1.1	260.5	
78.4	CARBONDALE	HERRIN	COAL	3.2	261.6	
75.2	CARBONDALE		UNDERCLAY	2.2	264.8	
73.0	CARBONDALE		SANDY SHALE	14.0	267.0	
59.0	CARBONDALE		GRAY SHALE	35.0	281.0	
24.0	CARBONDALE	BRIAR HILL	COAL	1.1	316.0	
22.9	CARBONDALE		GRAY SHALE	9.9	317.1	
13.0	CARBONDALE		SANDSTONE	10.0	327.0	
3.0	CARBONDALE		GRAY SHALE	45.4	337.0	
-42.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	382.4	
-45.2	CARBONDALE	SPRINGFIELD	COAL	5.7	385.2	
-50.9			UNDERCLAY	2.1	390.9	

MAPID: 05903577000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 14 **QUARTERS/FOOTAGES:** 2310' S line, 330' E line of SE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.066671 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.743764 **DATE COLLECTED:** 1 / 1 / 1971

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 428.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1050C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION P-10

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	7.0	0.0	
338.0	PLEISTOCENE		SAND & GRAVEL	73.0	7.0	
265.0	MODESTO		GRAY SHALE	5.0	80.0	
260.0	MODESTO		LIMESTONE	5.0	85.0	
255.0	MODESTO		GRAY SHALE	56.0	90.0	
199.0	MODESTO		BLACK SHALE	0.8	146.0	
198.2	MODESTO		COAL	1.3	146.8	W.KY. #24
196.9	MODESTO		UNDERCLAY	0.9	148.1	
196.0	MODESTO		SANDSTONE	81.0	149.0	
115.0	MODESTO		GRAY SHALE	16.0	230.0	
99.0	CARBONDALE	DANVILLE	COAL	2.7	246.0	
96.3	CARBONDALE		GRAY SHALE	13.7	248.7	
82.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	262.4	
77.6	CARBONDALE	ANVIL ROCK	SANDSTONE	19.6	267.4	
58.0	CARBONDALE	BRERETON	LIMESTONE	3.0	287.0	
55.0	CARBONDALE	ANNA	BLACK SHALE	0.6	290.0	
54.4	CARBONDALE	HERRIN	COAL	4.4	290.6	
50.0	CARBONDALE		UNDERCLAY	2.0	295.0	
48.0	CARBONDALE		SANDY SHALE	12.0	297.0	
36.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	5.0	309.0	
31.0	CARBONDALE		SANDY SHALE	29.0	314.0	
2.0	CARBONDALE	BRIAR HILL	COAL	2.2	343.0	
-0.2	CARBONDALE		SANDY SHALE	19.8	345.2	
-20.0	CARBONDALE		SHALE	56.0	365.0	
-76.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	421.0	
-78.6	CARBONDALE	SPRINGFIELD	COAL	5.1	423.6	

MAPID: 05900360000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.084812 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.739929 **DATE COLLECTED:** 0 / 0 / 1944

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 3510.0 **LOG TYPE:**

SOURCE: CHERRY&KD, GRAY AL 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
86.0	CARBONDALE	HERRIN	COAL	3.0	265.0	
-42.0	CARBONDALE	SPRINGFIELD	COAL	4.0	393.0	

MAPID: 05901072000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 390' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.100532 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.734408 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	3.0	252.0	
-	CARBONDALE	BRIAR HILL	COAL	-	302.0	
-	CARBONDALE	SPRINGFIELD	COAL	5.0	380.0	BLACK SHALE ROOF
-	CARBONDALE	HOUCHIN CREEK	COAL	-	440.0	

MAPID: 05901072000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 390' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.100532 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.734408 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
146.5	CARBONDALE	DANVILLE	COAL	2.5	193.5	
144.0	CARBONDALE		SHALE & SANDSTONE	15.0	196.0	
129.0	CARBONDALE	ALLENBY	COAL	1.0	211.0	
128.0	CARBONDALE		CLAYSTONE & SHALE	7.5	212.0	
120.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	219.5	
116.0	CARBONDALE	LAWSON	GRAY SHALE	2.0	224.0	
114.0	CARBONDALE	LAWSON	DARK GRAY SHALE	14.0	226.0	
100.0	CARBONDALE	LAWSON	GRAY SHALE	6.0	240.0	
94.0	CARBONDALE	BRERETON	LIMESTONE	3.0	246.0	
91.0	CARBONDALE	ANNA	BLACK SHALE	3.0	249.0	
88.0	CARBONDALE	HERRIN	COAL	3.0	252.0	

MAPID: 05901072000C **VERSION:** 3 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 390' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.100532 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.734408 **DATE COLLECTED:** 10 / 0 / 1951

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1708.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-195.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	545.0	
-286.0	SPOON	DAVIS	UNCLASSIFIED	-	636.0	
-1358.0	BASE OF PENN.		UNCLASSIFIED	-	1708.0	

MAPID: 05901072000C **VERSION:** 4 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' S line, 390' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.100532 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.734408 **DATE COLLECTED:** 10 / 0 / 1951

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L, HENRY E L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-45.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	445.0	
-95.0	CARBONDALE	SURVANT	COAL	1.3	495.0	
-148.0	CARBONDALE	COLCHESTER	COAL	0.5	548.0	
-209.0	CARBONDALE	DEKOVEN	COAL	3.0	609.0	
-209.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	609.0	
-235.0	CARBONDALE	DAVIS	COAL	3.0	635.0	
-265.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	665.0	60% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900316000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SE SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.112485 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.734305 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 3530.0 **LOG TYPE:**

SOURCE: MARTIN R B, CLAYTON H 0001 **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
66.0	CARBONDALE	HERRIN	COAL	3.0	287.0	
-51.0	CARBONDALE	SPRINGFIELD	COAL	5.0	404.0	

MAPID: 05901073000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.117165 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.734254 **DATE COLLECTED:** 1 / 0 / 1949

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1678.0 **LOG TYPE:** Electric Log

SOURCE: COCHRAN A L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1328.0	BASE OF PENN.		UNCLASSIFIED	-	1678.0	

MAPID: 05901073000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.117165 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.734254 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 2860.0 **LOG TYPE:** Electric Log

SOURCE: COCHRAN A L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
120.0	CARBONDALE	DANVILLE	COAL	-	230.0	
98.0	CARBONDALE	BANKSTON FORK	LIMESTONE	-	252.0	
88.0	CARBONDALE	ANVIL ROCK	SILTSTONE	10.0	262.0	
62.0	CARBONDALE	HERRIN	COAL	2.0	288.0	
48.0	CARBONDALE	VERMILIONVILLE	SILTSTONE	8.0	302.0	
10.0	CARBONDALE	BRIAR HILL	COAL	-	340.0	
7.0	CARBONDALE	CANTON	SILTSTONE/SANDSTONE	10.0	343.0	
-58.0	CARBONDALE	SPRINGFIELD	COAL	5.0	408.0	BLACK SHALE ROOF
-88.0	CARBONDALE	SS BELOW NO. 5	SILTSTONE/SANDSTONE	42.0	438.0	
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	482.0	

MAPID: 05902585000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1700' S line, 1650' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.114944 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.738056 **DATE COLLECTED:** 9 / 0 / 1961

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 2803.0 **LOG TYPE:** Electric Log

SOURCE: KNIGHT, PAUL S., SHRINERS HOSP **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-165.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	520.0	
-220.0	CARBONDALE	SURVANT	COAL	1.2	575.0	
-275.0	CARBONDALE	COLCHESTER	COAL	0.5	630.0	
-327.0	CARBONDALE	DEKOVEN	COAL	3.0	682.0	
-327.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	682.0	
-351.0	CARBONDALE	DAVIS	COAL	4.0	706.0	
-385.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	740.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05903261000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1274' S line, 85' W line of SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.120398 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.736827 **DATE COLLECTED:** 4 / 13 / 1967

SURFACE ELEVATION (FT.): 359.8 **LOGGED (FT.):** 451.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1916Q **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.8	PLEISTOCENE		SAND/CLAY	32.0	0.0	
327.8	MODESTO		GRAY SHALE	41.6	32.0	
286.2	MODESTO	CHAPEL	COAL	0.6	73.6	
285.6	MODESTO		GRAY SHALE	13.9	74.2	
271.7	MODESTO		SANDY SHALE	9.3	88.1	
262.4	MODESTO		GRAY SHALE	9.1	97.4	
253.3	MODESTO		SANDSTONE	11.5	106.5	
241.8	MODESTO		SANDY SHALE	15.9	118.0	
225.9	MODESTO		GRAY SHALE	2.8	133.9	
223.1	MODESTO		LIMESTONE	3.1	136.7	
220.0	MODESTO		GRAY SHALE	1.4	139.8	
218.6	MODESTO		SANDY SHALE	12.0	141.2	
206.6	MODESTO		GRAY SHALE	54.5	153.2	
152.1	MODESTO	WEST FRANKLIN	LIMESTONE	4.3	207.7	
147.8	MODESTO	WEST FRANKLIN	GRAY SHALE	0.8	212.0	
147.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.8	212.8	
142.2	MODESTO		GRAY SHALE	54.3	217.6	
87.9	CARBONDALE	DANVILLE	COAL	0.7	271.9	
87.2	CARBONDALE		GRAY SHALE	1.5	272.6	
85.7	CARBONDALE		SANDY SHALE	16.6	274.1	
69.1	CARBONDALE		GRAY SHALE	2.0	290.7	
67.1	CARBONDALE	BANKSTON FORK	LIMESTONE	3.2	292.7	
63.9	CARBONDALE		GRAY SHALE	23.9	295.9	
40.0	CARBONDALE	BRERETON	LIMESTONE	1.3	319.8	
38.7	CARBONDALE	ANNA	BLACK SHALE	4.3	321.1	
34.4	CARBONDALE	HERRIN	COAL	2.6	325.4	
31.8	CARBONDALE		GRAY SHALE	2.1	328.0	
29.7	CARBONDALE		SANDY SHALE	10.8	330.1	
18.9	CARBONDALE		SANDSTONE	22.9	340.9	
-4.0	CARBONDALE		SANDY SHALE	11.7	363.8	
-15.7	CARBONDALE	BRIAR HILL	COAL	1.5	375.5	
-17.2	CARBONDALE		UNDERCLAY	0.9	377.0	
-18.1	CARBONDALE		SANDY SHALE	50.7	377.9	
-68.8	CARBONDALE		GRAY SHALE	8.9	428.6	
-77.7	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	0.1	437.5	
-77.9	CARBONDALE	ST. DAVID	LIMESTONE	0.3	437.7	
-78.2	CARBONDALE	TURNER MINE	SHALE	2.1	438.0	
-80.3	CARBONDALE	TURNER MINE	DARK SHALE	0.9	440.1	
-81.2	CARBONDALE	TURNER MINE	GRAY SHALE	0.4	441.0	

-81.6	CARBONDALE	SPRINGFIELD	COAL	5.2	441.4
-86.7	CARBONDALE		GRAY SHALE	0.9	446.5
-87.6	CARBONDALE		SANDY SHALE	4.1	447.4

MAPID: 05903537000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1' N line, 1980' E line of NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.109005 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.748064 **DATE COLLECTED:** 5 / 18 / 1971

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 477.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1026-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION K-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	23.5	0.0	
346.5	MODESTO		GRAY SHALE	85.5	23.5	
261.0	MODESTO		BLACK SHALE	2.0	109.0	
259.0	MODESTO	CHAPEL	COAL	1.0	111.0	
258.0	MODESTO		UNDERCLAY	5.0	112.0	
253.0	MODESTO		GRAY SHALE	21.0	117.0	
232.0	MODESTO		SANDSTONE	10.0	138.0	
222.0	MODESTO		SHALY SANDSTONE	23.0	148.0	
199.0	MODESTO		GRAY SHALE	5.0	171.0	
194.0	MODESTO		LIMESTONE	3.0	176.0	
191.0	MODESTO		SANDY SHALE	60.8	179.0	
130.2	MODESTO	WEST FRANKLIN	LIMESTONE	1.7	239.8	
128.5	MODESTO		GRAY SHALE	6.5	241.5	
122.0	MODESTO		GRAY SHALE	55.0	248.0	
67.0	CARBONDALE	DANVILLE	COAL	2.0	303.0	
65.0	CARBONDALE		SHALE	7.0	305.0	
58.0	CARBONDALE		SANDY SHALE	8.5	312.0	
49.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	320.5	
43.0	CARBONDALE		SHALE	3.0	327.0	
40.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	330.0	
37.0	CARBONDALE		GRAY SHALE	11.2	333.0	
25.8	CARBONDALE	BRERETON	LIMESTONE	0.8	344.2	
25.0	CARBONDALE	ANNA	BLACK SHALE	5.0	345.0	
20.0	CARBONDALE	HERRIN	COAL	2.7	350.0	
17.3	CARBONDALE		UNDERCLAY	3.3	352.7	
14.0	CARBONDALE		SANDSTONE	11.0	356.0	
3.0	CARBONDALE		SHALY SANDSTONE	15.0	367.0	
-12.0	CARBONDALE		SANDY SHALE	14.5	382.0	
-26.5	CARBONDALE	BRIAR HILL	COAL	1.5	396.5	
-28.0	CARBONDALE		SANDY SHALE	9.0	398.0	
-37.0	CARBONDALE		SANDSTONE	21.0	407.0	
-58.0	CARBONDALE		SHALE	37.7	428.0	
-95.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	465.7	
-99.0	CARBONDALE	SPRINGFIELD	COAL	5.2	469.0	
-104.2	CARBONDALE		SANDSTONE	3.5	474.2	

MAPID: 05903591000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1320' S line, 1' E line of SE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.101939 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.737136 **DATE COLLECTED:** 9 / 21 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 399.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1055C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION Q13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	11.0	0.0	
329.0	PLEISTOCENE		SAND & GRAVEL	56.0	11.0	
273.0	MODESTO		LIMESTONE	0.4	67.0	
272.6	MODESTO		GRAY SHALE	73.6	67.4	
199.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	141.0	
197.7	MODESTO		GRAY SHALE	81.7	142.3	
116.0	MODESTO		BLACK SHALE	0.8	224.0	
115.2	CARBONDALE	DANVILLE	COAL	2.7	224.8	
112.5	CARBONDALE		SANDY SHALE	12.5	227.5	
100.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	240.0	
95.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.2	244.5	
74.3	CARBONDALE	BRERETON	LIMESTONE	1.3	265.7	
73.0	CARBONDALE	ANNA	BLACK SHALE	1.0	267.0	
72.0	CARBONDALE	ANNA	BLACK SHALE & LIMESTONE	1.0	268.0	
71.0	CARBONDALE	ANNA	BLACK SHALE	2.0	269.0	
69.0	CARBONDALE	HERRIN	COAL	5.5	271.0	
63.5	CARBONDALE		UNDERCLAY	2.5	276.5	
61.0	CARBONDALE		SANDY SHALE	41.0	279.0	
20.0	CARBONDALE	BRIAR HILL	COAL	2.3	320.0	
17.7	CARBONDALE		SANDY SHALE	66.7	322.3	
-49.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	389.0	
-51.6	CARBONDALE	SPRINGFIELD	COAL	5.3	391.6	
-56.9	CARBONDALE		UNDERCLAY	2.1	396.9	

MAPID: 05903592000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1320' S line, 2640' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.111108 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.737046 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 286.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1061-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
100.3	CARBONDALE		SILTY SHALE	11.5	249.7	
88.8	CARBONDALE	BANKSTON FORK	LIMESTONE	8.0	261.2	
80.8	CARBONDALE	LAWSON	SILTY SHALE	10.5	269.2	
70.3	CARBONDALE	BRERETON	LIMESTONE	1.0	279.7	
69.3	CARBONDALE	ANNA	BLACK SHALE	2.3	280.7	
67.0	CARBONDALE	HERRIN	COAL	3.1	283.0	

MAPID: 05901074000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.130831 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.745216 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 3090.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-73.0	CARBONDALE	HERRIN	COAL	3.0	550.0	
-119.0	CARBONDALE	BRIAR HILL	COAL	-	596.0	
-193.0	CARBONDALE	SPRINGFIELD	COAL	6.0	670.0	BLACK SHALE ROOF
-260.0	CARBONDALE	HOUCHIN CREEK	COAL	-	737.0	

MAPID: 05901157000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SE NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.121775 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.741543 **DATE COLLECTED:** 1 / 0 / 1953

SURFACE ELEVATION (FT.): 384.3 **LOGGED (FT.):** 495.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 57 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.3	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
374.3	MODESTO		SOFT SHALE	110.0	10.0	
264.3	MODESTO	CHAPEL	COAL	0.5	120.0	
263.8	MODESTO		UNDERCLAY	1.0	120.5	
262.8	MODESTO		SANDY SHALE	10.0	121.5	
252.8	MODESTO		SHALE	37.5	131.5	
215.3	MODESTO		DARK SHALE	4.0	169.0	
211.3	MODESTO		LIMESTONE	3.8	173.0	
207.5	MODESTO		SANDY SHALE	5.3	176.8	
202.3	MODESTO		DARK SHALE	8.0	182.0	
194.3	MODESTO		SANDY SHALE	8.0	190.0	
186.3	MODESTO		SHALE	22.0	198.0	
164.3	MODESTO		VARRIGATED SHALE	2.0	220.0	
162.3	MODESTO		SANDY SHALE	4.5	222.0	
157.8	MODESTO		SANDSTONE	5.0	226.5	
152.8	MODESTO		SANDY SHALE	9.5	231.5	
143.3	MODESTO		VARRIGATED SHALE	6.3	241.0	
137.0	MODESTO		SHALE W/ LIME NODULES	10.8	247.3	
126.3	MODESTO		SHALE	58.3	258.0	
68.0	CARBONDALE	DANVILLE	COAL	2.0	316.3	
66.0	CARBONDALE		SHALE	7.3	318.3	
58.7	CARBONDALE	ALLENBY	COAL	0.4	325.6	
58.3	CARBONDALE		SHALE	1.0	326.0	
57.3	CARBONDALE		LIMESTONE	0.4	327.0	
56.9	CARBONDALE		SHALE W/ LIME NODULES	7.1	327.4	
49.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.2	334.5	
43.6	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.7	340.7	
38.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.2	346.3	
33.8	CARBONDALE		SHALE	7.4	350.5	
26.4	CARBONDALE		FOSSILIFEROUS SHALE	0.6	357.9	
25.8	CARBONDALE	BRERETON	LIMESTONE	1.7	358.5	
24.1	CARBONDALE	ANNA	BLACK SHALE	5.7	360.2	
18.5	CARBONDALE	HERRIN	COAL	1.2	365.8	
17.3	CARBONDALE	HERRIN	BLUE BAND	0.2	367.0	
17.0	CARBONDALE	HERRIN	COAL	0.9	367.3	
16.1	CARBONDALE		UNDERCLAY	3.1	368.2	
13.0	CARBONDALE		SANDY SHALE	4.8	371.3	
8.3	CARBONDALE		SANDSTONE	17.5	376.0	
-9.2	CARBONDALE		SANDY SHALE	20.3	393.5	

-29.5	CARBONDALE	BRIAR HILL	COAL	1.6	413.8
-31.1	CARBONDALE		SANDY SHALE	8.6	415.4
-39.7	CARBONDALE		SANDSTONE	9.0	424.0
-48.7	CARBONDALE		SANDY SHALE	17.0	433.0
-65.7	CARBONDALE		GRAY SHALE	28.2	450.0
-93.9	CARBONDALE		FOSSILIFEROUS SHALE	1.3	478.2
-95.2	CARBONDALE	ST. DAVID	LIMESTONE	0.6	479.5
-95.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	480.1
-99.6	CARBONDALE	SPRINGFIELD	COAL	5.4	483.9
-105.0	CARBONDALE		UNDERCLAY	1.2	489.3
-106.2	CARBONDALE		SILTSTONE	4.5	490.5

MAPID: 05901158000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.120561 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.747939 **DATE COLLECTED:** 2 / 25 / 1953

SURFACE ELEVATION (FT.): 440.5 **LOGGED (FT.):** 582.5 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 58 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
440.5	PLEISTOCENE		UNCONSOLIDATED	73.0	0.0	
367.5	MODESTO		BLACK SHALE	2.0	73.0	
365.5	MODESTO		SOFT SHALE	8.0	75.0	
357.5	MODESTO		SANDY SHALE	3.0	83.0	
354.5	MODESTO		LIMESTONE	0.2	86.0	
354.3	MODESTO		SOFT SHALE	15.3	86.2	
339.0	MODESTO		SHALE/SANDSTONE/LIMESTONE	31.5	101.5	
307.5	MODESTO		SHALE WITH LIMESTONE	1.0	133.0	
306.5	MODESTO		SANDY SHALE	11.0	134.0	
295.5	MODESTO		SHALE	65.4	145.0	
230.1	MODESTO		LIMESTONE	0.3	210.4	
229.7	MODESTO		BLACK SHALE	2.5	210.8	
227.2	MODESTO	CHAPEL	COAL	1.3	213.3	
226.0	MODESTO		UNDERCLAY	4.0	214.5	
222.0	MODESTO		SANDY SHALE	19.0	218.5	
203.0	MODESTO		SHALE	15.5	237.5	
187.5	MODESTO		SHALE	35.0	253.0	
152.5	MODESTO		SANDY SHALE	9.5	288.0	
143.0	MODESTO		GRAY SHALE	10.5	297.5	
132.5	MODESTO		SOFT SHALE	3.0	308.0	
129.5	MODESTO		SANDY SHALE	13.0	311.0	
116.5	MODESTO		DARK SHALE	6.0	324.0	
110.5	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	330.0	
109.5	MODESTO	WEST FRANKLIN	SHALY LIMESTONE	2.3	331.0	
107.2	MODESTO		VARRIGATED SHALE	10.8	333.3	
96.5	MODESTO		GRAY SHALE	63.8	344.0	
32.7	CARBONDALE	DANVILLE	COAL	2.0	407.8	
30.7	CARBONDALE		SHALE	4.6	409.8	
26.2	CARBONDALE	ALLENBY	COAL	0.3	414.3	
25.8	CARBONDALE		SOFT SHALE	6.8	414.7	
19.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.5	421.5	
12.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.0	428.0	
-5.5	CARBONDALE	BRERETON	LIMESTONE	2.0	446.0	
-7.5	CARBONDALE	ANNA	BLACK SHALE	6.2	448.0	
-13.7	CARBONDALE	HERRIN	COAL	0.6	454.2	
-14.3	CARBONDALE	HERRIN	BLUE BAND	0.2	454.8	
-14.5	CARBONDALE	HERRIN	COAL	1.1	455.0	
-15.5	CARBONDALE		UNDERCLAY	5.2	456.0	

-20.7	CARBONDALE		SANDSTONE	14.5	461.2
-35.2	CARBONDALE		SANDY SHALE	19.8	475.7
-55.0	CARBONDALE		SHALE	5.8	495.5
-60.8	CARBONDALE		FOSSILIFEROUS SHALE	0.8	501.3
-61.6	CARBONDALE	BRIAR HILL	COAL	1.7	502.1
-63.3	CARBONDALE		SHALY SANDSTONE	20.8	503.8
-84.0	CARBONDALE		SANDY SHALE	13.0	524.5
-97.0	CARBONDALE		SHALE	30.0	537.5
-127.0	CARBONDALE		FOSSILIFEROUS SHALE	2.5	567.5
-129.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	570.0
-131.3	CARBONDALE	SPRINGFIELD	COAL	5.3	571.8
-136.7	CARBONDALE		UNDERCLAY	2.2	577.2
-138.8	CARBONDALE		LIMESTONE	2.5	579.3
-141.3	CARBONDALE		SHALE	0.7	581.8

MAPID: 05901164000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.138823 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.740698 **DATE COLLECTED:** 4 / 17 / 1953

SURFACE ELEVATION (FT.): 545.0 **LOGGED (FT.):** 528.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 64 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
545.0	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
505.0	MODESTO		SOFT SHALE	8.0	40.0	
497.0	MODESTO	WOMAC	COAL	0.3	48.0	
496.7	MODESTO		DARK SHALE	39.7	48.3	
457.0	MODESTO		SHALE	9.4	88.0	
447.6	MODESTO		SANDSTONE	2.8	97.4	
444.8	MODESTO		SILTSTONE/SANDSTONE	2.3	100.2	
442.5	MODESTO		SILTSTONE	24.5	102.5	
418.0	MODESTO		SANDY DARK SHALE	21.0	127.0	
397.0	MODESTO		GRAY SHALE	24.5	148.0	
372.5	MODESTO		DARK SHALE	4.0	172.5	
368.5	MODESTO		LIMESTONE	0.5	176.5	
368.0	MODESTO		SHALE W/ LIME NODULES	5.0	177.0	
363.0	MODESTO		SHALE	5.0	182.0	
358.0	MODESTO		SHALE W/ LIME NODULES	8.5	187.0	
349.5	MODESTO		COAL	0.4	195.5	
349.1	MODESTO		SANDY SHALE	3.1	195.9	
346.0	MODESTO		SHALY SANDSTONE	12.0	199.0	
334.0	MODESTO		SANDSTONE	6.8	211.0	
327.2	MODESTO		SHALY SANDSTONE	4.6	217.8	
322.6	MODESTO		GRAY SHALE	20.8	222.4	
301.8	MODESTO		SANDY SHALE	9.9	243.2	
291.9	MODESTO		SHALE	49.8	253.1	
242.2	MODESTO		FOSSILIFEROUS SHALE	1.0	302.8	
241.2	MODESTO	CHAPEL	COAL	1.0	303.8	
240.2	MODESTO		UNDERCLAY	2.7	304.8	
237.5	MODESTO		SANDY SHALE	7.5	307.5	
230.0	MODESTO		LIMESTONE	0.5	315.0	
229.5	MODESTO		SANDY SHALE	13.0	315.5	
216.5	MODESTO		SHALY SANDSTONE	33.5	328.5	
183.0	MODESTO		SHALE W/ LIME NODULES	3.5	362.0	
179.5	MODESTO		LIMESTONE	5.5	365.5	
174.0	MODESTO		SHALY SANDSTONE	10.0	371.0	
164.0	MODESTO		SHALE	20.0	381.0	
144.0	MODESTO		SHALE/COAL	0.5	401.0	
143.5	MODESTO		SANDSTONE	5.5	401.5	
138.0	MODESTO		SHALE W/ LIME NODULES	10.0	407.0	
128.0	MODESTO		SOFT SHALE	8.0	417.0	
120.0	MODESTO		SANDY SHALE	6.0	425.0	

114.0	MODESTO		SANDSTONE	24.0	431.0	
90.0	MODESTO		SHALE	4.6	455.0	
85.4	MODESTO		SHALE W/ LIME NODULES	4.4	459.6	
81.0	MODESTO		SHALE	31.0	464.0	
50.0	MODESTO		FOSSILIFEROUS LIMESTONE	1.0	495.0	
49.0	CARBONDALE	DANVILLE	COAL	1.7	496.0	
47.3	CARBONDALE		UNDERCLAY	2.3	497.7	
45.0	CARBONDALE		SANDY SHALE	4.0	500.0	
41.0	CARBONDALE		SANDSTONE	6.0	504.0	
35.0	CARBONDALE		SHALE	6.8	510.0	
28.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	516.8	
25.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	520.0	
23.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	522.0	LOST HOLE

MAPID: 05901177000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.134279 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74068 **DATE COLLECTED:** 7 / 23 / 1953

SURFACE ELEVATION (FT.): 515.3 **LOGGED (FT.):** 686.0 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERIES CO. 77 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
515.3	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0	
465.3	MODESTO		SOFT SHALE	5.0	50.0	
460.3	MODESTO		SANDY SHALE	16.0	55.0	
444.3	MODESTO		SANDSTONE	2.0	71.0	
442.3	MODESTO		SANDY SHALE	81.0	73.0	
361.3	MODESTO		LIMESTONE	0.5	154.0	
360.8	MODESTO	WOMAC	COAL	0.5	154.5	
360.3	MODESTO		SHALE W/ LIME NODULES	5.0	155.0	
355.3	MODESTO		SOFT SHALE	5.0	160.0	
350.3	MODESTO		SHALE	55.0	165.0	
295.3	MODESTO		SANDY SHALE	50.0	220.0	
245.3	MODESTO		SOFT SHALE	32.0	270.0	
213.3	MODESTO		SHALY SANDSTONE	16.0	302.0	
197.3	MODESTO		SANDSTONE	3.0	318.0	
194.3	MODESTO		SANDY SHALE	30.5	321.0	
163.8	MODESTO		LIMESTONE	3.5	351.5	
160.3	MODESTO		SHALE	5.5	355.0	
154.8	MODESTO		SOFT SHALE	14.5	360.5	
140.3	MODESTO		SHALE W/ LIME NODULES	25.0	375.0	
115.3	MODESTO		SHALE	60.0	400.0	
55.3	MODESTO		SANDY SHALE	34.0	460.0	
21.3	CARBONDALE	DANVILLE	COAL	1.0	494.0	
20.3	CARBONDALE		UNDERCLAY	2.0	495.0	
18.3	CARBONDALE		SHALE	2.0	497.0	
16.3	CARBONDALE		LIMESTONE	0.5	499.0	
15.8	CARBONDALE		SHALE	5.0	499.5	
10.8	CARBONDALE		SANDSTONE	5.5	504.5	
5.3	CARBONDALE		COAL	1.5	510.0	POSSIBLY ALLENBY
3.8	CARBONDALE		UNDERCLAY	0.5	511.5	
3.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.0	512.0	
-9.7	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	525.0	
-25.7	CARBONDALE		SHALE	2.0	541.0	
-27.7	CARBONDALE	BRERETON	LIMESTONE	1.0	543.0	
-28.7	CARBONDALE	ANNA	BLACK SHALE	5.2	544.0	
-33.9	CARBONDALE	HERRIN	SHALY COAL	1.3	549.2	
-35.1	CARBONDALE	HERRIN	SHALE	0.9	550.4	
-36.0	CARBONDALE	HERRIN	COAL	1.0	551.3	
-37.0	CARBONDALE		UNDERCLAY	4.2	552.3	
-41.2	CARBONDALE		SHALY LIMESTONE	0.5	556.5	

-41.7	CARBONDALE		SANDY SHALE	6.0	557.0
-47.7	CARBONDALE		SANDSTONE	16.0	563.0
-63.7	CARBONDALE		SHALE	16.3	579.0
-80.0	CARBONDALE	BRIAR HILL	COAL	1.8	595.3
-81.7	CARBONDALE		SANDY SHALE	5.0	597.0
-86.7	CARBONDALE		SHALY SANDSTONE	8.7	602.0
-95.4	CARBONDALE		SILTSTONE/SANDSTONE	25.3	610.7
-120.7	CARBONDALE		SANDSTONE/SILTSTONE	15.0	636.0
-135.7	CARBONDALE		SHALE	21.3	651.0
-157.0	CARBONDALE		FOSSILIFEROUS SHALE	3.0	672.3
-160.0	CARBONDALE		SHALE	1.3	675.3
-161.3	CARBONDALE	ST. DAVID	LIMESTONE	0.5	676.6
-161.8	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	677.1
-163.0	CARBONDALE	SPRINGFIELD	COAL	5.3	678.3
-168.4	CARBONDALE		UNDERCLAY	2.3	683.7

MAPID: 05901823000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.130893 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.739753 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 3120.0 **LOG TYPE:** Electric Log

SOURCE: HOWJE & KIM OIL CO., MATHIS LOUESA M **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-221.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	675.0	
-276.0	CARBONDALE	SURVANT	COAL	1.6	730.0	
-336.0	CARBONDALE	COLCHESTER	COAL	0.5	790.0	
-396.0	CARBONDALE	DEKOVEN	COAL	3.0	850.0	
-396.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	850.0	
-420.0	CARBONDALE	DAVIS	COAL	4.0	874.0	
-456.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	910.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-476.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	930.0	
-499.0	TRADEWATER	MT. RORAH	COAL	1.2	953.0	

MAPID: 05901823000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.130893 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.739753 **DATE COLLECTED:** 9 / 0 / 1955

SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 1840.0 **LOG TYPE:** Electric Log

SOURCE: HOWJE & KIM OIL CO. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1386.0	BASE OF PENN.		UNCLASSIFIED	-	1840.0	

MAPID: 05902389000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SE SE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.124101 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.736074 **DATE COLLECTED:** 11 / 0 / 1958

SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 2901.0 **LOG TYPE:** Electric Log

SOURCE: VANDENBARK JAMES H, WIEDERHOLD M E **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-171.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	532.0	
-224.0	CARBONDALE	SURVANT	COAL	1.2	585.0	
-284.0	CARBONDALE	COLCHESTER	COAL	0.5	645.0	
-339.0	CARBONDALE	DEKOVEN	COAL	4.0	700.0	
-339.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	700.0	
-364.0	CARBONDALE	DAVIS	COAL	4.0	725.0	
-399.0	TRADEWATER	SEAHORNE LS	LIMESTONE	3.0	760.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-419.0	TRADEWATER	STONEFORT	LIMESTONE	3.5	780.0	
-444.0	TRADEWATER	MT. RORAH	COAL	1.2	805.0	

MAPID: 05903473000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1980' S line, 2600' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.129808 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.73884 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 451.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1013-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
19.5	CARBONDALE	DANVILLE	COAL	1.5	380.5	
18.0	CARBONDALE		SHALE & SANDSTONE	18.7	382.0	
-0.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.4	400.7	
-5.1	CARBONDALE	LAWSON	SHALE	2.4	405.1	
-7.5	CARBONDALE	LAWSON	SANDSTONE	28.0	407.5	
-35.5	CARBONDALE	LAWSON	SILTY SHALE	6.4	435.5	
-41.9	CARBONDALE	BRERETON	LIMESTONE	1.7	441.9	
-43.6	CARBONDALE	ANNA	BLACK SHALE	5.4	443.6	
-49.0	CARBONDALE	HERRIN	COAL	2.7	449.0	

MAPID: 05903540000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.125283 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.736986 **DATE COLLECTED:** 9 / 23 / 1970

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 491.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1011-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	5.0	0.0	
375.0	MODESTO		SHALY SANDSTONE	5.0	5.0	
370.0	MODESTO		GRAY SHALE	22.2	10.0	
347.8	MODESTO		SANDY SHALE	69.3	32.2	
278.5	MODESTO		BLACK SHALE	1.0	101.5	
277.5	MODESTO	CHAPEL	COAL	1.5	102.5	
276.0	MODESTO		SHALE	2.0	104.0	
274.0	MODESTO		SANDSTONE/SHALE	10.0	106.0	
264.0	MODESTO		LIMESTONE	0.5	116.0	
263.5	MODESTO		SANDY SHALE	18.1	116.5	
245.4	MODESTO	WEST FRANKLIN	LIMESTONE	2.4	134.6	
243.0	MODESTO		SANDSTONE	25.5	137.0	
217.5	MODESTO		GRAY SHALE	7.0	162.5	
210.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	169.5	
207.5	MODESTO		SANDSTONE	14.5	172.5	
193.0	MODESTO		SANDY SHALE	50.5	187.0	
142.5	MODESTO		SANDSTONE	65.0	237.5	
77.5	MODESTO		SHALE	1.5	302.5	
76.0	CARBONDALE	DANVILLE	COAL	2.0	304.0	
74.0	CARBONDALE		SANDSTONE/SHALE	11.2	306.0	
62.8	CARBONDALE	BANKSTON FORK	LIMESTONE	9.6	317.2	
53.2	CARBONDALE	ANVIL ROCK	SANDSTONE	23.7	326.8	
29.5	CARBONDALE		SHALE	0.5	350.5	
29.0	CARBONDALE	BRERETON	LIMESTONE	3.7	351.0	
25.3	CARBONDALE	ANNA	BLACK SHALE	4.5	354.7	
20.8	CARBONDALE	HERRIN	COAL	2.7	359.2	
18.1	CARBONDALE		UNDERCLAY	0.8	361.9	
17.3	CARBONDALE		CALCAREOUS SANDSTONE	6.8	362.7	
10.5	CARBONDALE	HIGGINSVILLE	LIMESTONE	2.0	369.5	
8.5	CARBONDALE		SANDSTONE	20.0	371.5	
-11.5	CARBONDALE		SANDY SHALE	17.5	391.5	
-29.0	CARBONDALE	BRIAR HILL	COAL	1.8	409.0	
-30.8	CARBONDALE		SANDY SHALE	6.7	410.8	
-37.5	CARBONDALE		SANDSTONE	8.0	417.5	
-45.5	CARBONDALE		SANDY SHALE	34.5	425.5	
-80.0	CARBONDALE		GRAY SHALE	19.5	460.0	
-99.5	CARBONDALE		SHALE	0.7	479.5	
-100.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	480.2	

-102.2	CARBONDALE	SPRINGFIELD	COAL	5.2	482.2
-107.4	CARBONDALE		SANDY SHALE	3.8	487.4

MAPID: 05903593000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1640' N line, 1320' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.13421 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.74342 **DATE COLLECTED:** 10 / 7 / 1971

SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 701.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1057C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
530.0	PLEISTOCENE		CLAY	32.0	0.0	
498.0	BOND	CARTHAGE	LIMESTONE	6.0	32.0	
492.0	MODESTO		GRAY SHALE	134.0	38.0	
358.0	MODESTO		BLACK SHALE	1.4	172.0	
356.6	MODESTO		COAL	1.3	173.4	
355.3	MODESTO		UNDERCLAY	1.0	174.7	
354.3	MODESTO		GRAY SHALE	17.3	175.7	
337.0	MODESTO		LIMESTONE	2.0	193.0	
335.0	MODESTO		GRAY SHALE	90.0	195.0	
245.0	MODESTO		SANDY SHALE	87.0	285.0	
158.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	372.0	
154.0	MODESTO		SANDY SHALE	113.0	376.0	
41.0	CARBONDALE	DANVILLE	COAL	1.3	489.0	
39.7	CARBONDALE		UNDERCLAY	1.7	490.3	
38.0	CARBONDALE		SANDY SHALE	37.0	492.0	
1.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	529.0	
-2.5	CARBONDALE		SANDY SHALE	30.5	532.5	
-33.0	CARBONDALE	BRERETON	LIMESTONE	2.2	563.0	
-35.2	CARBONDALE	ANNA	CALCAREOUS BLACK SHALE	5.1	565.2	
-40.3	CARBONDALE	HERRIN	COAL	2.5	570.3	
-42.8	CARBONDALE		UNDERCLAY	1.2	572.8	
-44.0	CARBONDALE		SANDY SHALE	23.0	574.0	
-67.0	CARBONDALE		SANDSTONE	26.0	597.0	
-93.0	CARBONDALE		SANDY SHALE	6.0	623.0	
-99.0	CARBONDALE	BRIAR HILL	COAL	1.7	629.0	
-100.7	CARBONDALE		GRAY SHALE	5.3	630.7	
-106.0	CARBONDALE		SANDSTONE	10.0	636.0	
-116.0	CARBONDALE		SHALE	45.0	646.0	
-161.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	691.0	
-163.3	CARBONDALE		SHALE	1.2	693.3	
-164.5	CARBONDALE	SPRINGFIELD	COAL	5.5	694.5	
-170.0	CARBONDALE		UNDERCLAY	1.0	700.0	

MAPID: 05903594000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 660' N line, 1650' E line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.126319 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.746123 **DATE COLLECTED:** 10 / 19 / 1971

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 659.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1059C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION L-3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
480.0	PLEISTOCENE		CLAY	35.0	0.0	
445.0	MODESTO		GRAY SHALE	98.0	35.0	
347.0	MODESTO		BLACK SHALE	3.0	133.0	
344.0	MODESTO		GRAY SHALE	10.0	136.0	
334.0	MODESTO		SANDY SHALE	6.0	146.0	
328.0	MODESTO		GRAY SHALE	68.0	152.0	
260.0	MODESTO		GRAY SHALE & LIMESTONE	3.0	220.0	
257.0	MODESTO		GRAY SHALE	68.0	223.0	
189.0	MODESTO		BLACK SHALE	2.0	291.0	
187.0	MODESTO	CHAPEL	COAL	1.0	293.0	
186.0	MODESTO		SANDY SHALE	40.0	294.0	
146.0	MODESTO		GRAY SHALE	13.0	334.0	
133.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	347.0	
129.5	MODESTO		SANDY SHALE	50.0	350.5	
79.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	400.5	
76.5	MODESTO		SANDY SHALE	27.0	403.5	
49.5	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	430.5	
47.5	MODESTO		SANDY SHALE	47.5	432.5	
0.0	CARBONDALE	DANVILLE	COAL	2.3	480.0	
-2.3	CARBONDALE		GRAY SHALE	5.0	482.3	
-7.3	CARBONDALE		SANDY SHALE	17.7	487.3	
-25.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	505.0	
-28.5	CARBONDALE	ANVIL ROCK	SANDSTONE	15.5	508.5	
-44.0	CARBONDALE	BRERETON	LIMESTONE	1.2	524.0	
-45.2	CARBONDALE	ANNA	BLACK SHALE	4.8	525.2	
-50.0	CARBONDALE	HERRIN	COAL	2.9	530.0	
-52.9	CARBONDALE		UNDERCLAY	1.5	532.9	
-54.4	CARBONDALE		SANDY SHALE	1.6	534.4	
-56.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	3.0	536.0	
-59.0	CARBONDALE		SANDSTONE	9.0	539.0	
-68.0	CARBONDALE		SANDY SHALE	29.0	548.0	
-97.0	CARBONDALE	BRIAR HILL	COAL	1.9	577.0	
-98.9	CARBONDALE		SANDY SHALE	68.8	578.9	
-167.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.1	647.7	
-171.8	CARBONDALE	SPRINGFIELD	COAL	5.4	651.8	
-177.3	CARBONDALE		SHALE	1.9	657.3	
-179.2	CARBONDALE		LIMESTONE	0.4	659.2	

MAPID: 05903737000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 17 **QUARTERS/FOOTAGES:** 330' N line, 1' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.138755 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.747039 **DATE COLLECTED:** 3 / 10 / 1971

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 638.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1017C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
420.0	PLEISTOCENE		CLAY	12.0	0.0	
408.0	PLEISTOCENE		SAND/CLAY	38.0	12.0	
370.0	MODESTO		GRAY SHALE	14.0	50.0	
356.0	MODESTO		SANDY SHALE	9.0	64.0	
347.0	MODESTO		GRAY SHALE	21.0	73.0	
326.0	MODESTO		GRAY SHALE & SANDSTONE	34.0	94.0	
292.0	MODESTO		BLACK SHALE	2.1	128.0	
289.9	MODESTO		GRAY SHALE	1.9	130.1	
288.0	MODESTO		SANDY SHALE	3.0	132.0	
285.0	MODESTO		SANDSTONE	25.0	135.0	
260.0	MODESTO	CARLINVILLE	LIMESTONE	2.3	160.0	
257.7	MODESTO		SANDY SHALE	90.7	162.3	
167.0	MODESTO	CHAPEL	COAL	1.5	253.0	
165.5	MODESTO		UNDERCLAY	1.2	254.5	
164.3	MODESTO		SANDY SHALE	30.6	255.7	
133.7	MODESTO		SANDSTONE	30.7	286.3	
103.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.9	317.0	
100.1	MODESTO		SANDY SHALE	59.1	319.9	
41.0	MODESTO		SANDSTONE	21.0	379.0	
20.0	MODESTO		SANDY SHALE	23.0	400.0	
-3.0	MODESTO		GRAY SHALE	5.0	423.0	
-8.0	MODESTO		SANDY SHALE	25.0	428.0	
-33.0	CARBONDALE	DANVILLE	COAL	1.3	453.0	
-34.3	CARBONDALE		UNDERCLAY	0.7	454.3	
-35.0	CARBONDALE		SANDY SHALE	10.0	455.0	
-45.0	CARBONDALE		BLACK SHALE	1.0	465.0	
-46.0	CARBONDALE		SANDY SHALE	3.0	466.0	
-49.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	469.0	
-53.3	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	473.3	
-73.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.7	493.3	
-80.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.7	500.0	
-85.7	CARBONDALE	BRERETON	LIMESTONE	0.3	505.7	
-86.0	CARBONDALE	ANNA	BLACK SHALE	3.3	506.0	
-89.3	CARBONDALE	ANNA	LIMESTONE	0.6	509.3	
-89.9	CARBONDALE	HERRIN	COAL	2.4	509.9	
-92.3	CARBONDALE		UNDERCLAY	1.5	512.3	
-93.8	CARBONDALE		SHALY SANDSTONE	5.2	513.8	
-99.0	CARBONDALE		SANDY SHALE	10.0	519.0	

-109.0	CARBONDALE		SANDSTONE	15.0	529.0
-124.0	CARBONDALE		SANDY SHALE	18.3	544.0
-142.3	CARBONDALE	BRIAR HILL	COAL	1.8	562.3
-144.1	CARBONDALE		UNDERCLAY	0.9	564.1
-145.0	CARBONDALE		GRAY SHALE	2.0	565.0
-147.0	CARBONDALE		SANDY SHALE	18.0	567.0
-165.0	CARBONDALE		GRAY SHALE	5.0	585.0
-170.0	CARBONDALE		SANDY SHALE	15.0	590.0
-185.0	CARBONDALE		GRAY SHALE	4.0	605.0
-189.0	CARBONDALE		SANDY SHALE	18.3	609.0
-207.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	627.3
-211.2	CARBONDALE	SPRINGFIELD	COAL	5.0	631.2
-216.2	CARBONDALE		UNDERCLAY	1.8	636.2

MAPID: 05901168000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.147966 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.74071 **DATE COLLECTED:** 6 / 3 / 1953

SURFACE ELEVATION (FT.): 546.0 **LOGGED (FT.):** 535.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 68 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
546.0	PLEISTOCENE		UNCONSOLIDATED	48.0	0.0	
498.0	MODESTO		GRAY SHALE	4.5	48.0	
493.5	MODESTO		SHALE	77.5	52.5	
416.0	MODESTO		SOFT SHALE	47.0	130.0	
369.0	MODESTO		SHALE	13.0	177.0	
356.0	MODESTO		SANDY SHALE	10.5	190.0	
345.5	MODESTO		SHALY SANDSTONE	16.5	200.5	
329.0	MODESTO		SHALE	33.0	217.0	
296.0	MODESTO		SHALE	42.0	250.0	
254.0	MODESTO		FOSSILIFEROUS SHALE	0.5	292.0	
253.5	MODESTO		BLACK SHALE	1.5	292.5	
252.0	MODESTO	CHAPEL	COAL	0.9	294.0	
251.1	MODESTO		UNDERCLAY	5.1	294.9	
246.0	MODESTO		SHALE	8.0	300.0	
238.0	MODESTO		SHALE	9.0	308.0	
229.0	MODESTO		SOFT SHALE	2.0	317.0	
227.0	MODESTO		SHALY SANDSTONE	21.0	319.0	
206.0	MODESTO		SANDY SHALE	13.0	340.0	
193.0	MODESTO		DARK SHALE	2.0	353.0	
191.0	MODESTO		LIMESTONE	4.5	355.0	
186.5	MODESTO		SANDSTONE	9.5	359.5	
177.0	MODESTO		SHALE	9.0	369.0	
168.0	MODESTO		SANDY SHALE	11.0	378.0	
157.0	MODESTO		SHALE	15.8	389.0	
141.2	MODESTO		COAL	0.3	404.8	
140.8	MODESTO		SHALE	4.3	405.2	
136.5	MODESTO		SOFT SHALE	4.5	409.5	
132.0	MODESTO		SANDY SHALE	8.0	414.0	
124.0	MODESTO		SILTY SANDSTONE	4.5	422.0	
119.5	MODESTO		SILTSTONE	3.5	426.5	
116.0	MODESTO		SOFT SHALE	6.0	430.0	
110.0	MODESTO		SHALE W/ LIME NODULES	10.5	436.0	
99.5	MODESTO		SHALE	53.8	446.5	
45.7	CARBONDALE	DANVILLE	COAL	1.9	500.3	
43.8	CARBONDALE		SHALE	11.2	502.2	
32.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	513.3	
27.1	CARBONDALE		SOFT SHALE	0.8	518.9	
26.3	CARBONDALE	ANVIL ROCK	SANDSTONE	15.3	519.7	LOST HOLE IN SANDSTONE

MAPID: 05901184000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW/c NE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.144511 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.743435 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 522.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 84 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
76.9	CARBONDALE		SANDSTONE	19.0	453.1	
57.9	CARBONDALE	ALLENBY	BONE COAL	0.9	472.1	
57.0	CARBONDALE		CLAYSTONE	2.9	473.0	
54.1	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	4.2	475.9	
49.9	CARBONDALE	LAWSON	CLAYSTONE	0.7	480.1	
49.3	CARBONDALE	LAWSON	SILTSTONE	0.9	480.7	
48.4	CARBONDALE	LAWSON	SANDSTONE	29.0	481.6	
19.4	CARBONDALE	LAWSON	GRAY SHALE	2.3	510.6	
17.1	CARBONDALE	BRERETON	LIMESTONE	1.3	512.9	
15.8	CARBONDALE	ANNA	BLACK SHALE	5.8	514.2	
10.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	2.3	520.0	

MAPID: 05901184000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW/c NE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.144511 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.743435 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERY CO **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-19.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	476.0	
-24.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	29.0	481.0	
-65.0	CARBONDALE	HERRIN	COAL	0.9	522.0	
-79.0	CARBONDALE	VERMILIONVILLE		16.0	536.0	
-113.0	CARBONDALE	BRIAR HILL	COAL	6.9	570.0	
-116.0	CARBONDALE	CANTON	CALCAREOUS SANDSTONE	36.0	573.0	
-190.0	CARBONDALE	SPRINGFIELD	COAL	5.2	647.0	

MAPID: 05901184000C **VERSION:** 3 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW/c NE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.144511 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.743435 **DATE COLLECTED:** 9 / 14 / 1953

SURFACE ELEVATION (FT.): 498.0 **LOGGED (FT.):** 656.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 84 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
498.0	PLEISTOCENE		UNCONSOLIDATED	45.0	0.0	
453.0	MODESTO		SANDY SHALE	70.0	45.0	
383.0	MODESTO		SOFT SHALE	10.0	115.0	
373.0	MODESTO		SHALE	47.0	125.0	
326.0	MODESTO		LIMESTONE	0.7	172.0	
325.3	MODESTO		SANDY SHALE	7.3	172.7	
318.0	MODESTO		SHALE	10.0	180.0	
308.0	MODESTO		SHALE	15.0	190.0	
293.0	MODESTO		SHALE	53.0	205.0	
240.0	MODESTO	CHAPEL	COAL	2.0	258.0	
238.0	MODESTO		UNDERCLAY	3.0	260.0	
235.0	MODESTO		SHALE	19.0	263.0	
216.0	MODESTO		LIMESTONE	0.7	282.0	
215.3	MODESTO		SHALY SANDSTONE	32.8	282.7	
182.5	MODESTO	WEST FRANKLIN	LIMESTONE	5.5	315.5	
177.0	MODESTO		FOSSILIFEROUS SHALE	0.4	321.0	
176.6	MODESTO		SHALE	14.6	321.4	
162.0	MODESTO		SANDY SHALE	24.0	336.0	
138.0	MODESTO		COAL	0.5	360.0	
137.5	MODESTO		SHALE	15.5	360.5	
122.0	MODESTO		SHALY SANDSTONE	24.0	376.0	
98.0	MODESTO		SANDSTONE	26.0	400.0	
72.0	MODESTO		SOFT SHALE	9.0	426.0	
63.0	MODESTO		SHALE	17.0	435.0	
46.0	MODESTO		SANDSTONE	10.0	452.0	
36.0	CARBONDALE		SANDSTONE/COAL	1.0	462.0	#7
35.0	CARBONDALE		SANDSTONE	8.0	463.0	
27.0	CARBONDALE		DARK SHALE	3.6	471.0	
23.4	CARBONDALE		SHALE W/ LIME NODULES	1.8	474.6	
21.6	CARBONDALE	BANKSTON FORK	LIMESTONE	2.9	476.4	
18.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.7	479.3	
17.0	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	7.0	481.0	
10.0	CARBONDALE	ANVIL ROCK	SANDSTONE	22.3	488.0	
-12.3	CARBONDALE		DARK SHALE	2.0	510.3	
-14.3	CARBONDALE		FOSSILIFEROUS SHALE	0.4	512.3	
-14.8	CARBONDALE	BRERETON	LIMESTONE	1.3	512.8	
-16.0	CARBONDALE	ANNA	BLACK SHALE	6.2	514.0	
-22.2	CARBONDALE	HERRIN	BONE COAL	1.0	520.2	
-23.2	CARBONDALE	HERRIN	SHALE	0.6	521.2	

-23.8	CARBONDALE	HERRIN	COAL	0.9	521.8	
-24.7	CARBONDALE		SANDY CLAYSTONE	7.3	522.7	LIMESTONE NODULES
-32.0	CARBONDALE		SHALY SANDSTONE	6.0	530.0	
-38.0	CARBONDALE		SHALY SANDSTONE	9.0	536.0	
-47.0	CARBONDALE		DARK SHALE	24.8	545.0	
-71.8	CARBONDALE	BRIAR HILL	COAL	1.0	569.8	
-72.8	CARBONDALE		SILTSTONE	2.2	570.8	
-75.0	CARBONDALE		SHALY SANDSTONE	36.0	573.0	
-111.0	CARBONDALE		SILTSTONE	23.0	609.0	
-134.0	CARBONDALE		SHALE	10.5	632.0	
-144.5	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	1.5	642.5	
-146.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	644.0	
-146.5	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	0.3	644.5	
-146.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	644.8	
-149.0	CARBONDALE	SPRINGFIELD	COAL	5.2	647.0	
-154.2	CARBONDALE		UNDERCLAY	3.8	652.2	

MAPID: 05901133000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.155971 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725278 **DATE COLLECTED:** 3 / 7 / 1952

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 267.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 33 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	73.0	0.0	
-	CARBONDALE		SANDY SHALE	28.5	73.0	
-	CARBONDALE		BLACK SHALE	1.0	101.5	
-	CARBONDALE		GRAY SHALE	5.0	102.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	107.5	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	19.0	112.0	
-	CARBONDALE		GRAY SHALE	5.0	131.0	
-	CARBONDALE	BRERETON	LIMESTONE	2.0	136.0	
-	CARBONDALE	ANNA	BLACK SHALE	5.3	138.0	
-	CARBONDALE	HERRIN	COAL	0.9	143.3	
-	CARBONDALE	HERRIN	SHALE	0.3	144.2	
-	CARBONDALE	HERRIN	COAL	0.8	144.4	
-	CARBONDALE		UNDERCLAY	3.8	145.2	
-	CARBONDALE		SANDY SHALE	20.0	149.0	
-	CARBONDALE		DARK SHALE	20.0	169.0	
-	CARBONDALE	BRIAR HILL	COAL	1.5	189.0	
-	CARBONDALE		GRAY SHALE	12.0	190.5	
-	CARBONDALE		SANDSTONE	10.0	202.5	
-	CARBONDALE		GRAY SHALE	1.5	212.5	
-	CARBONDALE		SANDY SHALE	19.0	214.0	
-	CARBONDALE		GRAY SHALE	24.3	233.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	257.3	
-	CARBONDALE	SPRINGFIELD	COAL	4.9	260.3	
-	CARBONDALE		GRAY SHALE	1.8	265.2	

MAPID: 05901150000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.144694 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.728861 **DATE COLLECTED:** 12 / 5 / 1952

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 393.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 50 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0	
-	MODESTO		SHALY SANDSTONE	4.0	41.0	
-	MODESTO		SANDY SHALE	27.8	45.0	
-	MODESTO		BLACK SHALE	1.7	72.8	
-	MODESTO		LIMESTONE	3.1	74.4	
-	MODESTO		SANDY SHALE	10.5	77.5	
-	MODESTO		SHALE	27.0	88.0	
-	MODESTO		SANDY SHALE	12.3	115.0	
-	MODESTO		RED SHALE	4.2	127.3	
-	MODESTO		SANDY DARK SHALE	9.0	131.5	
-	MODESTO		SHALE W/ LIME NODULES	15.0	140.5	
-	MODESTO		DARK SHALE	48.1	155.5	
-	MODESTO		LIMESTONE	0.3	203.6	
-	CARBONDALE	DANVILLE	COAL	2.2	203.8	
-	CARBONDALE		UNDERCLAY	0.7	206.0	
-	CARBONDALE		SANDY SHALE	9.2	206.7	
-	CARBONDALE		DARK SHALE	3.2	215.8	
-	CARBONDALE	ALLENBY	COAL	0.3	219.0	
-	CARBONDALE		SOFT SHALE	5.6	219.3	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	224.9	
-	CARBONDALE		DARK SHALE	0.5	229.7	GREEN
-	CARBONDALE	ANVIL ROCK	SANDSTONE	14.4	230.2	
-	CARBONDALE		DARK SHALE	9.4	244.6	
-	CARBONDALE	ANNA	BLACK SHALE	3.8	254.0	
-	CARBONDALE	HERRIN	SHALY COAL	0.6	257.8	
-	CARBONDALE	HERRIN	SHALE	2.2	258.4	
-	CARBONDALE	HERRIN	COAL	0.4	260.6	
-	CARBONDALE		UNDERCLAY	1.6	261.0	
-	CARBONDALE		SANDY SHALE	4.9	262.6	
-	CARBONDALE		SANDSTONE	24.5	267.5	
-	CARBONDALE		SANDY SHALE	13.2	292.0	
-	CARBONDALE	BRIAR HILL	COAL	1.8	305.2	
-	CARBONDALE		UNDERCLAY	1.0	307.0	
-	CARBONDALE		SHALE	39.5	308.0	
-	CARBONDALE		SANDY SHALE	29.2	347.5	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	376.7	
-	CARBONDALE	TURNER MINE	FOSSILIFEROUS BLACK SHALE	5.2	378.3	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	383.5	

-	CARBONDALE	SANDY SHALE	5.0	388.0

MAPID: 05901150000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1650' N line, 1650' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.144694 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.728861 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 261.3 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 50 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
166.7	CARBONDALE	DANVILLE	COAL	2.1	203.3	
164.6	CARBONDALE		SHALE & SILTSTONE	11.9	205.4	
152.7	CARBONDALE	ALLENBY	COAL	0.2	217.3	
152.6	CARBONDALE		CLAYSTONE	7.4	217.4	
145.2	CARBONDALE	BANKSTON FORK	LIMESTONE	4.6	224.8	
140.6	CARBONDALE	LAWSON	CLAYSTONE	0.1	229.4	
140.5	CARBONDALE	LAWSON	CARBONACEOUS SHALE	0.3	229.5	
140.2	CARBONDALE	LAWSON	CLAYSTONE	0.2	229.8	
140.0	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	14.8	230.0	
125.2	CARBONDALE	LAWSON	GRAY SHALE	7.9	244.8	
117.3	CARBONDALE	BRERETON	CARBONACEOUS LIMESTONE	0.3	252.7	
117.0	CARBONDALE	ANNA	BLACK SHALE	5.0	253.0	
112.0	CARBONDALE	HERRIN	COAL WITH SHALE PARTINGS	3.3	258.0	

MAPID: 05903578000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1320' N line, 1320' E line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.143533 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.729777 **DATE COLLECTED:** 11 / 12 / 1971

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 381.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1062-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	30.0	0.0	
350.0	MODESTO		GRAY SHALE	6.5	30.0	
343.5	MODESTO		SANDSTONE	7.5	36.5	
336.0	MODESTO		SHALE	26.5	44.0	
309.5	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	70.5	
307.0	MODESTO		SHALE	39.0	73.0	
268.0	MODESTO		GRAY SHALE	25.0	112.0	
243.0	MODESTO		SHALE	11.5	137.0	
231.5	MODESTO		SANDSTONE	1.5	148.5	
230.0	MODESTO		GRAY SHALE	50.5	150.0	
179.5	CARBONDALE	DANVILLE	COAL	1.0	200.5	
178.5	CARBONDALE		UNDERCLAY	1.0	201.5	
177.5	CARBONDALE		GRAY SHALE	15.5	202.5	
162.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	218.0	
158.0	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	18.0	222.0	
140.0	CARBONDALE		GRAY SHALE	10.7	240.0	
129.3	CARBONDALE	ANNA	BLACK SHALE	2.0	250.7	
127.3	CARBONDALE	ANNA	LIMESTONE	1.5	252.7	
125.8	CARBONDALE	HERRIN	COAL	1.5	254.2	
124.3	CARBONDALE		UNDERCLAY	4.3	255.7	
120.0	CARBONDALE		SHALY SANDSTONE	30.0	260.0	
90.0	CARBONDALE		SHALE	11.7	290.0	
78.3	CARBONDALE	BRIAR HILL	COAL	1.7	301.7	
76.6	CARBONDALE		SHALY SANDSTONE	11.6	303.4	
65.0	CARBONDALE		SANDY SHALE	5.5	315.0	
59.5	CARBONDALE		SANDSTONE	16.5	320.5	
43.0	CARBONDALE		SANDY SHALE	19.0	337.0	
24.0	CARBONDALE		GRAY SHALE	15.6	356.0	
8.4	CARBONDALE		SHALE	0.8	371.6	
7.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	372.4	
4.4	CARBONDALE		SHALE	0.9	375.6	
3.5	CARBONDALE	SPRINGFIELD	COAL	5.3	376.5	

MAPID: 05903738000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 19 **QUARTERS/FOOTAGES:** 2310' N line, 1320' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.152543 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.727007 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 408.8 **LOGGED (FT.):** 317.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1006-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION E-8

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
408.8			CLAY	43.0	0.0	
365.8	MODESTO		GRAY SHALE	15.0	43.0	
350.8	MODESTO		BLACK SHALE	1.0	58.0	
349.8	MODESTO		GRAY SHALE	12.0	59.0	
337.8	MODESTO		SANDSTONE	2.7	71.0	
335.1	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	73.7	
333.6	MODESTO		SANDSTONE	3.8	75.2	
329.8	MODESTO		GRAY SHALE	59.0	79.0	
270.8	CARBONDALE	DANVILLE	COAL	1.0	138.0	
269.8	CARBONDALE		SANDY SHALE	10.5	139.0	
259.3	CARBONDALE		BLACK SHALE	1.0	149.5	
258.3	CARBONDALE		GRAY SHALE	7.5	150.5	
250.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	158.0	
245.3	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	10.0	163.5	
235.3	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	173.5	
232.3	CARBONDALE		GRAY SHALE	5.3	176.5	
227.0	CARBONDALE	BRERETON	LIMESTONE	0.9	181.8	
226.1	CARBONDALE		SHALE	1.5	182.7	
224.6	CARBONDALE	ANNA	BLACK SHALE	3.6	184.2	
221.0	CARBONDALE	ANNA	LIMESTONE	1.3	187.8	
219.7	CARBONDALE	HERRIN	COAL	1.5	189.1	
218.2	CARBONDALE		UNDERCLAY	3.4	190.6	
214.8	CARBONDALE		SANDSTONE	29.5	194.0	
185.3	CARBONDALE		GRAY SHALE	16.5	223.5	
168.8	CARBONDALE	BRIAR HILL	COAL	0.9	240.0	
167.9	CARBONDALE		SANDSTONE	20.0	240.9	
147.9	CARBONDALE		SANDY SHALE	20.7	260.9	
127.2	CARBONDALE		GRAY SHALE	24.5	281.6	
102.7	CARBONDALE		FOSSILIFEROUS SHALE	0.8	306.1	
101.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	306.9	
99.8	CARBONDALE	SPRINGFIELD	COAL	5.1	309.0	
94.7	CARBONDALE		SANDY SHALE	1.8	314.1	
92.9	CARBONDALE		SANDSTONE	1.2	315.9	

MAPID: 05901151000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2310' S line, 990' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.124108 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.725255 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 410.5 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 51 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
-	MODESTO		SANDSTONE	6.0	40.0	
-	MODESTO		SANDY SHALE	15.8	46.0	
-	MODESTO		LIMESTONE	3.3	61.8	
-	MODESTO		DARK SHALE	5.8	65.2	
-	MODESTO		SANDY SHALE	40.0	71.0	
-	MODESTO		GRAY SHALE	21.5	111.0	
-	MODESTO		VARRIGATED SHALE	15.5	132.5	
-	MODESTO		SHALE W/ LIME NODULES	13.0	148.0	
-	MODESTO		DARK SHALE	6.0	161.0	
-	MODESTO		GRAY SHALE	29.0	167.0	
-	MODESTO		SHALE	7.0	196.0	
-	CARBONDALE	DANVILLE	COAL	1.0	203.0	
-	CARBONDALE		SHALE	6.5	204.0	
-	CARBONDALE		SANDY SHALE	16.5	210.5	
-	CARBONDALE		SHALE WITH LIMESTONE	2.0	227.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	229.0	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	6.8	233.2	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	21.0	240.0	
-	CARBONDALE		DARK SHALE	5.0	261.0	
-	CARBONDALE		SHALE W/ LIME NODULES	2.0	266.0	
-	CARBONDALE	BRERETON	LIMESTONE	2.5	268.0	
-	CARBONDALE	ANNA	BLACK SHALE	3.5	270.5	
-	CARBONDALE	HERRIN	COAL	2.0	274.0	
-	CARBONDALE	HERRIN	SHALE	0.3	276.0	
-	CARBONDALE	HERRIN	COAL	1.0	276.3	
-	CARBONDALE		UNDERCLAY	3.8	277.3	
-	CARBONDALE		SANDY SHALE	43.0	281.0	
-	CARBONDALE	BRIAR HILL	COAL	2.0	324.0	
-	CARBONDALE		SANDY SHALE	68.5	326.0	
-	CARBONDALE		FOSSILIFEROUS BLACK SHALE	2.2	394.5	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.7	396.7	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	398.3	
-	CARBONDALE	SPRINGFIELD	COAL	5.3	401.0	
-	CARBONDALE		UNDERCLAY	4.2	406.3	

MAPID: 05901151000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 2310' S line, 990' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.124108 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.725255 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.0 **LOGGED (FT.):** 277.2 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 51 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
148.8	CARBONDALE	DANVILLE	COAL	1.5	202.2	
147.3	CARBONDALE		ROCK	24.3	203.7	
122.9	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	4.5	228.1	
118.4	CARBONDALE	LAWSON	SHALE & SILTSTONE	6.7	232.6	
111.8	CARBONDALE	LAWSON	SANDSTONE	21.4	239.2	
90.3	CARBONDALE	LAWSON	GRAY SHALE	5.3	260.7	
85.1	CARBONDALE	LAWSON	CARBONACEOUS LIMESTONE	0.3	265.9	
84.7	CARBONDALE	LAWSON	CLAYSTONE	1.2	266.3	
83.6	CARBONDALE	BRERETON	LIMESTONE	2.8	267.4	
80.7	CARBONDALE	ANNA	BLACK SHALE	3.8	270.3	
77.0	CARBONDALE	HERRIN	COAL	3.2	274.0	

MAPID: 05901167000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.135548 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.727065 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 427.5 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 67 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.0	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0	
315.0	MODESTO		SOFT SHALE	5.5	37.0	
309.5	MODESTO		SHALE	53.3	42.5	
256.2	MODESTO		LIMESTONE	2.9	95.8	
253.3	MODESTO		SANDY SHALE	1.3	98.7	
252.0	MODESTO		SHALY SANDSTONE	6.0	100.0	
246.0	MODESTO		SANDY SHALE	7.7	106.0	
238.3	MODESTO		COAL	0.1	113.7	
238.2	MODESTO		SILTSTONE	1.1	113.8	
237.2	MODESTO		SANDY SHALE	28.0	114.8	
209.2	MODESTO		SANDY DARK SHALE	20.7	142.8	
188.5	MODESTO		GRAY SHALE	8.0	163.5	
180.5	MODESTO		SHALE W/ LIME NODULES	9.5	171.5	
171.0	MODESTO		SANDY SHALE	3.3	181.0	
167.7	MODESTO	WEST FRANKLIN	LIMESTONE	1.2	184.3	
166.5	MODESTO		SHALE W/ LIME NODULES	0.5	185.5	
166.0	MODESTO		FOSSILIFEROUS SHALE	3.8	186.0	
162.2	MODESTO		SOFT SHALE	0.7	189.8	
161.5	MODESTO	WEST FRANKLIN	LIMESTONE	0.3	190.5	
161.2	MODESTO		BLACK SHALE	5.3	190.8	
156.0	MODESTO		SHALE	39.0	196.0	
117.0	CARBONDALE	DANVILLE	COAL	1.5	235.0	
115.5	CARBONDALE		UNDERCLAY	1.5	236.5	
114.0	CARBONDALE		SANDY SHALE	13.8	238.0	
100.2	CARBONDALE		DARK SHALE	9.3	251.8	
91.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	261.0	
88.0	CARBONDALE		BLACK SHALE	0.3	264.0	
87.7	CARBONDALE		SHALE	2.7	264.3	
85.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	267.0	
73.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	278.5	
71.5	CARBONDALE		SHALE	7.0	280.5	
64.5	CARBONDALE		FOSSILIFEROUS SHALE	0.8	287.5	
63.7	CARBONDALE	BRERETON	LIMESTONE	1.5	288.3	
62.2	CARBONDALE	ANNA	BLACK SHALE	4.6	289.8	
57.6	CARBONDALE	HERRIN	COAL	1.5	294.4	
56.1	CARBONDALE	HERRIN	SHALE	0.2	295.9	
55.9	CARBONDALE	HERRIN	COAL	0.9	296.1	
55.0	CARBONDALE		UNDERCLAY	3.5	297.0	
51.5	CARBONDALE		SANDY SHALE	8.0	300.5	

43.5	CARBONDALE		SANDSTONE	6.0	308.5
37.5	CARBONDALE		SANDY SHALE	29.0	314.5
8.5	CARBONDALE	BRIAR HILL	COAL	1.5	343.5
7.0	CARBONDALE		UNDERCLAY	0.5	345.0
6.5	CARBONDALE		SHALY SANDSTONE	30.5	345.5
-24.0	CARBONDALE		SANDY SHALE	40.0	376.0
-64.0	CARBONDALE	ST. DAVID	LIMESTONE	1.5	416.0
-65.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	417.5
-68.5	CARBONDALE	SPRINGFIELD	COAL	5.3	420.5
-73.8	CARBONDALE		UNDERCLAY	1.8	425.8

MAPID: 05903262000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 49' N line, 17' E line of NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.120794 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.733171 **DATE COLLECTED:** 4 / 20 / 1967

SURFACE ELEVATION (FT.): 385.2 **LOGGED (FT.):** 489.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1917-Q **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION A-2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.2	PLEISTOCENE		UNCONSOLIDATED	34.2	0.0	
351.0	MODESTO		GRAY SHALE	61.3	34.2	
289.7	MODESTO	CHAPEL	COAL	1.8	95.5	
287.9	MODESTO		UNDERCLAY	2.2	97.3	
285.7	MODESTO		SANDY SHALE	13.3	99.5	
272.5	MODESTO		SANDSTONE	3.5	112.7	
269.0	MODESTO		SANDY SHALE	6.7	116.2	
262.3	MODESTO		LIMESTONE	0.8	122.9	
261.5	MODESTO		SANDSTONE	12.2	123.7	
249.3	MODESTO		SANDY SHALE	22.9	135.9	
226.4	MODESTO	WEST FRANKLIN	LIMESTONE	3.9	158.8	
222.6	MODESTO		SANDY SHALE	34.4	162.6	
188.2	MODESTO		GRAY SHALE	13.7	197.0	
174.5	MODESTO		COAL	0.6	210.7	
173.9	MODESTO		GRAY SHALE	22.7	211.3	
151.2	MODESTO	WEST FRANKLIN	LIMESTONE	6.2	234.0	
145.0	MODESTO	WEST FRANKLIN	GRAY SHALE	3.3	240.2	
141.8	MODESTO	WEST FRANKLIN	LIMESTONE	0.8	243.4	
141.0	MODESTO	WEST FRANKLIN	GRAY SHALE	0.9	244.2	
140.1	MODESTO	WEST FRANKLIN	LIMESTONE	0.4	245.1	
139.7	MODESTO		GRAY SHALE	42.5	245.5	
97.2	CARBONDALE	DANVILLE	COAL	1.1	288.0	
96.2	CARBONDALE		GRAY SHALE	3.2	289.0	
93.0	CARBONDALE		SANDSTONE	6.5	292.2	
86.5	CARBONDALE		SANDY SHALE	17.7	298.7	
68.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	316.4	
64.1	CARBONDALE		GRAY SHALE	0.7	321.1	
63.4	CARBONDALE	ANVIL ROCK	SANDSTONE	2.1	321.8	
61.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.5	323.9	
38.9	CARBONDALE		SHALE	7.5	346.3	
31.4	CARBONDALE	BRERETON	LIMESTONE	2.2	353.8	
29.2	CARBONDALE	ANNA	BLACK SHALE	4.7	356.0	
24.5	CARBONDALE	HERRIN	COAL	4.3	360.7	
20.2	CARBONDALE		UNDERCLAY	3.9	365.0	
16.3	CARBONDALE		SANDY SHALE	5.5	368.9	
10.8	CARBONDALE		SANDSTONE	10.5	374.4	
0.3	CARBONDALE		SANDY SHALE	23.9	384.9	
-23.6	CARBONDALE	BRIAR HILL	COAL	2.0	408.8	
-25.6	CARBONDALE		SHALE	67.5	410.8	

-93.1	CARBONDALE	ST. DAVID	LIMESTONE	0.2	478.3
-93.3	CARBONDALE		SHALE	0.5	478.5
-93.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	478.9
-96.6	CARBONDALE	SPRINGFIELD	COAL	5.4	481.8
-102.0	CARBONDALE		GRAY SHALE	2.5	487.2

MAPID: 05903474000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1' N line, 990' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.135463 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.733411 **DATE COLLECTED:** 10 / 5 / 1970

SURFACE ELEVATION (FT.): 379.3 **LOGGED (FT.):** 489.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1012C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.3	PLEISTOCENE		UNCONSOLIDATED	20.7	0.0	
358.6	MODESTO		LIMESTONE	1.0	20.7	
357.6	MODESTO		SHALE	22.6	21.7	
335.0	MODESTO		SANDY SHALE	3.5	44.3	
331.5	MODESTO		GRAY SHALE	56.7	47.8	
274.8	MODESTO	CHAPEL	COAL	0.8	104.5	
274.0	MODESTO		UNDERCLAY	2.0	105.3	
272.0	MODESTO		SANDY SHALE	14.2	107.3	
257.8	MODESTO		LIMESTONE	1.5	121.5	
256.3	MODESTO		SANDSTONE	15.5	123.0	
240.8	MODESTO	WEST FRANKLIN	LIMESTONE	1.8	138.5	
239.0	MODESTO		SHALY SANDSTONE	26.7	140.3	
212.3	MODESTO	WEST FRANKLIN	LIMESTONE	3.2	167.0	
209.1	MODESTO		SANDY SHALE	49.8	170.2	
159.3	MODESTO		SANDSTONE	35.0	220.0	
124.3	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	255.0	
121.3	MODESTO		SHALY SANDSTONE	40.0	258.0	
81.3	MODESTO		GRAY SHALE	14.0	298.0	
67.3	CARBONDALE	DANVILLE	COAL	1.5	312.0	
65.8	CARBONDALE		SANDY SHALE	4.0	313.5	
61.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	317.5	
57.0	CARBONDALE		SANDY SHALE	3.2	322.3	
53.8	CARBONDALE	ANVIL ROCK	SANDSTONE	28.5	325.5	
25.3	CARBONDALE		GRAY SHALE	2.0	354.0	
23.3	CARBONDALE	BRERETON	LIMESTONE	2.0	356.0	
21.3	CARBONDALE	ANNA	BLACK SHALE	5.2	358.0	
16.1	CARBONDALE	HERRIN	COAL	3.0	363.2	
13.1	CARBONDALE		UNDERCLAY	3.5	366.2	
9.6	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.5	369.7	
8.1	CARBONDALE		SHALY SANDSTONE	23.8	371.2	
-15.7	CARBONDALE		SANDY SHALE	15.0	395.0	
-30.7	CARBONDALE	BRIAR HILL	COAL	1.5	410.0	
-32.2	CARBONDALE		SANDY SHALE	6.0	411.5	
-38.2	CARBONDALE		SANDSTONE	8.0	417.5	
-46.2	CARBONDALE		SANDY SHALE	37.5	425.5	
-83.7	CARBONDALE		GRAY SHALE	17.4	463.0	
-101.1	CARBONDALE		SHALE	1.1	480.4	
-102.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	481.5	
-105.4	CARBONDALE	SPRINGFIELD	COAL	5.2	484.7	

MAPID: 05903541000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1320' S line, 1320' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.125231 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.722524 **DATE COLLECTED:** 10 / 26 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 386.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1014-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION M-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	15.0	0.0	
335.0	PLEISTOCENE		SAND & GRAVEL	20.5	15.0	
314.5	PLEISTOCENE		CLAY & GRAVEL	12.0	35.5	
302.5	MODESTO		SOFT SHALE	3.0	47.5	
299.5	MODESTO		LIMESTONE	3.0	50.5	
296.5	MODESTO		GRAY SHALE	17.5	53.5	
279.0	MODESTO		SANDSTONE	3.0	71.0	
276.0	MODESTO		GRAY SHALE	23.5	74.0	
252.5	MODESTO		SANDY SHALE	15.7	97.5	
236.8	MODESTO		SHALY SANDSTONE	4.3	113.2	
232.5	MODESTO		GRAY SHALE	12.0	117.5	
220.5	MODESTO	WEST FRANKLIN	LIMESTONE	4.7	129.5	
215.8	MODESTO	WEST FRANKLIN	SHALE	0.4	134.2	
215.4	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	134.6	
213.4	MODESTO		SHALE	7.0	136.6	
206.4	MODESTO		GRAY SHALE & SANDSTONE	38.9	143.6	
167.5	CARBONDALE	DANVILLE	COAL	1.0	182.5	
166.5	CARBONDALE		SHALY SANDSTONE	15.2	183.5	
151.3	CARBONDALE		SANDSTONE	2.8	198.7	
148.5	CARBONDALE		SANDY SHALE	5.1	201.5	
143.4	CARBONDALE		BLACK SHALE	1.0	206.6	
142.4	CARBONDALE	BANKSTON FORK	LIMESTONE	5.7	207.6	
136.7	CARBONDALE		SHALE	1.2	213.3	
135.5	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	214.5	
103.5	CARBONDALE		GRAY SHALE	3.5	246.5	
100.0	CARBONDALE	BRERETON	LIMESTONE	3.4	250.0	
96.6	CARBONDALE	ANNA	BLACK SHALE	4.0	253.4	
92.6	CARBONDALE	HERRIN	COAL	3.0	257.4	
89.6	CARBONDALE		UNDERCLAY	3.3	260.4	
86.3	CARBONDALE		LIMESTONE	2.6	263.7	
83.7	CARBONDALE		SHALY SANDSTONE	19.7	266.3	
64.0	CARBONDALE		SANDY SHALE	20.5	286.0	
43.5	CARBONDALE	BRIAR HILL	COAL	1.5	306.5	
42.0	CARBONDALE		SANDY SHALE	15.5	308.0	
26.5	CARBONDALE		CALCAREOUS SANDSTONE	2.0	323.5	
24.5	CARBONDALE		SANDY SHALE	30.5	325.5	
-6.0	CARBONDALE		GRAY SHALE	20.7	356.0	
-26.7	CARBONDALE		SHALE	0.8	376.7	

-27.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	377.5
-30.5	CARBONDALE		SHALE	0.4	380.5
-30.8	CARBONDALE	SPRINGFIELD	COAL	5.5	380.8
-36.3	CARBONDALE		GRAY SHALE	0.5	386.3

MAPID: 05903595000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1320' N line, 660' E line of NE

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.122999 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.729681 **DATE COLLECTED:** 12 / 1 / 1971

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 427.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1064C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION 0-5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	12.0	0.0	
-	PLEISTOCENE		SAND & GRAVEL	18.0	12.0	
-	MODESTO		SHALE	40.0	30.0	
-	MODESTO		SANDSTONE	34.0	70.0	
-	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	104.0	
-	MODESTO		GRAY SHALE	57.5	107.5	
-	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	165.0	
-	MODESTO		SANDY SHALE	12.0	168.0	
-	MODESTO		GRAY SHALE	58.0	180.0	
-	MODESTO		SANDSTONE	3.0	238.0	
-	MODESTO		BLACK SHALE	1.5	241.0	
-	CARBONDALE		GRAY SHALE	5.5	242.5	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.9	248.0	
-	CARBONDALE		SANDY SHALE	3.0	251.9	
-	CARBONDALE	ANVIL ROCK	SANDSTONE	14.1	254.9	
-	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	269.0	
-	CARBONDALE	BRERETON	LIMESTONE	3.6	283.0	
-	CARBONDALE	ANNA	BLACK SHALE	5.0	286.6	
-	CARBONDALE	HERRIN	COAL	3.7	291.6	
-	CARBONDALE		UNDERCLAY	1.7	295.3	
-	CARBONDALE		GRAY SHALE	12.0	297.0	
-	CARBONDALE		SANDY SHALE	41.0	309.0	
-	CARBONDALE		SHALE	4.7	350.0	
-	CARBONDALE	BRIAR HILL	COAL	1.9	354.7	
-	CARBONDALE		SHALE	5.4	356.6	
-	CARBONDALE		SANDY SHALE	48.0	362.0	
-	CARBONDALE		GRAY SHALE & LIMESTONE	2.6	410.0	
-	CARBONDALE	ST. DAVID	LIMESTONE AND BLACK SHALE	1.1	412.6	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.6	413.7	
-	CARBONDALE		SHALE	1.2	417.3	
-	CARBONDALE	SPRINGFIELD	COAL	5.9	418.5	
-	CARBONDALE		UNDERCLAY	2.6	424.4	

MAPID: 05903628000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 20 **QUARTERS/FOOTAGES:** 660' S line, 330' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.137909 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.720729 **DATE COLLECTED:** 2 / 9 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 392.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1015-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION B-15

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	5.0	0.0	
345.0	PLEISTOCENE		SAND & GRAVEL	39.5	5.0	
305.5	MODESTO		GRAY SHALE	4.0	44.5	
301.5	MODESTO		SANDSTONE	5.5	48.5	
296.0	MODESTO		SANDY SHALE	16.0	54.0	
280.0	MODESTO		GRAY SHALE	14.8	70.0	
265.2	MODESTO	WEST FRANKLIN	LIMESTONE	3.2	84.8	
262.0	MODESTO		GRAY SHALE	6.0	88.0	
256.0	MODESTO		SANDY SHALE	10.0	94.0	
246.0	MODESTO		GRAY SHALE	52.0	104.0	
194.0	MODESTO		SANDSTONE	4.0	156.0	
190.0	MODESTO		GRAY SHALE	7.0	160.0	
183.0	MODESTO		LIMESTONE	0.5	167.0	
182.5	MODESTO		BLACK SHALE	2.0	167.5	
180.5	MODESTO		SHALE	42.3	169.5	
138.2	CARBONDALE	DANVILLE	COAL	1.8	211.8	
136.4	CARBONDALE		GRAY SHALE	11.7	213.6	
124.7	CARBONDALE		LIMESTONE	0.7	225.3	
124.0	CARBONDALE		SHALE	9.3	226.0	
114.7	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	235.3	
109.7	CARBONDALE		SHALE	4.2	240.3	
105.5	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	244.5	
97.5	CARBONDALE		SANDY SHALE	6.9	252.5	
90.6	CARBONDALE	BRERETON	LIMESTONE	2.8	259.4	
87.8	CARBONDALE	ANNA	BLACK SHALE	4.7	262.2	
83.1	CARBONDALE	HERRIN	COAL	2.7	266.9	
80.4	CARBONDALE		UNDERCLAY	3.9	269.6	
76.5	CARBONDALE		SHALE	12.0	273.5	
64.5	CARBONDALE		SANDSTONE	14.5	285.5	
50.0	CARBONDALE		SANDY SHALE	12.3	300.0	
37.7	CARBONDALE	BRIAR HILL	COAL	1.8	312.3	
35.9	CARBONDALE		SANDY SHALE	10.9	314.1	
25.0	CARBONDALE		SANDSTONE	19.5	325.0	
5.5	CARBONDALE		SANDY SHALE	20.0	344.5	
-14.5	CARBONDALE		GRAY SHALE	16.1	364.5	
-30.6	CARBONDALE		SHALE	0.5	380.6	
-31.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.3	381.0	
-35.3	CARBONDALE	SPRINGFIELD	COAL	5.1	385.3	
-40.4	CARBONDALE		GRAY SHALE	1.4	390.4	

-41.8	CARBONDALE	SANDSTONE	1.0	391.8

MAPID: 05901226000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1090' W line of E2 NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.112237 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.730746 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 1686.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-207.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	550.0	
-295.0	SPOON	DAVIS	UNCLASSIFIED	-	638.0	
-1343.0	BASE OF PENN.		UNCLASSIFIED	-	1686.0	

MAPID: 05901226000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1090' W line of E2 NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.112237 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.730746 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
100.0	CARBONDALE	HERRIN	COAL	2.0	243.0	
39.0	CARBONDALE	BRIAR HILL	COAL	-	304.0	
-32.0	CARBONDALE	SPRINGFIELD	COAL	6.0	375.0	BLACK SHALE ROOF
-97.0	CARBONDALE	HOUCHIN CREEK	COAL	-	440.0	

MAPID: 05901226000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 1090' W line of E2 NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.112237 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.730746 **DATE COLLECTED:** 8 / 0 / 1952

SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2900.0 **LOG TYPE:** Electric Log

SOURCE: REASOR G L, HENRY E L 2 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-100.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	443.0	
-147.0	CARBONDALE	SURVANT	COAL	2.0	490.0	
-207.0	CARBONDALE	COLCHESTER	COAL	0.5	550.0	
-267.0	CARBONDALE	DEKOVEN	COAL	3.0	610.0	
-267.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	610.0	
-292.0	CARBONDALE	DAVIS	COAL	4.0	635.0	
-322.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	665.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05903533000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1' S line, 330' W line of SW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.119468 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.718893 **DATE COLLECTED:** 5 / 19 / 1971

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 365.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1029C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION B-17

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
349.0	PLEISTOCENE		CLAY	15.0	0.0	
334.0	PLEISTOCENE		SAND & GRAVEL	7.0	15.0	
327.0	MODESTO		SANDSTONE	5.0	22.0	
322.0	MODESTO		GRAY SHALE	70.0	27.0	
252.0	MODESTO		SANDY SHALE	13.0	97.0	
239.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	110.0	
237.0	MODESTO		SANDSTONE	15.0	112.0	
222.0	MODESTO		SANDY SHALE	13.0	127.0	
209.0	MODESTO		SANDSTONE	34.0	140.0	
175.0	CARBONDALE		SANDY SHALE	7.0	174.0	
168.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.2	181.0	
164.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	16.8	184.2	
148.0	CARBONDALE	BRERETON	LIMESTONE	5.0	201.0	
143.0	CARBONDALE	ANNA	BLACK SHALE	3.9	206.0	
139.1	CARBONDALE	HERRIN	COAL	2.5	209.9	
136.6	CARBONDALE		UNDERCLAY	2.6	212.4	
134.0	CARBONDALE		SANDSTONE	40.0	215.0	
94.0	CARBONDALE	BRIAR HILL	COAL	2.6	255.0	
91.4	CARBONDALE		SANDSTONE	61.7	257.6	
29.7	CARBONDALE	ST. DAVID	GRAY SHALE & LIMESTONE	9.5	319.3	
20.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	328.8	
17.7	CARBONDALE	TURNER MINE	LIMESTONE	0.9	331.3	
16.8	CARBONDALE	SPRINGFIELD	COAL	4.7	332.2	
12.1	CARBONDALE		UNDERCLAY	1.1	336.9	
11.0	CARBONDALE		SANDSTONE	15.0	338.0	
-4.0	CARBONDALE		SANDY SHALE	12.0	353.0	

MAPID: 05903535000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1980' N line, 1980' W line of NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.113811 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.727913 **DATE COLLECTED:** 6 / 2 / 1971

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 380.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1032C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION G-7

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.0	PLEISTOCENE		CLAY	10.0	0.0	
345.0	PLEISTOCENE		SAND & GRAVEL	47.0	10.0	
298.0	MODESTO		GRAY SHALE	6.0	57.0	
292.0	MODESTO		LIMESTONE	4.0	63.0	
288.0	MODESTO		SANDY SHALE	67.0	67.0	
221.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	134.0	
219.7	MODESTO		SANDSTONE	15.0	135.3	
204.7	MODESTO		SANDY SHALE	23.7	150.3	
181.0	MODESTO		GRAY SHALE	21.0	174.0	
160.0	CARBONDALE	DANVILLE	COAL	0.8	195.0	
159.2	CARBONDALE		UNDERCLAY	1.2	195.8	
158.0	CARBONDALE		SANDSTONE	17.0	197.0	
141.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	214.0	
135.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	219.5	
123.5	CARBONDALE		SANDY SHALE	12.5	231.5	
111.0	CARBONDALE	BRERETON	LIMESTONE	1.5	244.0	
109.5	CARBONDALE	ANNA	BLACK SHALE	4.5	245.5	
105.0	CARBONDALE	HERRIN	COAL	3.6	250.0	
101.4	CARBONDALE		UNDERCLAY	2.4	253.6	
99.0	CARBONDALE		SANDSTONE	23.0	256.0	
76.0	CARBONDALE		SANDY SHALE	23.0	279.0	
53.0	CARBONDALE	BRIAR HILL	COAL	2.1	302.0	
50.9	CARBONDALE		SANDY SHALE	30.9	304.1	
20.0	CARBONDALE		SANDSTONE	8.0	335.0	
12.0	CARBONDALE		SANDY SHALE	17.0	343.0	
-5.0	CARBONDALE		SHALE	7.8	360.0	
-12.8	CARBONDALE	ST. DAVID	LIMESTONE	0.9	367.8	
-13.7	CARBONDALE	TURNER MINE	BLACK SHALE	4.9	368.7	
-18.6	CARBONDALE	SPRINGFIELD	COAL	4.9	373.6	
-23.5	CARBONDALE		UNDERCLAY	1.5	378.5	

MAPID: 05903608000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 21 **QUARTERS/FOOTAGES:** 1650' S line, 990' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.105603 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.723647 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 204.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1068-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
178.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.4	162.0	
174.6	CARBONDALE	LAWSON	SANDSTONE	28.0	165.4	
146.6	CARBONDALE	LAWSON	GRAY SHALE	2.6	193.4	
144.0	CARBONDALE	BRERETON	LIMESTONE	3.0	196.0	
141.0	CARBONDALE	ANNA	BLACK SHALE	2.0	199.0	
139.0	CARBONDALE	HERRIN	COAL	3.6	201.0	

MAPID: 05901076000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 990' S line, 330' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.101046 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.722551 **DATE COLLECTED:** 8 / 0 / 1947

SURFACE ELEVATION (FT.): 347.0 **LOGGED (FT.):** 2800.0 **LOG TYPE:** Electric Log

SOURCE: **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-68.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	415.0	
-115.0	CARBONDALE	SURVANT	COAL	1.8	462.0	
-171.0	CARBONDALE	COLCHESTER	COAL	0.5	518.0	
-235.0	CARBONDALE	DEKOVEN	COAL	4.0	582.0	
-235.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	582.0	
-261.0	CARBONDALE	DAVIS	COAL	5.0	608.0	
-295.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.8	642.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901186000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.10187 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.733496 **DATE COLLECTED:** 10 / 14 / 1953

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 382.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 86 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0	
287.0	MODESTO		SOFT SHALE	2.5	53.0	
284.5	MODESTO		SHALE	42.5	55.5	
242.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	98.0	
236.0	MODESTO		SHALE	7.0	104.0	
229.0	MODESTO		SHALE	5.0	111.0	
224.0	MODESTO		DARK SHALE	9.5	116.0	
214.5	MODESTO	WEST FRANKLIN	LIMESTONE	1.1	125.5	
213.4	MODESTO		DARK SHALE	5.0	126.6	
208.4	MODESTO		SANDY SHALE	9.4	131.6	
199.0	MODESTO		SANDSTONE	32.5	141.0	
166.5	MODESTO		SANDY SHALE	14.5	173.5	
152.0	MODESTO		SANDSTONE	5.0	188.0	
147.0	MODESTO		SOFT SHALE	1.0	193.0	
146.0	CARBONDALE	DANVILLE	COAL	1.7	194.0	
144.3	CARBONDALE		SANDY SHALE	8.3	195.7	
136.0	CARBONDALE		DARK SHALE	0.5	204.0	
135.5	CARBONDALE	ALLENBY	COAL	0.4	204.5	
135.1	CARBONDALE		DARK SHALE	7.3	204.9	
127.8	CARBONDALE		SHALE WITH LIMESTONE	0.7	212.2	
127.2	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	212.8	
123.3	CARBONDALE		SHALE WITH LIMESTONE	0.8	216.7	
122.6	CARBONDALE		DARK SHALE	0.8	217.4	
121.8	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.3	218.2	
119.6	CARBONDALE	ANVIL ROCK	SANDSTONE	2.6	220.4	
117.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	223.0	
107.0	CARBONDALE		DARK SHALE	6.0	233.0	
101.0	CARBONDALE		FOSSILIFEROUS SHALE	0.6	239.0	
100.4	CARBONDALE	BRERETON	LIMESTONE	4.3	239.6	
96.1	CARBONDALE	ANNA	BLACK SHALE	2.9	243.9	
93.2	CARBONDALE	HERRIN	COAL	2.6	246.8	
90.6	CARBONDALE	HERRIN	BLUE BAND	0.2	249.4	
90.4	CARBONDALE	HERRIN	COAL	1.0	249.6	
89.4	CARBONDALE		UNDERCLAY	2.6	250.6	
86.8	CARBONDALE		LIMESTONE	0.3	253.2	
86.6	CARBONDALE		SANDSTONE	2.6	253.4	
84.0	CARBONDALE		SANDY SHALE	30.0	256.0	
54.0	CARBONDALE		SHALE	11.0	286.0	
43.0	CARBONDALE	BRIAR HILL	COAL	1.5	297.0	

41.5	CARBONDALE		SANDSTONE	39.0	298.5
2.5	CARBONDALE		SANDY SILTSTONE	22.5	337.5
-20.0	CARBONDALE		SHALE	12.8	360.0
-32.8	CARBONDALE		FOSSILIFEROUS SHALE	0.7	372.8
-33.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	373.5
-35.0	CARBONDALE	SPRINGFIELD	COAL	5.8	375.0
-40.8	CARBONDALE		UNDERCLAY/SHALE	1.3	380.8

MAPID: 05901186000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.10187 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.733496 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 249.7 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 86 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
132.8	CARBONDALE	DANVILLE	COAL	1.8	197.2	
131.0	CARBONDALE		GRAY SHALE	8.7	199.0	
122.4	CARBONDALE	ALLENBY	COAL	0.7	207.6	
121.7	CARBONDALE		CLAYSTONE	7.6	208.3	
114.1	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	215.9	
109.8	CARBONDALE	LAWSON	GRAY SHALE	2.6	220.2	
107.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	3.4	222.7	
103.8	CARBONDALE	LAWSON	GRAY SHALE	1.2	226.2	
102.7	CARBONDALE	LAWSON	SILTSTONE	2.8	227.3	
99.9	CARBONDALE	LAWSON	GRAY SHALE	8.8	230.1	
91.2	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	4.3	238.8	
86.9	CARBONDALE	ANNA	BLACK SHALE	2.9	243.1	
84.0	CARBONDALE	HERRIN	COAL	3.7	246.0	

MAPID: 05901654000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1650' N line, 330' E line of NW
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.094009 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.728958 **DATE COLLECTED:** 1 / 0 / 1955
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2723.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK-MCGUIRE, HALL-CLAYTON **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-76.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	419.0	
-125.0	CARBONDALE	SURVANT	COAL	2.5	468.0	
-177.0	CARBONDALE	COLCHESTER	COAL	0.5	520.0	
-241.0	CARBONDALE	DEKOVEN	COAL	3.0	584.0	
-241.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	584.0	
-267.0	CARBONDALE	DAVIS	COAL	4.0	610.0	
-299.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	642.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05901654000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1650' N line, 330' E line of NW
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.094009 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.728958 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2723.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK-MCGUIRE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
120.0	CARBONDALE	HERRIN	COAL	3.0	223.0	
69.0	CARBONDALE	BRIAR HILL	COAL	-	274.0	
-8.0	CARBONDALE	SPRINGFIELD	COAL	5.0	351.0	BLACK SHALE ROOF
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	-	416.0	

MAPID: 05902137000C **VERSION:** 2 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 490' S line, 305' W line of SE NW
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.096408 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.727648 **DATE COLLECTED:** 9 / 0 / 1957
SURFACE ELEVATION (FT.): 348.5 **LOGGED (FT.):** 1794.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK JAMES H **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1445.5	BASE OF PENN.		UNCLASSIFIED	-	1794.0	

MAPID: 05903596000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1650' N line, 1980' W line of NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.095124 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.728955 **DATE COLLECTED:** 9 / 11 / 1971

SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 369.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1052C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION G-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
330.0	PLEISTOCENE		CLAY	12.0	0.0	
318.0	PLEISTOCENE		SAND & GRAVEL	50.0	12.0	
268.0	MODESTO		GRAY SHALE	26.0	62.0	
242.0	MODESTO		BLACK SHALE	1.0	88.0	
241.0	CARBONDALE	DANVILLE	COAL	1.4	89.0	
239.6	CARBONDALE		UNDERCLAY	2.6	90.4	
237.0	CARBONDALE		GRAY SHALE	17.0	93.0	
220.0	CARBONDALE		SANDSTONE	87.0	110.0	
133.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	197.0	
128.7	CARBONDALE	ANVIL ROCK	SANDSTONE	19.7	201.3	
109.0	CARBONDALE	BRERETON	LIMESTONE	5.0	221.0	
104.0	CARBONDALE	ANNA	BLACK SHALE	1.5	226.0	
102.5	CARBONDALE	HERRIN	COAL	4.0	227.5	
98.5	CARBONDALE		UNDERCLAY	2.5	231.5	
96.0	CARBONDALE		SANDSTONE	49.0	234.0	
47.0	CARBONDALE	BRIAR HILL	COAL	2.3	283.0	
44.7	CARBONDALE		SANDY SHALE	44.7	285.3	
0.0	CARBONDALE	ST. DAVID	GRAY SHALE & LIMESTONE	28.0	330.0	
-28.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	358.0	
-31.3	CARBONDALE	SPRINGFIELD	COAL	5.5	361.3	
-36.9	CARBONDALE		UNDERCLAY	2.2	366.9	

MAPID: 05901227000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.077923 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.732613 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 1787.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1443.0	BASE OF PENN.		UNCLASSIFIED	-	1787.0	

MAPID: 05901227000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.077923 **GEOLOGIST:** HOPKINS

CONFIDENTIAL: N **LATITUDE:** 37.732613 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
79.0	CARBONDALE	HERRIN	COAL	2.5	265.0	
31.0	CARBONDALE	BRIAR HILL	COAL	-	313.0	
-43.0	CARBONDALE	SPRINGFIELD	COAL	5.0	387.0	BLACK SHALE ROOF
-116.0	CARBONDALE	HOUCHIN CREEK	COAL	-	460.0	

MAPID: 05901227000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 23 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of NE NW

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.077923 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.732613 **DATE COLLECTED:** 10 / 0 / 1952

SURFACE ELEVATION (FT.): 344.0 **LOGGED (FT.):** 2830.0 **LOG TYPE:** Electric Log

SOURCE: SUN PRODUCTION COMPANY, LOGSDON ISABELLE **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-119.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	463.0	
-164.0	CARBONDALE	SURVANT	COAL	1.6	508.0	
-216.0	CARBONDALE	COLCHESTER	COAL	0.5	560.0	
-299.0	CARBONDALE	DEKOVEN	COAL	4.0	643.0	
-299.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	643.0	
-326.0	CARBONDALE	DAVIS	COAL	3.0	670.0	
-360.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.5	704.0	25% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-384.0	TRADEWATER	STONEFORT	LIMESTONE	3.0	728.0	
-406.0	TRADEWATER	MT. RORAH	COAL	1.2	750.0	

MAPID: 05903597000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 23 **QUARTERS/FOOTAGES:** 2310' S line, 0' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.083693 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.730297 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 269.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. P-1053-C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
103.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.6	236.5	
97.9	CARBONDALE	LAWSON	SILTY SHALE	18.4	242.1	
79.5	CARBONDALE	BRERETON	LIMESTONE	3.0	260.5	
76.5	CARBONDALE	ANNA	BLACK SHALE	0.5	263.5	
76.0	CARBONDALE	HERRIN	COAL	5.3	264.0	

MAPID: 05901170000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' N line, 0' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.120612 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.718874 **DATE COLLECTED:** 6 / 5 / 1953

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 341.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 70 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
332.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	18.0	
329.5	MODESTO		SANDY SHALE	10.0	20.5	
319.5	MODESTO		SOFT SHALE	54.5	30.5	
265.0	MODESTO		SANDY SHALE	6.0	85.0	
259.0	MODESTO		SANDSTONE	0.5	91.0	
258.5	CARBONDALE	DANVILLE	COAL	0.8	91.5	
257.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	18.2	92.3	
239.5	CARBONDALE	ANVIL ROCK	SANDSTONE	62.5	110.5	
177.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.6	173.0	
165.4	CARBONDALE	ANVIL ROCK	SANDSTONE	15.1	184.6	
150.3	CARBONDALE		SHALE	2.3	199.7	
148.0	CARBONDALE	BRERETON	LIMESTONE	6.8	202.0	
141.2	CARBONDALE	ANNA	SHALE W/ LIME NODULES	2.2	208.8	
139.0	CARBONDALE	ANNA	BLACK SHALE	1.0	211.0	
138.0	CARBONDALE	HERRIN	COAL	2.1	212.0	
135.9	CARBONDALE	HERRIN	BLUE BAND	0.2	214.1	
135.8	CARBONDALE	HERRIN	COAL	0.9	214.2	
134.8	CARBONDALE		UNDERCLAY	2.2	215.2	
132.7	CARBONDALE		SANDSTONE	3.0	217.3	
129.7	CARBONDALE		SANDY SHALE	23.7	220.3	
106.0	CARBONDALE		SHALE	16.0	244.0	
90.0	CARBONDALE	BRIAR HILL	COAL	1.2	260.0	
88.8	CARBONDALE		UNDERCLAY	2.3	261.2	
86.5	CARBONDALE		SANDY SHALE	15.5	263.5	
71.0	CARBONDALE		SANDSTONE	35.5	279.0	
35.5	CARBONDALE		SANDY SHALE	3.5	314.5	
32.0	CARBONDALE		SANDSTONE	2.0	318.0	
30.0	CARBONDALE		SHALE	8.0	320.0	
22.0	CARBONDALE		FOSSILIFEROUS SHALE	2.0	328.0	
20.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	330.0	
18.0	CARBONDALE	SPRINGFIELD	COAL	4.7	332.0	
13.3	CARBONDALE		UNDERCLAY	2.3	336.7	
11.0	CARBONDALE		LIMESTONE	2.0	339.0	

MAPID: 05901170000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 0' N line, 0' W line
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.120612 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.718874 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 215.2 **LOG TYPE:** Survey Core Study
SOURCE: UNION COLLIERY CO 70 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
237.0	CARBONDALE	LAWSON	SHALE & SANDSTONE	90.0	113.0	
147.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	6.8	203.0	
140.2	CARBONDALE	ANNA	BLACK SHALE	2.2	209.8	
138.0	CARBONDALE	HERRIN	COAL	3.2	212.0	

MAPID: 05901657000C **VERSION:** 1 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.11263 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.718079 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 343.0 **LOGGED (FT.):** 2745.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK-MCGUIRE **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
116.0	CARBONDALE	HERRIN	COAL	3.0	227.0	
67.0	CARBONDALE	BRIAR HILL	COAL	-	276.0	
-1.0	CARBONDALE	SPRINGFIELD	COAL	6.0	344.0	BLACK SHALE ROOF
-70.0	CARBONDALE	HOUCHIN CREEK	COAL	-	413.0	

MAPID: 05902128000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 330' N line, 330' W line
QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.1195 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.717977 **DATE COLLECTED:** 7 / 0 / 1957
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1652.0 **LOG TYPE:** Electric Log
SOURCE: VANDENBARK JAMES H **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-150.0	CARBONDALE	COLCHESTER	UNCLASSIFIED	-	500.0	
-234.0	SPOON	DAVIS	UNCLASSIFIED	-	584.0	
-1302.0	BASE OF PENN.		UNCLASSIFIED	-	1652.0	

MAPID: 05903609000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 660' N line, 2640' E line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.111521 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.717185 **DATE COLLECTED:** 2 / 4 / 1972

SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 299.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1069C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
330.0	PLEISTOCENE		CLAY	15.0	0.0	
315.0	PLEISTOCENE		SAND & GRAVEL	30.0	15.0	
285.0	MODESTO		GRAY SHALE	10.0	45.0	
275.0	MODESTO		SANDSTONE	60.0	55.0	
215.0	MODESTO		SANDY SHALE	20.0	115.0	
195.0	MODESTO		BLACK SHALE	1.5	135.0	
193.5	CARBONDALE		GRAY SHALE	5.0	136.5	
188.5	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	141.5	
182.5	CARBONDALE		GRAY SHALE	1.0	147.5	
181.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.0	148.5	
178.5	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	151.5	
172.5	CARBONDALE		GRAY SHALE	8.0	157.5	
164.5	CARBONDALE	BRERETON	LIMESTONE	4.0	165.5	
160.5	CARBONDALE	ANNA	BLACK SHALE	2.5	169.5	
158.0	CARBONDALE	HERRIN	COAL	3.7	172.0	
154.3	CARBONDALE		UNDERCLAY	2.3	175.7	
152.0	CARBONDALE		LIMESTONE	3.0	178.0	
149.0	CARBONDALE		SANDSTONE	14.0	181.0	
135.0	CARBONDALE		SANDY SHALE	30.0	195.0	
105.0	CARBONDALE	BRIAR HILL	COAL	2.2	225.0	
102.8	CARBONDALE		GRAY SHALE	10.0	227.2	
92.8	CARBONDALE		SANDSTONE	8.0	237.2	
84.8	CARBONDALE		SANDY SHALE	44.3	245.2	
40.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	289.5	
38.0	CARBONDALE	SPRINGFIELD	COAL	5.5	292.0	
32.5	CARBONDALE		UNDERCLAY	2.0	297.5	

MAPID: 05923814000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 28 **QUARTERS/FOOTAGES:** 990' N line, 2310' W line

QUADRANGLE: GROVE CENTER **LONGITUDE:** -88.112682 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.716257 **DATE COLLECTED:** 12 / 20 / 1971

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 230.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1065C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION H-4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.0	PLEISTOCENE		CLAY	10.0	0.0	
420.0	PLEISTOCENE		SAND & GRAVEL	46.5	10.0	
373.5	MODESTO		SANDSTONE	3.0	56.5	
370.5	MODESTO		GRAY SHALE	2.0	59.5	
368.5	CARBONDALE	DANVILLE	COAL	1.5	61.5	
367.0	CARBONDALE		UNDERCLAY	3.0	63.0	
364.0	CARBONDALE		SANDSTONE	4.0	66.0	
360.0	CARBONDALE		GRAY SHALE	10.0	70.0	
350.0	CARBONDALE		BLACK SHALE	1.5	80.0	
348.5	CARBONDALE		GRAY SHALE	3.0	81.5	
345.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	84.5	
343.5	CARBONDALE		GRAY SHALE	6.5	86.5	
337.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	93.0	
335.0	CARBONDALE		GRAY SHALE	12.0	95.0	
323.0	CARBONDALE	BRERETON	LIMESTONE	5.0	107.0	
318.0	CARBONDALE	ANNA	BLACK SHALE	4.0	112.0	
314.0	CARBONDALE	HERRIN	COAL	4.7	116.0	
309.3	CARBONDALE		UNDERCLAY	3.3	120.7	
306.0	CARBONDALE		LIMESTONE	1.5	124.0	
304.5	CARBONDALE		GRAY SHALE	9.5	125.5	
295.0	CARBONDALE		SANDSTONE	20.0	135.0	
275.0	CARBONDALE		SANDY SHALE	14.0	155.0	
261.0	CARBONDALE	BRIAR HILL	COAL	1.5	169.0	
259.5	CARBONDALE		GRAY SHALE	5.0	170.5	
254.5	CARBONDALE		SANDSTONE	12.0	175.5	
242.5	CARBONDALE		SANDY SHALE	35.0	187.5	
207.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	222.5	
205.0	CARBONDALE	SPRINGFIELD	COAL	4.8	225.0	
200.2	CARBONDALE		UNDERCLAY	1.0	229.8	

MAPID: 05901171000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.132966 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.711609 **DATE COLLECTED:** 6 / 18 / 1953

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 319.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 71 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	55.0	0.0	
295.0			SOFT SHALE	21.5	55.0	
273.5			LIMESTONE	2.0	76.5	
271.5			SOFT SHALE	16.5	78.5	
255.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.0	95.0	
245.0	CARBONDALE	ANVIL ROCK	SHALE & CONGLOMERATE	1.5	105.0	
243.5	CARBONDALE	ANVIL ROCK	SANDSTONE	83.5	106.5	
160.0	CARBONDALE	ANVIL ROCK	SHALE	5.3	190.0	
154.7	CARBONDALE	ANVIL ROCK	FOSSILIFEROUS SHALE	0.8	195.3	
153.8	CARBONDALE	BRERETON	LIMESTONE	2.7	196.2	
151.2	CARBONDALE	ANNA	BLACK SHALE	3.1	198.8	
148.2	CARBONDALE	HERRIN	COAL	2.5	201.8	
145.7	CARBONDALE		UNDERCLAY	5.7	204.3	
140.0	CARBONDALE		SHALY SANDSTONE	2.3	210.0	
137.7	CARBONDALE		SANDY SHALE	35.2	212.3	
102.6	CARBONDALE		BLACK SHALE	0.3	247.4	
102.2	CARBONDALE	BRIAR HILL	COAL	1.8	247.8	
100.4	CARBONDALE		SANDY SHALE	30.4	249.6	
70.0	CARBONDALE		SHALE	29.3	280.0	
40.7	CARBONDALE		FOSSILIFEROUS SHALE	2.0	309.3	
38.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	311.3	
36.2	CARBONDALE	SPRINGFIELD	COAL	4.0	313.8	
32.2	CARBONDALE		UNDERCLAY	1.2	317.8	

MAPID: 05901171000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.132966 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.711609 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 204.6 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 71 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
254.7	CARBONDALE	LAWSON	SANDSTONE	76.9	95.3	
177.8	CARBONDALE	LAWSON	CONGLOMERATE	0.6	172.2	
177.2	CARBONDALE	LAWSON	SANDSTONE	19.3	172.8	
158.0	CARBONDALE	LAWSON	GRAY SHALE	4.3	192.0	
153.7	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.6	196.3	
151.2	CARBONDALE	ANNA	BLACK SHALE	3.2	198.8	
148.0	CARBONDALE	HERRIN	COAL	2.6	202.0	

MAPID: 05903534000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' S line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.13455 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.70794 **DATE COLLECTED:** 5 / 13 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 278.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1025-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		CLAY	6.0	0.0	
334.0	PLEISTOCENE		SAND & GRAVEL	50.0	6.0	
284.0	PLEISTOCENE		SAND/CLAY	11.5	56.0	
272.5	MODESTO		SANDSTONE	37.0	67.5	
235.5	CARBONDALE	DANVILLE	COAL	0.5	104.5	
235.0	CARBONDALE		UNDERCLAY	2.0	105.0	
233.0	CARBONDALE		GRAY SHALE	17.0	107.0	
216.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	124.0	
211.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	129.0	
200.0	CARBONDALE		GRAY SHALE	12.0	140.0	
188.0	CARBONDALE	BRERETON	LIMESTONE	4.0	152.0	
184.0	CARBONDALE	ANNA	BLACK SHALE	3.0	156.0	
181.0	CARBONDALE	HERRIN	COAL	3.0	159.0	
178.0	CARBONDALE		UNDERCLAY	3.0	162.0	
175.0	CARBONDALE		SANDY SHALE	10.0	165.0	
165.0	CARBONDALE		GRAY SHALE	27.8	175.0	
137.2	CARBONDALE	BRIAR HILL	COAL	2.0	202.8	
135.2	CARBONDALE		SANDY SHALE	45.2	204.8	
90.0	CARBONDALE		GRAY SHALE	16.4	250.0	
73.6	CARBONDALE		SHALE	1.0	266.4	
72.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	267.4	
70.0	CARBONDALE	SPRINGFIELD	COAL	4.5	270.0	
65.5	CARBONDALE		UNDERCLAY	3.5	274.5	

MAPID: 05903569000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.131396 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.715251 **DATE COLLECTED:** 2 / 13 / 1971

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 347.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1016-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION I-5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	23.0	0.0	
322.0	PLEISTOCENE		SAND & GRAVEL	25.0	23.0	
297.0	PLEISTOCENE		CLAY	7.0	48.0	
290.0	MODESTO		SANDSTONE	13.0	55.0	
277.0	MODESTO		GRAY SHALE	12.0	68.0	
265.0	MODESTO		SANDY SHALE	10.0	80.0	
255.0	MODESTO		GRAY SHALE	13.0	90.0	
242.0	MODESTO		SANDY SHALE	65.0	103.0	
177.0			SANDSTONE	25.7	168.0	
151.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.3	193.7	
148.0	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	197.0	
123.0	CARBONDALE	BRERETON	LIMESTONE	2.0	222.0	
121.0	CARBONDALE	ANNA	BLACK SHALE	3.2	224.0	
117.8	CARBONDALE	HERRIN	COAL	3.1	227.2	
114.7	CARBONDALE		UNDERCLAY	1.7	230.3	
113.0	CARBONDALE		SANDY SHALE	11.0	232.0	
102.0	CARBONDALE		SANDSTONE	6.0	243.0	
96.0	CARBONDALE		SANDY SHALE	15.0	249.0	
81.0	CARBONDALE		GRAY SHALE	2.0	264.0	
79.0	CARBONDALE		SANDY SHALE	8.5	266.0	
70.5	CARBONDALE	BRIAR HILL	COAL	1.4	274.5	
69.1	CARBONDALE		GRAY SHALE	1.1	275.9	
68.0	CARBONDALE		SANDY SHALE	18.0	277.0	
50.0	CARBONDALE		SANDSTONE	10.0	295.0	
40.0	CARBONDALE		GRAY SHALE	7.0	305.0	
33.0	CARBONDALE		SANDY SHALE	25.5	312.0	
7.5	CARBONDALE	ST. DAVID	LIMESTONE	0.5	337.5	
7.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	338.0	
4.4	CARBONDALE	SPRINGFIELD	COAL	4.5	340.6	
-0.1	CARBONDALE		UNDERCLAY	1.8	345.1	

MAPID: 05903579000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 2640' N line, 330' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.137827 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.711621 **DATE COLLECTED:** 1 / 11 / 1972

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 337.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1066C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION B-9

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	PLEISTOCENE		CLAY	8.0	0.0	
347.0	PLEISTOCENE		SAND & GRAVEL	40.0	8.0	
307.0	CARBONDALE		GRAY SHALE	31.0	48.0	
276.0	CARBONDALE		SANDY SHALE	41.0	79.0	
235.0	CARBONDALE	ANVIL ROCK	SANDSTONE	80.0	120.0	
155.0	CARBONDALE		GRAY SHALE	8.5	200.0	
146.5	CARBONDALE	BRERETON	LIMESTONE	2.5	208.5	
144.0	CARBONDALE	ANNA	BLACK SHALE	4.5	211.0	
139.5	CARBONDALE	HERRIN	COAL	3.5	215.5	
136.0	CARBONDALE		UNDERCLAY	3.0	219.0	
133.0	CARBONDALE		LIMESTONE	2.0	222.0	
131.0	CARBONDALE		SANDY SHALE	30.0	224.0	
101.0	CARBONDALE		GRAY SHALE	7.5	254.0	
93.5	CARBONDALE	BRIAR HILL	COAL	2.1	261.5	
91.4	CARBONDALE		GRAY SHALE	4.4	263.6	
87.0	CARBONDALE		SANDSTONE	5.0	268.0	
82.0	CARBONDALE		SANDY SHALE	53.0	273.0	
29.0	CARBONDALE	ST. DAVID	LIMESTONE	1.8	326.0	
27.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	327.8	
24.4	CARBONDALE	SPRINGFIELD	COAL	4.3	330.6	
20.1	CARBONDALE		UNDERCLAY	2.8	334.9	

MAPID: 05903610000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 29 **QUARTERS/FOOTAGES:** 1320' S line, 660' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.136631 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.707984 **DATE COLLECTED:** 4 / 2 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 278.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P-1022-C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION C-13

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		CLAY	5.0	0.0	
345.0	PLEISTOCENE		SAND & GRAVEL	46.0	5.0	
299.0	PLEISTOCENE		CLAY	15.5	51.0	
283.5	CARBONDALE		SHALE	18.5	66.5	
265.0	CARBONDALE	ANVIL ROCK	SANDSTONE	62.0	85.0	
203.0	CARBONDALE		GRAY SHALE	9.5	147.0	
193.5	CARBONDALE	BRERETON	LIMESTONE	2.3	156.5	
191.2	CARBONDALE	ANNA	BLACK SHALE	3.5	158.8	
187.7	CARBONDALE	HERRIN	COAL	2.9	162.3	
184.8	CARBONDALE		UNDERCLAY	2.8	165.2	
182.0	CARBONDALE		SANDSTONE	3.0	168.0	
179.0	CARBONDALE		SANDY SHALE	19.0	171.0	
160.0	CARBONDALE		GRAY SHALE	15.0	190.0	
145.0	CARBONDALE	BRIAR HILL	COAL	1.5	205.0	
143.5	CARBONDALE		UNDERCLAY	0.5	206.5	
143.0	CARBONDALE		SANDSTONE	30.0	207.0	
113.0	CARBONDALE		SANDY SHALE	15.0	237.0	
98.0	CARBONDALE		GRAY SHALE	16.2	252.0	
81.8	CARBONDALE	ST. DAVID	LIMESTONE	0.3	268.2	
81.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	268.5	
78.9	CARBONDALE	SPRINGFIELD	COAL	4.5	271.1	
74.5	CARBONDALE		UNDERCLAY/SHALE	2.5	275.5	

MAPID: 05902590000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1155' N line, 495' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.155303 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.715792 **DATE COLLECTED:** 9 / 15 / 1961

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 260.3 **LOG TYPE:** Drillers Log

SOURCE: REPUBLIC COAL AND COKE 2-K3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
330.0	MODESTO		SANDSTONE	32.0	40.0	
298.0	CARBONDALE	DANVILLE	COAL	1.0	72.0	
297.0	CARBONDALE		GRAY SHALE	1.0	73.0	
296.0	CARBONDALE		SANDY SHALE	8.0	74.0	
288.0	CARBONDALE		GRAY SHALE	1.0	82.0	
287.0	CARBONDALE		SANDY SHALE	9.0	83.0	
278.0	CARBONDALE		BLACK SHALE	1.5	92.0	
276.5	CARBONDALE		GRAY SHALE	4.5	93.5	
272.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	98.0	
267.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	102.7	
265.3	CARBONDALE	ANVIL ROCK	SANDSTONE	13.3	104.7	
252.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.5	118.0	
242.5	CARBONDALE	BRERETON	LIMESTONE	1.0	127.5	
241.5	CARBONDALE	ANNA	BLACK SHALE	5.2	128.5	
236.3	CARBONDALE	HERRIN	COAL	2.3	133.7	
234.0	CARBONDALE		UNDERCLAY	3.0	136.0	
231.0	CARBONDALE		SANDY SHALE	7.0	139.0	
224.0	CARBONDALE		SANDSTONE	22.0	146.0	
202.0	CARBONDALE		SANDY SHALE	15.7	168.0	
186.3	CARBONDALE	BRIAR HILL	COAL	1.8	183.7	
184.5	CARBONDALE		SANDY SHALE	32.5	185.5	
152.0	CARBONDALE		SANDSTONE	3.0	218.0	BKSH AND COAL PARTINGS
149.0	CARBONDALE		GRAY SHALE & SANDSTONE	8.0	221.0	
141.0	CARBONDALE		GRAY SHALE	21.0	229.0	
120.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	250.0	
119.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	250.5	
117.4	CARBONDALE	TURNER MINE	LIMESTONE	0.4	252.6	
117.0	CARBONDALE	SPRINGFIELD	COAL	4.3	253.0	
112.7	CARBONDALE		UNDERCLAY	3.0	257.3	

MAPID: 05902590000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** 1155' N line, 495' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.155303 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.715792 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 136.7 **LOG TYPE:** Drillers Log

SOURCE: REPUBLIC COAL AND COKE 2K3 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
303.7	CARBONDALE	DANVILLE	COAL	1.0	73.3	
302.7	CARBONDALE		GRAY SHALE	18.0	74.3	
284.7	CARBONDALE	ALLENBY	BLACK SHALE	1.5	92.3	
283.2	CARBONDALE		GRAY SHALE	4.5	93.8	
278.7	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	98.3	
274.0	CARBONDALE	LAWSON	SILTY SHALE	2.0	103.0	
272.0	CARBONDALE	LAWSON	SANDSTONE	13.3	105.0	
258.7	CARBONDALE	LAWSON	SILTY SHALE	9.5	118.3	
249.2	CARBONDALE	BRERETON	LIMESTONE	1.0	127.8	
248.2	CARBONDALE	ANNA	BLACK SHALE	5.2	128.8	
243.0	CARBONDALE	HERRIN	COAL	2.7	134.0	

MAPID: 05902592000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW NE NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.145236 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.718481 **DATE COLLECTED:** 9 / 20 / 1961

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Drillers Log

SOURCE: REPUBLIC COAL AND COKE 3-K4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
377.0	MODESTO		GRAY SHALE	7.0	15.0	
370.0	MODESTO		GREEN SHALE	29.0	22.0	
341.0	MODESTO		SANDY SHALE	34.0	51.0	
307.0	MODESTO		SANDSTONE/SHALE	25.0	85.0	
282.0	MODESTO		SANDSTONE	28.5	110.0	
253.5	CARBONDALE	DANVILLE	COAL	1.5	138.5	
252.0	CARBONDALE		SANDY SHALE	5.0	140.0	
247.0	CARBONDALE		SANDSTONE	5.0	145.0	
242.0	CARBONDALE		BLACK SHALE	2.3	150.0	
239.7	CARBONDALE		GRAY SHALE	2.7	152.3	
237.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	155.0	
232.7	CARBONDALE	ANVIL ROCK	GRAY SHALE & SANDSTONE	3.7	159.3	
229.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	163.0	
218.0	CARBONDALE	ANVIL ROCK	SANDY DARK SHALE	9.0	174.0	LIMESTONE LOWER
209.0	CARBONDALE	BRERETON	LIMESTONE	3.2	183.0	
205.8	CARBONDALE	ANNA	BLACK SHALE	5.4	186.2	
200.4	CARBONDALE	HERRIN	COAL	2.1	191.6	
198.3	CARBONDALE		SANDY SHALE	5.3	193.7	
193.0	CARBONDALE		GRAY SHALE & LIMESTONE	7.0	199.0	
186.0	CARBONDALE		SANDSTONE	10.0	206.0	
176.0	CARBONDALE		SANDY SHALE	20.0	216.0	
156.0	CARBONDALE	BRIAR HILL	COAL	2.0	236.0	
154.0	CARBONDALE		GRAY SHALE	23.0	238.0	
131.0	CARBONDALE		SANDSTONE/LIMESTONE	9.0	261.0	
122.0	CARBONDALE		GRAY SHALE & SANDSTONE	15.0	270.0	
107.0	CARBONDALE		NO RECORD	21.9	285.0	GAP IN TOTAL FOOTAGES
85.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	306.9	
82.8	CARBONDALE	SPRINGFIELD	COAL	4.8	309.2	
78.0	CARBONDALE		UNDERCLAY	1.0	314.0	

MAPID: 05900017000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.152395 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.693001 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 865.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	MODESTO		ARGILACEOUS SHALE	38.0	0.0	
312.0	MODESTO		ARGILACEOUS SHALE	10.0	38.0	
302.0	MODESTO		SHALE	8.5	48.0	
293.5	MODESTO		SHALE	2.3	56.5	
291.2	MODESTO		SHALE	3.4	58.8	
287.7	MODESTO		COAL	0.7	62.3	
287.1	MODESTO		SHALE	4.0	62.9	
283.1	CARBONDALE	DANVILLE	COAL	2.0	66.9	
281.1	CARBONDALE		SANDSTONE	3.3	68.9	
277.7	CARBONDALE		SHALE	1.6	72.3	
276.2	CARBONDALE		SANDSTONE	13.5	73.8	
262.7	CARBONDALE		SHALE	2.1	87.3	
260.6	CARBONDALE	ANVIL ROCK	SANDSTONE	15.7	89.4	
244.9	CARBONDALE		SHALE	6.0	105.1	
238.9	CARBONDALE	BRERETON	LIMESTONE	3.3	111.1	
235.6	CARBONDALE	ANNA	SHALE	0.8	114.4	
234.8	CARBONDALE	HERRIN	COAL	3.8	115.2	
231.0	CARBONDALE		UNDERCLAY	2.0	119.0	
229.0	CARBONDALE		SANDSTONE	3.0	121.0	
226.0	CARBONDALE		SHALY SANDSTONE	36.0	124.0	
190.0	CARBONDALE		SHALE	2.0	160.0	
188.0	CARBONDALE	BRIAR HILL	COAL	3.0	162.0	
185.0	CARBONDALE		SANDSTONE	8.0	165.0	
177.0	CARBONDALE		SHALE	3.0	173.0	
174.0	CARBONDALE		SANDSTONE	4.0	176.0	
170.0	CARBONDALE		ARGILACEOUS SHALE	49.0	180.0	
121.0	CARBONDALE		SHALE	6.0	229.0	
115.0	CARBONDALE	SPRINGFIELD	COAL	5.0	235.0	
110.0	CARBONDALE		UNDERCLAY	3.0	240.0	BLACK
107.0	CARBONDALE		SHALE	3.0	243.0	
104.0	CARBONDALE		SHALY SANDSTONE	40.0	246.0	
64.0	CARBONDALE		SHALE	37.6	286.0	FERRUGINOUS
26.4	CARBONDALE		SANDSTONE	10.0	323.6	WHITE TO PINK
16.4	CARBONDALE	SURVANT	COAL	2.5	333.6	
13.9	CARBONDALE		SANDSTONE	16.0	336.1	
-2.1	CARBONDALE		SHALE	14.0	352.1	
-16.1	CARBONDALE	COLCHESTER	COAL	0.3	366.1	
-16.4	CARBONDALE		UNDERCLAY	3.0	366.4	
-19.4	CARBONDALE		SHALE	3.0	369.4	

-22.4	CARBONDALE		SANDSTONE	2.0	372.4	
-24.4	CARBONDALE		LIMESTONE	2.0	374.4	FERRUGINOUS
-26.4	CARBONDALE		SANDSTONE	3.0	376.4	
-29.4	CARBONDALE		SANDSTONE	20.0	379.4	
-49.4	CARBONDALE		SHALY SANDSTONE	22.0	399.4	
-71.4	CARBONDALE		SHALE	6.0	421.4	
-77.4	CARBONDALE	DEKOVEN	COAL	3.0	427.4	
-80.4	CARBONDALE		UNDERCLAY	3.0	430.4	
-83.4	CARBONDALE		SANDSTONE	12.0	433.4	
-95.4	CARBONDALE		SANDSTONE	11.0	445.4	
-106.4	CARBONDALE		SHALE	6.0	456.4	
-112.4	CARBONDALE	DAVIS	COAL	4.0	462.4	
-116.4	TRADEWATER		DARK SHALE	20.0	466.4	
-136.4	TRADEWATER		SHALE WITH LIMESTONE	40.0	486.4	
-176.4	TRADEWATER		SANDSTONE	30.0	526.4	
-206.4	TRADEWATER		SHALE	5.0	556.4	
-211.4	TRADEWATER	MT. RORAH	COAL	4.0	561.4	
-215.4	TRADEWATER		SHALE	25.0	565.4	
-240.4	TRADEWATER		LIMESTONE	4.0	590.4	
-244.4	TRADEWATER		SHALE	45.0	594.4	
-289.4	TRADEWATER		SANDSTONE	10.0	639.4	
-299.4	TRADEWATER		COAL	1.0	649.4	
-300.4	TRADEWATER		SHALE	14.0	650.4	
-314.4	TRADEWATER		SANDSTONE	10.0	664.4	
-324.4	TRADEWATER		SHALE	12.0	674.4	
-336.4	TRADEWATER		COAL	1.3	686.4	
-337.7	TRADEWATER		SHALE	3.5	687.7	
-341.2	TRADEWATER		SHALE	11.0	691.2	
-352.2	TRADEWATER		COAL	2.5	702.2	
-354.7	TRADEWATER		BROWN SANDSTONE	13.0	704.7	
-367.7	TRADEWATER		SANDSTONE	40.0	717.7	
-407.7	TRADEWATER		SHALY SANDSTONE	22.0	757.7	
-429.7	TRADEWATER		SHALE	25.0	779.7	
-454.7	TRADEWATER		COAL	1.0	804.7	
-455.7	TRADEWATER		SHALE	7.0	805.7	
-462.7	TRADEWATER		SHALY SANDSTONE	50.0	812.7	
-512.7	TRADEWATER		COAL	3.0	862.7	

MAPID: 05900017000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.152395 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.693001 **DATE COLLECTED:** 0 / 0 / 1887

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 866.0 **LOG TYPE:** Other Core Study

SOURCE: NO COMPANY **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
17.0	CARBONDALE	SURVANT	COAL	2.5	333.0	
-16.0	CARBONDALE	COLCHESTER	COAL	0.3	366.0	
-77.0	CARBONDALE	DEKOVEN	COAL	3.0	427.0	
-77.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	427.0	
-112.0	CARBONDALE	DAVIS	COAL	4.0	462.0	62% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-211.0	TRADEWATER	MT. RORAH	COAL	4.0	561.0	

MAPID: 05900018000C **VERSION:** 1 **PROJECT:** RI 148

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** SW SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.142196 **GEOLOGIST:** MW PULLEN

CONFIDENTIAL: N **LATITUDE:** 37.697747 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 3500.0 **LOG TYPE:** Drillers Log

SOURCE: SHAWNEETOG **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
250.0	CARBONDALE	HERRIN	COAL	-	100.0	
136.0	CARBONDALE	SPRINGFIELD	COAL	7.0	214.0	DEPTH UNCERTAIN

MAPID: 05901153000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 660' N line, 1980' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.145726 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.702579 **DATE COLLECTED:** 12 / 23 / 1952

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 263.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 53 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0	
314.0	CARBONDALE	ANVIL ROCK	SANDSTONE	65.0	36.0	
249.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	36.5	101.0	
212.5	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	137.5	
207.0	CARBONDALE		DARK SHALE	7.3	143.0	
199.7	CARBONDALE		CHERT	0.5	150.3	
199.2	CARBONDALE	BRERETON	LIMESTONE	2.0	150.8	
197.2	CARBONDALE	ANNA	BLACK SHALE	2.8	152.8	
194.5	CARBONDALE	HERRIN	COAL	1.8	155.5	
192.7	CARBONDALE	HERRIN	BLUE BAND	0.1	157.3	
192.6	CARBONDALE	HERRIN	COAL	1.0	157.4	
191.7	CARBONDALE		UNDERCLAY	5.2	158.3	
186.5	CARBONDALE		SANDY SHALE	21.5	163.5	
165.0	CARBONDALE		SHALE	16.0	185.0	
149.0	CARBONDALE	BRIAR HILL	COAL	1.5	201.0	
147.5	CARBONDALE		SHALE	32.5	202.5	
115.0	CARBONDALE		SHALE	18.0	235.0	
97.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	253.0	
96.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	253.5	
93.3	CARBONDALE	SPRINGFIELD	SHALY COAL	0.7	256.7	
92.7	CARBONDALE	SPRINGFIELD	COAL	4.0	257.3	
88.7	CARBONDALE		UNDERCLAY	1.7	261.3	

MAPID: 05901153000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 660' N line, 1980' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.145726 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.702579 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 160.1 **LOG TYPE:** Survey Core Study

SOURCE: UNION COLLIERY CO 53 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
247.9	CARBONDALE	LAWSON	SILTSTONE	32.5	102.1	
215.4	CARBONDALE	LAWSON	SANDSTONE	10.0	134.6	
205.4	CARBONDALE	LAWSON	GRAY SHALE	7.5	144.6	
197.9	CARBONDALE	BRERETON	LIMESTONE	2.3	152.1	
195.6	CARBONDALE	ANNA	BLACK SHALE	2.6	154.4	
193.0	CARBONDALE	HERRIN	COAL	3.1	157.0	

MAPID: 05903598000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 31 **QUARTERS/FOOTAGES:** 1650' N line, 990' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.153588 **GEOLOGIST:** CHENOWETH

CONFIDENTIAL: N **LATITUDE:** 37.699859 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 242.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY P1034C **WELL TYPE:** Coal Test

COMMENT: PEABODY LOCATION D-6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
349.0	PLEISTOCENE		CLAY	6.0	0.0	
343.0	PLEISTOCENE		SILT, SAND & GRAVEL	117.0	6.0	
226.0	CARBONDALE		SANDSTONE	12.0	123.0	
214.0	CARBONDALE		SANDY SHALE	16.5	135.0	
197.5	CARBONDALE		GRAY SHALE	16.0	151.5	
181.5	CARBONDALE	BRIAR HILL	COAL	1.5	167.5	
180.0	CARBONDALE		GRAY SHALE	4.0	169.0	
176.0	CARBONDALE		SANDSTONE	7.0	173.0	
169.0	CARBONDALE		SANDY SHALE	2.0	180.0	
167.0	CARBONDALE		SANDSTONE	3.0	182.0	
164.0	CARBONDALE		SANDY SHALE	42.0	185.0	
122.0	CARBONDALE		GRAY SHALE	6.3	227.0	
115.7	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.8	233.3	
114.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	234.1	
112.4	CARBONDALE		GRAY SHALE	0.3	236.6	
112.1	CARBONDALE	SPRINGFIELD	COAL	4.8	236.9	
107.3	CARBONDALE		UNDERCLAY	1.0	241.7	

MAPID: 059275B0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 9S 10E **SECTION:** 32 **QUARTERS/FOOTAGES:** NW NW NE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.133982 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.697376 **DATE COLLECTED:** 0 / 0 / 1892
SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 153.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-J M NICKLES **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0			ROCK	21.0	0.0	
319.0			COAL	2.0	21.0	
317.0			ROCK	132.0	23.0	

MAPID: 05901985000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 9S 11E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.045761 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.765226 **DATE COLLECTED:** 6 / 0 / 1956
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1676.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY A W **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1328.0	BASE OF PENN.		UNCLASSIFIED	-	1676.0	

MAPID: 05901985000C **VERSION:** 2 **PROJECT:** CIRC 431

COUNTY: GALLATIN **TWP/RNG:** 9S 11E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW
QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.045761 **GEOLOGIST:** HOPKINS
CONFIDENTIAL: N **LATITUDE:** 37.765226 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2402.0 **LOG TYPE:** Electric Log
SOURCE: CHERRY A W **WELL TYPE:** Producer-Oil
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
60.0	CARBONDALE	HERRIN	COAL	2.0	288.0	
8.0	CARBONDALE	BRIAR HILL	COAL	-	340.0	
-69.0	CARBONDALE	SPRINGFIELD	COAL	5.0	417.0	BLACK SHALE ROOF
-132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	480.0	

MAPID: 05901985000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 9S 11E **SECTION:** 6 **QUARTERS/FOOTAGES:** 330' N line, 330' W line of SW SW

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.045761 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.765226 **DATE COLLECTED:** 6 / 0 / 1956

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 2402.0 **LOG TYPE:** Electric Log

SOURCE: CHERRY A W, LOGSDON J L 1 **WELL TYPE:** Producer-Oil

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-135.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	483.0	
-177.0	CARBONDALE	SURVANT	COAL	1.3	525.0	
-237.0	CARBONDALE	COLCHESTER	COAL	0.5	585.0	
-302.0	CARBONDALE	DEKOVEN	COAL	3.0	650.0	
-302.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	650.0	
-322.0	CARBONDALE	DAVIS	COAL	3.0	670.0	
-362.0	TRADEWATER	SEAHORNE LS	LIMESTONE	2.0	710.0	20% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05903599000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 9S 11E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2310' S line, 0' W line

QUADRANGLE: WABASH ISLAND **LONGITUDE:** -88.046889 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.769302 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 289.4 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY COAL CO. P-1048-C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
109.9	CARBONDALE	DANVILLE	COAL	1.0	235.1	
108.9	CARBONDALE		SHALE & SANDSTONE	21.8	236.1	
87.1	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	257.9	
82.1	CARBONDALE	LAWSON	GRAY SHALE	2.5	262.9	
79.6	CARBONDALE	LAWSON	SANDSTONE	6.0	265.4	
73.6	CARBONDALE	LAWSON	SILTY SHALE	9.5	271.4	
64.1	CARBONDALE	BRERETON	LIMESTONE	3.1	280.9	
61.0	CARBONDALE	ANNA	BLACK SHALE	1.0	284.0	
60.0	CARBONDALE	HERRIN	COAL	4.4	285.0	

MAPID: 05900039000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276141 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.679248 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 762.0 **LOG TYPE:** Survey Core Study

SOURCE: BOYD & SON **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0			UNCONSOLIDATED	75.0	0.0	
302.0			ROCK	209.0	75.0	
93.0	CARBONDALE	HERRIN	COAL	4.1	284.0	
88.9	CARBONDALE		ROCK	52.0	288.1	
36.9	CARBONDALE	BRIAR HILL	COAL	1.9	340.1	
35.0	CARBONDALE		ROCK	52.1	342.0	
-17.1	CARBONDALE	SPRINGFIELD	COAL	4.3	394.1	
-21.3	CARBONDALE		ROCK	114.0	398.3	
-135.3			COAL	0.8	512.3	
-136.1			ROCK	22.0	513.1	
-158.1			COAL	2.3	535.1	
-160.3			ROCK	27.0	537.3	
-187.3			COAL	3.0	564.3	
-190.4			ROCK	35.3	567.4	
-225.6			COAL	0.2	602.6	
-225.8			ROCK	158.8	602.8	

MAPID: 05900039000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276141 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.679248 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 288.1 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
128.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	249.0	
124.0	CARBONDALE	LAWSON	SILTY SHALE	8.0	253.0	
116.0	CARBONDALE	LAWSON	SANDSTONE	10.0	261.0	
106.0	CARBONDALE	LAWSON	GRAY SHALE	9.0	271.0	
97.0	CARBONDALE	BRERETON	LIMESTONE	4.0	280.0	
93.0	CARBONDALE	HERRIN	COAL	4.1	284.0	

MAPID: 05900039000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276141 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.679248 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 762.0 **LOG TYPE:** Other Core Study

SOURCE: TAYLOR, BUELL H O 16 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-73.0	CARBONDALE	HOUCHIN CREEK	COAL	0.0	450.0	
-136.0	CARBONDALE	COLCHESTER	COAL	0.8	513.0	
-158.0	CARBONDALE	DEKOVEN	COAL	2.3	535.0	
-158.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	535.0	
-188.0	CARBONDALE	DAVIS	COAL	3.0	565.0	30% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900039000C **VERSION:** 4 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276141 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.679248 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 762.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD & SON 16 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		CLAY	5.0	0.0	
372.0	PLEISTOCENE		SAND & GRAVEL	70.0	5.0	
302.0			SHALE	5.0	75.0	
297.0			DARK SHALE	20.0	80.0	
277.0			SHALY SANDSTONE	15.0	100.0	
262.0			SHALE	19.0	115.0	
243.0			SHALE	3.0	134.0	
240.0			LIMESTONE	3.0	137.0	
237.0			SHALE	24.0	140.0	
213.0			SHALE	36.0	164.0	
177.0			SHALE	4.0	200.0	COAL PARTINGS; NO.7 HORIZON? -CPK
173.0			SHALE	5.0	204.0	
168.0			SANDSTONE	30.0	209.0	
138.0			SHALE & SANDSTONE	8.0	239.0	
130.0			DARK SHALE	2.0	247.0	
128.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	249.0	
124.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	253.0	
116.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	261.0	
106.0	CARBONDALE		DARK SHALE	9.0	271.0	
97.0	CARBONDALE	BRERETON	GRAY LIMESTONE	4.0	280.0	
93.0	CARBONDALE	HERRIN	COAL	1.7	284.0	
91.3	CARBONDALE	HERRIN	ROCK	0.1	285.7	BAND NOTED; BLUE
91.2	CARBONDALE	HERRIN	COAL	2.3	285.8	
88.9	CARBONDALE		UNDERCLAY	2.9	288.1	
86.0	CARBONDALE		SANDSTONE	25.0	291.0	
61.0	CARBONDALE		DARK SHALE	24.0	316.0	
37.0	CARBONDALE	BRIAR HILL	COAL	1.9	340.0	
35.1	CARBONDALE		SANDSTONE	13.1	341.9	
22.0	CARBONDALE		SHALE	10.0	355.0	
12.0	CARBONDALE		DARK SHALE	25.0	365.0	
-13.0	CARBONDALE	TURNER MINE	SHALE	4.0	390.0	
-17.0	CARBONDALE	SPRINGFIELD	COAL	4.3	394.0	
-21.3	CARBONDALE		UNDERCLAY	6.8	398.3	
-28.0	CARBONDALE		SHALE	10.0	405.0	
-38.0	CARBONDALE		DARK SHALE	31.0	415.0	
-69.0	CARBONDALE		SHALE	5.0	446.0	
-74.0	CARBONDALE		SHALE	9.0	451.0	
-83.0	CARBONDALE		DARK SHALE	20.0	460.0	
-103.0	CARBONDALE		SHALE	6.0	480.0	

-109.0	CARBONDALE		DARK SHALE	26.5	486.0	
-135.5	CARBONDALE	HOUCHIN CREEK	COAL	0.8	512.5	
-136.3	CARBONDALE		UNDERCLAY	2.8	513.3	
-139.0	CARBONDALE		SANDSTONE	19.0	516.0	
-158.0	CARBONDALE	SURVANT	COAL	2.3	535.0	
-160.3	CARBONDALE		SHALE	3.8	537.3	
-164.0	CARBONDALE		LIMESTONE	9.0	541.0	
-173.0	CARBONDALE		SHALE	7.0	550.0	
-180.0	CARBONDALE		DARK SHALE	6.0	557.0	
-186.0	CARBONDALE	MECCA QUARRY	SHALE	1.8	563.0	
-187.8	CARBONDALE	COLCHESTER	COAL	3.0	564.8	SHALE BAND NOTED
-190.8	CARBONDALE		UNDERCLAY	3.3	567.8	
-194.0	CARBONDALE		SHALE	10.0	571.0	
-204.0	CARBONDALE		SANDSTONE	7.0	581.0	
-211.0	CARBONDALE		DARK SHALE	15.0	588.0	
-226.0	CARBONDALE		COAL	0.2	603.0	
-226.2	CARBONDALE		UNDERCLAY	1.8	603.2	
-228.0	CARBONDALE		CALCAREOUS SHALE	37.0	605.0	
-265.0	CARBONDALE		SANDSTONE	62.0	642.0	
-327.0	CARBONDALE		SHALE	16.0	704.0	
-343.0	CARBONDALE		SANDSTONE	42.0	720.0	

MAPID: 05902221000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2500' S line, 1500' W line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276836 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.679606 **DATE COLLECTED:** 4 / 7 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 401.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 112 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SANDY CLAY	101.5	0.0	
273.5			SHALE & SANDSTONE	21.7	101.5	
251.8			BLUE SHALE	6.2	123.2	
245.7			BLUE LIMESTONE	2.3	129.3	
243.4			SHALE	0.3	131.6	
243.1			COAL	0.2	131.9	
242.9			SHALE	56.9	132.1	
186.0			COAL	0.4	189.0	
185.6			SHALE	0.6	189.4	
185.0			COAL	0.4	190.0	
184.6			DARK SHALE	3.9	190.4	
180.7			SHALE	29.8	194.3	
150.9			SANDSTONE	13.2	224.1	
137.7			BLUE SHALE	4.8	237.3	
132.9			COAL	1.3	242.1	
131.7			SANDSTONE	16.7	243.3	
115.0			BROWN LIMESTONE	3.0	260.0	
112.0			SHALE WITH LIMESTONE	46.5	263.0	
65.5			SHALE	3.5	309.5	
62.0			COAL	0.3	313.0	
61.7			GRAY LIMESTONE	0.7	313.3	
61.0			BLUE SHALE	44.0	314.0	
17.0			GRAY LIMESTONE	3.0	358.0	
14.0			COAL	0.3	361.0	
13.7			BLUE SHALE	40.3	361.3	

MAPID: 05902221000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** 2500' S line, 1500' W line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276836 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.679606 **DATE COLLECTED:** 4 / 7 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 401.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0			UNCONSOLIDATED	101.5	0.0	
273.5			ROCK	30.4	101.5	
243.1			COAL	0.2	131.9	
242.9			ROCK	56.9	132.1	
186.0			COAL	1.4	189.0	
184.6			ROCK	50.7	190.4	
133.9			COAL	1.3	241.1	
132.7			ROCK	69.7	242.3	
63.0			COAL	0.3	312.0	
62.7			ROCK	47.7	312.3	
15.0			COAL	0.3	360.0	
14.8			ROCK	40.3	360.2	

MAPID: 05924150000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 1 **QUARTERS/FOOTAGES:** NW NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276727 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.675977 **DATE COLLECTED:** 10 / 5 / 1966

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 100.5 **LOG TYPE:** Drillers Log

SOURCE: JOHN B RIDER, DRILLER **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	28.0	0.0	
342.0			ROCK	61.0	28.0	
281.0			COAL	4.5	89.0	
276.5			ROCK	7.0	93.5	

MAPID: 05902282000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.290715 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.68716 **DATE COLLECTED:** 8 / 30 / 1958

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CORP 140 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	91.0	0.0	
287.0	CARBONDALE	BRERETON	LIMESTONE	1.7	91.0	
285.3	CARBONDALE	ANNA	BLACK SHALE	0.3	92.7	
285.0	CARBONDALE	HERRIN	COAL	0.7	93.0	
284.3	CARBONDALE	HERRIN	SHALE	0.2	93.7	
284.2	CARBONDALE	HERRIN	COAL	0.3	93.8	
283.8	CARBONDALE		SHALE	3.5	94.2	
280.3	CARBONDALE		SANDSTONE	15.3	97.7	
265.0	CARBONDALE		DARK SHALE	32.5	113.0	
232.5	CARBONDALE	BRIAR HILL	COAL	1.3	145.5	
231.2	CARBONDALE		SANDSTONE	31.2	146.8	
200.0	CARBONDALE		SHALE	7.2	178.0	
192.8	CARBONDALE		BLACK SHALE	23.7	185.2	
169.2	CARBONDALE	ST. DAVID	LIMESTONE	1.3	208.8	
167.9	CARBONDALE	SPRINGFIELD	COAL	3.0	210.1	
164.9	CARBONDALE		SHALE	1.9	213.1	

MAPID: 05902282000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.290715 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.68716 **DATE COLLECTED:** 8 / 30 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 215.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	91.0	0.0	
289.0			ROCK	2.0	91.0	L-CORE BEGINS
287.0	CARBONDALE	HERRIN	COAL	1.2	93.0	
285.8	CARBONDALE		ROCK	51.3	94.2	
234.5	CARBONDALE	BRIAR HILL	COAL	1.8	145.5	
232.7	CARBONDALE		ROCK	61.8	147.3	L-END OF CORE
170.9	CARBONDALE		ROCK	1.0	209.1	
169.9	CARBONDALE	SPRINGFIELD	COAL	3.0	210.1	
166.9	CARBONDALE		ROCK	1.9	213.1	

MAPID: 05902292000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.286525 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.676443 **DATE COLLECTED:** 9 / 10 / 1959
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 279.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0			UNCONSOLIDATED	30.0	0.0	
327.0			ROCK	129.4	30.0	L-CORE BEGINS
197.6	CARBONDALE	HERRIN	COAL	3.5	159.4	
194.1	CARBONDALE		ROCK	57.3	162.9	
136.7	CARBONDALE	BRIAR HILL	COAL	2.0	220.3	
134.7	CARBONDALE		ROCK	47.2	222.3	
87.6	CARBONDALE		ROCK	3.5	269.4	L-CORE REMOVED. DRILLERS LOG
84.1	CARBONDALE	SPRINGFIELD	COAL	3.0	272.9	
81.1	CARBONDALE		ROCK	3.0	275.9	

MAPID: 05902292000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.286525 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.676443 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 163.5 **LOG TYPE:** Survey Core Study
SOURCE: **WELL TYPE:** Coal Test
COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
249.5	CARBONDALE		SANDSTONE	20.0	107.5	
229.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	127.5	
225.3	CARBONDALE	LAWSON	SHALE	0.5	131.7	
224.8	CARBONDALE	LAWSON	CLAYSTONE	0.5	132.2	
224.3	CARBONDALE	LAWSON	SHALE & SANDSTONE	15.8	132.7	
208.5	CARBONDALE	LAWSON	GRAY SHALE	7.2	148.5	
201.3	CARBONDALE	BRERETON	NODULAR LIMESTONE	0.8	155.7	
200.5	CARBONDALE	ANNA	BLACK SHALE	3.5	156.5	
197.0	CARBONDALE	HERRIN	COAL	3.5	160.0	

MAPID: 05902292000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.286525 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.676443 **DATE COLLECTED:** 9 / 10 / 1958

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 279.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 142 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.0	PLEISTOCENE		CLAY	30.0	0.0	
327.0	CARBONDALE		BLUE SHALE	1.3	30.0	
325.7	CARBONDALE		GRAY SANDSTONE	98.8	31.3	
227.0	CARBONDALE		GRAY LIMESTONE	4.2	130.0	
222.8	CARBONDALE		SHALE	0.2	134.2	
222.7	CARBONDALE		COAL	0.3	134.3	
222.4	CARBONDALE		SHALE	0.6	134.6	
221.8	CARBONDALE		SANDSTONE	7.3	135.2	
214.5	CARBONDALE		SHALE	4.8	142.5	
209.7	CARBONDALE		BLUE SHALE	5.5	147.3	
204.2	CARBONDALE		SHALE	0.3	152.8	
203.9	CARBONDALE	BRERETON	LIMESTONE	0.5	153.1	
203.4	CARBONDALE	ANNA	SHALE	5.9	153.6	
197.5	CARBONDALE	HERRIN	COAL	3.5	159.5	
194.0	CARBONDALE		SHALE	3.3	163.0	
190.7	CARBONDALE		SHALE	8.3	166.3	
182.4	CARBONDALE		GRAY SANDSTONE	21.9	174.6	
160.5	CARBONDALE		SHALE	1.7	196.5	
158.8	CARBONDALE		BLUE SHALE	11.3	198.2	
147.5	CARBONDALE		SHALE	6.1	209.5	
141.4	CARBONDALE		BLUE SHALE	3.8	215.6	
137.7	CARBONDALE	BRIAR HILL	COAL	2.0	219.3	
135.7	CARBONDALE		SHALE	13.2	221.3	
122.5	CARBONDALE		SHALE	35.3	234.5	
87.2	CARBONDALE		SHALE WITH LIMESTONE	0.5	269.8	
86.7	CARBONDALE	TURNER MINE	SHALE	2.8	270.3	
84.0	CARBONDALE	SPRINGFIELD	COAL	3.0	273.0	
81.0	CARBONDALE		SHALE	3.0	276.0	

MAPID: 05902358000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.29541 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.676418 **DATE COLLECTED:** 11 / 15 / 1958

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 154 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.0	PLEISTOCENE		CLAY	29.6	0.0	
342.4			BROWN SANDSTONE	8.9	29.6	
333.5			BLUE SHALE	17.5	38.5	
316.0			COAL	1.3	56.0	CUTLER RIDER?
314.7			BLUE SHALE	3.8	57.3	
310.8			SHALE & SANDSTONE	25.9	61.2	
284.9			GRAY SANDSTONE	18.9	87.1	
266.0			BLUE SHALE	1.0	106.0	
265.0			GRAY SANDSTONE	30.3	107.0	
234.7			SHALE	4.8	137.3	
229.8			SANDSTONE	4.3	142.2	COAL STREAKS; GRAY
225.5	CARBONDALE	ALLENBY	COAL	0.5	146.5	SHALE NOTED
225.0	CARBONDALE		SHALE	3.1	147.0	
221.9	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	3.3	150.1	
218.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	17.7	153.3	
201.0	CARBONDALE		SHALE	7.3	171.0	
193.7	CARBONDALE		SHALE	2.5	178.3	
191.2	CARBONDALE	BRERETON	LIMESTONE	2.0	180.8	
189.2	CARBONDALE	ANNA	SHALE	0.5	182.8	
188.7	CARBONDALE	HERRIN	COAL	4.0	183.3	
184.7	CARBONDALE		SHALE	6.8	187.3	
178.0	CARBONDALE		SHALE	6.8	194.0	
171.2	CARBONDALE		GRAY SANDSTONE	16.3	200.8	
154.9	CARBONDALE		DARK SHALE	22.9	217.1	
132.0	CARBONDALE	BRIAR HILL	COAL	2.5	240.0	
129.5	CARBONDALE		SHALE	49.5	242.5	
80.0	CARBONDALE	ST. DAVID	LIMESTONE	1.1	292.0	
78.9	CARBONDALE	TURNER MINE	SHALE	3.2	293.1	
75.7	CARBONDALE	SPRINGFIELD	COAL	3.2	296.3	
72.6	CARBONDALE		SHALE	2.6	299.4	

MAPID: 05902358000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 2 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.29541 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.676418 **DATE COLLECTED:** 11 / 15 / 1958

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 302.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
372.0			UNCONSOLIDATED	29.6	0.0	
342.4			ROCK	26.4	29.6	
316.0	MODESTO	LAKE CREEK	COAL	1.3	56.0	
314.7			ROCK	29.2	57.3	
285.5			ROCK	59.5	86.5	L-CORE BEGINS
226.0	CARBONDALE	ALLENBY	COAL	0.5	146.0	L-CORE ENDS AT 147'
225.5	CARBONDALE		ROCK	38.3	146.5	
187.2	CARBONDALE	HERRIN	COAL	4.0	184.8	
183.2	CARBONDALE		ROCK	52.8	188.8	
130.5	CARBONDALE	BRIAR HILL	COAL	2.5	241.5	
128.0	CARBONDALE		ROCK	53.8	244.0	
74.2	CARBONDALE	SPRINGFIELD	COAL	3.2	297.8	
71.1	CARBONDALE		ROCK	2.7	300.9	

MAPID: 05900040000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309246 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.680183 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log

SOURCE: A. R. BYRD & SON 14 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	PLEISTOCENE		SAND & GRAVEL	9.0	0.0	
391.0	CARBONDALE		SANDSTONE	1.5	9.0	
389.5	CARBONDALE		SANDSTONE	6.5	10.5	
383.0	CARBONDALE	BANKSTON FORK	WHITE LIMESTONE	5.0	17.0	
378.0	CARBONDALE		SHALY LIMESTONE	13.0	22.0	
365.0	CARBONDALE		SHALE	3.0	35.0	
362.0	CARBONDALE		DARK SHALE	11.0	38.0	
351.0	CARBONDALE	BRERETON	GRAY LIMESTONE	5.0	49.0	
346.0	CARBONDALE	ANNA	SHALE	0.7	54.0	
345.3	CARBONDALE	HERRIN	COAL	3.4	54.7	
341.9	CARBONDALE		UNDERCLAY	2.9	58.1	
339.0	CARBONDALE		SANDSTONE	14.0	61.0	
325.0	CARBONDALE		LIMESTONE	15.0	75.0	
310.0	CARBONDALE		SHALE	25.0	90.0	
285.0	CARBONDALE		DARK SHALE	3.0	115.0	
282.0	CARBONDALE	BRIAR HILL	COAL	1.8	118.0	
280.2	CARBONDALE		UNDERCLAY	1.2	119.8	
279.0	CARBONDALE		SANDSTONE	2.0	121.0	
277.0	CARBONDALE		SANDSTONE	22.0	123.0	
255.0	CARBONDALE		DARK SHALE	24.0	145.0	
231.0	CARBONDALE	TURNER MINE	SHALE	4.3	169.0	
226.7	CARBONDALE	SPRINGFIELD	COAL	4.7	173.3	
222.0	CARBONDALE		UNDERCLAY	2.0	178.0	
220.0	CARBONDALE		SHALY LIMESTONE	10.0	180.0	
210.0	CARBONDALE		SHALE	10.0	190.0	
200.0	CARBONDALE		DARK SHALE	36.0	200.0	
164.0	CARBONDALE	EXCELLO	SHALE	4.3	236.0	
159.7	CARBONDALE	HOUCHIN CREEK	COAL	1.7	240.3	
158.0	CARBONDALE		UNDERCLAY	3.0	242.0	
155.0	CARBONDALE		SANDSTONE	7.0	245.0	

MAPID: 05900040000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309246 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.680183 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log

SOURCE: F. K. TAYLOR CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	10.5	0.0	
389.5			ROCK	44.2	10.5	
345.3	CARBONDALE	HERRIN	COAL	3.4	54.7	
341.9	CARBONDALE		ROCK	59.9	58.1	
282.0	CARBONDALE	BRIAR HILL	COAL	1.8	118.0	
280.2	CARBONDALE		ROCK	53.5	119.8	
226.7	CARBONDALE	SPRINGFIELD	COAL	4.7	173.3	
222.0	CARBONDALE		ROCK	62.3	178.0	
159.7			COAL	1.7	240.3	
158.0			ROCK	10.0	242.0	

MAPID: 05902236000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 375' S line, 75' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309492 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.681221 **DATE COLLECTED:** 6 / 3 / 1954

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING 126 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0			NO RECORD	8.0	0.0	
357.0			SANDSTONE	30.0	8.0	START OF CORE (20')
327.0			SANDSTONE	0.5	38.0	COAL SPARS & LAMINAE
326.5			SANDSTONE	29.0	38.5	
297.5			SANDSTONE & CONGLOMERATE	1.0	67.5	
296.5			SANDSTONE	2.5	68.5	
294.0			SANDSTONE & CONGLOMERATE	1.7	71.0	
292.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	72.7	
287.2	CARBONDALE		SILTSTONE	2.8	77.8	WITH SANDSTONE
284.4	CARBONDALE	ANVIL ROCK	SANDSTONE	2.9	80.6	
281.5	CARBONDALE		SHALE	21.8	83.5	
259.7	CARBONDALE	BRERETON	LIMESTONE	1.4	105.3	CORE REMOVED
258.2	CARBONDALE	ANNA	BLACK SHALE	0.3	106.8	COREWOOD
257.9	CARBONDALE	HERRIN	COAL	3.8	107.1	COREWOOD
254.2	CARBONDALE		UNDERCLAY	1.7	110.8	CORE REMOVED
252.5	CARBONDALE		SILTSTONE	5.5	112.5	
247.0	CARBONDALE		SANDSTONE	30.0	118.0	
217.0	CARBONDALE		SHALE	27.3	148.0	
189.7	CARBONDALE	BRIAR HILL	COAL	1.7	175.3	
188.1	CARBONDALE		SILTSTONE	0.3	176.9	
187.8	CARBONDALE		SANDSTONE	11.8	177.2	WITH SILTSTONE
176.0	CARBONDALE		SILTSTONE	3.0	189.0	
173.0	CARBONDALE		SHALE	8.0	192.0	
165.0	CARBONDALE		SANDSTONE	7.5	200.0	
157.5	CARBONDALE		SHALE	7.0	207.5	
150.5	CARBONDALE		DARK SHALE	4.5	214.5	END OF CORE (219)
146.0	CARBONDALE		SHALE	10.0	219.0	
136.0	CARBONDALE	ST. DAVID	LIMESTONE	0.9	229.0	
135.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	229.9	
132.2	CARBONDALE	SPRINGFIELD	COAL	4.2	232.8	
128.0	CARBONDALE	SPRINGFIELD	BONE COAL	0.1	237.0	
127.9	CARBONDALE	SPRINGFIELD	COAL	0.2	237.1	
127.7	CARBONDALE		SHALE	2.8	237.3	

MAPID: 05902236000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 375' S line, 75' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309492 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.681221 **DATE COLLECTED:** 6 / 4 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 240.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	20.0	0.0	
365.0			ROCK	87.1	20.0	
277.9	CARBONDALE	HERRIN	COAL	3.8	107.1	
274.2	CARBONDALE		ROCK	64.4	110.8	
209.7	CARBONDALE	BRIAR HILL	COAL	1.7	175.3	
208.1	CARBONDALE		ROCK	42.1	176.9	
166.0	CARBONDALE		ROCK	13.8	219.0	L-CORE ENDS
152.2	CARBONDALE	SPRINGFIELD	COAL	4.4	232.8	
147.7	CARBONDALE		ROCK	2.8	237.3	

MAPID: 05902244000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31633 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.678368 **DATE COLLECTED:** 6 / 23 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 132 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	8.3	0.0	
376.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	56.9	8.3	
319.8	CARBONDALE		BLUE SHALE	0.3	65.2	
319.5	CARBONDALE	BRERETON	LIMESTONE	4.3	65.5	
315.2	CARBONDALE		SHALE	8.7	69.8	
306.5	CARBONDALE		SHALE	11.1	78.5	
295.4	CARBONDALE		SHALE	6.9	89.6	
288.5	CARBONDALE		SHALE	2.9	96.5	
285.6	CARBONDALE		GRAY SANDSTONE	10.9	99.4	
274.7	CARBONDALE		SHALE	16.2	110.3	
258.5	CARBONDALE		BLUE SHALE	16.8	126.5	
241.7	CARBONDALE		SHALE	1.7	143.3	
240.0	CARBONDALE	BRIAR HILL	COAL	2.2	145.0	
237.8	CARBONDALE		SHALE	0.3	147.2	
237.6	CARBONDALE		SHALY SANDSTONE	22.8	147.4	
214.7	CARBONDALE		SHALE	28.8	170.3	
185.9	CARBONDALE	ST. DAVID	LIMESTONE	0.9	199.1	
185.0	CARBONDALE	TURNER MINE	SHALE	2.5	200.0	
182.5	CARBONDALE	SPRINGFIELD	COAL	4.0	202.5	
178.5	CARBONDALE		SHALE	3.5	206.5	

MAPID: 05902244000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31633 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.678368 **DATE COLLECTED:** 6 / 23 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	21.5	0.0	
363.5			ROCK	124.0	21.5	
239.5	CARBONDALE	BRIAR HILL	COAL	2.2	145.5	
237.3	CARBONDALE		ROCK	54.8	147.7	
182.5	CARBONDALE	SPRINGFIELD	COAL	4.0	202.5	
178.5	CARBONDALE		ROCK	3.5	206.5	

MAPID: 05902244000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31633 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.678368 **DATE COLLECTED:** 6 / 23 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 210.0 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CORP 132 **WELL TYPE:** Coal Test

COMMENT: #6 COAL MISSING

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		UNCONSOLIDATED	8.3	0.0	
376.7			SANDSTONE	39.3	8.3	START OF CORE
337.5			SANDSTONE & CONGLOMERATE	0.5	47.5	
337.0	CARBONDALE		SANDSTONE	9.0	48.0	
328.0	CARBONDALE		SHALE	0.3	57.0	
327.7	CARBONDALE		SANDSTONE	0.7	57.3	
327.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	58.0	
323.0	CARBONDALE		CLAYSTONE & SILTSTONE	15.8	62.0	WITH SILTSTONE
307.2	CARBONDALE		BLACK SHALE	5.8	77.8	ABUNDANT JOINTS & SLICKENSIDES
301.5	CARBONDALE		NO RECORD	6.0	83.5	CORELOSS;DRILLER REPORTS NO COAL
295.5	CARBONDALE		UNDERCLAY	1.0	89.5	
294.5	CARBONDALE		SILTSTONE	4.5	90.5	
290.0	CARBONDALE		SANDSTONE	24.5	95.0	
265.5	CARBONDALE		SILTSTONE	6.0	119.5	
259.5	CARBONDALE		SHALE	16.0	125.5	
243.5	CARBONDALE		DARK SHALE	1.8	141.5	RASHY
241.7	CARBONDALE		NO RECORD	2.2	143.3	THICKNESSES & MARKERS OFF
239.5	CARBONDALE	BRIAR HILL	COAL	2.2	145.5	
237.3	CARBONDALE		UNDERCLAY	1.3	147.7	
236.0	CARBONDALE		SANDSTONE	32.5	149.0	WITH SILTSTONE
203.5	CARBONDALE		SHALE	18.2	181.5	
185.3	CARBONDALE		SHALE	0.3	199.7	
185.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	200.0	
184.5	CARBONDALE		SHALE	0.2	200.5	
184.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	200.7	
182.5	CARBONDALE	SPRINGFIELD	COAL	4.0	202.5	
178.5	CARBONDALE		UNDERCLAY	2.3	206.5	END OF CORE
176.2	CARBONDALE		SHALE	1.2	208.8	

MAPID: 05902284000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.30337 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.679221 **DATE COLLECTED:** 8 / 27 / 1958

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 272.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 139 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0			ARGILLACEOUS SANDSTONE	28.5	0.0	
348.5			GRAY SANDSTONE	78.5	28.5	
270.0	CARBONDALE	ALLENBY	SHALE	1.0	107.0	COAL STREAKS
269.0	CARBONDALE		SHALE	1.5	108.0	
267.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	109.5	
263.2	CARBONDALE		SHALE	0.8	113.8	
262.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	12.7	114.5	
249.8	CARBONDALE		SHALE	6.0	127.2	
243.8	CARBONDALE		DARK SHALE	7.3	133.2	
236.6	CARBONDALE	BRERETON	LIMESTONE	2.2	140.4	
234.4	CARBONDALE	HERRIN	COAL	4.3	142.6	
230.2	CARBONDALE		SHALE	16.2	146.8	
214.0	CARBONDALE		GRAY SANDSTONE	24.3	163.0	
189.7	CARBONDALE		BLUE SHALE	20.3	187.3	
169.5	CARBONDALE	BRIAR HILL	COAL	2.0	207.5	
167.5	CARBONDALE		SHALE	0.8	209.5	
166.7	CARBONDALE		GRAY SANDSTONE	3.5	210.3	
163.2	CARBONDALE		SHALE	47.5	213.8	
115.7	CARBONDALE	ST. DAVID	LIMESTONE	2.1	261.3	
113.7	CARBONDALE	TURNER MINE	SHALE	2.6	263.3	
111.1	CARBONDALE	SPRINGFIELD	COAL	4.0	265.9	
107.1	CARBONDALE		SHALE	2.6	269.9	

MAPID: 05902284000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.30337 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.679221 **DATE COLLECTED:** 8 / 27 / 1958

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 272.5 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0			UNCONSOLIDATED	28.5	0.0	
348.5			ROCK	78.5	28.5	
270.0			COAL	0.2	107.0	
269.8			ROCK	35.4	107.2	
234.4	CARBONDALE	HERRIN	COAL	4.3	142.6	
230.2	CARBONDALE		ROCK	60.7	146.8	
169.5	CARBONDALE	BRIAR HILL	COAL	2.0	207.5	
167.5	CARBONDALE		ROCK	57.0	209.5	L-CORE ENDS-DRILLERS LOG BEGINS AT 265'
110.5	CARBONDALE	SPRINGFIELD	COAL	4.0	266.5	
106.5	CARBONDALE		ROCK	2.6	270.5	

MAPID: 05902284000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.30337 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.679221 **DATE COLLECTED:** 8 / 27 / 1958

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 272.5 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CORP 139 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0			UNCLASSIFIED	28.5	0.0	START OF CORE
348.5			SANDSTONE	77.4	28.5	
271.1			CONGLOMERATE	0.4	105.9	
270.7			SANDSTONE	0.7	106.3	COAL BANDS
270.0	CARBONDALE	ALLENBY	COAL	0.6	107.0	
269.4	CARBONDALE		UNDERCLAY	1.5	107.6	
267.8	CARBONDALE	BANKSTON FORK	LIMESTONE	4.6	109.2	
263.2	CARBONDALE		SHALE	0.8	113.8	
262.5	CARBONDALE	ANVIL ROCK	SANDSTONE	13.7	114.5	
248.8	CARBONDALE		SHALE	12.3	128.2	
236.6	CARBONDALE	BRERETON	LIMESTONE	2.2	140.4	
234.4	CARBONDALE	HERRIN	COAL	4.3	142.6	
230.2	CARBONDALE		UNDERCLAY	2.3	146.8	
227.9	CARBONDALE		SILTSTONE	1.3	149.1	
226.6	CARBONDALE		SANDSTONE	38.2	150.4	
188.4	CARBONDALE		SHALE	18.9	188.6	
169.5	CARBONDALE	BRIAR HILL	COAL	2.0	207.5	
167.5	CARBONDALE		UNDERCLAY	0.8	209.5	
166.7	CARBONDALE		SANDSTONE	3.7	210.3	
163.0	CARBONDALE		SHALE	6.0	214.0	
157.0	CARBONDALE		SANDSTONE	19.5	220.0	
137.5	CARBONDALE		SILTSTONE	5.0	239.5	
132.5	CARBONDALE		SHALE	17.3	244.5	
115.2	CARBONDALE	ST. DAVID	LIMESTONE	2.1	261.8	END OF CORE
113.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	263.9	
111.1	CARBONDALE	SPRINGFIELD	COAL	4.0	265.9	
107.1	CARBONDALE		SHALE	2.6	269.9	

MAPID: 05902285000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.313995 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.6765 **DATE COLLECTED:** 10 / 4 / 1958

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 258.6 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 141 **WELL TYPE:** Coal Test

COMMENT: PROBABLY BELOW SPRINGFIELD COAL -CGT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.0	PLEISTOCENE		SANDY CLAY	47.7	0.0	
315.3			SANDSTONE	48.4	47.7	GRAYISH BROWN
266.9			BLUE SHALE	2.2	96.1	
264.7			CONGLOMERATE	2.8	98.3	
262.0			BLUE SHALE	16.7	101.0	
245.3			GRAY SANDSTONE	19.4	117.7	
225.9			SHALE	22.9	137.1	
203.0			GRAY SANDSTONE	24.5	160.0	
178.5			BLUE SHALE	11.9	184.5	
166.6			SHALE	2.2	196.4	
164.4			COAL	1.7	198.6	
162.7			SHALE	19.1	200.3	
143.7			SHALE	29.9	219.3	
113.7			LIMESTONE	0.9	249.3	
112.8			SHALE	0.7	250.2	
112.2			LIMESTONE	0.5	250.8	
111.7			SHALE	3.2	251.3	
108.5			COAL	1.9	254.5	
106.6			SHALE	1.0	256.4	
105.6			SHALE	1.2	257.4	

MAPID: 05902285000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.313995 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.6765 **DATE COLLECTED:** 9 / 4 / 1958

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 258.6 **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
363.0			UNCONSOLIDATED	47.7	0.0	
315.3			ROCK	150.9	47.7	
164.4	CARBONDALE	BRIAR HILL	COAL	2.3	198.6	
162.1	CARBONDALE		ROCK	53.6	200.9	
108.5	CARBONDALE	SPRINGFIELD	COAL	2.0	254.5	
106.5	CARBONDALE		ROCK	1.7	256.5	

MAPID: 05902334000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.312706 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.686695 **DATE COLLECTED:** 9 / 25 / 1958

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 193.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 78 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
440.0	PLEISTOCENE		CLAY	10.5	0.0	BROWN
429.5	CARBONDALE		BROWN SANDSTONE	17.5	10.5	
412.0	CARBONDALE		GRAY SANDSTONE	12.1	28.0	
399.9	CARBONDALE		SHALE	0.3	40.1	DARK GRAY
399.7	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	3.8	40.3	
395.9	CARBONDALE		SHALE	0.3	44.1	
395.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	13.8	44.3	
381.9	CARBONDALE		SHALE	12.9	58.1	
369.0	CARBONDALE	HERRIN	COAL	2.6	71.0	
366.4	CARBONDALE		UNDERCLAY	3.9	73.6	
362.5	CARBONDALE		SHALE	2.8	77.5	
359.7	CARBONDALE		SHALE	12.7	80.3	
347.0	CARBONDALE		SANDSTONE	22.0	93.0	
325.0	CARBONDALE		SHALE	18.1	115.0	
306.9	CARBONDALE	BRIAR HILL	COAL	2.0	133.1	
304.9	CARBONDALE		SHALE	0.9	135.1	
304.0	CARBONDALE		SANDSTONE	2.0	136.0	
302.0	CARBONDALE		SHALE & SANDSTONE	19.0	138.0	
283.0	CARBONDALE		SHALE	27.8	157.0	
255.2	CARBONDALE	ST. DAVID	LIMESTONE	0.9	184.8	
254.3	CARBONDALE	TURNER MINE	SHALE	1.9	185.7	
252.4	CARBONDALE	SPRINGFIELD	COAL	4.1	187.6	
248.3	CARBONDALE		UNDERCLAY	1.3	191.7	

MAPID: 05902334000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.312706 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.686695 **DATE COLLECTED:** 9 / 25 / 1958

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 193.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	10.5	0.0	
429.5			ROCK	60.5	10.5	
369.0	CARBONDALE	HERRIN	COAL	2.6	71.0	
366.4	CARBONDALE		ROCK	59.5	73.6	
306.9	CARBONDALE	BRIAR HILL	COAL	2.0	133.1	
304.9	CARBONDALE		ROCK	52.5	135.1	
252.4	CARBONDALE	SPRINGFIELD	COAL	4.1	187.6	
248.3	CARBONDALE		ROCK	1.3	191.7	

MAPID: 05903671000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1310' S line, 2390' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310402 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.676377 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 368.0 **LOGGED (FT.):** 110.0 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-63C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION, DEPTHS CORRECTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
338.3	CARBONDALE		SANDSTONE	52.7	29.7	
285.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	82.4	
280.9	CARBONDALE	LAWSON	SANDSTONE	4.9	87.1	
276.0	CARBONDALE	LAWSON	SILTY SHALE	2.7	92.0	
273.3	CARBONDALE	BRERETON	LIMESTONE	11.6	94.7	
261.7	CARBONDALE	ANNA	MOTTLED SHALE	0.1	106.3	
261.6	CARBONDALE	HERRIN	COAL	4.0	106.4	

MAPID: 05990061000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 300' N line, 100' W line of NW NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.304199 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.679329 **DATE COLLECTED:** 8 / 27 / 1958

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 270.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-3-139 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		CLAY	28.5	0.0	
348.5			SANDSTONE	78.5	28.5	GRAY
270.0	CARBONDALE	ALLENBY	BLACK SHALE	1.0	107.0	WITH COAL STREAKS
269.0	CARBONDALE		GRAY SHALE	1.5	108.0	
267.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	109.5	
263.2	CARBONDALE		GRAY SHALE	0.8	113.8	
262.5	CARBONDALE	ANVIL ROCK	SANDSTONE	12.7	114.5	GRAY
249.8	CARBONDALE		SANDY SHALE	4.0	127.2	
245.8	CARBONDALE		DARK SHALE	7.3	131.2	
238.6	CARBONDALE	BRERETON	LIMESTONE	2.2	138.4	
236.4	CARBONDALE	HERRIN	COAL	4.3	140.6	
232.2	CARBONDALE		GRAY SHALE	16.2	144.8	
216.0	CARBONDALE		SANDSTONE	24.3	161.0	GRAY
191.7	CARBONDALE		BLUE SHALE	20.3	185.3	
171.5	CARBONDALE	BRIAR HILL	COAL	2.0	205.5	
169.5	CARBONDALE		GRAY SHALE	0.8	207.5	
168.7	CARBONDALE		SANDSTONE	3.5	208.3	GRAY
165.2	CARBONDALE		BLUE SHALE	47.5	211.8	
117.7	CARBONDALE	ST. DAVID	LIMESTONE	2.1	259.3	
115.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	261.3	
113.1	CARBONDALE	SPRINGFIELD	COAL	4.0	263.9	
109.1	CARBONDALE		GRAY SHALE	2.6	267.9	

MAPID: 05990062000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 100' N line, 200' E line of NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309945 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.679911 **DATE COLLECTED:** 5 / 3 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-3-126 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	8.3	0.0	
376.7			SANDSTONE	59.2	8.3	GRAY
317.5	CARBONDALE		CONGLOMERATE	1.2	67.5	
316.3	CARBONDALE		SANDSTONE	3.3	68.7	
313.0	CARBONDALE		CONGLOMERATE	2.1	72.0	
310.9	CARBONDALE	BANKSTON FORK	LIMESTONE	10.8	74.1	
300.1	CARBONDALE	ANVIL ROCK	SANDSTONE	8.5	84.9	GRAY
291.6	CARBONDALE		SANDY DARK SHALE	6.6	93.4	
285.0	CARBONDALE		BLACK SHALE	5.3	100.0	
279.7	CARBONDALE	BRERETON	LIMESTONE	1.4	105.3	
278.3	CARBONDALE	ANNA	BLACK SHALE	0.3	106.7	
277.9	CARBONDALE	HERRIN	COAL	3.8	107.1	
274.2	CARBONDALE		GRAY SHALE	1.8	110.8	
272.3	CARBONDALE		SANDY SHALE	6.1	112.7	
266.3	CARBONDALE		SANDSTONE	29.5	118.7	GRAY
236.8	CARBONDALE		SANDY SHALE	2.3	148.2	
234.5	CARBONDALE		DARK SHALE	23.5	150.5	
211.0	CARBONDALE	BRIAR HILL	COAL	1.7	174.0	
209.3	CARBONDALE		SHALY SANDSTONE	3.7	175.7	
205.7	CARBONDALE		SANDY SHALE	9.2	179.3	
196.5	CARBONDALE		SANDY SHALE	11.8	188.5	
184.8	CARBONDALE		SHALY SANDSTONE	8.8	200.2	
176.0	CARBONDALE	CANTON	SANDY SHALE	16.7	209.0	
159.3	CARBONDALE	CANTON	SHALE	3.3	225.7	
156.0	CARBONDALE	ST. DAVID	LIMESTONE	0.9	229.0	
155.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	229.9	
152.2	CARBONDALE	SPRINGFIELD	COAL	4.4	232.8	
147.7	CARBONDALE		GRAY SHALE	2.8	237.3	

MAPID: 05990063000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 200' S line, 100' W line of NW NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.313539 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.68632 **DATE COLLECTED:** 9 / 25 / 1958

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 193.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-3-78 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
440.0	PLEISTOCENE		CLAY	10.5	0.0	BROWN
429.5	CARBONDALE		SANDSTONE	17.5	10.5	BROWN
412.0	CARBONDALE		SANDSTONE	12.1	28.0	GRAY
399.9	CARBONDALE		GRAY SHALE	0.3	40.1	
399.7	CARBONDALE	BANKSTON FORK	LIMESTONE	3.8	40.3	GRAY
395.9	CARBONDALE		GRAY SHALE	0.3	44.1	
395.7	CARBONDALE	ANVIL ROCK	SANDSTONE	13.8	44.3	
381.9	CARBONDALE		GRAY SHALE	12.9	58.1	
369.0	CARBONDALE	HERRIN	COAL	2.6	71.0	
366.4	CARBONDALE		UNDERCLAY	3.9	73.6	
362.5	CARBONDALE		GRAY SHALE	2.8	77.5	
359.7	CARBONDALE		SANDY SHALE	12.7	80.3	
347.0	CARBONDALE		SANDSTONE	22.0	93.0	GRAY
325.0	CARBONDALE		SANDY SHALE	18.1	115.0	
306.9	CARBONDALE	BRIAR HILL	COAL	2.0	133.1	
304.9	CARBONDALE		GRAY SHALE	0.9	135.1	
304.0	CARBONDALE		SANDSTONE	2.0	136.0	GRAY
302.0	CARBONDALE		GRAY SHALE	19.0	138.0	WITH SAND
283.0	CARBONDALE		SANDY SHALE	27.8	157.0	
255.2	CARBONDALE	ST. DAVID	LIMESTONE	0.9	184.8	GRAY
254.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	185.7	
252.4	CARBONDALE	SPRINGFIELD	COAL	4.1	187.6	
248.3	CARBONDALE		UNDERCLAY	1.3	191.7	

MAPID: 05990064000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 50' S line, 300' W line of SE SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31064 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672901 **DATE COLLECTED:** 9 / 8 / 1958

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 258.6 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-141 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.0	PLEISTOCENE		CLAY	47.7	0.0	
315.3	CARBONDALE	ANVIL ROCK	SANDSTONE	48.4	47.7	GRAY
266.9	CARBONDALE	ANVIL ROCK	BLUE SHALE	2.2	96.1	
264.7	CARBONDALE	ANVIL ROCK	CONGLOMERATE	2.8	98.3	
262.0	CARBONDALE	ANVIL ROCK	BLUE SHALE	16.7	101.0	
245.3	CARBONDALE	ANVIL ROCK	SANDSTONE	19.4	117.7	GRAY
225.9	CARBONDALE	ANVIL ROCK	SANDY SHALE	22.9	137.1	
203.0	CARBONDALE	ANVIL ROCK	SANDSTONE	24.5	160.0	GRAY
178.5	CARBONDALE		BLUE SHALE	11.9	184.5	#6 CUT OUT BY ANVIL ROCK
166.6	CARBONDALE		BLACK SHALE	2.2	196.4	
164.4	CARBONDALE	BRIAR HILL	COAL	1.7	198.6	
162.7	CARBONDALE		SANDY SHALE	19.1	200.3	
143.6	CARBONDALE		GRAY SHALE	29.9	219.4	
113.7	CARBONDALE	ST. DAVID	LIMESTONE	0.9	249.3	
112.8	CARBONDALE	ST. DAVID	GRAY SHALE	0.7	250.2	
112.1	CARBONDALE	ST. DAVID	LIMESTONE	0.5	250.9	
111.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	251.4	
108.5	CARBONDALE	SPRINGFIELD	COAL	1.9	254.5	
106.5	CARBONDALE		BLACK SHALE	1.0	256.5	
105.5	CARBONDALE		GRAY SHALE	1.2	257.5	

MAPID: 05990065000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 50' S line, 300' E line of SE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.300965 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672822 **DATE COLLECTED:** 9 / 13 / 1958

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 279.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CREEK COAL CO. EC-3-142 **WELL TYPE:** Coal Test

COMMENT: PERMIT #294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0	PLEISTOCENE		SANDY CLAY	30.0	0.0	
327.0	CARBONDALE		BLUE SHALE	1.3	30.0	
325.7	CARBONDALE		SANDSTONE	98.8	31.3	GRAY
227.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.2	130.0	GRAY
222.8	CARBONDALE		GRAY SHALE	0.2	134.2	
222.7	CARBONDALE		COAL	0.3	134.3	
222.4	CARBONDALE		GRAY SHALE	0.6	134.6	
221.8	CARBONDALE	ANVIL ROCK	SANDSTONE	7.3	135.2	
214.5	CARBONDALE		SANDY SHALE	4.8	142.5	
209.7	CARBONDALE		BLUE SHALE	5.5	147.3	
204.2	CARBONDALE		BLACK SHALE	0.3	152.8	
203.9	CARBONDALE	BRERETON	LIMESTONE	0.5	153.1	
203.4	CARBONDALE	ANNA	BLACK SHALE	5.9	153.6	
197.5	CARBONDALE	HERRIN	COAL	3.5	159.5	
194.0	CARBONDALE		GRAY SHALE	3.3	163.0	
190.7	CARBONDALE		SANDY SHALE	8.3	166.3	
182.4	CARBONDALE		SANDSTONE	21.9	174.6	GRAY
160.5	CARBONDALE		SANDY SHALE	1.7	196.5	
158.8	CARBONDALE		BLUE SHALE	11.3	198.2	
147.5	CARBONDALE		SANDY SHALE	6.1	209.5	
141.4	CARBONDALE		BLUE SHALE	3.8	215.6	
137.7	CARBONDALE	BRIAR HILL	COAL	2.0	219.3	
135.7	CARBONDALE		SANDY SHALE	13.2	221.3	
122.5	CARBONDALE		SHALE	35.3	234.5	
87.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	269.8	WITH SHALE
86.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	270.3	
84.0	CARBONDALE	SPRINGFIELD	COAL	3.0	273.0	
81.0	CARBONDALE		GRAY SHALE	3.0	276.0	

MAPID: 05990068000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 400' S line, 50' W line of SE SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.316122 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.681322 **DATE COLLECTED:** 11 / 16 / 1972

SURFACE ELEVATION (FT.): 397.3 **LOGGED (FT.):** 197.3 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-42-C **WELL TYPE:** Coal Test

COMMENT: PERMIT #294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
397.3			CORE LOSS	66.0	0.0	
331.3	CARBONDALE	BRERETON	LIMESTONE	1.7	66.0	GRAY
329.6	CARBONDALE	ANNA	BLACK SHALE	0.6	67.7	
329.0	CARBONDALE	HERRIN	COAL	3.0	68.3	
326.0	CARBONDALE		SANDY SHALE	3.0	71.3	
323.0	CARBONDALE		SANDSTONE	1.3	74.3	GRAY
321.8	CARBONDALE		SANDSTONE	0.3	75.5	GRAY
321.5			CORE LOSS	87.3	75.8	
234.3			SANDSTONE	17.0	163.0	GRAY
217.3	CARBONDALE	ST. DAVID	LIMESTONE	1.3	180.0	GRAY
216.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	181.3	
212.7			GRAY SHALE	0.6	184.6	WITH COAL STREAKS
212.1	CARBONDALE	SPRINGFIELD	COAL	3.8	185.2	
208.3			UNDERCLAY	2.3	189.0	
206.1			GRAY SHALE	1.3	191.2	
204.8			SANDY SHALE	4.8	192.5	

MAPID: 05990078000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 100' S line, 250' W line of SE SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310811 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.67304 **DATE COLLECTED:** 9 / 8 / 1958

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 258.6 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO. EC-141 **WELL TYPE:** Coal Test

COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.0	PLEISTOCENE		CLAY	47.7	0.0	
315.3			SANDSTONE	48.4	47.7	HERRIN COAL ERODED BY CHANNEL
266.9	CARBONDALE		SHALE	2.2	96.1	
264.7	CARBONDALE		CONGLOMERATE	2.8	98.3	
262.0	CARBONDALE		SHALE	16.7	101.0	BROKEN
245.3	CARBONDALE		SANDSTONE	19.4	117.7	
225.9	CARBONDALE		SANDY SHALE	22.9	137.1	
203.0	CARBONDALE		SANDSTONE	24.5	160.0	SPRINGFIELD COAL ERODED BY CHANNEL
178.5	CARBONDALE		SHALE	11.9	184.5	
166.6	CARBONDALE	EXCELLO	BLACK SHALE	2.2	196.4	
164.4	CARBONDALE	HOUCHIN CREEK	COAL	1.7	198.6	
162.7	CARBONDALE		SANDY SHALE	19.1	200.3	
143.7	CARBONDALE		GRAY SHALE	29.9	219.3	
113.7	CARBONDALE		LIMESTONE	0.9	249.3	
112.8	CARBONDALE		GRAY SHALE	0.7	250.2	

MAPID: 05990079000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 3 **QUARTERS/FOOTAGES:** 2320' N line, 758' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.316019 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.681225 **DATE COLLECTED:** 11 / 20 / 1972

SURFACE ELEVATION (FT.): 397.3 **LOGGED (FT.):** 197.3 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO. SW-42C **WELL TYPE:** Coal Test

COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
397.3			UNKNOWN	66.0	0.0	TOP OF CORE
331.3	CARBONDALE	BRERETON	LIMESTONE	1.7	66.0	GRAY
329.6	CARBONDALE	ANNA	BLACK SHALE	0.6	67.7	
329.0	CARBONDALE	HERRIN	COAL	2.4	68.3	
326.6	CARBONDALE	HERRIN	GRAY SHALE	0.1	70.7	
326.6	CARBONDALE	HERRIN	COAL	0.5	70.7	
326.0	CARBONDALE		UNDERCLAY	3.0	71.3	
323.0	CARBONDALE		SANDSTONE	1.3	74.3	
321.8	CARBONDALE		SANDSTONE	0.3	75.5	LIMESTONE NODULES
321.5	CARBONDALE		UNKNOWN	87.3	75.8	GAP IN LOG
234.3	CARBONDALE		SANDSTONE	17.0	163.0	
217.3	CARBONDALE	ST. DAVID	SHALY LIMESTONE	0.5	180.0	DARK GRAY
216.8	CARBONDALE	ST. DAVID	LIMESTONE	0.8	180.5	DARK GRAY
216.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	181.3	
212.7	CARBONDALE		GRAY SHALE	0.6	184.6	COAL
212.1	CARBONDALE	SPRINGFIELD	COAL	3.8	185.2	FRACTURED WITH ??LOWER 2 FEET
208.3	CARBONDALE		UNDERCLAY	2.3	189.0	LOST
206.0	CARBONDALE		GRAY SHALE	1.3	191.3	CLAY WITH SLIPS
204.8	CARBONDALE		SANDY SHALE	4.8	192.5	

MAPID: 05901661000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.319875 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.673761 **DATE COLLECTED:** 0 / 0 / 1939

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1310.0 **LOG TYPE:** Electric Log

SOURCE: DILLON, ETAL **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-950.0	BASE OF PENN.		UNCLASSIFIED	-	1310.0	

MAPID: 05902207000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 900' S line, 100' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335854 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.67541 **DATE COLLECTED:** 5 / 22 / 1958

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 166.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 59 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0	PLEISTOCENE		CLAY	4.0	0.0	BROWN
384.0	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	6.5	4.0	
377.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	12.5	10.5	
365.0	CARBONDALE		SHALE	3.5	23.0	
361.5	CARBONDALE		SHALE	8.5	26.5	
353.0	CARBONDALE	BRERETON	GRAY LIMESTONE	4.9	35.0	
348.1	CARBONDALE		SHALE	0.3	39.9	
347.8	CARBONDALE	HERRIN	COAL	3.3	40.2	
344.6	CARBONDALE		UNDERCLAY	4.1	43.4	GRAY
340.5	CARBONDALE		GRAY SANDSTONE	1.8	47.5	
338.7	CARBONDALE		GRAY SANDSTONE	5.2	49.3	
333.5	CARBONDALE		GRAY SANDSTONE	20.5	54.5	
313.0	CARBONDALE		SHALE	27.1	75.0	
285.9	CARBONDALE	BRIAR HILL	COAL	2.1	102.1	
283.8	CARBONDALE		SHALE	1.8	104.2	
282.0	CARBONDALE		SHALY SANDSTONE	22.5	106.0	GRAY
259.5	CARBONDALE		UNCLASSIFIED	26.5	128.5	GRAY
233.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.5	155.0	
232.5	CARBONDALE	TURNER MINE	SHALE	4.8	155.5	
227.7	CARBONDALE	SPRINGFIELD	COAL	4.7	160.3	
223.0	CARBONDALE		UNDERCLAY	1.5	165.0	GRAY

MAPID: 05902207000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 900' S line, 100' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335854 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.67541 **DATE COLLECTED:** 5 / 22 / 1958

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 166.5 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0			UNCONSOLIDATED	4.0	0.0	
384.0			ROCK	17.0	4.0	
367.0			ROCK	19.0	21.0	L-CORE BEGINS
348.0	CARBONDALE	HERRIN	COAL	3.3	40.0	
344.7	CARBONDALE		ROCK	58.4	43.3	
286.3	CARBONDALE	BRIAR HILL	COAL	2.2	101.7	
284.2	CARBONDALE		ROCK	56.3	103.8	
227.9	CARBONDALE	SPRINGFIELD	COAL	4.7	160.1	L-CORE ENDS

MAPID: 05902231000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 100' S line, 25' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.327818 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.673155 **DATE COLLECTED:** 5 / 29 / 1958

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 61 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.0	PLEISTOCENE		CLAY	6.5	0.0	BROWN
397.5	CARBONDALE		BROWN SANDSTONE	3.0	6.5	
394.5	CARBONDALE		BROWN SANDSTONE	35.5	9.5	
359.0	CARBONDALE		GRAY SANDSTONE	11.7	45.0	
347.3	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	1.4	56.7	
345.9	CARBONDALE		SHALE	0.6	58.1	
345.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	15.0	58.7	
330.3	CARBONDALE		SHALE	14.2	73.7	
316.2	CARBONDALE	BRERETON	GRAY LIMESTONE	1.1	87.8	
315.1	CARBONDALE	ANNA	SHALE	0.8	88.9	
314.2	CARBONDALE	HERRIN	COAL	3.7	89.8	
310.6	CARBONDALE		UNDERCLAY	5.1	93.4	GRAY
305.5	CARBONDALE		SHALY SANDSTONE	23.5	98.5	GRAY
282.0	CARBONDALE		SHALE	29.6	122.0	
252.4	CARBONDALE	BRIAR HILL	COAL	2.1	151.6	
250.3	CARBONDALE		SANDSTONE/SHALE	21.8	153.7	GRAY
228.5	CARBONDALE		SHALE	30.5	175.5	
198.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.3	206.0	
196.7	CARBONDALE	TURNER MINE	SHALE	2.7	207.3	
194.0	CARBONDALE	SPRINGFIELD	COAL	4.6	210.0	
189.4	CARBONDALE		UNDERCLAY	1.9	214.6	GRAY

MAPID: 05902231000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 100' S line, 25' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.327818 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.673155 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 222.5 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	6.0	0.0	
394.0			ROCK	27.0	6.0	
367.0			ROCK	62.8	33.0	L-CORE BEGINS
304.2	CARBONDALE	HERRIN	COAL	3.9	95.8	
300.4	CARBONDALE		ROCK	56.8	99.6	
243.5	CARBONDALE	BRIAR HILL	COAL	2.0	156.5	
241.5	CARBONDALE		ROCK	48.5	158.5	
193.0	CARBONDALE		ROCK	9.0	207.0	L-CORE ENDS
184.0	CARBONDALE	SPRINGFIELD	COAL	4.6	216.0	
179.4	CARBONDALE		ROCK	1.9	220.6	

MAPID: 05902231000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 100' S line, 25' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.327818 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.673155 **DATE COLLECTED:** 5 / 29 / 1958

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CORP 61 **WELL TYPE:** Coal Test

COMMENT: CORED 27-94.5,99.5-190.5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.0	PLEISTOCENE		UNCONSOLIDATED	6.5	0.0	
397.5	CARBONDALE		SANDSTONE	3.0	6.5	WEATHERED
394.5	CARBONDALE		SANDSTONE	46.0	9.5	
348.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.6	55.5	
345.9	CARBONDALE		BLACK SHALE	0.1	58.1	
345.8	CARBONDALE		CLAYSTONE & SHALE	0.5	58.2	
345.3	CARBONDALE		SILTSTONE	0.7	58.7	
344.7	CARBONDALE	ANVIL ROCK	SANDSTONE	13.2	59.3	
331.5	CARBONDALE		SANDSTONE/SHALE	2.5	72.5	
329.0	CARBONDALE		SHALE	12.9	75.0	
316.1	CARBONDALE	BRERETON	LIMESTONE	0.8	87.9	
315.2	CARBONDALE	ANNA	BLACK SHALE	1.0	88.8	
314.2	CARBONDALE	HERRIN	COAL	3.8	89.8	
310.4	CARBONDALE		UNDERCLAY	4.9	93.6	
305.5	CARBONDALE		SILTSTONE	9.5	98.5	
296.0	CARBONDALE		SANDSTONE	11.5	108.0	
284.5	CARBONDALE		SILTSTONE	12.5	119.5	
272.0	CARBONDALE		SHALE	17.8	132.0	
254.2	CARBONDALE		LIMESTONE	0.3	149.8	
253.9	CARBONDALE		SHALE	0.3	150.1	
253.6	CARBONDALE	BRIAR HILL	COAL	2.1	150.4	
251.5	CARBONDALE		SILTSTONE	2.3	152.5	
249.2	CARBONDALE		SANDSTONE	20.7	154.8	
228.5	CARBONDALE		SILTSTONE	15.0	175.5	
213.5	CARBONDALE		SHALE	15.5	190.5	
198.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	206.0	
196.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	207.3	
194.0	CARBONDALE	SPRINGFIELD	COAL	4.6	210.0	
189.4	CARBONDALE		UNDERCLAY	1.4	214.6	

MAPID: 05902333000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.325483 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.68582 **DATE COLLECTED:** 9 / 9 / 1958

SURFACE ELEVATION (FT.): 483.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 77 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
483.0	PLEISTOCENE		CLAY	8.5	0.0	BROWN
474.5			BROWN SANDSTONE	9.5	8.5	
465.0			GRAY SANDSTONE	38.7	18.0	
426.3			SHALE	1.7	56.7	
424.7			SHALE	6.2	58.3	
418.5			SHALE	7.2	64.5	
411.3			GRAY SANDSTONE	1.7	71.7	
409.7			SHALE	2.0	73.3	
407.7	CARBONDALE	ALLENBY	COAL	0.2	75.3	
407.5	CARBONDALE		SHALE	2.5	75.5	
405.0	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	4.3	78.0	
400.7	CARBONDALE		SHALE	0.8	82.3	
399.8	CARBONDALE		SHALE	3.1	83.2	
396.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	7.3	86.3	
389.5	CARBONDALE		SHALE	13.1	93.5	
376.4	CARBONDALE	BRERETON	GRAY LIMESTONE	5.2	106.6	
371.2	CARBONDALE	HERRIN	COAL	3.8	111.8	
367.5	CARBONDALE		UNDERCLAY	2.5	115.5	
365.0	CARBONDALE		SANDSTONE	19.0	118.0	
346.0	CARBONDALE		SHALE	30.1	137.0	
315.9	CARBONDALE	BRIAR HILL	COAL	1.9	167.1	
314.0	CARBONDALE		SHALE	0.8	169.0	
313.2	CARBONDALE		SHALE	7.2	169.8	
306.0	CARBONDALE		SANDSTONE	13.0	177.0	
293.0	CARBONDALE		SHALE	30.1	190.0	
262.9	CARBONDALE	ST. DAVID	LIMESTONE	1.2	220.1	
261.7	CARBONDALE	TURNER MINE	SHALE	3.3	221.3	
258.5	CARBONDALE	SPRINGFIELD	COAL	4.3	224.5	
254.2	CARBONDALE		UNDERCLAY	1.2	228.8	

MAPID: 05902333000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.325483 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.68582 **DATE COLLECTED:** 9 / 9 / 1958

SURFACE ELEVATION (FT.): 483.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
483.0			UNCONSOLIDATED	8.5	0.0	
474.5			ROCK	66.8	8.5	
407.7			COAL	0.2	75.3	
407.5			ROCK	36.3	75.5	
371.3	CARBONDALE	HERRIN	COAL	3.8	111.7	
367.5	CARBONDALE		ROCK	51.6	115.5	
315.9	CARBONDALE	BRIAR HILL	COAL	1.9	167.1	
314.0	CARBONDALE		ROCK	55.5	169.0	
258.5	CARBONDALE	SPRINGFIELD	COAL	4.3	224.5	
254.2	CARBONDALE		ROCK	1.2	228.8	

MAPID: 05902376000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330068 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.685845 **DATE COLLECTED:** 11 / 25 / 1958

SURFACE ELEVATION (FT.): 565.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 160 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
565.0	PLEISTOCENE		CLAY	12.3	0.0	
552.7			BROWN SANDSTONE	42.7	12.3	
510.0			COAL	1.0	55.0	
509.0			SHALE	31.0	56.0	
478.0			SANDSTONE	7.0	87.0	
471.0			SHALE	1.0	94.0	
470.0			COAL	0.5	95.0	
469.5			LIMESTONE	4.5	95.5	ABOVE HERRIN COAL - CGT

MAPID: 05902376000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330068 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.685845 **DATE COLLECTED:** 11 / 25 / 1958

SURFACE ELEVATION (FT.): 565.0 **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
565.0			UNCONSOLIDATED	12.4	0.0	
552.6			ROCK	42.8	12.4	
509.8			COAL	1.0	55.2	
508.8			ROCK	39.0	56.2	
469.8			COAL	0.5	95.2	
469.3			ROCK	4.5	95.7	

MAPID: 05902415000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 50' S line, 500' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.334527 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.673056 **DATE COLLECTED:** 2 / 23 / 1959

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 102.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 205 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
416.0	PLEISTOCENE		CLAY	13.5	0.0	
402.5			BROWN SANDSTONE	46.5	13.5	
356.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	18.8	60.0	
337.2	CARBONDALE		SHALE	7.2	78.8	
330.0	CARBONDALE		SHALE	6.3	86.0	
323.7	CARBONDALE	BRERETON	LIMESTONE	4.8	92.3	
318.9	CARBONDALE	ANNA	SHALE	0.3	97.1	
318.6	CARBONDALE	HERRIN	COAL	3.5	97.4	
315.1	CARBONDALE		UNDERCLAY	1.1	100.9	

MAPID: 05902415000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 50' S line, 500' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.334527 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.673056 **DATE COLLECTED:** 2 / 23 / 1959

SURFACE ELEVATION (FT.): 416.0 **LOGGED (FT.):** 102.0 **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
416.0			UNCONSOLIDATED	30.0	0.0	
386.0			ROCK	67.1	30.0	L-CORE BEGINS
318.9			ROCK	0.3	97.1	L-CORE ENDS
318.6	CARBONDALE	HERRIN	COAL	3.5	97.4	
315.1			ROCK	1.1	100.9	

MAPID: 05903672000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1180' N line, 730' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.333429 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.684454 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 545.0 **LOGGED (FT.):** 114.4 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-44C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
493.3	CARBONDALE	DANVILLE	CARBONACEOUS SHALE	1.3	51.7	
492.0	CARBONDALE		SHALE & SANDSTONE	23.5	53.0	
468.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.7	76.5	
463.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	12.2	81.2	
451.6	CARBONDALE	LAWSON	SILTY SHALE	11.9	93.4	
439.7	CARBONDALE	BRERETON	LIMESTONE	5.8	105.3	
434.0	CARBONDALE	HERRIN	COAL	3.4	111.0	

MAPID: 05923901000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.32446 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.673772 **DATE COLLECTED:** 7 / 7 / 1975

SURFACE ELEVATION (FT.): 416.4 **LOGGED (FT.):** 115.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 4709-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
416.4	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
398.4	CARBONDALE	ANVIL ROCK	SANDSTONE	58.0	18.0	
340.4	CARBONDALE	ANVIL ROCK	CONGLOMERATE & SANDSTONE	4.0	76.0	
336.4	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	80.0	GRAY
318.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.7	98.0	
315.7	CARBONDALE		GRAY SHALE	3.5	100.7	
312.2	CARBONDALE	BRERETON	LIMESTONE	4.8	104.2	
307.4	CARBONDALE	ANNA	BLACK SHALE	0.7	109.0	
306.7	CARBONDALE	HERRIN	COAL	3.8	109.7	
302.9	CARBONDALE		UNDERCLAY	1.8	113.5	

MAPID: 05923907000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 660' S line, 660' E line of SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330182 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.674717 **DATE COLLECTED:** 8 / 11 / 1975

SURFACE ELEVATION (FT.): 424.8 **LOGGED (FT.):** 111.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 4738C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
424.8	PLEISTOCENE		UNCONSOLIDATED	10.8	0.0	
414.0	CARBONDALE	ANVIL ROCK	SANDSTONE	76.7	10.8	
337.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	13.3	87.5	
324.0	CARBONDALE		BLACK SHALE	0.6	100.8	
323.5	CARBONDALE	BRERETON	LIMESTONE	4.5	101.3	
319.0	CARBONDALE	ANNA	BLACK SHALE	0.3	105.8	
318.7	CARBONDALE	HERRIN	COAL	3.9	106.1	
314.8	CARBONDALE		UNDERCLAY	1.7	110.0	

MAPID: 05923908000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' N line, 330' W line of NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.331195 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.687697 **DATE COLLECTED:** 11 / 3 / 1975

SURFACE ELEVATION (FT.): 546.5 **LOGGED (FT.):** 122.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 5008C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
546.5	PLEISTOCENE		UNCONSOLIDATED	6.5	0.0	
540.0	MODESTO		SANDSTONE	41.0	6.5	
499.0	CARBONDALE	DANVILLE	COAL	0.5	47.5	
498.5	CARBONDALE		UNDERCLAY	1.0	48.0	
497.5	CARBONDALE		GRAY SHALE	36.0	49.0	
461.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	85.0	
459.0	CARBONDALE		GRAY SHALE	2.0	87.5	
457.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	89.5	
449.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.0	97.5	
435.0	CARBONDALE	ANNA	BLACK SHALE	4.0	111.5	
431.0	CARBONDALE		GRAY SHALE	1.0	115.5	
430.0	CARBONDALE	HERRIN	COAL	3.9	116.5	
426.1	CARBONDALE		UNDERCLAY	2.0	120.4	

MAPID: 059274A0012F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** SW NW NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335564 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.678938 **DATE COLLECTED:** 0 / 0 / 1932

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 3.8 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-FULLER & WANLESS **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	0.5		
-	CARBONDALE	SPRINGFIELD	COAL	3.3		

MAPID: 05990058000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 300' N line, 300' E line of NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.324223 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.686836 **DATE COLLECTED:** 9 / 9 / 1958

SURFACE ELEVATION (FT.): 483.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-4-77 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
483.0	PLEISTOCENE		CLAY	8.5	0.0	BROWN
474.5	MODESTO		SANDSTONE	9.5	8.5	BROWN
465.0	MODESTO		SANDSTONE	38.7	18.0	GRAY
426.3	MODESTO		GRAY SHALE	1.7	56.7	
424.7	CARBONDALE		SANDY SHALE	6.2	58.3	#7 MISSING
418.5	CARBONDALE		GRAY SHALE	7.2	64.5	
411.3	CARBONDALE		SANDSTONE	1.7	71.7	GRAY
409.6	CARBONDALE		GRAY SHALE	2.0	73.4	
407.6	CARBONDALE	ALLENBY	COAL	0.2	75.4	
407.5	CARBONDALE		GRAY SHALE	2.5	75.5	
405.0	CARBONDALE	BANKSTON FORK	LIMESTONE	4.3	78.0	GRAY
400.6	CARBONDALE		GRAY SHALE	0.8	82.4	
399.8	CARBONDALE		SANDY SHALE	3.1	83.2	
396.7	CARBONDALE	ANVIL ROCK	SANDSTONE	7.3	86.3	GRAY
389.5	CARBONDALE		GRAY SHALE	13.1	93.5	
376.4	CARBONDALE	BRERETON	LIMESTONE	5.2	106.6	GRAY
371.2	CARBONDALE	HERRIN	COAL	3.8	111.8	
367.5	CARBONDALE		UNDERCLAY	2.5	115.5	
365.0	CARBONDALE		SANDSTONE	19.0	118.0	GRAY
346.0	CARBONDALE		SANDY SHALE	30.1	137.0	
315.9	CARBONDALE	BRIAR HILL	COAL	1.9	167.1	
314.0	CARBONDALE		GRAY SHALE	0.8	169.0	
313.2	CARBONDALE		SANDY SHALE	7.2	169.8	
306.0	CARBONDALE		SANDSTONE	13.0	177.0	GRAY
293.0	CARBONDALE		SANDY SHALE	30.1	190.0	
262.9	CARBONDALE	ST. DAVID	LIMESTONE	1.2	220.1	GRAY
261.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	221.3	
258.5	CARBONDALE	SPRINGFIELD	COAL	4.3	224.5	
254.2	CARBONDALE		UNDERCLAY	1.2	228.8	

MAPID: 05990066000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 200' N line, 400' W line of NE SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.333363 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.676061 **DATE COLLECTED:** 5 / 20 / 1958

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 166.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-4-59 **WELL TYPE:** Coal Test

COMMENT: PERMIT #294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0	PLEISTOCENE		CLAY	4.0	0.0	BROWN
384.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	4.0	BROWN
372.4	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	15.6	GRAY
365.0	CARBONDALE		SANDY SHALE	3.5	23.0	
361.5	CARBONDALE		GRAY SHALE	8.5	26.5	
353.0	CARBONDALE	BRERETON	LIMESTONE	4.9	35.0	GRAY
348.1	CARBONDALE	ANNA	GRAY SHALE	0.3	39.9	
347.8	CARBONDALE	HERRIN	COAL	3.3	40.2	
344.6	CARBONDALE		UNDERCLAY	4.1	43.4	
340.5			SANDSTONE	1.8	47.5	GRAY
338.7			SHALY SANDSTONE	5.2	49.3	GRAY
333.5			SANDSTONE	20.5	54.5	GRAY
313.0			SANDY SHALE	27.1	75.0	
285.9	CARBONDALE	BRIAR HILL	COAL	2.1	102.1	
283.8			SANDY SHALE	1.8	104.2	
282.0			SANDY SHALE	22.5	106.0	
259.5			SANDY SHALE	26.5	128.5	
233.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	155.0	GRAY
232.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.8	155.5	
227.7	CARBONDALE	SPRINGFIELD	COAL	4.7	160.3	
223.0			UNDERCLAY	1.5	165.0	

MAPID: 05990067000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 4 **QUARTERS/FOOTAGES:** 50' S line, 350' W line of SW SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.326692 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.673011 **DATE COLLECTED:** 5 / 29 / 1958

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 216.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-4-61 **WELL TYPE:** Coal Test

COMMENT: PERMIT #294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.0	PLEISTOCENE		CLAY	6.5	0.0	BROWN
397.5	CARBONDALE		SANDSTONE	38.5	6.5	BROWN
359.0	CARBONDALE		SANDSTONE	11.7	45.0	GRAY
347.3	CARBONDALE	BANKSTON FORK	LIMESTONE	1.4	56.7	GRAY
345.9	CARBONDALE		GRAY SHALE	0.6	58.1	
345.3	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	58.7	GRAY
330.3	CARBONDALE		GRAY SHALE	14.2	73.7	
316.2	CARBONDALE	BRERETON	LIMESTONE	1.1	87.8	GRAY
315.1	CARBONDALE	ANNA	BLACK SHALE	0.8	88.9	
314.2	CARBONDALE	HERRIN	COAL	3.7	89.8	
310.6	CARBONDALE		UNDERCLAY	5.1	93.4	
305.5	CARBONDALE		SANDSTONE	23.5	98.5	GRAY
282.0	CARBONDALE		SANDY SHALE	29.6	122.0	
252.4	CARBONDALE	BRIAR HILL	COAL	2.1	151.6	
250.3	CARBONDALE		SANDSTONE	21.8	153.7	GRAY
228.5	CARBONDALE		SANDY SHALE	30.5	175.5	
198.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	206.0	GRAY
196.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	207.3	
194.0	CARBONDALE	SPRINGFIELD	COAL	4.6	210.0	
189.4	CARBONDALE		UNDERCLAY	1.9	214.6	

MAPID: 05902277000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 198' N line, 1056' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350488 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.687382 **DATE COLLECTED:** 0 / 0 / 1958

SURFACE ELEVATION (FT.): 454.0 **LOGGED (FT.):** 170.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 135 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
454.0	PLEISTOCENE		SANDY CLAY	9.3	0.0	
444.7	PLEISTOCENE		CLAY	25.9	9.3	BLUE
418.7			SHALE	5.9	35.3	PROBABLY TRADEWATER FORMATION -CGT
412.8			BLUE SHALE	2.1	41.2	
410.7			BROWN SANDSTONE	7.3	43.3	
403.5			SHALE	16.5	50.5	
387.0			COAL	2.0	67.0	
385.0			SHALE	24.0	69.0	
361.0			BLUE SHALE	16.1	93.0	
344.9			SHALE	7.2	109.1	
337.7			SHALE	4.9	116.3	
332.8			SANDSTONE	6.5	121.2	
326.3			SHALE	5.2	127.7	
321.2			LIMESTONE	1.5	132.8	
319.7			SHALE	1.8	134.3	
317.8			COAL	0.3	136.2	
317.5			SHALE	33.5	136.5	

MAPID: 05902277000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 198' N line, 1056' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350488 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.687382 **DATE COLLECTED:** 0 / 0 / 1958

SURFACE ELEVATION (FT.): 454.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
454.0			UNCONSOLIDATED	35.3	0.0	
418.7			ROCK	28.1	35.3	
390.7	SPOON	DAVIS	COAL	2.0	63.3	
388.7			ROCK	70.8	65.3	
317.8			COAL	0.3	136.2	
317.5			ROCK	21.0	136.5	

MAPID: 05902281000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345131 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.680421 **DATE COLLECTED:** 8 / 8 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 160.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 64 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	3.0	0.0	
397.0	PLEISTOCENE		SAND	26.3	3.0	CLAY AND GRAVEL
370.7	CARBONDALE		SHALE	3.8	29.3	
367.0	CARBONDALE		SHALE	4.2	33.0	
362.8	CARBONDALE	SPRINGFIELD	COAL	4.5	37.2	
358.3	CARBONDALE		UNDERCLAY	4.7	41.7	
353.7	CARBONDALE		SHALE	53.2	46.3	
300.5	CARBONDALE		SHALE	4.8	99.5	
295.7	CARBONDALE	HOUCHIN CREEK	COAL	1.7	104.3	
294.0	CARBONDALE		SHALE	0.5	106.0	
293.5	CARBONDALE		SANDSTONE	39.2	106.5	
254.3	CARBONDALE	SURVANT	COAL	1.8	145.7	
252.6	CARBONDALE		SHALE	13.1	147.4	

MAPID: 05902281000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345131 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.680421 **DATE COLLECTED:** 8 / 8 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 160.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	29.3	0.0	
370.7			ROCK	7.9	29.3	
362.8			COAL	4.5	37.2	
358.3			ROCK	62.5	41.7	
295.8			COAL	1.7	104.2	
294.1			ROCK	39.7	105.9	
254.5			COAL	1.8	145.5	
252.7			ROCK	12.5	147.3	

MAPID: 05902294000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350768 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.683275 **DATE COLLECTED:** 9 / 18 / 1958

SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 94.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 144 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
462.0	CARBONDALE		ARGILLACEOUS SANDSTONE	8.3	0.0	
453.7	CARBONDALE		BLUE SHALE	11.7	8.3	
442.0	CARBONDALE		SHALE	21.1	20.0	
420.9	CARBONDALE	BRIAR HILL	COAL	1.5	41.1	
419.4	CARBONDALE		SHALE	0.6	42.6	
418.8	CARBONDALE		GRAY SANDSTONE	1.4	43.2	
417.4	CARBONDALE		SHALE	1.0	44.6	
416.4	CARBONDALE		SHALE	3.4	45.6	
413.0	CARBONDALE		SHALE	13.5	49.0	
399.5	CARBONDALE		DARK SHALE	17.0	62.5	
382.5	CARBONDALE		SHALE	3.0	79.5	DARK GRAY
379.5	CARBONDALE	ST. DAVID	LIMESTONE	1.2	82.5	
378.3	CARBONDALE	TURNER MINE	SHALE	2.8	83.7	
375.5	CARBONDALE	SPRINGFIELD	COAL	4.3	86.5	
371.2	CARBONDALE		SHALE	3.2	90.8	

MAPID: 05902294000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350768 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.683275 **DATE COLLECTED:** 9 / 8 / 1958

SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 94.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
462.0			UNCONSOLIDATED	8.3	0.0	
453.7			ROCK	32.8	8.3	
420.9			COAL	1.5	41.1	
419.4			ROCK	43.9	42.6	
375.5			COAL	4.3	86.5	
371.2			ROCK	3.2	90.8	

MAPID: 05902303000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345131 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.680421 **DATE COLLECTED:** 9 / 22 / 1958

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 145 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	63.8	0.0	
-	CARBONDALE	BRERETON	LIMESTONE	0.7	63.8	
-	CARBONDALE	HERRIN	COAL	1.1	64.4	
-	CARBONDALE		SHALE	0.3	65.5	
-	CARBONDALE		SHALE	5.3	65.8	
-	CARBONDALE		SHALE & SANDSTONE	11.3	71.0	
-	CARBONDALE		SHALE	7.1	82.3	
-	CARBONDALE		SHALE	26.7	89.3	
-	CARBONDALE	BRIAR HILL	COAL	2.0	116.0	
-	CARBONDALE		SHALE	0.5	118.0	
-	CARBONDALE		SHALE & SANDSTONE	10.8	118.5	
-	CARBONDALE		SANDY SHALE	10.8	129.3	
-	CARBONDALE		DARK SHALE	26.8	140.2	
-	CARBONDALE	ST. DAVID	LIMESTONE	1.1	167.0	
-	CARBONDALE	TURNER MINE	SHALE	3.3	168.1	
-	CARBONDALE	SPRINGFIELD	COAL	4.6	171.4	
-	CARBONDALE		SHALE	4.0	176.0	

MAPID: 05902303000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345131 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.680421 **DATE COLLECTED:** 9 / 22 / 1958

SURFACE ELEVATION (FT.): 374.0 **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
374.0			UNCONSOLIDATED	63.8	0.0	
310.2	CARBONDALE		ROCK	0.7	63.8	
309.6	CARBONDALE	HERRIN	COAL	1.1	64.4	
308.5	CARBONDALE		ROCK	50.5	65.5	
258.0	CARBONDALE	BRIAR HILL	COAL	2.0	116.0	
256.0	CARBONDALE		ROCK	53.4	118.0	
202.6	CARBONDALE	SPRINGFIELD	COAL	4.6	171.4	
198.0	CARBONDALE		ROCK	4.0	176.0	

MAPID: 05902304000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.353092 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.675841 **DATE COLLECTED:** 9 / 23 / 1958

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 72.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 146 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.0	PLEISTOCENE		SANDY CLAY	30.5	0.0	
371.5	CARBONDALE	BANKSTON FORK	LIMESTONE	5.2	30.5	
366.3	CARBONDALE		COAL	0.2	35.7	
366.2	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.1	35.8	
352.1	CARBONDALE		SHALE	5.1	49.9	
347.0	CARBONDALE		SHALE	7.0	55.0	
340.0	CARBONDALE	BRERETON	LIMESTONE	2.5	62.0	
337.5	CARBONDALE	ANNA	SHALE	0.5	64.5	
337.0	CARBONDALE	HERRIN	COAL	3.7	65.0	
333.3	CARBONDALE		SHALE	3.3	68.7	

MAPID: 05902304000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.353092 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.675841 **DATE COLLECTED:** 9 / 23 / 1958

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 72.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.0			UNCONSOLIDATED	30.5	0.0	
371.5			ROCK	34.5	30.5	
337.0	CARBONDALE	HERRIN	COAL	3.7	65.0	
333.3	CARBONDALE		ROCK	3.3	68.7	

MAPID: 05902307000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350854 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.673961 **DATE COLLECTED:** 9 / 24 / 1958

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 74.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 147 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	CARBONDALE	ANVIL ROCK	ARGILLACEOUS SANDSTONE	54.0	0.0	
324.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	4.5	54.0	
319.5	CARBONDALE		DARK SHALE	7.0	58.5	
312.5	CARBONDALE		SHALE	1.3	65.5	
311.2	CARBONDALE	BRERETON	LIMESTONE	2.8	66.8	
308.3	CARBONDALE	HERRIN	COAL	3.8	69.7	
304.6	CARBONDALE		SHALE	1.1	73.4	

MAPID: 05902307000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350854 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.673961 **DATE COLLECTED:** 9 / 24 / 1958

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 74.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0			ROCK	69.7	0.0	
308.3	CARBONDALE	HERRIN	COAL	3.8	69.7	
304.6	CARBONDALE		ROCK	1.1	73.4	

MAPID: 05902322000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1300' S line, 950' W line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350912 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.676617 **DATE COLLECTED:** 10 / 2 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 149 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	9.6	0.0	
390.4	CARBONDALE		BLUE SHALE	22.4	9.6	
368.0	CARBONDALE	BRERETON	LIMESTONE	0.8	32.0	
367.2	CARBONDALE	HERRIN	COAL	4.0	32.8	
363.2	CARBONDALE		SHALE	3.3	36.8	

MAPID: 05902322000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 1300' S line, 950' W line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.350912 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.676617 **DATE COLLECTED:** 10 / 2 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	32.8	0.0	
367.2	CARBONDALE	HERRIN	COAL	4.0	32.8	
363.2	CARBONDALE		ROCK	3.3	36.8	

MAPID: 05902423000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.338468 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.674796 **DATE COLLECTED:** 3 / 16 / 1959
SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 101.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 207 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
418.0	PLEISTOCENE		CLAY	7.0	0.0	BROWN
411.0			SHALE	13.0	7.0	
398.0			GRAY SANDSTONE	5.2	20.0	
392.8			GRAY SANDSTONE	35.5	25.2	
357.3			SHALE	0.8	60.7	
356.5	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	3.4	61.5	
353.1	CARBONDALE		SHALE	0.2	64.9	
352.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	22.9	65.1	
330.0	CARBONDALE		SHALE	3.8	88.0	
326.2	CARBONDALE	BRERETON	GRAY LIMESTONE	4.3	91.8	
322.0	CARBONDALE	ANNA	SHALE	0.3	96.0	
321.7	CARBONDALE	HERRIN	COAL	3.7	96.3	
318.1	CARBONDALE		UNDERCLAY	1.1	99.9	GRAY

MAPID: 05902423000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.338468 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.674796 **DATE COLLECTED:** 3 / 16 / 1959
SURFACE ELEVATION (FT.): 418.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
418.0			UNCONSOLIDATED	17.0	0.0	
401.0			ROCK	79.3	17.0	
321.7	CARBONDALE	HERRIN	COAL	3.7	96.3	
318.1	CARBONDALE		ROCK	1.1	99.9	

MAPID: 05903673000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 60' S line, 1485' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.349074 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.673184 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 99.8 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-7C **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
386.6	CARBONDALE	DANVILLE	COAL	1.6	34.4	
385.0	CARBONDALE		SILTY SHALE	18.8	36.0	
366.2	CARBONDALE	BANKSTON FORK	LIMESTONE AND SANDSTONE	6.4	54.8	
359.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	5.1	61.2	
354.7	CARBONDALE	LAWSON	SANDSTONE	14.9	66.3	
339.8	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	3.5	81.2	
336.3	CARBONDALE	LAWSON	SILTY SHALE	5.0	84.7	
331.3	CARBONDALE	LAWSON	GRAY SHALE	2.2	89.7	
329.1	CARBONDALE	BRERETON	LIMESTONE	3.9	91.9	
325.2	CARBONDALE	ANNA	BLACK SHALE	0.3	95.8	
325.0	CARBONDALE	HERRIN	COAL	3.8	96.0	

MAPID: 05925046000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 60' S line, 10' E line of SE SW SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.347431 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.68061 **DATE COLLECTED:** 10 / 9 / 1997

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 29.0 **LOG TYPE:** Drillers Log

SOURCE: NECO LAND CO. 5-EVG-66 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	3.0	0.0	TAN
-	CARBONDALE		SANDSTONE	8.0	3.0	
-	CARBONDALE		SANDY SHALE	9.0	11.0	
-	CARBONDALE	BRERETON	LIMESTONE	3.8	20.0	BEGIN 8' CORE
-	CARBONDALE	BRERETON	CALCAREOUS SHALE	0.1	23.8	
-	CARBONDALE	HERRIN	COAL	2.7	23.9	
-	CARBONDALE	HERRIN	SHALE	0.1	26.6	
-	CARBONDALE	HERRIN	COAL	0.7	26.7	
-	CARBONDALE		CLAYSTONE & SILTSTONE	1.6	27.4	

MAPID: 05925051000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 300' S line, 355' W line of SW NW SW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.352944 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.683194 **DATE COLLECTED:** 10 / 7 / 1997
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 33.0 **LOG TYPE:** Drillers Log
SOURCE: NECO LAND CO. 5-EVG-63 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	6.0	0.0	TAN
-	CARBONDALE		SANDSTONE	6.0	6.0	
-	CARBONDALE		SANDY SHALE	6.0	12.0	
-	CARBONDALE		CORE LOSS	1.5	18.0	BEGIN 11.5' CORE
-	CARBONDALE		SHALE	4.6	19.5	WEATHERED
-	CARBONDALE	BRERETON	LIMESTONE	0.4	24.1	
-	CARBONDALE		CORE LOSS	2.0	24.5	
-	CARBONDALE	HERRIN	COAL	3.7	26.5	
-	CARBONDALE		CLAYSTONE & SILTSTONE	2.8	30.2	

MAPID: 059274A0013F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE NE NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.33665 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.679871 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 19.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-G. CADY **WELL TYPE:** Outcrop
COMMENT: EXPOSED ON SIDE OF GULCH

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	15.0		
-	CARBONDALE	HERRIN	COAL	4.0		SH BLUE BAND

MAPID: 059274A0022F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.351943 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.678629 **DATE COLLECTED:** 6 / 1 / 1954
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-H. B. STONEHOUSE **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 059274A0014F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW NE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346799 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.682762 **DATE COLLECTED:** 0 / 0 / 1927

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-CADY. **WELL TYPE:** Underground mine

COMMENT: ABD DRIFT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNKNOWN	0.0	0.0	

MAPID: 059274A0015F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** NE SE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345678 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.681821 **DATE COLLECTED:** 0 / 0 / 1932

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 52.2 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-M W FULLER **WELL TYPE:** Outcrop

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0	CARBONDALE		ROCK	5.0	0.0	
-	CARBONDALE	HERRIN	COAL	4.7		2.7' POORLY EXPOSED
-	CARBONDALE		ROCK	44.5		

MAPID: 05990027000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 50' S line, 50' W line of SW SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344958 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.680557 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 398.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-5-18 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
475.0	PLEISTOCENE		SOIL	2.0	0.0	
473.0	PLEISTOCENE		CLAY	6.0	2.0	
467.0	CARBONDALE		SANDSTONE	3.0	8.0	BROWN
464.0	CARBONDALE		SANDSTONE	6.0	11.0	GRAY
458.0	CARBONDALE		DARK GRAY SHALE	3.0	17.0	
455.0	CARBONDALE		SANDSTONE	2.0	20.0	
453.0	CARBONDALE		SANDY SHALE	1.0	22.0	
452.0	CARBONDALE		GRAY SHALE	8.0	23.0	
444.0	CARBONDALE	ANNA	CALCAREOUS BLACK SHALE	3.0	31.0	
441.0	CARBONDALE	HERRIN	COAL	4.0	34.0	APPROXIMATE THICKNESS
437.0	CARBONDALE		UNDERCLAY	5.0	38.0	
432.0	CARBONDALE		SANDSTONE	27.0	43.0	
405.0	CARBONDALE		SANDY SHALE	12.0	70.0	
393.0	CARBONDALE		DARK SHALE	12.5	82.0	
380.5	CARBONDALE	BRIAR HILL	COAL	2.0	94.5	APPROXIMATE THICKNESS
378.5	CARBONDALE		SANDSTONE	15.5	96.5	
363.0	CARBONDALE		SANDY SHALE	4.0	112.0	
359.0	CARBONDALE		SANDSTONE	13.0	116.0	
346.0	CARBONDALE		SANDY SHALE	16.2	129.0	START CORE #1
329.8	CARBONDALE		CALCAREOUS SHALE	0.1	145.2	
329.7	CARBONDALE	ST. DAVID	LIMESTONE	0.5	145.3	
329.2	CARBONDALE	ST. DAVID	CALCAREOUS BLACK SHALE	0.2	145.8	
329.0	CARBONDALE	ST. DAVID	LIMESTONE	1.8	146.0	
327.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	147.8	
325.8	CARBONDALE	SPRINGFIELD	COAL	4.7	149.2	
321.1	CARBONDALE		UNDERCLAY	4.1	153.9	
317.0	CARBONDALE		SILTSTONE	0.7	158.0	
316.3	CARBONDALE		SANDY SHALE	8.3	158.7	END CORE #1
308.0	CARBONDALE		SANDSTONE	3.0	167.0	
305.0	CARBONDALE		SANDY SHALE	39.0	170.0	
266.0	CARBONDALE	EXCELLO	CALCAREOUS BLACK SHALE	3.0	209.0	
263.0	CARBONDALE	EXCELLO	BLACK SHALE	2.0	212.0	
261.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	214.0	APPROXIMATE THICKNESS
259.0	CARBONDALE		SANDY SHALE	3.0	216.0	
256.0	CARBONDALE		SANDSTONE	11.0	219.0	
245.0	CARBONDALE		SANDY SHALE	18.5	230.0	
226.5	CARBONDALE	SURVANT	COAL	1.5	248.5	

225.0	CARBONDALE		SANDY SHALE	5.0	250.0	
220.0	CARBONDALE		SANDSTONE	3.0	255.0	
217.0	CARBONDALE		SHALY SANDSTONE	9.0	258.0	
208.0	CARBONDALE		COAL	1.0	267.0	WITH DARK SHALE, APPROXIMATE THICKNESS
207.0	CARBONDALE		SANDY SHALE	34.0	268.0	
173.0	CARBONDALE		DARK SHALE	6.0	302.0	
167.0	CARBONDALE	COLCHESTER	SHALY COAL	1.0	308.0	APPROX. THICKNESS
166.0	CARBONDALE		SANDY SHALE	3.0	309.0	
163.0	CARBONDALE		SANDSTONE	27.0	312.0	
136.0	CARBONDALE		SHALY SANDSTONE	6.0	339.0	
130.0	CARBONDALE		SANDSTONE	7.0	345.0	
123.0	CARBONDALE	DEKOVEN	COAL	2.5	352.0	APPROX. THICKNESS
120.5	CARBONDALE		UNDERCLAY	1.5	354.5	
119.0	CARBONDALE		SANDSTONE	14.0	356.0	
105.0	CARBONDALE		SANDY SHALE	6.0	370.0	
99.0	CARBONDALE		GRAY SHALE	2.0	376.0	
97.0	CARBONDALE		DARK GRAY SHALE	0.1	378.0	
96.9	CARBONDALE		SANDY SHALE	0.3	378.1	START CORE #2
96.6	CARBONDALE		DARK SHALE	0.0	378.4	
96.6	CARBONDALE		GRAY SHALE	1.2	378.4	
95.4	CARBONDALE		BLACK SHALE	2.6	379.6	
92.8	CARBONDALE	DAVIS	COAL	3.5	382.2	
89.3	TRADEWATER		UNDERCLAY	2.1	385.7	
87.2	TRADEWATER		SANDSTONE	10.3	387.8	

MAPID: 05990037000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.34827 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.682195 **DATE COLLECTED:** 10 / 10 / 1987

SURFACE ELEVATION (FT.): 423.3 **LOGGED (FT.):** 292.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-13-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
423.3	PLEISTOCENE		CLAY	15.0	0.0	BROWN
408.3	PLEISTOCENE		CLAY	10.0	15.0	GRAY
398.3	CARBONDALE		GRAY SHALE	20.0	25.0	
378.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	45.0	
374.3	CARBONDALE	SPRINGFIELD	COAL	4.5	49.0	APPROXIMATE THICKNESS
369.8	CARBONDALE		CLAYSTONE	11.5	53.5	
358.3	CARBONDALE		GRAY SHALE	17.0	65.0	
341.3	CARBONDALE		DARK GRAY SHALE	28.0	82.0	
313.3	CARBONDALE	HOUCHIN CREEK	COAL	0.7	110.0	APPROXIMATE THICKNESS
312.6	CARBONDALE		DARK GRAY SHALE	5.3	110.7	
307.3	CARBONDALE		GRAY SHALE	2.5	116.0	
304.8	CARBONDALE		SANDY SHALE	16.5	118.5	
288.3	CARBONDALE		SANDY SHALE	16.0	135.0	
272.3	CARBONDALE	SURVANT	COAL	1.0	151.0	APPROXIMATE THICKNESS
271.3	CARBONDALE		SANDY SHALE	17.0	152.0	
254.3	CARBONDALE		SANDSTONE	3.0	169.0	
251.3	CARBONDALE		SANDY SHALE	39.0	172.0	
212.3	CARBONDALE	COLCHESTER	COAL	1.0	211.0	APPROXIMATE THICKNESS
211.3	CARBONDALE		UNDERCLAY	4.0	212.0	
207.3	CARBONDALE	PALZO	SANDSTONE	36.0	216.0	
171.3	CARBONDALE		DARK GRAY SHALE	3.0	252.0	
168.3	CARBONDALE	DEKOVEN	COAL	2.5	255.0	APPROXIMATE THICKNESS
165.8	CARBONDALE		SANDY SHALE	1.5	257.5	
164.3	CARBONDALE		GRAY SHALE	7.0	259.0	
157.3	CARBONDALE		DARK GRAY SHALE	4.0	266.0	
153.3	CARBONDALE		GRAY SHALE	17.5	270.0	
135.8	CARBONDALE	DAVIS	COAL	3.5	287.5	APPROXIMATE
132.3	TRADEWATER		UNDERCLAY	1.0	291.0	

MAPID: 05990038000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 650' N line, 650' W line of SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.353143 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.682724 **DATE COLLECTED:** 10 / 29 / 1987

SURFACE ELEVATION (FT.): 513.7 **LOGGED (FT.):** 155.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-12-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
513.7	PLEISTOCENE		SILTY CLAY	8.0	0.0	BROWN
505.7	CARBONDALE		SANDSTONE	6.0	8.0	BROWN
499.7	CARBONDALE		CLAYSTONE	14.0	14.0	GRAY
485.7	CARBONDALE		DARK GRAY SHALE	2.0	28.0	
483.7	CARBONDALE		CLAYSTONE	10.0	30.0	OLD #6 MINE
473.7	CARBONDALE		SANDY SHALE	3.0	40.0	
470.7	CARBONDALE		SANDSTONE	17.0	43.0	GRAY
453.7	CARBONDALE		DARK GRAY SHALE	33.0	60.0	
420.7	CARBONDALE	BRIAR HILL	COAL	1.7	93.0	APPROXIMATE THICKNESS
419.0	CARBONDALE		SANDSTONE	5.7	94.7	GRAY
413.4	CARBONDALE		SANDSTONE	4.7	100.3	DARK GRAY
408.7	CARBONDALE		GRAY SHALE	6.0	105.0	
402.7	CARBONDALE		SANDY SHALE	32.2	111.0	
370.5	CARBONDALE	ST. DAVID	LIMESTONE	1.3	143.2	WITH SHALE STREAKS
369.2	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	144.5	
364.2	CARBONDALE	SPRINGFIELD	COAL	4.3	149.5	APPROXIMATE THICKNESS
359.9	CARBONDALE		UNDERCLAY	1.2	153.8	

MAPID: 05990039000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 200' N line, 200' W line of NE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337875 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.676055 **DATE COLLECTED:** 10 / 13 / 1987

SURFACE ELEVATION (FT.): 434.9 **LOGGED (FT.):** 207.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-10-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
434.9	PLEISTOCENE		SILTY CLAY	11.0	0.0	BROWN
423.9	CARBONDALE		SANDSTONE	32.0	11.0	TAN
391.9	CARBONDALE	ALLENBY	COAL	0.7	43.0	
391.2	CARBONDALE	ANVIL ROCK	SANDSTONE	39.3	43.7	GRAY
351.9	CARBONDALE		DARK GRAY SHALE	2.0	83.0	
349.9	CARBONDALE	BRERETON	LIMESTONE	6.0	85.0	
343.9	CARBONDALE		DARK GRAY SHALE	0.3	91.0	
343.6	CARBONDALE	HERRIN	COAL	3.5	91.3	APPROXIMATE THICKNESS
340.1	CARBONDALE		UNDERCLAY	4.3	94.8	
335.9	CARBONDALE		GRAY SHALE	9.0	99.0	
326.9	CARBONDALE		SANDSTONE	14.0	108.0	GRAY
312.9	CARBONDALE		GRAY SHALE	5.0	122.0	
307.9	CARBONDALE		DARK GRAY SHALE	29.4	127.0	
278.5	CARBONDALE	BRIAR HILL	COAL	1.8	156.4	
276.6	CARBONDALE		UNDERCLAY	1.2	158.3	
275.5	CARBONDALE		SANDY SHALE	15.6	159.4	
259.9	CARBONDALE		SANDSTONE	15.0	175.0	
244.9	CARBONDALE		GRAY SHALE	1.0	190.0	
243.9	CARBONDALE		GRAY SHALE	10.0	191.0	
233.9	CARBONDALE		DARK GRAY SHALE	1.0	201.0	
232.9	CARBONDALE	SPRINGFIELD	COAL	4.0	202.0	APPROXIMATE THICKNESS
228.9	CARBONDALE		UNDERCLAY	1.0	206.0	

MAPID: 05990040000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 200' N line, 200' E line of NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346319 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.680436 **DATE COLLECTED:** 10 / 9 / 1987

SURFACE ELEVATION (FT.): 475.8 **LOGGED (FT.):** 155.7 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-9-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
475.8	PLEISTOCENE		SANDY CLAY	5.0	0.0	BROWN
470.8	PLEISTOCENE		SANDSTONE	3.0	5.0	BROWN
467.8	PLEISTOCENE		CLAYSTONE	3.0	8.0	LIGHT GRAY
464.8	CARBONDALE		SANDSTONE	10.0	11.0	GRAY
454.8	CARBONDALE		GRAY SHALE	10.4	21.0	
444.4	CARBONDALE	BRERETON	LIMESTONE	3.8	31.4	
440.6	CARBONDALE	HERRIN	COAL	3.4	35.2	
437.2	CARBONDALE		UNDERCLAY	3.8	38.6	
433.4	CARBONDALE		SANDSTONE	18.6	42.4	
414.8	CARBONDALE		SANDY SHALE	13.0	61.0	
401.8	CARBONDALE		BLACK SHALE	18.0	74.0	
383.8	CARBONDALE		GRAY SHALE	2.7	92.0	
381.1	CARBONDALE	BRIAR HILL	COAL	2.0	94.7	APPROXIMATE THICKNESS
379.1	CARBONDALE		GRAY SHALE	1.0	96.7	
378.1	CARBONDALE		GRAY SHALE	9.3	97.7	
368.8	CARBONDALE		SHALE	2.0	107.0	
366.8	CARBONDALE		SANDSTONE	12.0	109.0	DARK GRAY
354.8	CARBONDALE		GRAY SHALE	21.0	121.0	
333.8	CARBONDALE		DARK GRAY SHALE	7.7	142.0	
326.1	CARBONDALE	SPRINGFIELD	COAL	4.0	149.7	APPROXIMATE THICKNESS
322.1	CARBONDALE		UNDERCLAY	2.0	153.7	

MAPID: 05990041000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 100' N line, 200' W line of NW SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344763 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.675183 **DATE COLLECTED:** 10 / 9 / 1987

SURFACE ELEVATION (FT.): 437.8 **LOGGED (FT.):** 210.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-8-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
437.8	PLEISTOCENE		SILTY CLAY	9.0	0.0	BROWN
428.8	MODESTO		SANDSTONE	20.2	9.0	BROWN
408.6	CARBONDALE	DANVILLE	COAL	1.1	29.2	
407.5	CARBONDALE		GRAY SHALE	10.8	30.3	
396.8	CARBONDALE		SANDSTONE	4.0	41.0	BROWN
392.8	CARBONDALE	ALLENBY	COAL	0.6	45.0	
392.2	CARBONDALE		UNDERCLAY	5.9	45.6	
386.3	CARBONDALE		GRAY SHALE	2.5	51.5	
383.8	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	54.0	
377.5	CARBONDALE		UNDERCLAY	0.7	60.3	
376.8	CARBONDALE		GRAY SHALE	1.3	61.0	
375.5	CARBONDALE		SANDSTONE	12.2	62.3	GRAY
363.3	CARBONDALE		BLACK SHALE	14.7	74.5	
348.6	CARBONDALE	HERRIN	COAL	3.3	89.2	
345.3	CARBONDALE		UNDERCLAY	1.7	92.5	
343.6	CARBONDALE		GRAY SHALE	3.8	94.2	
339.8	CARBONDALE		SANDSTONE	2.0	98.0	
337.8	CARBONDALE		GRAY SHALE	4.0	100.0	
333.8	CARBONDALE		SANDSTONE	12.0	104.0	GRAY
321.8	CARBONDALE		SANDY SHALE	2.0	116.0	
319.8	CARBONDALE		SANDY SHALE	11.0	118.0	
308.8	CARBONDALE		DARK GRAY SHALE	17.0	129.0	
291.8	CARBONDALE		GRAY SHALE	2.6	146.0	
289.2	CARBONDALE	BRIAR HILL	COAL	1.8	148.6	
287.4	CARBONDALE		SANDY SHALE	8.6	150.4	
278.8	CARBONDALE		SANDSTONE	4.4	159.0	
274.4	CARBONDALE		DARK GRAY SHALE	19.6	163.4	
254.8	CARBONDALE		SANDY SHALE	10.0	183.0	
244.8	CARBONDALE		SANDY SHALE	10.0	193.0	
234.8	CARBONDALE	SPRINGFIELD	COAL	4.6	203.0	
230.2	CARBONDALE		UNDERCLAY	2.4	207.6	

MAPID: 05990059000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' N line, 100' W line of NW SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344843 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.676702 **DATE COLLECTED:** 7 / 24 / 1995

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 92.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-5-25 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.0	PLEISTOCENE		SANDY CLAY	4.0	0.0	TAN
426.0	MODESTO		SANDSTONE	23.0	4.0	BROWN
403.0	CARBONDALE	DANVILLE	COAL	0.9	27.0	
402.1	CARBONDALE		SANDY SHALE	3.1	27.9	
399.0	CARBONDALE		SANDSTONE	7.0	31.0	GRAY
392.0	CARBONDALE		SANDSTONE	6.0	38.0	WITH SHALE STREAKS; GRAY
386.0	CARBONDALE		LIMESTONE	1.0	44.0	
385.0	CARBONDALE		SANDY SHALE	4.0	45.0	
381.0	CARBONDALE	ALLENBY	COAL	-	49.0	TRACE
381.0	CARBONDALE		SANDY SHALE	4.0	49.0	
377.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	53.0	
372.0	CARBONDALE		SANDY SHALE	3.0	58.0	
369.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	61.0	GRAY
358.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	72.0	WITH SHALE STREAKS; GRAY
352.0	CARBONDALE		SANDY SHALE	6.0	78.0	
346.0	CARBONDALE		DARK GRAY SHALE	1.0	84.0	
345.0	CARBONDALE	BRERETON	LIMESTONE	2.1	85.0	START CORING
342.9	CARBONDALE	ANNA	BLACK SHALE	0.4	87.1	
342.5	CARBONDALE	HERRIN	COAL	3.2	87.5	
339.3	CARBONDALE	HERRIN	PYRITE	0.1	90.7	
339.2	CARBONDALE		SANDY CLAYSTONE	1.3	90.8	

MAPID: 05990071000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 0' N line, 150' E line of NE NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.345652 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.680426 **DATE COLLECTED:** 7 / 24 / 1995
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: SUGAR CAMP COAL CO SCG-5-26 **WELL TYPE:** Coal Test
COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
480.0	PLEISTOCENE		SANDY CLAY	4.0	0.0	TAN
476.0	CARBONDALE		SANDSTONE	8.0	4.0	BROWN
468.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	12.0	GRAY
460.0	CARBONDALE		SANDY SHALE	14.0	20.0	
446.0	CARBONDALE	BRERETON	LIMESTONE	3.9	34.0	START CORING
442.1	CARBONDALE		DARK GRAY SHALE	0.1	37.9	
442.0	CARBONDALE	ANNA	BLACK SHALE	0.2	38.0	
441.8	CARBONDALE	HERRIN	COAL	3.6	38.2	
438.2	CARBONDALE		SANDY CLAYSTONE	1.2	41.8	

MAPID: 05990072000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 5 **QUARTERS/FOOTAGES:** 200' S line, 400' E line of SE SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342136 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.673522 **DATE COLLECTED:** 7 / 24 / 1995
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: SUGAR CAMP COAL CO SCG-5-27 **WELL TYPE:** Coal Test
COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		SANDY CLAY	21.0	0.0	TAN
369.0	CARBONDALE		SANDSTONE	9.0	21.0	BROWN
360.0	CARBONDALE	ALLENBY	COAL	-	30.0	TRACE
360.0	CARBONDALE		SANDY CLAYSTONE	4.0	30.0	
356.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	34.0	
351.0	CARBONDALE		SANDSTONE	16.0	39.0	GRAY
335.0	CARBONDALE		SANDY SHALE	14.0	55.0	
321.0	CARBONDALE	BRERETON	LIMESTONE	1.7	69.0	START CORING
319.3	CARBONDALE	ANNA	BLACK SHALE	0.4	70.7	
318.9	CARBONDALE	HERRIN	COAL	3.7	71.1	
315.2	CARBONDALE	HERRIN	PYRITE	0.1	74.8	
315.1	CARBONDALE		SANDY CLAYSTONE	3.1	74.9	

MAPID: 05902206000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW NW NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.373347 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.686646 **DATE COLLECTED:** 5 / 21 / 1958

SURFACE ELEVATION (FT.): 371.0 **LOGGED (FT.):** 183.3 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CORP 123 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
371.0			NO RECORD	30.0	0.0	
341.0			SANDSTONE	25.5	30.0	START OF CORE
315.5			NO RECORD	3.0	55.5	DEPTH & MARKER OFF
312.5			COAL	4.2	58.5	BEDS DIPPING 10 DEGREES
308.3			UNDERCLAY	1.3	62.7	
307.0			SILTSTONE	13.8	64.0	
293.2			SANDSTONE	7.0	77.8	
286.2			SILTSTONE	20.3	84.8	
266.0			SHALE	13.1	105.0	
252.9			COAL	1.7	118.1	
251.2			SANDSTONE	42.8	119.8	
208.4			SILTSTONE	0.9	162.6	DEPTH AND MARKER OFF
207.5			SHALE	10.0	163.5	
197.5			LIMESTONE	0.7	173.5	
196.8			BLACK SHALE	3.1	174.2	
193.7			COAL	0.8	177.3	
192.9			NO RECORD	5.2	178.1	CORE NOT DESCRIBED TO TD

MAPID: 05902206000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW NW NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.373347 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.686646 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 183.3 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	30.0	0.0	
350.0			ROCK	28.5	30.0	
321.5			COAL	4.2	58.5	
317.3			ROCK	55.4	62.7	
261.9			COAL	1.7	118.1	
260.2			ROCK	57.5	119.8	
202.7			COAL	0.8	177.3	
201.9			ROCK	5.2	178.1	L-CORE NOT DESCRIBED TO BOTTOM OF HOLE

MAPID: 05902208000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364108 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.680553 **DATE COLLECTED:** 2 / 0 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 311.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 107 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	4.0	0.0	
396.0	MODESTO		GRAY SANDSTONE	14.0	4.0	
382.0	MODESTO		BLUE SHALE	6.3	18.0	
375.7	MODESTO		SHALY SANDSTONE	39.0	24.3	
336.7	MODESTO		COAL	0.8	63.3	
336.0	MODESTO		SHALE	5.2	64.0	
330.8	MODESTO		GRAY SANDSTONE	46.1	69.2	
284.7	MODESTO		SHALE	3.3	115.3	
281.4	CARBONDALE	DANVILLE	COAL	2.0	118.6	
279.4	CARBONDALE		BLUE SHALE	59.9	120.6	
219.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	3.5	180.5	
216.0	CARBONDALE	HERRIN	COAL	3.8	184.0	
212.2	CARBONDALE		SHALE	6.7	187.8	
205.5	CARBONDALE		SHALE & SANDSTONE	21.8	194.5	
183.7	CARBONDALE		SHALE	1.8	216.3	
181.8	CARBONDALE		SHALE	28.0	218.2	
153.8	CARBONDALE	BRIAR HILL	COAL	1.5	246.2	
152.3	CARBONDALE		SHALE	0.4	247.7	
151.9	CARBONDALE		SHALE	9.2	248.1	
142.7	CARBONDALE		SHALE & SANDSTONE	15.2	257.3	
127.6	CARBONDALE		DARK SHALE	28.8	272.4	
98.7	CARBONDALE	ST. DAVID	LIMESTONE	0.8	301.3	
98.0	CARBONDALE	TURNER MINE	SHALE	2.5	302.0	
95.5	CARBONDALE	SPRINGFIELD	COAL	4.0	304.5	
91.5	CARBONDALE		SHALE	3.0	308.5	

MAPID: 05902208000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364108 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.680553 **DATE COLLECTED:** 2 / 0 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 311.5 **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	4.0	0.0	
396.0			ROCK	59.3	4.0	
336.7			COAL	0.8	63.3	
336.0			ROCK	54.6	64.0	
281.4			COAL	2.0	118.6	
279.4			ROCK	63.4	120.6	
216.0	CARBONDALE	HERRIN	COAL	3.8	184.0	
212.2	CARBONDALE		ROCK	6.7	187.8	
205.5	CARBONDALE		ROCK	51.7	194.5	L-CORE DEEPENED 5/58
153.8	CARBONDALE	BRIAR HILL	COAL	1.2	246.2	
152.7	CARBONDALE		ROCK	56.8	247.3	
95.9	CARBONDALE	SPRINGFIELD	COAL	4.0	304.1	
91.9	CARBONDALE		ROCK	3.0	308.1	

MAPID: 05902222000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 500' N line, 1250' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.358542 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.679151 **DATE COLLECTED:** 1 / 6 / 1958

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 337.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 103 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.0	PLEISTOCENE		CLAY	8.3	0.0	
393.7	MODESTO		SANDSTONE	21.9	8.3	
371.7	CARBONDALE	DANVILLE	COAL	1.7	30.3	
370.1	CARBONDALE		SHALE & SANDSTONE	30.1	31.9	
340.0	CARBONDALE		SHALE	2.7	62.0	
337.3	CARBONDALE	ALLENBY	COAL	0.4	64.7	
336.9	CARBONDALE	ANVIL ROCK	SANDSTONE	23.2	65.1	
313.7	CARBONDALE		SHALE	11.8	88.3	
301.9	CARBONDALE	BRERETON	LIMESTONE	2.4	100.1	
299.5	CARBONDALE	HERRIN	COAL	3.5	102.5	
296.0	CARBONDALE		DARK SHALE	5.3	106.0	
290.7	CARBONDALE		SHALY SANDSTONE	28.9	111.3	
261.7	CARBONDALE		DARK SHALE	20.8	140.3	
241.0	CARBONDALE	BRIAR HILL	COAL	0.1	161.0	
240.9	CARBONDALE	BRIAR HILL	SHALE	0.3	161.1	
240.6	CARBONDALE	BRIAR HILL	COAL	0.1	161.4	
240.5	CARBONDALE		SHALE & SANDSTONE	18.8	161.5	
221.7	CARBONDALE		BLUE SHALE	30.8	180.3	
190.8	CARBONDALE	ST. DAVID	LIMESTONE	0.9	211.2	
189.9	CARBONDALE	TURNER MINE	SHALE	3.9	212.1	
186.0	CARBONDALE	SPRINGFIELD	COAL	5.3	216.0	
180.7	CARBONDALE		DARK SHALE	58.2	221.3	
122.6	CARBONDALE	HOUCHIN CREEK	COAL	1.5	279.4	
121.1	CARBONDALE		SHALE	34.6	280.9	
86.5	CARBONDALE	SURVANT	COAL	1.0	315.5	
85.5	CARBONDALE		BLUE SHALE	21.0	316.5	

MAPID: 05902222000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 500' N line, 1250' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.358542 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.679151 **DATE COLLECTED:** 1 / 6 / 1958

SURFACE ELEVATION (FT.): 402.0 **LOGGED (FT.):** 337.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.0			ROCK	30.3	0.0	
371.7			COAL	1.7	30.3	
370.0			ROCK	32.8	32.0	
337.3			COAL	0.4	64.7	
336.9	CARBONDALE		ROCK	37.4	65.1	
299.5	CARBONDALE	HERRIN	COAL	3.5	102.5	
296.0	CARBONDALE		ROCK	55.0	106.0	
240.9	CARBONDALE	BRIAR HILL	COAL	0.5	161.1	
240.5	CARBONDALE		ROCK	54.5	161.5	
186.0	CARBONDALE	SPRINGFIELD	COAL	5.3	216.0	
180.7	CARBONDALE		ROCK	58.2	221.3	
122.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	279.5	
121.0	CARBONDALE		ROCK	34.7	281.0	
86.3	CARBONDALE		COAL	1.0	315.7	
85.3	CARBONDALE		ROCK	21.0	316.7	

MAPID: 05902223000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1400' N line, 1320' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.358758 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.68413 **DATE COLLECTED:** 1 / 29 / 1958
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 187.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 106 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
475.0	PLEISTOCENE		CLAY	18.0	0.0	
457.0	CARBONDALE	BANKSTON FORK	BROWN LIMESTONE	3.3	18.0	
453.7	CARBONDALE	BANKSTON FORK	GRAY LIMESTONE	4.1	21.3	
449.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	16.9	25.3	
432.7	CARBONDALE		SHALE	17.1	42.3	
415.7	CARBONDALE	BRERETON	GRAY LIMESTONE	1.3	59.3	
414.3	CARBONDALE	HERRIN	COAL	3.3	60.7	
411.0	CARBONDALE		UNDERCLAY	0.8	64.0	
410.2	CARBONDALE		SHALY SANDSTONE	36.6	64.8	
373.7	CARBONDALE		SHALE	12.7	101.3	
361.0	CARBONDALE		SHALE	10.4	114.0	
350.6	CARBONDALE	BRIAR HILL	COAL	1.3	124.4	
349.3	CARBONDALE		SHALE	46.1	125.7	
303.2	CARBONDALE		SHALE	6.3	171.8	
297.0	CARBONDALE	SPRINGFIELD	COAL	4.1	178.0	
292.9	CARBONDALE		SHALE	5.4	182.1	

MAPID: 05902223000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1400' N line, 1320' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.358758 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.68413 **DATE COLLECTED:** 1 / 29 / 1958
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 187.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
475.0			UNCONSOLIDATED	18.0	0.0	
457.0			ROCK	42.7	18.0	
414.3	CARBONDALE	HERRIN	COAL	3.3	60.7	
411.0	CARBONDALE		ROCK	60.4	64.0	
350.6	CARBONDALE	BRIAR HILL	COAL	1.3	124.4	
349.3	CARBONDALE		ROCK	52.3	125.7	
297.0	CARBONDALE	SPRINGFIELD	COAL	4.1	178.0	
292.9	CARBONDALE		ROCK	5.4	182.1	

MAPID: 05902224000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.361668 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.674947 **DATE COLLECTED:** 2 / 21 / 1958

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 234.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 108 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.0	PLEISTOCENE		SANDY CLAY	8.0	0.0	
384.0	MODESTO		SANDSTONE	35.2	8.0	
348.8	CARBONDALE	DANVILLE	COAL	1.3	43.2	
347.5	CARBONDALE		SHALE	23.9	44.5	
323.6	CARBONDALE	ALLENBY	COAL	0.3	68.4	
323.3	CARBONDALE		BLUE SHALE	32.3	68.7	
291.0	CARBONDALE	BRERETON	LIMESTONE	4.0	101.0	
287.0	CARBONDALE	HERRIN	COAL	4.3	105.0	
282.7	CARBONDALE		SHALE	16.2	109.3	
266.5	CARBONDALE		DARK SHALE	37.1	125.5	
229.4	CARBONDALE	BRIAR HILL	COAL	1.1	162.6	
228.3	CARBONDALE		SHALE	2.6	163.7	
225.7	CARBONDALE		GRAY SANDSTONE	8.9	166.3	
216.8	CARBONDALE		BLUE SHALE	46.4	175.2	
170.4	CARBONDALE	TURNER MINE	SHALE	3.1	221.6	
167.3	CARBONDALE	SPRINGFIELD	COAL	4.3	224.7	
163.0	CARBONDALE		SHALE	5.0	229.0	

MAPID: 05902224000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.361668 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.674947 **DATE COLLECTED:** 1 / 21 / 1958

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 234.0 **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	8.0	0.0	
384.0			ROCK	35.2	8.0	
348.8			COAL	1.3	43.2	
347.5			ROCK	23.9	44.5	
323.6			COAL	0.3	68.4	
323.3			ROCK	36.3	68.7	
287.0	CARBONDALE	HERRIN	COAL	4.3	105.0	E-TP=287'
282.7	CARBONDALE		ROCK	53.3	109.3	
229.4	CARBONDALE	BRIAR HILL	COAL	1.1	162.6	
228.3	CARBONDALE		ROCK	65.3	163.7	
163.0	CARBONDALE	SPRINGFIELD	COAL	4.3	229.0	
158.7	CARBONDALE		ROCK	5.0	233.3	

MAPID: 05902354000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.357937 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.675865 **DATE COLLECTED:** 10 / 30 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 92 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	17.0	0.0	GRAY
353.0	PLEISTOCENE		SILT & SAND	32.0	17.0	
321.0			GRAY LIMESTONE	4.2	49.0	
316.8			SHALE	0.5	53.2	
316.3			GRAY SANDSTONE	16.8	53.7	
299.5			SHALE	13.7	70.5	
285.8			GRAY LIMESTONE	2.0	84.2	
283.8			COAL	3.8	86.2	NO.6 ?
280.0			UNDERCLAY	1.0	90.0	

MAPID: 05902354000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.357937 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.675865 **DATE COLLECTED:** 10 / 30 / 1958
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 91.0 **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
390.0			ROCK	86.2	0.0	
303.8	CARBONDALE	HERRIN	COAL	3.8	86.2	
300.0	CARBONDALE		ROCK	1.0	90.0	

MAPID: 05902355000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1320' S line, 400' W line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.362744 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.67673 **DATE COLLECTED:** 10 / 31 / 1958
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 93 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	6.0	0.0	BROWN
364.0	PLEISTOCENE		SANDY CLAY	25.5	6.0	
338.5	MODESTO		GRAY SANDSTONE	16.0	31.5	
322.5	MODESTO		SHALE	0.5	47.5	DARK GRAY
322.0	MODESTO		GRAY LIMESTONE	0.2	48.0	
321.8	MODESTO		SHALE	3.9	48.2	
317.9	CARBONDALE	DANVILLE	COAL	2.0	52.1	CORRELATION UNCERTAIN: ABOVE HERRIN -CGT
315.9	CARBONDALE		SHALE	1.9	54.1	
314.0	CARBONDALE		SHALE	4.0	56.0	

MAPID: 05902355000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1320' S line, 400' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.362744 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.67673 **DATE COLLECTED:** 10 / 31 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 60.0 **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
370.0			UNCONSOLIDATED	31.5	0.0	
338.5			ROCK	20.6	31.5	
317.9			COAL	2.0	52.1	
315.9			ROCK	5.9	54.1	

MAPID: 05903630000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.356091 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.673525 **DATE COLLECTED:** 1 / 11 / 1973

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 95.0 **LOG TYPE:** Drillers Log

SOURCE: Q. RICHEY, DR **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	15.0	0.0	
370.0			ROCK	31.0	15.0	
339.0			COAL	1.0	46.0	
338.0			ROCK	48.0	47.0	

MAPID: 05903684000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 2310' S line, 1650' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35993 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.679452 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 109.0 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-27C **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.3	CARBONDALE	DANVILLE	COAL	2.4	32.7	
374.9	CARBONDALE		SILTY SHALE	25.3	35.1	
349.6	CARBONDALE	ALLENBY	COAL	0.3	60.4	
349.3	CARBONDALE		CLAYSTONE	2.6	60.7	
346.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.6	63.3	
340.1	CARBONDALE	LAWSON	SANDSTONE	16.0	69.9	
324.1	CARBONDALE	LAWSON	SILTY SHALE	14.3	85.9	
309.8	CARBONDALE	BRERETON	LIMESTONE	4.3	100.2	
305.5	CARBONDALE	ANNA	BLACK SHALE	0.5	104.5	
305.0	CARBONDALE	HERRIN	COAL	4.0	105.0	

MAPID: 05925047000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 140' N line, 315' W line of NW SW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.358024 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.685741 **DATE COLLECTED:** 10 / 8 / 1997

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 98.0 **LOG TYPE:** Drillers Log

SOURCE: NECO LAND CO. 6-EVG-64 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	12.0	0.0	TAN
-	PLEISTOCENE		SILTY CLAY	13.0	12.0	BROWN
-	CARBONDALE		SHALE	5.0	25.0	WEATHERED
-	CARBONDALE		SANDSTONE	3.0	30.0	
-	CARBONDALE		SANDSTONE	2.0	33.0	
-	CARBONDALE		SHALE & SANDSTONE	9.0	35.0	
-	CARBONDALE		SANDY SHALE	35.0	44.0	
-	CARBONDALE		COAL	0.7	79.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	1.6	79.7	
-	CARBONDALE	EXCELLO	BLACK SHALE	2.0	81.3	"WITH COAL" NOTED
-	CARBONDALE	HOUCHIN CREEK	COAL	1.4	83.3	
-	CARBONDALE		SANDY SHALE	3.3	84.7	
-	CARBONDALE		SANDSTONE	10.0	88.0	

MAPID: 05925048000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 30' N line, 80' W line of NW NW SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.358848 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.684181 **DATE COLLECTED:** 10 / 7 / 1997
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 32.0 **LOG TYPE:** Drillers Log
SOURCE: NECO LAND CO. 6-EVG-60 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	10.0	0.0	TAN
-	CARBONDALE		SANDY SHALE	15.0	10.0	
-	CARBONDALE		SANDSTONE	0.1	25.0	WEATHERED, BEGIN 7' CORE; BROWN
-	CARBONDALE	HERRIN	COAL	2.8	25.1	
-	CARBONDALE	HERRIN	DARK SHALE	0.2	27.9	
-	CARBONDALE	HERRIN	COAL	0.4	28.0	
-	CARBONDALE	HERRIN	DARK SHALE	0.1	28.4	
-	CARBONDALE	HERRIN	COAL	0.4	28.5	
-	CARBONDALE		CLAYSTONE & SILTSTONE	3.2	28.8	

MAPID: 05925049000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 315' N line, 220' W line of NW SW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.358355 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.685258 **DATE COLLECTED:** 10 / 7 / 1997
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log
SOURCE: NECO LAND CO. 6-EVG-61 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	9.0	0.0	TAN
-	PLEISTOCENE		SILTY CLAY	8.0	9.0	BROWN
-	CARBONDALE		SANDY SHALE	9.0	17.0	
-	CARBONDALE		SANDY SHALE	12.0	26.0	
-	CARBONDALE		SHALE & SANDSTONE	13.0	38.0	
-	CARBONDALE		SANDSTONE	1.0	51.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	52.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.8	55.5	
-	CARBONDALE		CLAYSTONE & SILTSTONE	2.7	60.3	

MAPID: 05925050000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 240' S line, 65' W line of SW NE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.35643 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.683052 **DATE COLLECTED:** 10 / 7 / 1997
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log
SOURCE: NECO LAND CO. 6-EVG-62 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	7.0	0.0	TAN
-	CARBONDALE		SANDSTONE	16.0	7.0	
-	CARBONDALE		SANDY SHALE	14.2	23.0	BEGIN 16' CORE
-	CARBONDALE	BRERETON	LIMESTONE	0.3	37.2	
-	CARBONDALE	BRERETON	LIMESTONE	1.6	37.5	
-	CARBONDALE		SHALE	0.1	39.1	
-	CARBONDALE	HERRIN	COAL	2.4	39.2	
-	CARBONDALE	HERRIN	SHALE	0.2	41.6	
-	CARBONDALE	HERRIN	COAL	0.7	41.8	
-	CARBONDALE		CLAYSTONE & SILTSTONE	1.6	42.4	

MAPID: 05925052000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 25' S line, 55' E line of SE SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.354361 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.684315 **DATE COLLECTED:** 10 / 8 / 1997
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: NECO LAND CO. 6-EVG-65 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	7.0	0.0	TAN
-	CARBONDALE		SANDSTONE	11.0	7.0	
-	CARBONDALE		SANDY SHALE	6.0	18.0	
-	CARBONDALE		SANDY SHALE	13.0	24.0	
-	CARBONDALE		DARK SHALE	8.0	37.0	
-	CARBONDALE	BRIAR HILL	COAL	1.7	45.0	
-	CARBONDALE		SANDY SHALE	1.3	46.7	
-	CARBONDALE		SANDSTONE/SHALE	20.0	48.0	
-	CARBONDALE		SANDY SHALE	30.0	68.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	98.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.3	101.0	
-	CARBONDALE		SANDY SHALE	2.7	105.3	

MAPID: 05925053000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 75' N line, 225' W line of NW NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.358322 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.687787 **DATE COLLECTED:** 10 / 9 / 1997

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 138.0 **LOG TYPE:** Drillers Log

SOURCE: NECO LAND CO. 6-EVG-67 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SANDY CLAY	5.0	0.0	TAN
-	CARBONDALE		SANDSTONE	16.0	5.0	
-	CARBONDALE	SURVANT	COAL	1.7	21.0	
-	CARBONDALE		CLAYSTONE & SILTSTONE	2.3	22.7	
-	CARBONDALE		SANDY SHALE	13.0	25.0	
-	CARBONDALE		DARK SHALE	5.0	38.0	
-	CARBONDALE		SANDSTONE	7.0	43.0	
-	CARBONDALE		SANDY SHALE	39.0	50.0	
-	CARBONDALE		DARK SHALE	7.0	89.0	
-	CARBONDALE		BLACK SHALE	1.5	96.0	
-	CARBONDALE		LIMESTONE	0.5	97.5	
-	CARBONDALE	DEKOVEN	COAL	2.0	98.0	
-	CARBONDALE		CLAYSTONE & SILTSTONE	1.0	100.0	
-	CARBONDALE		SANDY SHALE	7.0	101.0	
-	CARBONDALE		SANDSTONE	1.0	108.0	WITH COAL BANDS
-	CARBONDALE		SANDSTONE/SHALE	8.0	109.0	
-	CARBONDALE		SANDY SHALE	8.0	117.0	
-	CARBONDALE	DAVIS	COAL	3.7	125.0	
-	TRADEWATER		CLAYSTONE & SILTSTONE	4.3	128.7	
-	TRADEWATER		SANDSTONE/SHALE	5.0	133.0	

MAPID: 059274A0016F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** SW SW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.363459 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.684746 **DATE COLLECTED:** 0 / 0 / 1932

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 4.3 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-M W FULLER **WELL TYPE:** Roadcut

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0			ROCK	1.2	0.0	
-			COAL	1.5		
-			ROCK	1.7		

MAPID: 05990035000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 200' N line, 200' E line of NE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.360008 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.683709 **DATE COLLECTED:** 10 / 27 / 1987

SURFACE ELEVATION (FT.): 473.3 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-11-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
473.3	PLEISTOCENE		SILTY CLAY	12.0	0.0	BROWN
461.3	PLEISTOCENE		CLAY	18.0	12.0	BROWN
443.3	CARBONDALE		SANDSTONE	5.0	30.0	GRAY
438.3	CARBONDALE	ALLENBY	COAL	0.8	35.0	
437.5	CARBONDALE		UNDERCLAY	3.2	35.8	
434.3	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	39.0	
428.3	CARBONDALE		SANDY SHALE	33.2	45.0	
395.1	CARBONDALE	ANNA	BLACK SHALE	0.3	78.2	
394.8	CARBONDALE	HERRIN	COAL	3.3	78.5	
391.5	CARBONDALE		UNDERCLAY	5.2	81.8	
386.3	CARBONDALE		SANDY SHALE	40.0	87.0	
346.3	CARBONDALE		BLACK SHALE	9.5	127.0	
336.8	CARBONDALE	BRIAR HILL	COAL	1.8	136.5	
335.0	CARBONDALE		SANDSTONE	16.7	138.3	GRAY
318.3	CARBONDALE		SANDY SHALE	35.0	155.0	
283.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	190.0	
278.8	CARBONDALE	SPRINGFIELD	COAL	4.0	194.5	
274.8	CARBONDALE		UNDERCLAY	1.5	198.5	

MAPID: 05990043000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35927 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.679412 **DATE COLLECTED:** 10 / 26 / 1987

SURFACE ELEVATION (FT.): 431.4 **LOGGED (FT.):** 225.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-7-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.4	PLEISTOCENE		SILTY CLAY	8.0	0.0	BROWN
423.4	MODESTO		SANDSTONE	13.0	8.0	BROWN
410.4	MODESTO		SANDSTONE	15.5	21.0	WHITE
394.9	CARBONDALE	DANVILLE	COAL	1.1	36.5	
393.8	CARBONDALE		CLAYSTONE	10.4	37.6	
383.4	CARBONDALE		SANDY SHALE	20.0	48.0	
363.4	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	68.0	
358.9	CARBONDALE		SANDY SHALE	30.5	72.5	
328.4	CARBONDALE	BRERETON	LIMESTONE	3.5	103.0	DARK GRAY
324.9	CARBONDALE	ANNA	BLACK SHALE	1.5	106.5	
323.4	CARBONDALE	HERRIN	COAL	3.0	108.0	APPROXIMATE THICKNESS
320.4	CARBONDALE		UNDERCLAY	6.0	111.0	
314.4	CARBONDALE		GRAY SHALE	10.0	117.0	
304.4	CARBONDALE		SANDSTONE	10.0	127.0	GRAY
294.4	CARBONDALE		SANDY SHALE	18.0	137.0	
276.4	CARBONDALE		BLACK SHALE	9.5	155.0	
266.9	CARBONDALE	BRIAR HILL	COAL	1.5	164.5	APPROXIMATE THICKNESS
265.4	CARBONDALE		SANDY SHALE	14.0	166.0	
251.4	CARBONDALE		SANDSTONE	10.5	180.0	GRAY
240.9	CARBONDALE		SANDY SHALE	24.5	190.5	
216.4	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	215.0	
211.9	CARBONDALE	SPRINGFIELD	COAL	4.5	219.5	APPROXIMATE THICKNESS
207.4	CARBONDALE		UNDERCLAY	1.0	224.0	

MAPID: 05990044000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 0' S line, 100' W line of SW SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.373715 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.673288 **DATE COLLECTED:** 9 / 28 / 1987

SURFACE ELEVATION (FT.): 406.4 **LOGGED (FT.):** 340.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-6-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294; FAULTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
406.4	PLEISTOCENE		CLAY	5.0	0.0	BROWN
401.4			SANDSTONE	9.0	5.0	BROWN
392.4			SANDSTONE	7.0	14.0	
385.4			SANDSTONE	13.0	21.0	
372.4			DARK GRAY SHALE	6.0	34.0	
366.4			BLACK SHALE	9.0	40.0	
357.4			GRAY SHALE	2.0	49.0	UCLY STRUCTURE
355.4			SANDY SHALE	2.0	51.0	
353.4			COAL	0.2	53.0	
353.2			GRAY SHALE	1.8	53.2	UCLY STRUCTURE
351.4			SANDY SHALE	3.0	55.0	
348.4			BLACK SHALE	1.0	58.0	
347.4			SANDSTONE	11.0	59.0	GRAY
336.4			SANDSTONE	31.0	70.0	LIGHT GRAY
305.4			SANDY SHALE	59.0	101.0	
246.4	CARBONDALE		SANDSTONE	15.0	160.0	GRAY
231.4	CARBONDALE	HERRIN	COAL	2.5	175.0	APPROXIMATE THICKNESS
228.9	CARBONDALE		GRAY SHALE	31.5	177.5	
197.4	CARBONDALE		SANDY SHALE	10.0	209.0	
187.4	CARBONDALE		DARK GRAY SHALE	17.0	219.0	
170.4	CARBONDALE	BRIAR HILL	COAL	2.0	236.0	
168.4	CARBONDALE		SANDY SHALE	48.0	238.0	
120.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	286.0	WITH SHALE STREAKS
119.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	287.0	
116.4	CARBONDALE	SPRINGFIELD	COAL	4.5	290.0	APPROXIMATE THICKNESS
111.9	CARBONDALE		GRAY SHALE	1.5	294.5	UCLY STRUCTURE
110.4	CARBONDALE		GRAY SHALE	44.0	296.0	

MAPID: 05990057000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 50' S line, 100' E line of SW SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.357017 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.680665 **DATE COLLECTED:** 7 / 24 / 1995

SURFACE ELEVATION (FT.): 425.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-6-24 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
425.0	PLEISTOCENE		SANDY CLAY	14.0	0.0	TAN
411.0			SANDSTONE	3.0	14.0	BROWN
408.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	17.0	
403.0	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	22.0	GRAY
388.0	CARBONDALE	CONANT	LIMESTONE	3.0	37.0	
385.0	CARBONDALE		SANDY SHALE	15.0	40.0	
370.0	CARBONDALE	BRERETON	LIMESTONE	1.2	55.0	START CORING
368.8	CARBONDALE	ANNA	BLACK SHALE	0.3	56.2	
368.5	CARBONDALE	HERRIN	COAL	3.7	56.5	
364.8	CARBONDALE		SANDY CLAYSTONE	1.8	60.2	

MAPID: 05990060000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 300' S line, 0' E line of NE SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.354219 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.675745 **DATE COLLECTED:** 7 / 21 / 1995

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 69.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-6-22 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.0	PLEISTOCENE		SANDY CLAY	13.0	0.0	TAN
382.0	CARBONDALE		SANDSTONE	3.0	13.0	BROWN
379.0	CARBONDALE		SANDSTONE	5.0	16.0	GRAY
374.0	CARBONDALE		DARK GRAY SHALE	2.0	21.0	
372.0	CARBONDALE	ALLENBY	COAL	-	23.0	TRACE
372.0	CARBONDALE		SANDY SHALE	4.0	23.0	
368.0	CARBONDALE	BANKSTON FORK	LIMESTONE	7.0	27.0	
361.0	CARBONDALE		SANDY SHALE	7.0	34.0	
354.0	CARBONDALE		LIMESTONE	1.0	41.0	
353.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	42.0	GRAY
346.0	CARBONDALE		SANDY SHALE	12.0	49.0	
334.0	CARBONDALE	BRERETON	LIMESTONE	3.0	61.0	START CORE; BLACK
331.0	CARBONDALE	ANNA	BLACK SHALE	0.1	64.0	WITH COAL STREAKS
330.9	CARBONDALE	HERRIN	COAL	3.4	64.1	
327.5	CARBONDALE		SANDY CLAYSTONE	1.5	67.5	

MAPID: 05990070000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 6 **QUARTERS/FOOTAGES:** 200' S line, 200' W line of NW SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35844 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.682948 **DATE COLLECTED:** 7 / 21 / 1995

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-6-23 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
480.0	PLEISTOCENE		SANDY CLAY	5.0	0.0	TAN
475.0	MODESTO		SANDSTONE	6.0	5.0	BROWN
469.0	CARBONDALE	DANVILLE	SMUT	0.4	11.0	
468.6	CARBONDALE		UNDERCLAY	1.6	11.4	
467.0	CARBONDALE		SANDY SHALE	10.0	13.0	
457.0	CARBONDALE		SANDSTONE	10.0	23.0	WITH SHALE STREAKS; GRAY
447.0	CARBONDALE		SANDY SHALE	11.0	33.0	
436.0	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	44.0	
430.0	CARBONDALE	ANVIL ROCK	SANDSTONE	12.0	50.0	GRAY
418.0	CARBONDALE		SANDY SHALE	16.0	62.0	
402.0	CARBONDALE	BRERETON	LIMESTONE	3.0	78.0	START CORING
399.0	CARBONDALE	ANNA	BLACK SHALE	0.1	81.0	WITH COAL STREAKS
398.9	CARBONDALE	HERRIN	COAL	3.7	81.1	
395.2	CARBONDALE		SANDY CLAYSTONE	1.2	84.8	

MAPID: 05902204000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364248 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.66568 **DATE COLLECTED:** 5 / 17 / 1958

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 186.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 122 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	7.3	0.0	
-	CARBONDALE		SANDSTONE	13.9	7.3	BROWN GRAY
-	CARBONDALE		BLUE SHALE	21.3	21.3	
-	CARBONDALE		SHALE	16.8	42.6	
-	CARBONDALE	HERRIN	COAL	0.7	59.4	BONE
-	CARBONDALE	HERRIN	SHALE	7.2	60.1	
-	CARBONDALE	HERRIN	COAL	0.3	67.3	
-	CARBONDALE		SHALE	1.8	67.6	
-	CARBONDALE		SHALE	7.3	69.3	
-	CARBONDALE		GRAY SANDSTONE	32.7	76.7	
-	CARBONDALE		SHALE	0.5	109.3	
-	CARBONDALE	BRIAR HILL	COAL	1.7	109.8	
-	CARBONDALE		BLUE SHALE	55.5	111.5	
-	CARBONDALE		SANDSTONE	13.2	167.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.8	180.2	
-	CARBONDALE		SHALE	2.1	183.9	

MAPID: 05902204000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364248 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.66568 **DATE COLLECTED:** 5 / 17 / 1958

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 186.0 **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	7.3	0.0	
412.7			ROCK	52.1	7.3	
360.6			COAL	0.7	59.4	
359.9			ROCK	7.2	60.1	
352.8			COAL	0.3	67.2	
352.4			ROCK	42.3	67.6	
310.2			COAL	1.7	109.8	
308.5			ROCK	68.7	111.5	
239.9			COAL	3.8	180.1	
236.1			ROCK	2.1	183.9	

MAPID: 05902276000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.365499 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.664757 **DATE COLLECTED:** 6 / 25 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 169.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CORP 65 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			NO RECORD	70.0	0.0	
300.0	CARBONDALE		SANDSTONE	8.5	70.0	START OF CORE
291.5	CARBONDALE		SILTSTONE	6.0	78.5	
285.5	CARBONDALE		SHALE	28.3	84.5	
257.2	CARBONDALE	BRIAR HILL	COAL	2.2	112.8	
255.0	CARBONDALE		SILTSTONE	1.3	115.0	
253.7	CARBONDALE		SILTSTONE	17.4	116.3	WITH SHALE
236.3	CARBONDALE		SILTSTONE	3.8	133.7	
232.5	CARBONDALE		SHALE	21.9	137.5	
210.6	CARBONDALE	ST. DAVID	LIMESTONE	1.3	159.4	
209.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.6	160.7	
205.7	CARBONDALE	SPRINGFIELD	COAL	4.8	164.3	

MAPID: 05902276000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.365499 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.664757 **DATE COLLECTED:** 6 / 25 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 169.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	70.0	0.0	
300.0	CARBONDALE		ROCK	32.3	70.0	
267.7	CARBONDALE	BRIAR HILL	COAL	2.2	102.3	
265.5	CARBONDALE		ROCK	49.5	104.5	
216.0	CARBONDALE	SPRINGFIELD	COAL	4.8	154.0	

MAPID: 05903700000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 990' N line, 1650' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35999 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.670342 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 372.0 **LOGGED (FT.):** 74.3 **LOG TYPE:** Drillers Log

SOURCE: CONSOLIDATION C.C. SB-2R-L **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.4	CARBONDALE	LAWSON	SANDSTONE	12.0	19.6	
340.4	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	36.2	31.6	
304.2	CARBONDALE	BRERETON	LIMESTONE	3.2	67.8	
301.0	CARBONDALE	HERRIN	COAL	3.3	71.0	

MAPID: 05903747000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.373474 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.672665 **DATE COLLECTED:** 9 / 15 / 1973

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: Q. RICHEY, DRILLER **WELL TYPE:** Water Well

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	9.0	0.0	
411.0			ROCK	89.0	9.0	
322.0			COAL	3.0	98.0	
319.0			ROCK	66.0	101.0	
253.0			COAL	4.0	167.0	
249.0			ROCK	29.0	171.0	

MAPID: 05990042000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 450' S line, 300' W line of SW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.361349 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.670491 **DATE COLLECTED:** 10 / 31 / 1987

SURFACE ELEVATION (FT.): 411.0 **LOGGED (FT.):** 243.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-14-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
411.0	PLEISTOCENE		SILTY CLAY	9.5	0.0	BROWN
401.5	CARBONDALE		SANDSTONE	20.5	9.5	BROWN
381.0	CARBONDALE		SANDSTONE	15.5	30.0	GRAY
365.5	CARBONDALE	DANVILLE	COAL	1.5	45.5	APPROXIMATE THICKNESS
364.0	CARBONDALE		SANDY SHALE	79.0	47.0	
285.0	CARBONDALE		SANDSTONE	1.5	126.0	
283.5	CARBONDALE		SANDY SHALE	32.5	127.5	
251.0	CARBONDALE		DARK GRAY SHALE	19.0	160.0	
232.0	CARBONDALE	BRIAR HILL	COAL	1.7	179.0	
230.3	CARBONDALE		SANDY SHALE	8.3	180.7	
222.0	CARBONDALE		SANDSTONE	5.0	189.0	GRAY
217.0	CARBONDALE		SANDY SHALE	33.5	194.0	
183.5	CARBONDALE	ST. DAVID	LIMESTONE	1.5	227.5	
182.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	229.0	
177.5	CARBONDALE	SPRINGFIELD	COAL	4.5	233.5	APPROXIMATE THICKNESS
173.0	CARBONDALE		UNDERCLAY	5.5	238.0	

MAPID: 05990045000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** 400' S line, 50' E line of SE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364452 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.663079 **DATE COLLECTED:** 9 / 24 / 1987

SURFACE ELEVATION (FT.): 375.6 **LOGGED (FT.):** 180.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-5-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.6	PLEISTOCENE		CLAY	17.0	0.0	BROWN
358.6	PLEISTOCENE		CLAY	19.0	17.0	GRAY
339.6	PLEISTOCENE		SAND	23.0	36.0	BROWN
316.6	CARBONDALE		SANDY SHALE	14.0	59.0	
302.6	CARBONDALE		DARK GRAY SHALE	2.0	73.0	
300.6	CARBONDALE	BRIAR HILL	COAL	2.0	75.0	APPROXIMATE THICKNESS
298.6	CARBONDALE		SANDSTONE	8.0	77.0	GRAY
290.6	CARBONDALE		SANDY SHALE	20.0	85.0	
270.6	CARBONDALE		SANDSTONE	10.0	105.0	GRAY
260.6	CARBONDALE		SANDSTONE	8.0	115.0	WITH SHALE STREAKS
252.6	CARBONDALE		SHALE	2.0	123.0	WITH LIMESTONE STREAKS
250.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	125.0	
247.1	CARBONDALE	TURNER MINE	LIMESTONE	0.4	128.5	
246.7	CARBONDALE	TURNER MINE	BLACK SHALE	0.2	128.9	
246.5	CARBONDALE	SPRINGFIELD	COAL	4.7	129.1	
241.8	CARBONDALE		GRAY SHALE	1.3	133.8	
240.6	CARBONDALE		SANDSTONE	45.0	135.0	GRAY

MAPID: 05990049000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.358874 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.6726 **DATE COLLECTED:** 9 / 29 / 1987

SURFACE ELEVATION (FT.): 404.2 **LOGGED (FT.):** 242.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-1-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.2	PLEISTOCENE		SILTY CLAY	7.0	0.0	BROWN
397.2	MODESTO		SANDSTONE	21.3	7.0	BROWN
375.9	MODESTO		SANDSTONE	18.3	28.3	GRAY
357.5	MODESTO	PIASA	LIMESTONE	0.6	46.7	
357.0	CARBONDALE	DANVILLE	COAL	1.3	47.2	
355.7	CARBONDALE		UNDERCLAY	1.5	48.5	
354.2	CARBONDALE		SANDY SHALE	24.5	50.0	
329.7	CARBONDALE	BANKSTON FORK	LIMESTONE	6.3	74.5	
323.5	CARBONDALE		BLACK SHALE	0.3	80.7	
323.2	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	81.0	
310.2	CARBONDALE		SANDY SHALE	16.0	94.0	
294.2	CARBONDALE	BRERETON	LIMESTONE	1.3	110.0	
292.9	CARBONDALE	ANNA	BLACK SHALE	0.7	111.3	
292.2	CARBONDALE	HERRIN	COAL	3.8	112.0	
288.4	CARBONDALE		SANDY SHALE	2.2	115.8	
286.2	CARBONDALE		SANDSTONE	22.0	118.0	LIGHT GRAY
264.2	CARBONDALE		SANDY SHALE	21.0	140.0	
243.2	CARBONDALE		GRAY SHALE	9.0	161.0	
234.2	CARBONDALE	BRIAR HILL	COAL	1.5	170.0	
232.7	CARBONDALE		SANDY SHALE	0.8	171.5	
231.9	CARBONDALE		SANDSTONE	16.7	172.3	
215.2	CARBONDALE		SANDY SHALE	13.0	189.0	
202.2	CARBONDALE		GRAY SHALE	21.0	202.0	
181.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	223.0	
180.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	224.0	
176.5	CARBONDALE	SPRINGFIELD	COAL	4.4	227.7	
172.1	CARBONDALE		UNDERCLAY	5.3	232.1	
166.8	CARBONDALE		SANDSTONE	4.6	237.4	

MAPID: 05900041000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.338723 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.663704 **DATE COLLECTED:** 8 / 0 / 1912

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1006.0 **LOG TYPE:** Other Core Study

SOURCE: BYRD & PITTSBURG, TEMPLE **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
158.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	190.0	
120.0	CARBONDALE	SURVANT	COAL	2.1	228.0	
55.0	CARBONDALE	COLCHESTER	COAL	0.7	293.0	
26.0	CARBONDALE	DEKOVEN	COAL	3.0	322.0	
26.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	322.0	
-12.0	CARBONDALE	DAVIS	COAL	3.7	360.0	
-26.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	374.0	23% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900041000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.338723 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.663704 **DATE COLLECTED:** 8 / 0 / 1912

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1006.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD-PITTSBURG CO **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
348.0			UNCONSOLIDATED	41.0	0.0	
307.0			ROCK	54.2	41.0	
252.8	CARBONDALE	SPRINGFIELD	COAL	4.5	95.2	
248.3			ROCK	58.8	99.7	
189.5			COAL	1.4	158.5	
188.1			ROCK	36.9	159.9	
151.2			COAL	2.5	196.8	
148.7			ROCK	63.4	199.3	
85.3			COAL	0.8	262.7	
84.4			ROCK	29.5	263.6	
54.9			COAL	3.1	293.1	
51.8			ROCK	34.3	296.2	
17.6			COAL	3.8	330.4	
13.8			ROCK	44.2	334.2	
-30.3			COAL	0.7	378.3	
-31.0			ROCK	31.8	379.0	
-62.7			COAL	0.8	410.7	
-63.5			ROCK	17.3	411.5	
-80.7			COAL	0.7	428.7	
-81.4			ROCK	161.4	429.4	
-242.8			COAL	0.2	590.8	
-243.0			ROCK	85.3	591.0	
-328.3			COAL	0.5	676.3	
-328.8			ROCK	297.8	676.8	

MAPID: 05900041000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.338723 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.663704 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 1006.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD-PITTSBURG 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.0	PLEISTOCENE		CLAY	73.0	0.0	
275.0	CARBONDALE		SHALY SANDSTONE	24.0	73.0	
251.0	CARBONDALE		SHALE	25.0	97.0	
226.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	122.0	
225.0	CARBONDALE	TURNER MINE	SHALE	5.2	123.0	
219.8	CARBONDALE	SPRINGFIELD	COAL	0.8	128.2	
219.0	CARBONDALE	SPRINGFIELD	COAL	3.7	129.0	
215.3	CARBONDALE		UNDERCLAY	5.3	132.7	
210.0	CARBONDALE		SHALE	10.0	138.0	
200.0	CARBONDALE		SHALE	26.0	148.0	
174.0	CARBONDALE		SHALE	10.0	174.0	YELLOW BANDS; BLUE
164.0	CARBONDALE	EXCELLO	SHALE	6.8	184.0	
157.2	CARBONDALE	HOUCHIN CREEK	COAL	1.4	190.8	
155.7	CARBONDALE		SHALE	1.0	192.3	
154.7	CARBONDALE		LIMESTONE	2.8	193.3	
152.0	CARBONDALE		SHALY SANDSTONE	33.2	196.0	
118.8	CARBONDALE	SURVANT	COAL	2.2	229.2	
116.7	CARBONDALE	SURVANT	COAL	0.5	231.3	BONY
116.2	CARBONDALE		SHALE	10.2	231.8	
106.0	CARBONDALE		SHALE	20.0	242.0	HARD BANDS; DARK
86.0	CARBONDALE		SANDSTONE	9.0	262.0	
77.0	CARBONDALE		SHALE	10.0	271.0	SANDSTONE BANDS
67.0	CARBONDALE		CLAYSTONE	19.7	281.0	BLUE
47.3	CARBONDALE	MECCA QUARRY	SHALE	4.0	300.7	
43.3	CARBONDALE	COLCHESTER	COAL	0.8	304.7	BONEY
42.5	CARBONDALE		LIMESTONE	5.0	305.5	
37.5	CARBONDALE		BLUE SHALE	3.5	310.5	
34.0	CARBONDALE		SANDSTONE	9.2	314.0	
24.8	CARBONDALE		SHALE	0.5	323.2	
24.3	CARBONDALE	DEKOVEN	COAL	0.3	323.7	
24.0	CARBONDALE	DEKOVEN	COAL	2.8	324.0	SULFUR PARTINGS
21.2	CARBONDALE		LIMESTONE	3.0	326.8	
18.2	CARBONDALE		SANDSTONE	22.3	329.8	
-4.0	CARBONDALE		SHALE	8.0	352.0	
-12.0	CARBONDALE	DAVIS	COAL	2.0	360.0	
-14.0	CARBONDALE	DAVIS	PYRITE	0.3	362.0	
-14.3	CARBONDALE	DAVIS	COAL	1.5	362.3	
-15.8	TRADEWATER		UNDERCLAY	1.3	363.8	
-17.0	TRADEWATER		SHALE	18.0	365.0	

-35.0	TRADEWATER	SANDSTONE	6.0	383.0	
-41.0	TRADEWATER	DARK SHALE	15.0	389.0	
-56.0	TRADEWATER	BLUE SHALE	3.8	404.0	
-59.8	TRADEWATER	COAL	0.5	407.8	DIRTY
-60.3	TRADEWATER	UNDERCLAY	3.0	408.3	
-63.3	TRADEWATER	LIMESTONE	4.0	411.3	
-67.3	TRADEWATER	SANDSTONE	5.3	415.3	
-72.5	TRADEWATER	BLUE SHALE	14.5	420.5	
-87.0	TRADEWATER	LIMESTONE	2.0	435.0	
-89.0	TRADEWATER	SHALE	2.0	437.0	
-91.0	TRADEWATER	BLUE SHALE	2.0	439.0	
-93.0	TRADEWATER	COAL	0.5	441.0	SHALE NOTED
-93.5	TRADEWATER	SHALE WITH LIMESTONE	12.0	441.5	
-105.5	TRADEWATER	DARK SHALE	8.0	453.5	
-113.5	TRADEWATER	COAL	0.5	461.5	SHALE NOTED
-114.0	TRADEWATER	SHALE WITH LIMESTONE	4.0	462.0	
-118.0	TRADEWATER	LIMESTONE	7.0	466.0	
-125.0	TRADEWATER	DARK SHALE	2.0	473.0	
-127.0	TRADEWATER	BLUE SHALE	5.0	475.0	
-132.0	TRADEWATER	SANDSTONE	24.0	480.0	LIGHT
-156.0	TRADEWATER	DARK SANDSTONE	10.0	504.0	
-166.0	TRADEWATER	SANDSTONE	1.7	514.0	
-167.7	TRADEWATER	COAL	0.7	515.7	SHALE NOTED
-168.3	TRADEWATER	SANDSTONE	16.7	516.3	
-185.0	TRADEWATER	SHALY SANDSTONE	39.0	533.0	
-224.0	TRADEWATER	SANDSTONE	47.0	572.0	
-271.0	TRADEWATER	SHALE	3.0	619.0	
-274.0	TRADEWATER	BLUE SHALE	2.0	622.0	
-276.0	TRADEWATER	DARK SANDSTONE	19.0	624.0	
-295.0	TRADEWATER	SHALY SANDSTONE	8.0	643.0	
-303.0	TRADEWATER	DARK SHALE	12.0	651.0	
-315.0	TRADEWATER	SANDY SHALE	28.0	663.0	
-343.0	TRADEWATER	SANDSTONE	2.5	691.0	LIGHT
-345.5	TRADEWATER	BLUE SHALE	8.5	693.5	
-354.0	TRADEWATER	COAL	0.5	702.0	
-354.5	TRADEWATER	LIMESTONE	4.0	702.5	
-358.5	TRADEWATER	SANDSTONE	14.5	706.5	LIGHT
-373.0	TRADEWATER	SANDSTONE	30.0	721.0	
-403.0	TRADEWATER	BLUE SHALE	16.5	751.0	
-419.5	TRADEWATER	DARK SANDSTONE	15.5	767.5	
-435.0	TRADEWATER	SANDSTONE	17.0	783.0	LIGHT
-452.0	TRADEWATER	SANDSTONE	20.0	800.0	
-472.0	TRADEWATER	SHALY SANDSTONE	9.0	820.0	
-481.0	TRADEWATER	SHALY SANDSTONE	9.0	829.0	
-490.0	TRADEWATER	SHALE	28.0	838.0	
-518.0	TRADEWATER	SANDSTONE	2.0	866.0	LIGHT
-520.0	TRADEWATER	SANDSTONE	29.0	868.0	
-549.0	TRADEWATER	SANDSTONE	9.5	897.0	LIGHT

-558.5	TRADEWATER	SHALY SANDSTONE	17.5	906.5	
-576.0	TRADEWATER	SANDSTONE	3.0	924.0	LIGHT
-579.0	TRADEWATER	SHALY SANDSTONE	8.3	927.0	
-587.3	TRADEWATER	COAL	0.3	935.3	
-587.6	TRADEWATER	CONGLOMERATE	0.4	935.6	
-588.0	TRADEWATER	SANDSTONE	3.0	936.0	CONGLOMERATE
-591.0	TRADEWATER	SANDSTONE	8.0	939.0	LIGHT
-599.0	TRADEWATER	BLUE SHALE	2.0	947.0	
-601.0	TRADEWATER	SHALE & CONGLOMERATE	3.0	949.0	
-604.0	TRADEWATER	BLUE SHALE	6.0	952.0	
-610.0	TRADEWATER	SANDSTONE	4.0	958.0	CONGLOMERATE
-614.0	TRADEWATER	SANDSTONE	4.0	962.0	LIGHT
-618.0	TRADEWATER	WHITE SANDSTONE	30.0	966.0	
-648.0	TRADEWATER	SANDSTONE	10.0	996.0	LIGHT

MAPID: 05902166000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.349792 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.669329 **DATE COLLECTED:** 8 / 27 / 1957

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 35 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	13.3	0.0	SAND AND GRAVEL
376.7	CARBONDALE		SANDSTONE	10.2	13.3	
366.5	CARBONDALE		WHITE SANDSTONE	10.2	23.5	
356.3	CARBONDALE		SANDSTONE	1.5	33.7	CONGLOMERATE
354.8	CARBONDALE		SHALE	2.3	35.2	
352.5	CARBONDALE		SANDSTONE	0.3	37.5	
352.2	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	37.8	
347.2	CARBONDALE		SHALE	0.3	42.8	GRAY TO BLACK
346.8	CARBONDALE	ANVIL ROCK	WHITE SANDSTONE	18.7	43.2	
328.2	CARBONDALE		SHALE	3.7	61.8	GRAY TO BLACK
324.5	CARBONDALE		SHALE	9.8	65.5	GRAY TO BLACK
314.7	CARBONDALE	HERRIN	COAL	2.4	75.3	
312.3	CARBONDALE		UNDERCLAY	2.3	77.7	
310.0	CARBONDALE		SILTSTONE	7.3	80.0	
302.7	CARBONDALE		SANDSTONE	2.0	87.3	
300.7	CARBONDALE		SILTSTONE	1.8	89.3	
298.9	CARBONDALE		WHITE SANDSTONE	0.7	91.1	
298.2	CARBONDALE		SILTSTONE	0.3	91.8	
298.0	CARBONDALE		WHITE SANDSTONE	8.0	92.0	
290.0	CARBONDALE		SHALE	12.7	100.0	
277.3	CARBONDALE		SHALE	24.0	112.7	DARK GRAY
253.3	CARBONDALE	BRIAR HILL	COAL	0.2	136.7	
253.2	CARBONDALE		SILTSTONE	2.7	136.8	
250.5	CARBONDALE		SANDSTONE	4.8	139.5	COAL LAMINAE; WHITE
245.7	CARBONDALE		SHALE & SANDSTONE	13.0	144.3	
232.7	CARBONDALE		SHALE	28.3	157.3	
204.4	CARBONDALE	ST. DAVID	LIMESTONE	1.2	185.6	
203.2	CARBONDALE	TURNER MINE	SHALE	3.6	186.8	PYRITIC
199.7	CARBONDALE	SPRINGFIELD	COAL	3.5	190.3	
196.1	CARBONDALE		BROWN SHALE	2.8	193.9	
193.3	CARBONDALE		NO RECORD	1.4	196.7	ADJUSTED FOR MARKER

MAPID: 05902166000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.349792 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669329 **DATE COLLECTED:** 8 / 27 / 1957
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 198.0 **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
390.0			UNCONSOLIDATED	13.3	0.0	
376.7			ROCK	62.0	13.3	
314.7	CARBONDALE	HERRIN	COAL	2.4	75.3	
312.3	CARBONDALE		ROCK	58.9	77.7	
253.3	CARBONDALE	BRIAR HILL	COAL	2.2	136.7	
251.2	CARBONDALE		ROCK	53.5	138.8	
197.7	CARBONDALE	SPRINGFIELD	COAL	3.6	192.3	
194.1	CARBONDALE		ROCK	4.1	195.9	

MAPID: 05902225000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2200' S line, 2000' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.343427 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.664268 **DATE COLLECTED:** 3 / 8 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 196.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 110 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		SANDY CLAY	37.5	0.0	
342.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	11.3	37.5	
331.2	CARBONDALE		DARK SHALE	16.8	48.8	
314.5	CARBONDALE	HERRIN	COAL	4.3	65.5	
310.2	CARBONDALE		SHALE	4.5	69.8	
305.7	CARBONDALE		SHALY SANDSTONE	28.8	74.3	
276.9	CARBONDALE		DARK SHALE	29.3	103.1	
247.7	CARBONDALE	BRIAR HILL	COAL	2.0	132.3	
245.7	CARBONDALE		SHALE	1.9	134.3	
243.7	CARBONDALE		SHALY SANDSTONE	15.8	136.3	
228.0	CARBONDALE		DARK SHALE	28.3	152.0	
199.7	CARBONDALE		GRAY LIMESTONE	0.8	180.3	
198.9	CARBONDALE		SHALE	5.2	181.1	
193.7	CARBONDALE	ST. DAVID	GRAY LIMESTONE	2.3	186.3	
191.5	CARBONDALE	SPRINGFIELD	COAL	4.3	188.5	
187.2	CARBONDALE		SHALE	3.8	192.8	

MAPID: 05902225000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 2200' S line, 2000' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.343427 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.664268 **DATE COLLECTED:** 3 / 8 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 196.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	37.5	0.0	
342.5			ROCK	28.0	37.5	
314.5	CARBONDALE	HERRIN	COAL	4.3	65.5	
310.2	CARBONDALE		ROCK	62.6	69.8	
247.7	CARBONDALE	BRIAR HILL	COAL	2.0	132.3	
245.7	CARBONDALE		ROCK	54.2	134.3	
191.5	CARBONDALE	SPRINGFIELD	COAL	4.3	188.5	
187.2	CARBONDALE		ROCK	3.8	192.8	

MAPID: 05902263000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' S line, 75' W line of SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340809 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.658173 **DATE COLLECTED:** 6 / 23 / 1958
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 107.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 63 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	5.0	0.0	SANDSTONE
380.0	CARBONDALE		BROWN SHALE	16.0	5.0	
364.0	CARBONDALE		SHALE	10.2	21.0	
353.8	CARBONDALE		SHALE	14.8	31.2	
339.0	CARBONDALE	BRIAR HILL	COAL	2.3	46.0	
336.7	CARBONDALE		SHALE & SANDSTONE	15.7	48.3	
321.0	CARBONDALE		SANDSTONE	4.5	64.0	
316.5	CARBONDALE		SHALE	27.8	68.5	
288.7	CARBONDALE	ST. DAVID	GRAY LIMESTONE	0.7	96.3	
288.0	CARBONDALE	TURNER MINE	SHALE	3.7	97.0	
284.3	CARBONDALE	SPRINGFIELD	COAL	5.0	100.7	
279.3	CARBONDALE		UNDERCLAY	1.3	105.7	

MAPID: 05902263000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 0' S line, 75' W line of SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340809 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.658173 **DATE COLLECTED:** 6 / 23 / 1958

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 107.0 **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
385.0			UNCONSOLIDATED	5.0	0.0	
380.0	CARBONDALE		ROCK	41.0	5.0	
339.0	CARBONDALE	BRIAR HILL	COAL	2.3	46.0	
336.7	CARBONDALE		ROCK	52.3	48.3	
284.3	CARBONDALE	SPRINGFIELD	COAL	5.0	100.7	
279.3	CARBONDALE		ROCK	1.3	105.7	

MAPID: 05902422000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1250' S line, 1400' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.341225 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.669021 **DATE COLLECTED:** 3 / 26 / 1959

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 206 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	13.0	0.0	BROWN
362.0	PLEISTOCENE		CLAY	26.3	13.0	GRAY
335.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	11.9	39.3	
323.7	CARBONDALE		SHALE	7.3	51.3	
316.5	CARBONDALE		SHALE	5.0	58.5	
311.5	CARBONDALE	BRERETON	LIMESTONE	5.8	63.5	
305.7	CARBONDALE	ANNA	SHALE	0.3	69.3	
305.4	CARBONDALE	HERRIN	COAL	3.7	69.6	
301.7	CARBONDALE		UNDERCLAY	1.8	73.3	GRAY

MAPID: 05902422000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1250' S line, 1400' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.341225 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.669021 **DATE COLLECTED:** 3 / 26 / 1959

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 75.0 **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
375.0			UNCONSOLIDATED	39.3	0.0	
335.7			ROCK	30.3	39.3	
305.4			COAL	3.7	69.6	
301.8			ROCK	1.8	73.2	

MAPID: 05903680000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1630' S line, 2000' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.343466 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.662695 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 429.0 **LOGGED (FT.):** 85.8 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-16C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
419.0	CARBONDALE	LAWSON	SANDSTONE	57.0	10.0	
362.0	CARBONDALE	LAWSON	SILTY SHALE	11.2	67.0	
350.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	4.5	78.2	
346.3	CARBONDALE	ANNA	BLACK SHALE	0.3	82.7	
346.0	CARBONDALE	HERRIN	COAL	2.8	83.0	

MAPID: 05925420000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 482' N, 340' W, SE/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337769 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.659473 **DATE COLLECTED:** 6 / 26 / 2000

SURFACE ELEVATION (FT.): 383.9 **LOGGED (FT.):** 358.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 8EVG206 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
383.9			UNCONSOLIDATED	106.0	0.0	
277.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	106.0	
275.9	CARBONDALE	SPRINGFIELD	COAL	3.4	108.0	
272.5	CARBONDALE		CLAYSTONE & SILTSTONE	3.6	111.4	
268.9	CARBONDALE		SANDY SHALE	48.0	115.0	
220.9	CARBONDALE	EXCELLO	BLACK SHALE	1.0	163.0	
219.9	CARBONDALE	EXCELLO	LIMESTONE	1.0	164.0	
218.9	CARBONDALE	EXCELLO	BLACK SHALE	3.0	165.0	
215.9	CARBONDALE	EXCELLO	LIMESTONE	1.0	168.0	
214.9	CARBONDALE	HOUCHIN CREEK	COAL	1.7	169.0	
213.2	CARBONDALE		CLAYSTONE & SILTSTONE	2.3	170.7	
210.9	CARBONDALE	PLEASANTVIEW	SANDSTONE	29.0	173.0	
181.9	CARBONDALE	PLEASANTVIEW	SHALY SANDSTONE	3.0	202.0	
178.9	CARBONDALE	SURVANT	COAL	2.1	205.0	
176.8	CARBONDALE		SANDSTONE	56.9	207.1	
119.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	264.0	
117.9	CARBONDALE	COLCHESTER	COAL	0.3	266.0	
117.6	CARBONDALE		CLAYSTONE & SILTSTONE	3.7	266.3	
113.9	CARBONDALE		SANDY SHALE	31.0	270.0	
82.9	CARBONDALE	DEKOVEN	COAL	3.0	301.0	
79.9	CARBONDALE		CLAYSTONE & SILTSTONE	3.0	304.0	
76.9	CARBONDALE		SANDY SHALE	3.0	307.0	
73.9	CARBONDALE		SANDSTONE	20.5	310.0	
53.4	CARBONDALE		SANDY SHALE	7.1	330.5	
46.3	CARBONDALE		BLACK SHALE	1.1	337.6	
45.2	CARBONDALE	DAVIS	COAL	3.7	338.7	
41.5	TRADEWATER		UNDERCLAY	1.1	342.4	
40.4	TRADEWATER		CLAYSTONE & SILTSTONE	2.1	343.5	
38.3	TRADEWATER		SANDSTONE/LIMESTONE	2.5	345.6	
35.9	TRADEWATER		SANDY SHALE	10.0	348.0	

MAPID: 05925421000C **VERSION:** 1 **PROJECT:**

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 3' N, 2541' E, SW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345603 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.658223 **DATE COLLECTED:** 6 / 29 / 2000

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 318.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 8EVG205 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.0			UNCONSOLIDATED	88.0	0.0	
276.0			SANDY SHALE	37.0	88.0	
239.0	CARBONDALE	EXCELLO	BLACK SHALE	1.0	125.0	
238.0	CARBONDALE	EXCELLO	LIMESTONE	1.0	126.0	
237.0	CARBONDALE	EXCELLO	BLACK SHALE	1.0	127.0	
236.0	CARBONDALE	EXCELLO	LIMESTONE	1.0	128.0	
235.0	CARBONDALE	EXCELLO	BLACK SHALE	3.0	129.0	
232.0	CARBONDALE	HOUCHIN CREEK	COAL	1.7	132.0	
230.3	CARBONDALE	PLEASANTVIEW	SANDSTONE	1.3	133.7	
229.0	CARBONDALE	PLEASANTVIEW	SANDY SHALE	2.0	135.0	
227.0	CARBONDALE	PLEASANTVIEW	SANDSTONE	11.0	137.0	
216.0	CARBONDALE	PLEASANTVIEW	SHALY SANDSTONE	19.0	148.0	
197.0	CARBONDALE	SURVANT	COAL	2.5	167.0	
194.5	CARBONDALE		SANDY SHALE	57.5	169.5	
137.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	227.0	
135.0	CARBONDALE	COLCHESTER	COAL	0.3	229.0	
134.7	CARBONDALE		CLAYSTONE & SILTSTONE	2.7	229.3	
132.0	CARBONDALE		SANDY SHALE	6.0	232.0	
126.0	CARBONDALE		SILTY, SANDY SHALE	4.0	238.0	
122.0	CARBONDALE		SANDY SHALE	28.0	242.0	
94.0	CARBONDALE	DEKOVEN	COAL	3.0	270.0	
91.0	CARBONDALE		CLAYSTONE & SILTSTONE	2.0	273.0	
89.0	CARBONDALE		SHALY SANDSTONE	24.5	275.0	
64.5	CARBONDALE		BLACK SHALE	2.5	299.5	
62.0	CARBONDALE	DAVIS	PYRITE	0.1	302.0	
61.9	CARBONDALE	DAVIS	COAL	2.1	302.1	
59.8	CARBONDALE	DAVIS	FUSAIN	0.2	304.2	
59.7	CARBONDALE	DAVIS	COAL	1.3	304.3	
58.4	CARBONDALE		UNDERCLAY	1.9	305.6	
56.5	CARBONDALE		SANDY CLAYSTONE	10.5	307.5	

MAPID: 05925430000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 882' N, 1272' W, SE/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340963 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.660599 **DATE COLLECTED:** 6 / 21 / 2000

SURFACE ELEVATION (FT.): 361.9 **LOGGED (FT.):** 340.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 8EVG197 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.9			UNCONSOLIDATED	94.0	0.0	
267.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	94.0	
265.9	CARBONDALE	SPRINGFIELD	COAL	3.2	96.0	
262.7	CARBONDALE		SANDY SHALE	52.8	99.2	
209.9	CARBONDALE	EXCELLO	BLACK SHALE	5.0	152.0	
204.9	CARBONDALE	HOUCHIN CREEK	COAL	1.8	157.0	
203.1	CARBONDALE		CLAYSTONE & SILTSTONE	4.2	158.8	
198.9	CARBONDALE		SHALE/SANDSTONE/LIMESTONE	30.0	163.0	
168.9	CARBONDALE	PLEASANTVIEW	SANDSTONE	1.0	193.0	
167.9	CARBONDALE	SURVANT	COAL	2.1	194.0	
165.8	CARBONDALE		CLAYSTONE & SILTSTONE	4.9	196.1	
160.9	CARBONDALE		SANDY SHALE	47.0	201.0	
113.9	CARBONDALE		DARK SHALE	5.0	248.0	
108.9	CARBONDALE	COLCHESTER	COAL	0.3	253.0	
108.6	CARBONDALE		CLAYSTONE & SILTSTONE	3.7	253.3	
104.9	CARBONDALE		SANDY SHALE	27.0	257.0	
77.9	CARBONDALE		DARK SHALE	4.0	284.0	
73.9	CARBONDALE	DEKOVEN	COAL	3.1	288.0	
70.8	CARBONDALE		CLAYSTONE & SILTSTONE	1.9	291.1	
68.9	CARBONDALE		SANDY SHALE	4.0	293.0	
64.9	CARBONDALE		SANDSTONE	18.0	297.0	
46.9	CARBONDALE		SANDSTONE	7.3	315.0	
39.6	CARBONDALE		DARK SHALE	0.7	322.3	
38.9	CARBONDALE		BLACK SHALE	2.0	323.0	
37.0	CARBONDALE	DAVIS	COAL	3.7	324.9	.05" PYRITE AT 325.1'
33.3	TRADEWATER		UNDERCLAY	2.1	328.6	
31.2	TRADEWATER		SANDY CLAYSTONE	6.3	330.7	
24.9	TRADEWATER		SANDY SHALE	3.0	337.0	

MAPID: 05925431000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1135' N, 2555' E, SW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345522 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.66133 **DATE COLLECTED:** 6 / 27 / 2000

SURFACE ELEVATION (FT.): 365.3 **LOGGED (FT.):** 360.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 8EVG196 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.3			UNCONSOLIDATED	76.0	0.0	
289.3			SANDSTONE	10.0	76.0	
279.3			SANDY SHALE	25.0	86.0	
254.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	111.0	
253.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	112.0	
249.3	CARBONDALE	SPRINGFIELD	COAL	4.8	116.0	
244.5	CARBONDALE		CLAYSTONE & SILTSTONE	3.2	120.8	
241.3	CARBONDALE		SANDY SHALE	48.0	124.0	
193.3	CARBONDALE		DARK SHALE	5.0	172.0	
188.3	CARBONDALE	EXCELLO	BLACK SHALE	2.0	177.0	
186.3	CARBONDALE	HOUCHIN CREEK	COAL	1.6	179.0	
184.7	CARBONDALE		CLAYSTONE & SILTSTONE	2.4	180.6	
182.3	CARBONDALE		SANDSTONE	25.0	183.0	
157.3	CARBONDALE		SANDY SHALE	6.0	208.0	
151.3	CARBONDALE	SURVANT	COAL	1.8	214.0	
149.5	CARBONDALE		SANDY SHALE	55.2	215.8	
94.3	CARBONDALE		BLACK SHALE	2.0	271.0	
92.3	CARBONDALE		LIMESTONE	1.0	273.0	
91.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	274.0	
90.3	CARBONDALE	COLCHESTER	COAL	0.3	275.0	
90.0	CARBONDALE		CLAYSTONE & SILTSTONE	4.7	275.3	
85.3	CARBONDALE		SANDY SHALE	29.0	280.0	
56.3	CARBONDALE		DARK SHALE	4.0	309.0	
52.3	CARBONDALE	DEKOVEN	COAL	2.8	313.0	
49.5	CARBONDALE		CLAYSTONE & SILTSTONE	3.2	315.8	
46.3	CARBONDALE		SANDSTONE/SHALE	23.1	319.0	INTERBEDDED
23.2	CARBONDALE		BLACK SHALE	1.8	342.1	
21.4	CARBONDALE	DAVIS	COAL	2.5	343.9	
18.9	CARBONDALE	DAVIS	BONE COAL	0.1	346.4	
18.8	CARBONDALE	DAVIS	COAL	1.3	346.5	
17.5	TRADEWATER		UNDERCLAY	1.6	347.8	
15.9	TRADEWATER		CLAYSTONE & SILTSTONE	9.7	349.4	
6.3	TRADEWATER		LIMESTONE	1.0	359.0	

MAPID: 05990026000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 25' N line, 25' E line of NW NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.352075 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672968 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 416.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG8-17 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SOIL	4.0	0.0	
371.0	PLEISTOCENE		CLAY	26.0	4.0	GRAY
345.0	PLEISTOCENE		CLAY	8.0	30.0	GREEN
337.0	CARBONDALE		GRAY SHALE	52.0	38.0	
285.0	CARBONDALE		SANDY SHALE	28.0	90.0	
257.0	CARBONDALE	BRIAR HILL	COAL	1.5	118.0	APPROX.
255.5	CARBONDALE		SANDSTONE	8.5	119.5	
247.0	CARBONDALE		SANDY SHALE	40.0	128.0	
207.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	168.0	
206.0	CARBONDALE	TURNER MINE	DARK SHALE	2.0	169.0	
204.0	CARBONDALE	TURNER MINE	LIMESTONE	2.0	171.0	WITH PYRITE
202.0	CARBONDALE	SPRINGFIELD	COAL	4.0	173.0	APPROX. THICKNESS
198.0	CARBONDALE		UNDERCLAY	7.0	177.0	
191.0	CARBONDALE		SANDSTONE	10.0	184.0	
181.0	CARBONDALE		SANDY SHALE	24.0	194.0	
157.0	CARBONDALE		GRAY SHALE	9.0	218.0	
148.0	CARBONDALE	EXCELLO	CARBONACEOUS SHALE	7.0	227.0	
141.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	234.0	APPROX THICKNESS
139.0	CARBONDALE		GRAY SHALE	5.0	236.0	
134.0	CARBONDALE		SANDSTONE	5.0	241.0	
129.0	CARBONDALE		SANDY SHALE	4.0	246.0	
125.0	CARBONDALE		GRAY SHALE	12.0	250.0	
113.0	CARBONDALE	SURVANT	COAL	1.5	262.0	
111.5	CARBONDALE		SANDY SHALE	2.5	263.5	
109.0	CARBONDALE		SANDSTONE	14.0	266.0	
95.0	CARBONDALE		SANDY SHALE	38.0	280.0	
57.0	CARBONDALE		GRAY SHALE	2.0	318.0	
55.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	320.0	
52.0	CARBONDALE	COLCHESTER	COAL	1.0	323.0	APPROX. THICKNESS
51.0	CARBONDALE	PALZO	SANDSTONE	51.0	324.0	
0.0	CARBONDALE	DEKOVEN	COAL	3.0	375.0	APPROX. THICKNESS
-3.0	CARBONDALE		SANDY SHALE	1.0	378.0	
-4.0	CARBONDALE		SANDSTONE	10.0	379.0	
-14.0	CARBONDALE		GRAY SHALE	4.0	389.0	
-18.0	CARBONDALE		DARK GRAY SHALE	2.0	393.0	
-20.0	CARBONDALE		DARK SHALE	1.0	395.0	
-21.0	CARBONDALE		DARK GRAY SHALE	2.0	396.0	
-23.0	CARBONDALE		DARK SHALE	1.7	398.0	
-24.7	CARBONDALE	DAVIS	COAL	3.2	399.7	

-27.9	TRADEWATER	UNDERCLAY	2.0	402.9
-29.9	TRADEWATER	SANDSTONE	11.1	404.9

MAPID: 05990046000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 50' N line, 350' W line of NW NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.353952 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.665431 **DATE COLLECTED:** 9 / 19 / 1987

SURFACE ELEVATION (FT.): 366.2 **LOGGED (FT.):** 165.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-4-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
366.2	PLEISTOCENE		CLAY	27.0	0.0	BROWN
339.2	PLEISTOCENE		CLAY	20.0	27.0	GRAY
319.2	PLEISTOCENE		SAND	6.0	47.0	BROWN
313.2	PLEISTOCENE		CLAY	7.0	53.0	
306.2	CARBONDALE		SANDSTONE	5.0	60.0	WITH SHALE STREAKS
301.2	CARBONDALE		SANDY SHALE	12.0	65.0	
289.2	CARBONDALE		SANDY SHALE	17.0	77.0	
272.2	CARBONDALE	BRIAR HILL	COAL	2.1	94.0	
270.1	CARBONDALE		SANDY SHALE	7.9	96.1	
262.2	CARBONDALE		SANDSTONE	21.0	104.0	GRAY
241.2	CARBONDALE		SANDY SHALE	19.5	125.0	
221.7	CARBONDALE	ST. DAVID	LIMESTONE	0.5	144.5	
221.2	CARBONDALE	TURNER MINE	BLACK SHALE	4.1	145.0	
217.1	CARBONDALE	SPRINGFIELD	COAL	4.8	149.1	
212.4	CARBONDALE		SANDY SHALE	11.2	153.8	

MAPID: 05990047000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 100' N line, 50' W line of NW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.34569 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.665607 **DATE COLLECTED:** 9 / 16 / 1987

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-3-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		SILTY CLAY	10.0	0.0	BROWN
365.0	PLEISTOCENE		CLAY	21.0	10.0	BROWN
344.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	31.0	
342.0	CARBONDALE	ANVIL ROCK	SANDSTONE	8.0	33.0	GRAY
334.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	41.0	DARK GRAY
323.0	CARBONDALE		DARK GRAY SHALE	9.0	52.0	
314.0	CARBONDALE	BRERETON	LIMESTONE	2.5	61.0	
311.5	CARBONDALE	ANNA	BLACK SHALE	1.0	63.5	
310.5	CARBONDALE	HERRIN	COAL	3.5	64.5	APPROXIMATE THICKNESS
307.0	CARBONDALE		SANDY SHALE	4.0	68.0	
303.0	CARBONDALE		SANDSTONE	25.0	72.0	
278.0	CARBONDALE		SANDY SHALE	4.0	97.0	
274.0	CARBONDALE		DARK GRAY SHALE	27.0	101.0	
247.0	CARBONDALE	BRIAR HILL	COAL	1.7	128.0	
245.3	CARBONDALE		SANDY SHALE	50.6	129.7	
194.7	CARBONDALE	ST. DAVID	SANDY LIMESTONE	1.6	180.3	GRAY
193.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	181.8	
189.5	CARBONDALE	SPRINGFIELD	COAL	4.8	185.5	
184.7	CARBONDALE		SANDY SHALE	9.8	190.3	

MAPID: 05990048000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 200' N line, 300' E line of NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.341788 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672492 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.3 **LOGGED (FT.):** 205.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO TB-2-87 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.3	PLEISTOCENE		CLAY	9.0	0.0	BROWN
376.3	PLEISTOCENE		CLAY	6.0	9.0	WITH SANDSTONE STREAKS
370.3	CARBONDALE		SANDSTONE	10.0	15.0	BROWN
360.3	CARBONDALE		SANDSTONE	9.0	25.0	GRAY
351.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	34.0	
345.8	CARBONDALE	ANVIL ROCK	SANDSTONE	16.5	39.5	GRAY
329.3	CARBONDALE	ANVIL ROCK	SANDSTONE	1.5	56.0	DARK GRAY
327.8	CARBONDALE		SANDY SHALE	9.0	57.5	
318.8	CARBONDALE	BRERETON	LIMESTONE	4.5	66.5	DARK GRAY
314.3	CARBONDALE	ANNA	BLACK SHALE	1.0	71.0	
313.3	CARBONDALE	HERRIN	COAL	4.0	72.0	APPROXIMATE THICKNESS
309.3	CARBONDALE		SANDY SHALE	44.0	76.0	
265.3	CARBONDALE		SANDY SHALE	12.5	120.0	
252.8	CARBONDALE	BRIAR HILL	COAL	1.8	132.5	
251.0	CARBONDALE		SANDSTONE	5.7	134.3	GRAY
245.3	CARBONDALE		SANDSTONE	2.0	140.0	
243.3	CARBONDALE		SANDY SHALE	38.0	142.0	
205.3	CARBONDALE	ST. DAVID	LIMESTONE	4.3	180.0	WITH SHALE
201.0	CARBONDALE		GRAY SHALE	0.7	184.3	
200.3	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	185.0	
195.3	CARBONDALE	SPRINGFIELD	COAL	4.7	190.0	
190.6	CARBONDALE		SANDY SHALE	10.3	194.7	

MAPID: 05990053000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 300' S line, 25' E line of SE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340906 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.670092 **DATE COLLECTED:** 7 / 25 / 1995

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-8-28 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
415.0	PLEISTOCENE		SANDY CLAY	2.0	0.0	TAN
413.0			SANDSTONE	31.0	2.0	BROWN
382.0	CARBONDALE		SANDSTONE	13.0	33.0	GRAY
369.0	CARBONDALE	ALLENBY	COAL	-	46.0	
369.0	CARBONDALE		SANDSTONE	15.0	46.0	GRAY
354.0	CARBONDALE		SANDY SHALE	13.5	61.0	
340.5	CARBONDALE	BRERETON	LIMESTONE	5.2	74.5	START CORE
335.3	CARBONDALE	ANNA	BLACK SHALE	0.2	79.7	
335.1	CARBONDALE	HERRIN	COAL	3.9	79.9	
331.2	CARBONDALE		UNDERCLAY	2.2	83.8	

MAPID: 05990054000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 200' S line, 200' E line of NW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.343864 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.664294 **DATE COLLECTED:** 7 / 25 / 1995

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 73.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-8-29 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
440.0	PLEISTOCENE		SANDY CLAY	7.0	0.0	TAN
433.0			SANDSTONE	12.0	7.0	BROWN
421.0	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	19.0	GRAY
389.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	51.0	WITH SHALE STREAKS; GRAY
384.0	CARBONDALE		SANDY SHALE	7.0	56.0	
377.0	CARBONDALE	BRERETON	LIMESTONE	4.7	63.0	
372.3	CARBONDALE	ANNA	BLACK SHALE	0.4	67.7	
371.9	CARBONDALE	HERRIN	COAL	4.0	68.1	APPROXIMATE THICKNESS
367.9	CARBONDALE		UNDERCLAY	0.9	72.1	

MAPID: 05990055000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 50' N line, 300' W line of NW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.34421 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672845 **DATE COLLECTED:** 11 / 23 / 1993

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 465.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-8-14 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
410.0	PLEISTOCENE		SOIL	7.0	0.0	
403.0			SANDSTONE	3.0	7.0	BROWN
400.0	CARBONDALE		SANDSTONE	43.0	10.0	GRAY
357.0	CARBONDALE		BLACK SHALE	1.0	53.0	
356.0	CARBONDALE		GRAY SHALE	2.0	54.0	
354.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	56.0	
349.0	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	61.0	
334.0	CARBONDALE		SANDY DARK SHALE	5.0	76.0	
329.0	CARBONDALE		SANDSTONE	2.0	81.0	
327.0	CARBONDALE		SHALY SANDSTONE	3.0	83.0	
324.0	CARBONDALE		DARK SHALE	4.0	86.0	
320.0	CARBONDALE	BRERETON	LIMESTONE	4.0	90.0	
316.0	CARBONDALE		DARK SHALE	1.0	94.0	
315.0	CARBONDALE	HERRIN	COAL	2.0	95.0	APPROXIMATE THICKNESS
313.0	CARBONDALE		UNDERCLAY	3.0	97.0	
310.0	CARBONDALE		SANDSTONE	31.0	100.0	
279.0	CARBONDALE		SHALY SANDSTONE	12.0	131.0	
267.0	CARBONDALE		DARK SHALE	3.0	143.0	
264.0	CARBONDALE		GRAY SHALE	12.0	146.0	
252.0	CARBONDALE	BRIAR HILL	COAL	2.0	158.0	APPROXIAMTE THICKNESS
250.0	CARBONDALE		SANDSTONE	8.0	160.0	
242.0	CARBONDALE		SHALY SANDSTONE	1.0	168.0	
241.0	CARBONDALE		SANDSTONE	2.0	169.0	
239.0	CARBONDALE		SANDSTONE	2.0	171.0	
237.0	CARBONDALE		SHALY SANDSTONE	13.0	173.0	
224.0	CARBONDALE		SANDSTONE	9.0	186.0	
215.0	CARBONDALE		SHALY SANDSTONE	14.0	195.0	
201.0	CARBONDALE		BLACK SHALE	1.9	209.0	START CORE #1
199.1	CARBONDALE	ST. DAVID	LIMESTONE	0.6	210.9	
198.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	211.5	
197.2	CARBONDALE	SPRINGFIELD	COAL	4.2	212.8	
193.1	CARBONDALE		UNDERCLAY	4.1	216.9	
189.0	CARBONDALE		GRAY SHALE	6.0	221.0	
183.0	CARBONDALE		LIMESTONE	1.5	227.0	
181.5	CARBONDALE		SANDY SHALE	1.5	228.5	
180.0	CARBONDALE		SANDSTONE	6.0	230.0	
174.0	CARBONDALE		SANDY SHALE	2.0	236.0	
172.0	CARBONDALE		SANDSTONE	2.0	238.0	
170.0	CARBONDALE		SANDY SHALE	22.0	240.0	

148.0	CARBONDALE		GRAY SHALE	11.0	262.0	
137.0	CARBONDALE	EXCELLO	BLACK SHALE	4.0	273.0	
133.0	CARBONDALE	HOUCHIN CREEK	COAL	2.0	277.0	APPROXIMATE THICKNESS
131.0	CARBONDALE		UNDERCLAY	1.5	279.0	
129.5	CARBONDALE		SANDSTONE	3.5	280.5	
126.0	CARBONDALE		SHALY SANDSTONE	17.0	284.0	
109.0	CARBONDALE		SANDY SHALE	3.0	301.0	
106.0	CARBONDALE		GRAY SHALE	6.0	304.0	
100.0	CARBONDALE	SURVANT	COAL	2.0	310.0	APPROXIMATE THICKNESS
98.0	CARBONDALE		SANDSTONE	8.0	312.0	
90.0	CARBONDALE		GRAY SHALE	8.0	320.0	
82.0	CARBONDALE		SANDSTONE	12.0	328.0	
70.0	CARBONDALE		SHALY SANDSTONE	32.0	340.0	
38.0	CARBONDALE	MECCA QUARRY	DARK SHALE	6.0	372.0	
32.0	CARBONDALE	COLCHESTER	COAL	1.0	378.0	APPROXIMATE THICKNESS
31.0	CARBONDALE		UNDERCLAY	4.0	379.0	
27.0	CARBONDALE		SANDSTONE	2.0	383.0	
25.0	CARBONDALE		SHALY SANDSTONE	13.0	385.0	
12.0	CARBONDALE		SANDSTONE	12.0	398.0	
0.0	CARBONDALE		SHALY SANDSTONE	3.0	410.0	
-3.0	CARBONDALE	DEKOVEN	COAL	2.5	413.0	APPROXIMATE THICKNESS
-5.5	CARBONDALE		UNDERCLAY	2.5	415.5	
-8.0	CARBONDALE		SANDSTONE	3.0	418.0	
-11.0	CARBONDALE		SHALY SANDSTONE	14.0	421.0	
-25.0	CARBONDALE		SANDY DARK SHALE	0.2	435.0	START CORE #2
-25.2	CARBONDALE		SANDSTONE	1.1	435.2	
-26.3	CARBONDALE		SANDY SHALE	0.6	436.3	
-26.9	CARBONDALE		SANDSTONE	9.6	436.9	
-36.5	CARBONDALE	DAVIS	COAL	3.5	446.5	
-40.0	TRADEWATER		UNDERCLAY	1.4	450.0	
-41.4	TRADEWATER		SANDSTONE	5.7	451.4	
-47.0	TRADEWATER		SHALY SANDSTONE	3.0	457.0	
-50.0	TRADEWATER		SANDSTONE	5.0	460.0	

MAPID: 05990056000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 325' N line, 325' W line of NW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344264 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.664696 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 418.0 **LOGGED (FT.):** 450.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-8-13 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
418.0	PLEISTOCENE		SOIL	8.0	0.0	
410.0	PLEISTOCENE		SANDY CLAY	3.0	8.0	BROWN
407.0	PLEISTOCENE		SAND	3.0	11.0	BROWN
404.0	PLEISTOCENE		SANDY CLAY	1.0	14.0	WHITE
403.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	15.0	BROWN
397.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	21.0	WHITE
386.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	32.0	RED
384.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	1.0	34.0	
383.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	35.0	RED
372.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	46.0	GRAY
370.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	48.0	WITH .17 COAL
369.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	49.0	
364.0	CARBONDALE	ANVIL ROCK	CALCAREOUS SANDSTONE	3.0	54.0	
361.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	2.0	57.0	
359.0	CARBONDALE	ANVIL ROCK	SANDSTONE	14.0	59.0	
345.0	CARBONDALE	ANVIL ROCK	SANDY DARK SHALE	2.0	73.0	
343.0	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	3.0	75.0	
340.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	78.0	
339.0	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	2.0	79.0	
337.0	CARBONDALE		DARK SHALE	3.0	81.0	
334.0	CARBONDALE	BRERETON	LIMESTONE	5.0	84.0	BLACK
329.0	CARBONDALE	ANNA	BLACK SHALE	1.0	89.0	
328.0	CARBONDALE	HERRIN	COAL	4.0	90.0	APPROXIMATE THICKNESS
324.0	CARBONDALE		UNDERCLAY	4.0	94.0	
320.0	CARBONDALE		SANDSTONE	24.0	98.0	
296.0	CARBONDALE		SHALY SANDSTONE	6.0	122.0	
290.0	CARBONDALE		SANDY DARK SHALE	24.0	128.0	
266.0	CARBONDALE	BRIAR HILL	COAL	1.5	152.0	APPROXIMATE THICKNESS
264.5	CARBONDALE		SANDSTONE	14.5	153.5	
250.0	CARBONDALE		SANDSTONE	2.0	168.0	
248.0	CARBONDALE		SANDSTONE	30.0	170.0	
218.0	CARBONDALE		SANDY DARK SHALE	1.6	200.0	START CORE
216.4	CARBONDALE	ST. DAVID	LIMESTONE	1.6	201.6	
214.8	CARBONDALE	ST. DAVID	CALCAREOUS BLACK SHALE	1.0	203.2	
213.8	CARBONDALE	ST. DAVID	LIMESTONE	0.9	204.2	WITH SIDERITE
213.0	CARBONDALE	ST. DAVID	LIMESTONE	0.6	205.0	
212.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.4	205.6	

211.0	CARBONDALE		SANDY DARK SHALE	0.5	207.0	
210.5	CARBONDALE		DARK SHALE	0.9	207.5	
209.6	CARBONDALE	SPRINGFIELD	COAL	4.5	208.4	
205.1	CARBONDALE		UNDERCLAY	6.1	212.9	END OF CORE
199.0	CARBONDALE		SANDY SHALE	6.0	219.0	
193.0	CARBONDALE		SANDSTONE	3.0	225.0	
190.0	CARBONDALE		SANDY SHALE	20.0	228.0	
170.0	CARBONDALE		GRAY SHALE	17.0	248.0	
153.0	CARBONDALE	HANOVER	LIMESTONE	3.0	265.0	BLACK
150.0	CARBONDALE	EXCELLO	DARK SHALE	2.5	268.0	
147.5	CARBONDALE	HOUCHIN CREEK	COAL	2.0	270.5	APPROXIMATE THICKNESS
145.5	CARBONDALE		UNDERCLAY	1.5	272.5	
144.0	CARBONDALE		SANDY SHALE	4.0	274.0	
140.0	CARBONDALE		SANDSTONE	26.0	278.0	
114.0	CARBONDALE		SANDSTONE	2.0	304.0	
112.0	CARBONDALE		DARK GRAY SHALE	5.0	306.0	
107.0	CARBONDALE		DARK SHALE	0.5	311.0	
106.5	CARBONDALE	SURVANT	COAL	1.5	311.5	APPROXIMATE THICKNESS
105.0	CARBONDALE		SANDY SHALE	10.0	313.0	
95.0	CARBONDALE		GRAY SHALE	20.0	323.0	
75.0	CARBONDALE		SANDY SHALE	17.0	343.0	
58.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.0	360.0	
53.0	CARBONDALE	MECCA QUARRY	SANDY SHALE	1.0	365.0	
52.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	366.0	
49.0	CARBONDALE	COLCHESTER	COAL	1.0	369.0	APPROXIMATE THICKNESS
48.0	CARBONDALE		UNDERCLAY	3.0	370.0	
45.0	CARBONDALE		SANDY SHALE	2.0	373.0	
43.0	CARBONDALE		SANDSTONE	4.0	375.0	
39.0	CARBONDALE		SANDSTONE	28.0	379.0	
11.0	CARBONDALE	DEKOVEN	COAL	3.0	407.0	APPROXIMATE THICKNESS
8.0	CARBONDALE		UNDERCLAY	3.0	410.0	
5.0	CARBONDALE		SHALY SANDSTONE	1.0	413.0	
4.0	CARBONDALE		SANDSTONE	14.0	414.0	
-10.0	CARBONDALE		SANDY SHALE	8.9	428.0	START CORE #2
-18.9	CARBONDALE		DARK SHALE	0.5	436.9	
-19.4	CARBONDALE	DAVIS	COAL	3.9	437.4	
-23.3	TRADEWATER		SANDSTONE	8.7	441.3	

MAPID: 05990069000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 50' S line, 100' E line of SE SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336792 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.665675 **DATE COLLECTED:** 8 / 1 / 1991

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 228.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO ECG-8-11 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294;

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
393.0	PLEISTOCENE		CLAY	9.0	0.0	TAN
384.0	CARBONDALE		SANDY SHALE	30.0	9.0	
354.0	CARBONDALE		SANDSTONE	4.0	39.0	BROWN
350.0	CARBONDALE		SANDSTONE	12.0	43.0	GRAY
338.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	55.0	
336.0	CARBONDALE	ANVIL ROCK	SANDSTONE	16.0	57.0	WITH SHALE STREAKS; GRAY
320.0	CARBONDALE		SANDY SHALE	9.0	73.0	
311.0	CARBONDALE	BRERETON	LIMESTONE	5.0	82.0	
306.0	CARBONDALE	HERRIN	COAL	3.7	87.0	APPROXIMATE THICKNESS
302.3	CARBONDALE		UNDERCLAY	5.3	90.7	
297.0	CARBONDALE		SANDY SHALE	6.0	96.0	
291.0	CARBONDALE		SANDSTONE	14.0	102.0	GRAY
277.0	CARBONDALE		SANDY SHALE	34.0	116.0	
243.0	CARBONDALE	BRIAR HILL	COAL	2.3	150.0	APPROXIMATE THICKNESS
240.7	CARBONDALE		SANDY SHALE	7.7	152.3	
233.0	CARBONDALE		SANDSTONE	20.0	160.0	GRAY
213.0	CARBONDALE		SANDY SHALE	22.2	180.0	
190.8	CARBONDALE	ST. DAVID	LIMESTONE	0.6	202.2	
190.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	202.8	
186.9	CARBONDALE	SPRINGFIELD	COAL	4.9	206.1	
182.0	CARBONDALE		UNDERCLAY	2.7	211.0	SANDY
179.3	CARBONDALE		SANDSTONE	14.3	213.7	GRAY

MAPID: 05990073000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 8 **QUARTERS/FOOTAGES:** 100' N line, 100' E line of SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336711 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.668959 **DATE COLLECTED:** 8 / 1 / 1991

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO. EV-8-11 **WELL TYPE:** Coal Test

COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
393.0	PLEISTOCENE		CLAY	9.0	0.0	
384.0			SANDY SHALE	30.0	9.0	
354.0			SANDSTONE	4.0	39.0	BROWN
350.0			SANDSTONE	12.0	43.0	GRAY
338.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	55.0	
336.0	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	57.0	
321.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	9.0	72.0	
312.0	CARBONDALE	BRERETON	LIMESTONE	5.0	81.0	
307.0	CARBONDALE	HERRIN	COAL	3.7	86.0	
303.3	CARBONDALE		UNDERCLAY	5.3	89.7	
298.0	CARBONDALE		SANDY SHALE	6.0	95.0	
292.0	CARBONDALE		SANDSTONE	14.0	101.0	
278.0	CARBONDALE		SANDY SHALE	34.0	115.0	
244.0	CARBONDALE	BRIAR HILL	COAL	2.3	149.0	
241.7	CARBONDALE		SANDY SHALE	7.7	151.3	
234.0	CARBONDALE		SANDSTONE	20.0	159.0	
214.0	CARBONDALE		SANDY SHALE	22.2	179.0	
191.8	CARBONDALE	ST. DAVID	LIMESTONE	0.6	201.2	
191.2	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	201.8	
187.9	CARBONDALE	SPRINGFIELD	COAL	3.6	205.1	
184.3	CARBONDALE	SPRINGFIELD	PYRITE	0.1	208.7	
184.2	CARBONDALE	SPRINGFIELD	COAL	0.1	208.8	
184.2	CARBONDALE	SPRINGFIELD	PYRITE	0.2	208.8	
184.0	CARBONDALE	SPRINGFIELD	COAL	1.0	209.0	
183.0	CARBONDALE		SANDY CLAYSTONE	2.7	210.0	
180.3	CARBONDALE		SANDSTONE	1.4	212.7	
178.9	CARBONDALE		UNKNOWN	2.9	214.1	LOST CORE
176.0	CARBONDALE		SANDSTONE	10.0	217.0	

MAPID: 05902234000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 300' S line, 0' W line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336426 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.666364 **DATE COLLECTED:** 5 / 29 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 172.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 60 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	5.0	0.0	BROWN
375.0	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	10.0	5.0	
365.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	14.8	15.0	
350.2	CARBONDALE		SHALE	13.0	29.8	
337.2	CARBONDALE	BRERETON	GRAY LIMESTONE	2.3	42.8	
334.8	CARBONDALE	ANNA	SHALE	0.3	45.2	
334.6	CARBONDALE	HERRIN	COAL	3.5	45.4	
331.1	CARBONDALE		UNDERCLAY	4.9	48.9	GRAY
326.2	CARBONDALE		GRAY SANDSTONE	26.2	53.8	
300.0	CARBONDALE		SHALE	26.3	80.0	
273.7	CARBONDALE	BRIAR HILL	COAL	1.3	106.3	
272.4	CARBONDALE		SHALE	5.5	107.6	
266.9	CARBONDALE		GRAY SANDSTONE	16.9	113.1	
250.0	CARBONDALE		SHALE	31.5	130.0	
218.5	CARBONDALE	ST. DAVID	GRAY LIMESTONE	2.0	161.5	
216.5	CARBONDALE	TURNER MINE	SHALE	3.1	163.5	
213.4	CARBONDALE	SPRINGFIELD	COAL	4.7	166.6	
208.7	CARBONDALE		UNDERCLAY	1.3	171.3	

MAPID: 05902234000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 300' S line, 0' W line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336426 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.666364 **DATE COLLECTED:** 5 / 29 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 172.5 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	5.0	0.0	
375.0			ROCK	40.6	5.0	
334.4	CARBONDALE	HERRIN	COAL	3.5	45.6	
330.9	CARBONDALE		ROCK	1.7	49.1	
329.2	CARBONDALE		ROCK	56.2	50.8	L-CORE ENDS
273.0	CARBONDALE	BRIAR HILL	COAL	1.3	107.0	
271.7	CARBONDALE		ROCK	58.0	108.3	
213.7	CARBONDALE	SPRINGFIELD	COAL	4.7	166.3	
209.1	CARBONDALE		ROCK	1.3	170.9	

MAPID: 05902293000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.319818 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.670039 **DATE COLLECTED:** 9 / 15 / 1958
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 214.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 143 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	25.5	0.0	
359.5	CARBONDALE	ANVIL ROCK	SANDSTONE	43.5	25.5	
316.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.1	69.0	COAL STREAKS; GRAY
313.9	CARBONDALE	ANVIL ROCK	CONGLOMERATE	2.6	71.1	
311.3	CARBONDALE		DARK SHALE	8.8	73.7	
302.5	CARBONDALE	HERRIN	COAL	1.5	82.5	
301.0	CARBONDALE		SHALE	18.6	84.0	
282.4	CARBONDALE		GRAY SANDSTONE	25.2	102.6	
257.2	CARBONDALE		BLUE SHALE	20.4	127.8	
236.8	CARBONDALE	BRIAR HILL	COAL	2.0	148.2	
234.8	CARBONDALE		SHALY SANDSTONE	19.8	150.2	
215.0	CARBONDALE		SHALE	3.1	170.0	
211.9	CARBONDALE		GRAY SANDSTONE	2.5	173.1	
209.4	CARBONDALE		BLUE SHALE	30.4	175.6	
179.0	CARBONDALE	ST. DAVID	LIMESTONE	1.1	206.0	
177.9	CARBONDALE	TURNER MINE	SHALE	2.6	207.1	
175.3	CARBONDALE	SPRINGFIELD	COAL	2.8	209.7	
172.6	CARBONDALE		SHALE	2.1	212.4	

MAPID: 05902293000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.319818 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.670039 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 214.5 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0			UNCONSOLIDATED	25.5	0.0	
359.5			ROCK	57.0	25.5	
302.5	CARBONDALE	HERRIN	COAL	1.2	82.5	
301.3	CARBONDALE		ROCK	64.2	83.7	
237.2	CARBONDALE	BRIAR HILL	COAL	2.0	147.8	
235.2	CARBONDALE		ROCK	59.5	149.8	
175.7	CARBONDALE	SPRINGFIELD	COAL	2.8	209.3	
172.9	CARBONDALE		ROCK	2.1	212.1	

MAPID: 05902414000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330803 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.671971 **DATE COLLECTED:** 2 / 19 / 1959

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 204 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.0	PLEISTOCENE		CLAY	6.0	0.0	
370.0	CARBONDALE	ANVIL ROCK	SANDSTONE	13.5	6.0	BROKEN
356.5	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	7.5	19.5	
349.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.2	27.0	
343.8	CARBONDALE	ANVIL ROCK	SHALE	6.3	32.2	
337.5	CARBONDALE	ANVIL ROCK	SANDSTONE	1.3	38.5	
336.2	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	11.5	39.8	
324.7	CARBONDALE		SHALE	2.7	51.3	
322.0	CARBONDALE	BRERETON	LIMESTONE	3.3	54.0	
318.7	CARBONDALE	ANNA	SHALE	0.3	57.3	
318.3	CARBONDALE	HERRIN	COAL	3.7	57.7	
314.7	CARBONDALE		UNDERCLAY	0.7	61.3	

MAPID: 05902414000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330803 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.671971 **DATE COLLECTED:** 2 / 19 / 1959

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.0			UNCONSOLIDATED	6.0	0.0	
370.0			ROCK	51.7	6.0	
318.3			COAL	3.7	57.7	
314.7			ROCK	0.7	61.3	

MAPID: 05902424000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.322572 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.672386 **DATE COLLECTED:** 3 / 19 / 1959

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 113.8 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD 208 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.0	PLEISTOCENE		UNCONSOLIDATED	8.5	0.0	
383.5			SANDSTONE	56.5	8.5	CORE STARTS AT 27'
327.0			SANDSTONE & CONGLOMERATE	2.0	65.0	
325.0			SANDSTONE	4.6	67.0	COAL BANDS
320.4			SANDSTONE	2.0	71.6	
318.4			SHALE & SANDSTONE	2.1	73.6	WITH SILTSTONE
316.3			SANDSTONE & CONGLOMERATE	6.7	75.7	
309.7	CARBONDALE	ANVIL ROCK	SANDSTONE	4.6	82.3	
305.1	CARBONDALE		SHALE	10.3	86.9	DIPPING BEDS
294.8	CARBONDALE	BRERETON	LIMESTONE	0.3	97.2	
294.5	CARBONDALE	HERRIN	COAL	1.3	97.5	DIPPING BEDS
293.2	CARBONDALE		UNDERCLAY	2.5	98.8	
290.7	CARBONDALE		SILTSTONE	1.5	101.3	
289.2	CARBONDALE		SANDSTONE	11.0	102.8	

MAPID: 05902424000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.322572 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.672386 **DATE COLLECTED:** 3 / 19 / 1959

SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 113.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.0			UNCONSOLIDATED	8.5	0.0	
383.5			ROCK	89.0	8.5	
294.5			COAL	0.1	97.5	
294.4			ROCK	15.4	97.6	

MAPID: 05902425000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.329718 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.671038 **DATE COLLECTED:** 3 / 19 / 1959
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 209 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	1.0	0.0	
364.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	1.0	
360.5	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	19.5	4.5	
341.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	9.2	24.0	
331.8	CARBONDALE		SHALE	9.8	33.2	
322.0	CARBONDALE		SHALE	3.1	43.0	
318.9	CARBONDALE	BRERETON	LIMESTONE	5.3	46.1	
313.7	CARBONDALE	ANNA	SHALE	0.5	51.3	
313.2	CARBONDALE	HERRIN	COAL	3.6	51.8	
309.6	CARBONDALE		UNDERCLAY	1.6	55.4	

MAPID: 05902425000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.329718 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.671038 **DATE COLLECTED:** 3 / 9 / 1959
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 57.0 **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
365.0			UNCONSOLIDATED	1.0	0.0	
364.0			ROCK	54.5	1.0	
309.5	CARBONDALE	HERRIN	COAL	3.6	55.5	
305.9	CARBONDALE		ROCK	1.6	59.1	

MAPID: 05902426000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 800' S line, 75' W line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336133 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.667741 **DATE COLLECTED:** 3 / 25 / 1959

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 71.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 211 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	2.0	0.0	BROWN
378.0	CARBONDALE		BROWN SANDSTONE	28.0	2.0	
350.0	CARBONDALE		GRAY SANDSTONE	2.5	30.0	
347.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.8	32.5	
342.7	CARBONDALE		SHALE	0.3	37.3	
342.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	13.8	37.7	
328.5	CARBONDALE		SHALE	13.6	51.5	
314.9	CARBONDALE	BRERETON	GRAY LIMESTONE	1.0	65.1	
313.9	CARBONDALE	ANNA	SHALE	0.5	66.1	
313.4	CARBONDALE	HERRIN	COAL	3.8	66.6	
309.7	CARBONDALE		UNDERCLAY	1.2	70.3	GRAY

MAPID: 05902426000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 800' S line, 75' W line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336133 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.667741 **DATE COLLECTED:** 3 / 25 / 1959

SURFACE ELEVATION (FT.): 380.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	2.0	0.0	
378.0			ROCK	64.1	2.0	
313.9	CARBONDALE	HERRIN	COAL	5.0	66.1	
308.9	CARBONDALE		ROCK	1.0	71.1	

MAPID: 05902431000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 800' S line, 950' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.322 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.66761 **DATE COLLECTED:** 3 / 24 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 2431 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	5.0	0.0	
360.0	PLEISTOCENE		CLAY	45.7	5.0	
314.3	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.2	50.7	
309.2	CARBONDALE		SHALE	1.8	55.8	
307.3	CARBONDALE		SHALE	0.5	57.7	
306.8	CARBONDALE	HERRIN	COAL	2.2	58.2	
304.7	CARBONDALE		UNDERCLAY	1.7	60.3	

MAPID: 05902431000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 800' S line, 950' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.322 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.66761 **DATE COLLECTED:** 3 / 24 / 1959

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 62.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	50.7	0.0	
314.3	CARBONDALE		ROCK	7.5	50.7	
306.8	CARBONDALE	HERRIN	COAL	2.2	58.2	
304.7	CARBONDALE		ROCK	1.7	60.3	

MAPID: 05903681000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2050' N line, 275' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.319653 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.667175 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 55.5 **LOG TYPE:** Survey Core Study

SOURCE: CONSOLIDATION C.C. SB-55C **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
363.9	CARBONDALE	LAWSON	SANDSTONE	29.5	15.1	
334.4	CARBONDALE	LAWSON	GRAY SHALE	0.6	44.6	
333.8	CARBONDALE	BRERETON	LIMESTONE	6.2	45.2	
327.6	CARBONDALE	ANNA	BLACK SHALE	0.6	51.4	
327.0	CARBONDALE	HERRIN	COAL	3.5	52.0	

MAPID: 05925417000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 280' N, 1037' E, SW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.333028 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.658865 **DATE COLLECTED:** 7 / 5 / 2000

SURFACE ELEVATION (FT.): 364.9 **LOGGED (FT.):** 355.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 9EVG207 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
364.9			UNCONSOLIDATED	20.0	0.0	STRIP MINE
344.9			UNCONSOLIDATED	84.0	20.0	
260.9	CARBONDALE	SPRINGFIELD	COAL	3.6	104.0	
257.3	CARBONDALE		UNDERCLAY	2.4	107.6	
254.9	CARBONDALE		SANDY SHALE	51.0	110.0	
203.9	CARBONDALE	EXCELLO	BLACK SHALE	1.0	161.0	
202.9	CARBONDALE	EXCELLO	LIMESTONE	3.0	162.0	
199.9	CARBONDALE	EXCELLO	BLACK SHALE	1.0	165.0	
198.9	CARBONDALE	EXCELLO	LIMESTONE	1.0	166.0	
197.9	CARBONDALE	EXCELLO	BLACK SHALE	1.0	167.0	
196.9	CARBONDALE	HOUCHIN CREEK	COAL	1.2	168.0	
195.7	CARBONDALE		SANDY SHALE	2.8	169.2	
192.9	CARBONDALE		GRAY SANDSTONE	33.0	172.0	
159.9	CARBONDALE		SANDY SHALE	3.0	205.0	
156.9	CARBONDALE	SURVANT	COAL	2.0	208.0	
154.9	CARBONDALE		SANDY SHALE	60.0	210.0	
94.9	CARBONDALE		DARK SHALE	2.0	270.0	
92.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	272.0	
90.9	CARBONDALE	COLCHESTER	COAL	0.3	274.0	
90.6	CARBONDALE		CLAYSTONE & SILTSTONE	3.7	274.3	
86.9	CARBONDALE		SANDSTONE	1.0	278.0	
85.9	CARBONDALE		SANDY SHALE	12.0	279.0	
73.9	CARBONDALE	DEKOVEN	COAL	1.3	291.0	
72.6	CARBONDALE	DEKOVEN	SANDY SHALE	2.7	292.3	
69.9	CARBONDALE	DEKOVEN	COAL	0.3	295.0	
69.6	CARBONDALE	DEKOVEN	SANDY SHALE	2.7	295.3	
66.9	CARBONDALE	DEKOVEN	COAL	2.8	298.0	
64.1	CARBONDALE		CLAYSTONE & SILTSTONE	6.2	300.8	
57.9	CARBONDALE		SANDY SHALE	5.0	307.0	
52.9	CARBONDALE		SANDSTONE	12.6	312.0	
40.3	CARBONDALE		SANDY SHALE	3.8	324.6	NODULES
36.5	CARBONDALE		DARK SHALE	1.9	328.4	
34.6	CARBONDALE		BLACK SHALE	2.2	330.3	
32.4	CARBONDALE	DAVIS	COAL	3.9	332.5	
28.5	TRADEWATER		CLAYSTONE	2.4	336.4	
26.1	TRADEWATER		CORE LOSS	1.2	338.8	LOST CORE
24.9	TRADEWATER		GRAY SANDSTONE	3.0	340.0	
21.9	TRADEWATER		SANDY SHALE	2.0	343.0	
19.9	TRADEWATER		GRAY SANDSTONE	10.0	345.0	

MAPID: 05925433000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1427' N, 1002' W, SE/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.322117 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.661875 **DATE COLLECTED:** 6 / 20 / 2000

SURFACE ELEVATION (FT.): 385.4 **LOGGED (FT.):** 390.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 9EVG198 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.4			UNCONSOLIDATED	18.0	0.0	
367.4			UNCONSOLIDATED	34.0	18.0	
333.4			RED SHALE	3.0	52.0	
330.4			GRAY SHALE	28.0	55.0	
302.4	CARBONDALE	BRIAR HILL	COAL	2.0	83.0	
300.4	CARBONDALE		SANDSTONE/SHALE	47.0	85.0	
253.4	CARBONDALE		BLACK SHALE	1.0	132.0	
252.4	CARBONDALE		SANDY SHALE	7.0	133.0	
245.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	140.0	
242.4	CARBONDALE	SPRINGFIELD	COAL	4.7	143.0	
237.7	CARBONDALE		CLAYSTONE & SILTSTONE	5.3	147.7	
232.4	CARBONDALE		SANDY SHALE	49.0	153.0	
183.4	CARBONDALE	EXCELLO	BLACK SHALE	2.0	202.0	
181.4	CARBONDALE	EXCELLO	LIMESTONE	1.0	204.0	
180.4	CARBONDALE	EXCELLO	BLACK SHALE	1.0	205.0	
179.4	CARBONDALE	EXCELLO	LIMESTONE	1.0	206.0	
178.4	CARBONDALE	HOUCHIN CREEK	COAL	1.6	207.0	
176.8	CARBONDALE		CLAYSTONE & SILTSTONE	7.4	208.6	
169.4	CARBONDALE		SANDSTONE	31.0	216.0	
138.4	CARBONDALE		BLACK SHALE	1.0	247.0	
137.4	CARBONDALE	SURVANT	COAL	2.3	248.0	
135.1	CARBONDALE		BLACK SHALE	1.7	250.3	
133.4	CARBONDALE		SANDY SHALE	54.0	252.0	
79.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	306.0	
77.4	CARBONDALE	COLCHESTER	COAL	0.3	308.0	
77.1	CARBONDALE		CLAYSTONE & SILTSTONE	3.7	308.3	
73.4	CARBONDALE		SANDSTONE/SHALE	21.0	312.0	
52.4	CARBONDALE		DARK SHALE	8.0	333.0	
44.4	CARBONDALE	DEKOVEN	COAL	2.5	341.0	
41.9	CARBONDALE		CLAYSTONE & SILTSTONE	1.5	343.5	
40.4	CARBONDALE		SANDSTONE/SHALE	26.5	345.0	
13.9	CARBONDALE		BLACK SHALE	1.8	371.5	
12.1	CARBONDALE	DAVIS	COAL	3.4	373.3	
8.7	CARBONDALE	DAVIS	PYRITE	0.2	376.7	
8.6	CARBONDALE	DAVIS	COAL	0.3	376.8	
8.3	TRADEWATER		UNDERCLAY	1.7	377.1	
6.6	TRADEWATER		CLAYSTONE & SILTSTONE	2.3	378.8	
4.4	TRADEWATER		SANDSTONE	6.0	381.0	
-1.6	TRADEWATER		SANDY SHALE	3.0	387.0	

MAPID: 05990051000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 300' S line, 200' E line of SE NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.319413 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.669933 **DATE COLLECTED:** 9 / 10 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 214.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC9-143 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	25.5	0.0	
349.5	CARBONDALE	ANVIL ROCK	SANDSTONE	43.5	25.5	GRAY
306.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.1	69.0	WITH COAL STREAKS; GRAY
303.9	CARBONDALE	ANVIL ROCK	CONGLOMERATE	2.6	71.1	
301.3	CARBONDALE		DARK SHALE	8.8	73.7	
292.5	CARBONDALE	HERRIN	COAL	1.5	82.5	
291.0	CARBONDALE		SANDY SHALE	18.6	84.0	
272.4	CARBONDALE		SANDSTONE	25.2	102.6	GRAY
247.3	CARBONDALE		BLUE SHALE	20.4	127.7	
226.8	CARBONDALE	BRIAR HILL	COAL	2.0	148.2	
224.8	CARBONDALE		SHALY SANDSTONE	19.8	150.2	
205.0	CARBONDALE		SANDY SHALE	3.1	170.0	
201.9	CARBONDALE		SANDSTONE	2.5	173.1	GRAY
199.4	CARBONDALE		BLUE SHALE	30.4	175.6	
169.0	CARBONDALE		SANDSTONE	1.1	206.0	
167.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	207.1	
165.3	CARBONDALE	SPRINGFIELD	COAL	2.8	209.7	
162.6	CARBONDALE		GRAY SHALE	2.1	212.4	

MAPID: 05990052000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 300' S line, 300' E line of SW SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.326384 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.666269 **DATE COLLECTED:** 5 / 28 / 1958

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 172.5 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO EC-9-60 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	5.0	0.0	BROWN
373.0			SANDSTONE	10.0	5.0	BROWN
363.0	CARBONDALE	ANVIL ROCK	SANDSTONE	14.8	15.0	GRAY
348.2	CARBONDALE		GRAY SHALE	13.0	29.8	
335.2	CARBONDALE	BRERETON	LIMESTONE	2.3	42.8	GRAY
332.8	CARBONDALE	ANNA	BLACK SHALE	0.3	45.2	
332.6	CARBONDALE	HERRIN	COAL	3.5	45.4	
329.1	CARBONDALE		UNDERCLAY	4.9	48.9	
324.2	CARBONDALE		SANDSTONE	26.2	53.8	GRAY
298.0	CARBONDALE		SANDY SHALE	22.3	80.0	
275.7	CARBONDALE	BRIAR HILL	COAL	1.3	102.3	
274.4	CARBONDALE		SANDY SHALE	4.5	103.6	
269.9	CARBONDALE		SANDSTONE	21.9	108.1	GRAY
248.0	CARBONDALE		SANDY SHALE	31.5	130.0	
216.5	CARBONDALE	ST. DAVID	LIMESTONE	2.0	161.5	GRAY
214.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	163.5	
211.4	CARBONDALE	SPRINGFIELD	COAL	4.7	166.6	
206.7	CARBONDALE		UNDERCLAY	1.3	171.3	

MAPID: 05990076000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 9 **QUARTERS/FOOTAGES:** 200' S line, 50' W line of NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.32295 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.669682 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 455.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO. SCG-9-15 **WELL TYPE:** Coal Test

COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		SOIL	6.0	0.0	
379.0	PLEISTOCENE		CLAY	24.0	6.0	AND SAND
355.0			GRAY SHALE	3.0	30.0	
352.0			COAL	0.5	33.0	
351.5			SANDSTONE	49.5	33.5	
302.0			GRAY SHALE	2.0	83.0	
300.0			SANDSTONE	5.0	85.0	
295.0			SANDY SHALE	3.0	90.0	
292.0			SANDSTONE	1.0	93.0	
291.0			SANDY SHALE	3.0	94.0	
288.0	CARBONDALE	ANVIL ROCK	SANDSTONE	34.0	97.0	
254.0	CARBONDALE		SANDY SHALE	8.0	131.0	
246.0	CARBONDALE		DARK SHALE	12.0	139.0	
234.0	CARBONDALE	HERRIN	COAL	1.5	151.0	
232.5	CARBONDALE		SANDSTONE	17.5	152.5	
215.0	CARBONDALE		SANDY SHALE	30.0	170.0	
185.0	CARBONDALE		DARK SHALE	3.0	200.0	START CORE #1
182.0	CARBONDALE		CALCAREOUS BLACK SHALE	1.0	203.0	
181.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	204.0	BROKEN & FRACTURED
178.8	CARBONDALE	TURNER MINE	LIMESTONE	0.8	206.2	
178.0	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	207.0	
177.3	CARBONDALE	SPRINGFIELD	COAL	3.8	207.7	
173.5	CARBONDALE	SPRINGFIELD	PYRITE	0.2	211.5	
173.3	CARBONDALE	SPRINGFIELD	COAL W/ PYRITE	0.3	211.7	
173.0	CARBONDALE		UNDERCLAY	5.0	212.0	
168.0	CARBONDALE		SANDSTONE	3.0	217.0	END CORE #1
165.0	CARBONDALE		SANDSTONE	10.0	220.0	
155.0	CARBONDALE		SANDY SHALE	25.0	230.0	
130.0	CARBONDALE		GRAY SHALE	7.0	255.0	
123.0	CARBONDALE		SANDY SHALE	6.0	262.0	
117.0	CARBONDALE		DARK SHALE	1.0	268.0	
116.0	CARBONDALE	HANOVER	LIMESTONE	2.0	269.0	
114.0	CARBONDALE	EXCELLO	BLACK SHALE	2.0	271.0	
112.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	273.0	
110.5	CARBONDALE		SANDY SHALE	2.5	274.5	
108.0	CARBONDALE		SANDSTONE	31.0	277.0	
77.0	CARBONDALE		DARK SHALE	4.0	308.0	
73.0	CARBONDALE	SURVANT	COAL	1.0	312.0	SHALE

72.0	CARBONDALE		SANDY DARK SHALE	15.0	313.0	
57.0	CARBONDALE		SANDSTONE	8.0	328.0	
49.0	CARBONDALE		SANDY SHALE	22.0	336.0	
27.0	CARBONDALE		GRAY SHALE	9.0	358.0	
18.0	CARBONDALE		DARK SHALE	2.0	367.0	
16.0	CARBONDALE		SANDSTONE	44.0	369.0	
-28.0	CARBONDALE	DEKOVEN	COAL	2.5	413.0	
-30.5	CARBONDALE		SANDY SHALE	6.5	415.5	
-37.0	CARBONDALE		SANDSTONE	13.0	422.0	
-50.0	CARBONDALE		DARK SHALE	1.1	435.0	START CORE #2
-51.1	CARBONDALE		DARK SHALE	2.8	436.1	FRACTURED, WITH WASH OUT
-53.9	CARBONDALE			2.0	438.9	FRACTURED
-55.9	CARBONDALE		PYRITE	0.2	440.9	
-56.1	CARBONDALE	DAVIS	COAL	3.1	441.1	
-59.1	TRADEWATER		UNDERCLAY	1.3	444.1	
-60.4	TRADEWATER		SANDSTONE	2.5	445.4	ROOT ZONE
-62.9	TRADEWATER		SANDSTONE	1.7	447.9	
-64.6	TRADEWATER		SANDSTONE	5.4	449.6	WASH OUTS

MAPID: 05902215000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2500' S line, 2000' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.307092 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.664822 **DATE COLLECTED:** 1 / 3 / 1958

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 207.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 52 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	3.0	0.0	BROWN
362.0	CARBONDALE		SANDSTONE	13.5	3.0	
348.5	CARBONDALE		GRAY SANDSTONE	33.5	16.5	
315.0	CARBONDALE		SHALE	3.0	50.0	
312.0	CARBONDALE	ANVIL ROCK	SANDSTONE	31.8	53.0	GRY; HERRIN COAL ERODED BY CHANNEL
280.2	CARBONDALE	ANVIL ROCK	SHALE	3.3	84.8	
277.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	5.5	88.0	
271.5	CARBONDALE	ANVIL ROCK	SHALE	2.5	93.5	
269.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	24.0	96.0	
245.0	CARBONDALE		SHALE	26.0	120.0	
219.0	CARBONDALE		SHALE	0.2	146.0	
218.8	CARBONDALE	BRIAR HILL	COAL	1.3	146.2	
217.5	CARBONDALE		SHALE	1.5	147.5	
216.0	CARBONDALE		SHALE	10.0	149.0	
206.0	CARBONDALE		SANDSTONE	9.5	159.0	
196.5	CARBONDALE		SHALE	29.5	168.5	
167.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.2	198.0	
165.8	CARBONDALE	TURNER MINE	SHALE	3.3	199.2	
162.5	CARBONDALE	SPRINGFIELD	COAL	4.3	202.5	
158.2	CARBONDALE		UNDERCLAY	0.7	206.8	

MAPID: 05902215000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2500' S line, 2000' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.307092 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.664822 **DATE COLLECTED:** 1 / 3 / 1958

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 207.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0			UNCONSOLIDATED	3.0	0.0	
362.0			ROCK	143.2	3.0	# 6 CUT OUT BY CHANNEL AT 88'
218.8	CARBONDALE	BRIAR HILL	COAL	1.3	146.2	
217.5	CARBONDALE		ROCK	55.0	147.5	
162.5	CARBONDALE	SPRINGFIELD	COAL	4.3	202.5	

MAPID: 05903731000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 2310' S line, 990' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.315237 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.664291 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 99.2 **LOG TYPE:** Drillers Log

SOURCE: CONSOLIDATION C.C. SB-37R **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.0	CARBONDALE	LAWSON	SILTY SHALE	14.4	10.0	
387.6	CARBONDALE	LAWSON	SANDSTONE	50.8	24.4	
336.8	CARBONDALE	LAWSON	SILTY SHALE	15.8	75.2	
321.0	CARBONDALE	BRERETON	LIMESTONE	0.6	91.0	
320.4	CARBONDALE	ANNA	BLACK SHALE	4.4	91.6	
316.0	CARBONDALE	HERRIN	COAL	3.2	96.0	

MAPID: 05925432000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 343' N, 1161' E, SW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314623 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.658858 **DATE COLLECTED:** 6 / 16 / 2000

SURFACE ELEVATION (FT.): 376.4 **LOGGED (FT.):** 350.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 10EVG199 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.4			UNCONSOLIDATED	10.0	0.0	
366.4			UNCONSOLIDATED	18.0	10.0	
348.4			BROWN SANDSTONE	7.0	28.0	
341.4	CARBONDALE	BRIAR HILL	COAL	1.8	35.0	
339.6	CARBONDALE		SANDSTONE/SHALE	53.2	36.8	
286.4	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	90.0	
282.4	CARBONDALE	SPRINGFIELD	COAL	4.3	94.0	
278.1	CARBONDALE		CLAYSTONE & SILTSTONE	3.7	98.3	
274.4	CARBONDALE		SANDY SHALE	48.0	102.0	
226.4	CARBONDALE		LIMESTONE	1.0	150.0	
225.4	CARBONDALE		SANDY SHALE	2.0	151.0	
223.4	CARBONDALE	EXCELLO	BLACK SHALE	3.0	153.0	
220.4	CARBONDALE	HOUCHIN CREEK	COAL	1.7	156.0	
218.7	CARBONDALE		SANDY SHALE	4.3	157.7	
214.4	CARBONDALE	PLEASANTVIEW	SANDSTONE/LIMESTONE	11.0	162.0	
203.4	CARBONDALE	PLEASANTVIEW	SANDSTONE	23.0	173.0	
180.4	CARBONDALE	PLEASANTVIEW	BLACK SHALE	1.0	196.0	
179.4	CARBONDALE	PLEASANTVIEW	SANDSTONE	1.0	197.0	
178.4	CARBONDALE		BLACK SHALE	1.0	198.0	
177.4	CARBONDALE	SURVANT	COAL	2.6	199.0	
174.8	CARBONDALE		SANDY SHALE	11.4	201.6	
163.4	CARBONDALE		BLACK SHALE	5.0	213.0	
158.4	CARBONDALE		SANDY SHALE	2.0	218.0	
156.4	CARBONDALE		LIMESTONE	3.0	220.0	
153.4	CARBONDALE		SANDY SHALE	31.0	223.0	
122.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	254.0	
120.4	CARBONDALE		SANDSTONE/SHALE	32.0	256.0	
88.4	CARBONDALE		DARK SHALE	10.0	288.0	
78.4	CARBONDALE	DEKOVEN	COAL	2.7	298.0	
75.7	CARBONDALE		CLAYSTONE & SILTSTONE	3.3	300.7	
72.4	CARBONDALE		SANDSTONE/SHALE	21.6	304.0	
50.8	CARBONDALE		BLACK SHALE	2.0	325.6	
48.8	CARBONDALE	DAVIS	COAL	3.7	327.6	
45.1	TRADEWATER		CLAYSTONE & SILTSTONE	3.7	331.3	
41.4	TRADEWATER		SANDY SHALE	15.0	335.0	

MAPID: 059274A0017F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.315202 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.658844 **DATE COLLECTED:** 0 / 0 / 1927

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 10.5 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-CADY,PURCELL MINE (BERKEL) **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	3.0		
-			COAL	7.5		ONLY LOWER 4 FT. MINED

MAPID: 05990050000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 10 **QUARTERS/FOOTAGES:** 200' N line, 100' W line of NW NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.318333 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.664817 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 455.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-10-16 **WELL TYPE:** Coal Test

COMMENT: PERMIT 294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
405.0	PLEISTOCENE		SOIL	9.0	0.0	
396.0	CARBONDALE	ANVIL ROCK	SANDSTONE	33.0	9.0	BROWN
363.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.0	42.0	RED
361.0	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	44.0	GRAY
343.0	CARBONDALE		SANDY SHALE	10.0	62.0	
333.0	CARBONDALE		SANDSTONE	6.0	72.0	
327.0	CARBONDALE		SANDY SHALE	7.0	78.0	
320.0	CARBONDALE	BRERETON	LIMESTONE	1.0	85.0	BLACK
319.0	CARBONDALE	ANNA	BLACK SHALE	1.0	86.0	
318.0	CARBONDALE	HERRIN	COAL	2.0	87.0	APPROXIMATE THICKNESS
316.0	CARBONDALE		UNDERCLAY	2.0	89.0	
314.0	CARBONDALE		SANDSTONE	8.0	91.0	
306.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	3.0	99.0	
303.0	CARBONDALE		SANDSTONE	44.0	102.0	
259.0	CARBONDALE		DARK GRAY SHALE	6.0	146.0	
253.0	CARBONDALE	BRIAR HILL	COAL	1.0	152.0	APPROXIMATE THICKNESS
252.0	CARBONDALE		SANDSTONE	5.0	153.0	
247.0	CARBONDALE		SANDY SHALE	3.0	158.0	
244.0	CARBONDALE		SANDSTONE	7.0	161.0	
237.0	CARBONDALE		SANDY SHALE	2.0	168.0	
235.0	CARBONDALE		SANDSTONE	27.0	170.0	
208.0	CARBONDALE		SANDY SHALE	3.0	197.0	
205.0	CARBONDALE		SANDY SHALE	2.0	200.0	START CORE #1
203.0	CARBONDALE	ST. DAVID	LIMESTONE	0.7	202.0	
202.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	202.7	
198.5	CARBONDALE		GRAY SHALE	0.9	206.5	
197.6	CARBONDALE		DARK SHALE	0.3	207.4	
197.3	CARBONDALE	SPRINGFIELD	COAL	4.7	207.7	
192.6	CARBONDALE		UNDERCLAY	3.8	212.4	
188.8	CARBONDALE		SANDY SHALE	3.9	216.2	END CORE #1
185.0	CARBONDALE		SANDY SHALE	16.0	220.0	
169.0	CARBONDALE		DARK GRAY SHALE	30.0	236.0	
139.0	CARBONDALE	EXCELLO	BLACK SHALE	3.5	266.0	
135.5	CARBONDALE	HOUCHIN CREEK	COAL	2.0	269.5	APPROXIMATE THICKNESS
133.5	CARBONDALE		SANDSTONE	38.5	271.5	
95.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	310.0	
92.5	CARBONDALE	COLCHESTER	COAL	2.0	312.5	APPROXIMATE THICKNESS
90.5	CARBONDALE		SANDY SHALE	25.5	314.5	
65.0	CARBONDALE		GRAY SHALE	10.0	340.0	

55.0	CARBONDALE		SANDY SHALE	5.0	350.0	
50.0	CARBONDALE		GRAY SHALE	17.0	355.0	
33.0	CARBONDALE		DARK SHALE	2.0	372.0	WITH COAL
31.0	CARBONDALE		GRAY SHALE	8.0	374.0	
23.0	CARBONDALE		SANDSTONE	23.0	382.0	
0.0	CARBONDALE		DARK SHALE	2.0	405.0	
-2.0	CARBONDALE	DEKOVEN	COAL	3.5	407.0	APPROXIMATE THICKNESS
-5.5	CARBONDALE		SANDY SHALE	1.5	410.5	
-7.0	CARBONDALE		SANDSTONE	21.7	412.0	START CORE #2; GRAY
-28.7	CARBONDALE		DARK GRAY SHALE	3.0	433.7	
-31.7	CARBONDALE		BLACK SHALE	2.8	436.7	
-34.5	CARBONDALE	DAVIS	COAL	3.6	439.5	
-38.1	TRADEWATER		UNDERCLAY	2.6	443.1	
-40.6	TRADEWATER		SANDSTONE	3.4	445.6	END CORE #2; GRAY
-44.0	TRADEWATER		SANDY SHALE	6.0	449.0	

MAPID: 05902140000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 19' N line, 41' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.282198 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.665258 **DATE COLLECTED:** 8 / 20 / 1957

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 367.0 **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
375.0			UNCONSOLIDATED	26.5	0.0	
348.5			ROCK	213.8	26.5	
134.7	CARBONDALE	HERRIN	COAL	3.5	240.3	
131.3	CARBONDALE		ROCK	69.8	243.7	
61.5	CARBONDALE	BRIAR HILL	COAL	2.7	313.5	
58.8	CARBONDALE		ROCK	44.3	316.2	
14.5	CARBONDALE	SPRINGFIELD	COAL	4.0	360.5	
10.5	CARBONDALE		ROCK	2.5	364.5	

MAPID: 05902140000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 19' N line, 41' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.282198 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.665258 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 243.5 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
240.3	CARBONDALE	LAWSON	SANDSTONE	84.0	134.7	
156.3	CARBONDALE	JAMESTOWN	COAL WITH SHALE PARTINGS	0.3	218.7	
156.1	CARBONDALE		CARBONACEOUS SHALE	16.6	218.9	
139.5	CARBONDALE	BRERETON	LIMESTONE	4.4	235.5	
135.1	CARBONDALE	ANNA	BLACK SHALE	0.1	239.9	
135.0	CARBONDALE	HERRIN	COAL	3.5	240.0	

MAPID: 05902140000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 19' N line, 41' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.282198 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.665258 **DATE COLLECTED:** 8 / 20 / 1957

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 367.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING 36 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0			NO RECORD	26.5	0.0	
348.5			NO RECORD	42.5	26.5	START OF CORE; CORE LOST
306.0			SHALE	31.8	69.0	
274.2			SHALE	0.4	100.8	MAY HAVE BEEN CORELOSS
273.7			SHALE	3.8	101.3	
269.9			NO RECORD	0.9	105.1	CORE LOSS
269.0			SHALE	1.7	106.0	
267.3			COAL	-	107.7	CORE SPIN MAY HAVE LOST THIN COAL
267.3			SHALE	9.3	107.7	
258.1			SILTSTONE	7.2	116.9	
250.9			NO RECORD	1.9	124.1	CORE LOSS
249.0			SILTSTONE	1.6	126.0	
247.4			BLACK SHALE	0.4	127.6	
247.0			SILTSTONE	4.0	128.0	
243.0			SANDSTONE	1.0	132.0	THIN COAL INCLUSIONS
242.0			SANDSTONE	28.5	133.0	WITH SHALE LAMINAE
213.5			SANDSTONE	10.8	161.5	THIN COAL INCLUSIONS NEAR MIDDLE
202.7			SANDSTONE	44.1	172.3	CLEAN
158.6			SANDSTONE	0.8	216.4	COAL INCLUSIONS
157.7			SANDSTONE & CONGLOMERATE	0.7	217.3	
157.1			COAL	0.1	217.9	
157.0			SANDSTONE	0.1	218.0	
156.9			COAL	0.1	218.1	
156.8			CONGLOMERATE	1.6	218.2	
155.2	CARBONDALE		SHALE	13.3	219.8	
142.0	CARBONDALE		BLACK SHALE	2.8	233.0	
139.2	CARBONDALE	BRERETON	LIMESTONE	4.4	235.8	
134.8	CARBONDALE	ANNA	BLACK SHALE	0.0	240.2	
134.7	CARBONDALE	HERRIN	COAL	3.5	240.3	
131.3	CARBONDALE		UNDERCLAY	1.1	243.7	
130.2	CARBONDALE		SILTSTONE	9.7	244.8	
120.5	CARBONDALE		SANDSTONE	34.6	254.5	
85.9	CARBONDALE		SHALE	24.4	289.1	
61.5	CARBONDALE	BRIAR HILL	CORE LOSS	2.7	313.5	POSSIBLE CORELOSS
58.8	CARBONDALE		CLAYSTONE & SHALE	1.3	316.2	
57.5	CARBONDALE		SILTSTONE	5.0	317.5	
52.5	CARBONDALE		SHALE	1.3	322.5	COAL INCLUSIONS
51.2	CARBONDALE		SHALE	11.0	323.8	

40.2	CARBONDALE		SILTSTONE	13.0	334.8	
27.2	CARBONDALE		SHALE	8.3	347.8	
19.9	CARBONDALE		NO RECORD	0.9	355.1	CORE LOSS
19.0	CARBONDALE	ST. DAVID	LIMESTONE	1.3	356.0	
17.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	357.3	
14.5	CARBONDALE	SPRINGFIELD	COAL	4.0	360.5	
10.5	CARBONDALE		SHALE	2.5	364.5	

MAPID: 05902323000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 25' N line, 675' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.288752 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.665236 **DATE COLLECTED:** 10 / 14 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 217.7 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 151 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	26.3	0.0	
343.7	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	51.3	26.3	
292.3	CARBONDALE		SHALE	7.8	77.7	
284.5	CARBONDALE		DARK SHALE	3.8	85.5	
280.7	CARBONDALE		SHALE	3.9	89.3	
276.7	CARBONDALE	BRERETON	LIMESTONE	1.8	93.3	
274.9	CARBONDALE	ANNA	SHALE	0.3	95.1	
274.7	CARBONDALE	HERRIN	COAL	3.0	95.3	
271.7	CARBONDALE		SHALE	4.0	98.3	
267.7	CARBONDALE		GRAY SANDSTONE	12.2	102.3	
255.5	CARBONDALE		SHALE	15.6	114.5	
239.9	CARBONDALE		DARK SHALE	25.4	130.1	
214.5	CARBONDALE	BRIAR HILL	COAL	2.5	155.5	
212.0	CARBONDALE		DARK SHALE	0.5	158.0	
211.5	CARBONDALE		SHALE & SANDSTONE	12.8	158.5	
198.7	CARBONDALE		DARK SHALE	34.3	171.3	
164.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	205.5	
163.5	CARBONDALE	TURNER MINE	SHALE	3.0	206.5	
160.5	CARBONDALE		LIMESTONE	0.3	209.5	
160.2	CARBONDALE	SPRINGFIELD	COAL	4.8	209.8	
155.3	CARBONDALE		SHALE	3.0	214.7	

MAPID: 05902323000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 25' N line, 675' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.288752 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.665236 **DATE COLLECTED:** 10 / 14 / 1958

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 217.7 **LOG TYPE:** Multiple log types

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT: 1,4,1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	26.3	0.0	
343.7			ROCK	65.7	26.3	
278.0			ROCK	3.3	92.0	L-CORE ENDS
274.7	CARBONDALE	HERRIN	COAL	3.0	95.3	
271.7	CARBONDALE		ROCK	2.0	98.3	
269.7	CARBONDALE		ROCK	54.7	100.3	L-CORE RESUMES
215.0	CARBONDALE	BRIAR HILL	COAL	2.4	155.0	
212.6	CARBONDALE		ROCK	48.6	157.4	
164.0	CARBONDALE		ROCK	3.3	206.0	L-CORE ENDS
160.7	CARBONDALE	SPRINGFIELD	COAL	4.8	209.3	
155.8			ROCK	3.0	214.2	

MAPID: 05902338000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 0' N line, 660' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.284267 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.672717 **DATE COLLECTED:** 10 / 29 / 1958

SURFACE ELEVATION (FT.): 358.0 **LOGGED (FT.):** 176.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING 153 **WELL TYPE:** Coal Test

COMMENT: WELL CUTS THROUGH GRINDSTAFF FAULT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.0			NO RECORD	52.0	0.0	
306.0			SHALE	78.7	52.0	START OF CORE
227.3			SHALE	1.0	130.7	CORE BELOW BUT BY FAULTS; BED DIPS 50-60
226.3			UNDERCLAY	0.8	131.7	
225.5			SHALE	12.1	132.5	
213.4			LIMESTONE	0.3	144.6	
213.1			BLACK SHALE	0.5	144.9	
212.6			CLAYSTONE & SHALE	0.8	145.4	1" THICK COAL;RELATIONSHIP UNCLEAR
211.7			ROCK	1.7	146.3	BROKEN
210.1			NO RECORD	3.3	147.9	CORE LOSS
206.8			SILTSTONE	2.7	151.2	
204.2			LIMESTONE	0.7	153.8	FITS ST.D.DESCRIP;POSSIBLY FAULTED IN
203.5			SILTSTONE	2.5	154.5	WITH BROKEN LIMESTONE AT BASE
201.0			NO RECORD	4.0	157.0	CORE LOSS
197.0			SILTSTONE	3.0	161.0	INTERLAMINATED WITH SHALE
194.0			SHALE	7.5	164.0	
186.5			NO RECORD	5.0	171.5	CORE LOSS

MAPID: 05902353000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.295524 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.668993 **DATE COLLECTED:** 10 / 29 / 1958

SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 91 **WELL TYPE:** Coal Test

COMMENT: ON BAS.OF#5STRUCT.,NO.6ATELEV.280 0R77'D

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.0	PLEISTOCENE		CLAY	2.0	0.0	SOFT
355.0	PLEISTOCENE		CLAY	33.0	2.0	GRAY
322.0	PLEISTOCENE		CLAY	14.5	35.0	BROWN
307.5			SHALE	13.5	49.5	ABOVE HERRIN COAL - CGT
294.0			BROWN SANDSTONE	3.7	63.0	
290.3			SHALE	1.3	66.7	
289.0			GRAY SANDSTONE	32.0	68.0	

MAPID: 05902457000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 250' S line, 650' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284383 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.658592 **DATE COLLECTED:** 6 / 10 / 1959
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 220 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.0	PLEISTOCENE		CLAY	43.0	0.0	BROWN
302.0			SHALE	21.5	43.0	
280.5			GRAY SANDSTONE	35.5	64.5	

MAPID: 05902458000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.293393 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.663458 **DATE COLLECTED:** 6 / 11 / 1959
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 221 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	5.0	0.0	
355.0	PLEISTOCENE		SILT & SAND	95.0	5.0	

MAPID: 05902460000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** 50' S line, 800' E line of SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.294011 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.658053 **DATE COLLECTED:** 6 / 16 / 1959
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 223 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0	PLEISTOCENE		CLAY	6.0	0.0	
349.0	PLEISTOCENE		SILT & SAND	94.0	6.0	

MAPID: 05903362000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.292356 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.658836 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 96.7 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 225 **WELL TYPE:** Coal Test
COMMENT: NO LOG RECEIVED BY SURVEY. COMP.MAPDATA

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
263.0	CARBONDALE	SPRINGFIELD	COAL	4.7	92.0	

MAPID: 05903362000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.292356 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.658836 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 92.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			ROCK	87.3	0.0	
267.7	CARBONDALE	SPRINGFIELD	COAL	4.7	87.3	

MAPID: 05900022300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** SE NW SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.271028 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.645499 **DATE COLLECTED:** 0 / 0 / 1911
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BLACK C C,BENTLEY MINE **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05900226800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.276277 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.645933 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-BARNETT & LOVE C C **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	35.0	0.0	
365.0	CARBONDALE	SPRINGFIELD	COAL	5.0	35.0	

MAPID: 05900227000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NE SW SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.271033 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.651939 **DATE COLLECTED:** 0 / 0 / 1941

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-HICKORY HILL C C **WELL TYPE:** Underground mine

COMMENT:

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

MAPID: 05901156000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.279197 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.648223 **DATE COLLECTED:** 1 / 20 / 1953

SURFACE ELEVATION (FT.): 351.8 **LOGGED (FT.):** 437.0 **LOG TYPE:** Drillers Log

SOURCE: UNION COLLIERIES CO. 56 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
351.8	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0	
317.8	MODESTO		SOFT SHALE	24.5	34.0	
293.3	MODESTO		DARK SHALE	1.3	58.5	
292.0	MODESTO	CHAPEL	COAL	1.0	59.8	
291.0	MODESTO		SOFT SHALE	11.2	60.8	
279.8	MODESTO		SANDSTONE	1.3	72.0	
278.5	MODESTO		SANDY SHALE	11.7	73.3	
266.8	MODESTO		DARK SHALE	10.7	85.0	
256.1	MODESTO		SANDSTONE	6.3	95.7	
249.8	MODESTO		SANDY SHALE	20.5	102.0	
229.3	MODESTO		BLACK SHALE	7.0	122.5	
222.3	MODESTO		LIMESTONE	2.5	129.5	
219.8	MODESTO		SANDY SHALE	16.0	132.0	
203.8	MODESTO		GRAY SHALE	46.0	148.0	
157.8	MODESTO		LIMESTONE	1.3	194.0	
156.5	MODESTO		GRAY SHALE	17.0	195.3	
139.5	MODESTO		SANDY SHALE	10.0	212.3	
129.5	MODESTO		SHALE WITH LIMESTONE	1.8	222.3	
127.8	MODESTO		GRAY SHALE	22.0	224.0	
105.8	MODESTO		SHALE	6.0	246.0	
99.8	MODESTO		DARK SHALE	2.8	252.0	
97.0	CARBONDALE	DANVILLE	COAL	2.0	254.8	
95.0	CARBONDALE		UNDERCLAY	1.2	256.8	
93.8	CARBONDALE		SHALE	3.5	258.0	
90.3	CARBONDALE	ALLENBY	SHALY COAL	0.8	261.5	
89.5	CARBONDALE		GRAY SHALE	4.2	262.3	
85.3	CARBONDALE		SHALE WITH LIMESTONE	3.0	266.5	
82.3	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	269.5	
77.8	CARBONDALE		GREEN SHALE	0.2	274.0	
77.6	CARBONDALE		GRAY SHALE	1.8	274.2	
75.8	CARBONDALE	ANVIL ROCK	SHALE	16.0	276.0	
59.8	CARBONDALE		SHALE WITH LIMESTONE	3.5	292.0	
56.3	CARBONDALE		SHALE	1.5	295.5	
54.8	CARBONDALE		FOSSILIFEROUS SHALE	0.8	297.0	
54.0	CARBONDALE	BRERETON	LIMESTONE	3.2	297.8	
50.8	CARBONDALE	ANNA	BLACK SHALE	4.0	301.0	
46.8	CARBONDALE	HERRIN	COAL	1.5	305.0	
45.3	CARBONDALE	HERRIN	BLUE BAND	0.2	306.5	
45.1	CARBONDALE	HERRIN	COAL	1.0	306.7	

44.1	CARBONDALE		UNDERCLAY	1.0	307.7
43.1	CARBONDALE		SANDSTONE	7.0	308.7
36.1	CARBONDALE		SANDY SHALE	32.3	315.7
3.8	CARBONDALE		SHALE	9.0	348.0
-5.2	CARBONDALE	BRIAR HILL	COAL	1.9	357.0
-7.1	CARBONDALE		SHALE	13.1	358.9
-20.2	CARBONDALE		SANDY SHALE	10.0	372.0
-30.2	CARBONDALE		SHALE	40.0	382.0
-70.2	CARBONDALE		DARK SHALE	3.0	422.0
-73.2	CARBONDALE	TURNER MINE	BLACK SHALE & LIMESTONE	1.5	425.0
-74.7	CARBONDALE	SPRINGFIELD	COAL	5.3	426.5
-80.0	CARBONDALE		UNDERCLAY	4.0	431.8
-84.0	CARBONDALE		SANDSTONE	1.2	435.8

MAPID: 05901156000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SE NW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.279197 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.648223 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: UNION COLLIERY CO 56 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
101.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	259.0	
65.5	CARBONDALE	SURVANT	COAL	2.5	294.5	
1.5	CARBONDALE	COLCHESTER	COAL	1.0	358.5	
-36.0	CARBONDALE	DEKOVEN	COAL	3.5	396.0	
-36.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	396.0	
-59.0	CARBONDALE	DAVIS	COAL	3.7	419.0	

MAPID: 05901294000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.277442 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.646851 **DATE COLLECTED:** 8 / 12 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 84.9 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 461 **WELL TYPE:** Coal Test
COMMENT: GIBSONIA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	1.0	0.0	
379.0	CARBONDALE	ANVIL ROCK	SANDSTONE	28.0	1.0	
351.0	CARBONDALE	ANVIL ROCK	GRAY SHALE	2.0	29.0	
349.0	CARBONDALE	ANVIL ROCK	SANDSTONE	27.5	31.0	
321.5	CARBONDALE		BLACK SHALE	2.5	58.5	
319.0	CARBONDALE		DARK SHALE	15.0	61.0	
304.0	CARBONDALE	BRERETON	LIMESTONE	4.0	76.0	
300.0	CARBONDALE	HERRIN	COAL	2.9	80.0	
297.1	CARBONDALE		UNDERCLAY	2.0	82.9	

MAPID: 05902203000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1250' S line, 775' E line of SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.275467 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.646623 **DATE COLLECTED:** 4 / 28 / 1958
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 226.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 117 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		SAND/CLAY	20.0	0.0	
360.0	CARBONDALE	ANVIL ROCK	SANDSTONE	62.3	20.0	GRAYISH BROWN
297.7	CARBONDALE		SHALE	8.2	82.3	
289.5	CARBONDALE	BRERETON	GRAY LIMESTONE	2.8	90.5	
286.7	CARBONDALE	HERRIN	COAL	1.0	93.3	
285.7	CARBONDALE	HERRIN	PYRITE	0.3	94.3	
285.4	CARBONDALE	HERRIN	COAL	3.0	94.6	
282.4	CARBONDALE		SHALE	1.3	97.6	
281.2	CARBONDALE		SHALE & SANDSTONE	19.3	98.8	
261.8	CARBONDALE		GRAY SANDSTONE	3.2	118.2	
258.7	CARBONDALE		SHALY SANDSTONE	13.9	121.3	
244.7	CARBONDALE		SHALE	29.3	135.3	
215.5	CARBONDALE	BRIAR HILL	COAL	2.5	164.5	
213.0	CARBONDALE		SHALE	1.1	167.0	
211.9	CARBONDALE		BLUE SHALE	49.4	168.1	
162.5	CARBONDALE	SPRINGFIELD	COAL	5.1	217.5	
157.4	CARBONDALE		SHALE	3.9	222.6	

MAPID: 05902203000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1250' S line, 775' E line of SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.275467 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.646623 **DATE COLLECTED:** 4 / 28 / 1958

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 225.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNCONSOLIDATED	20.0	0.0	
360.0			ROCK	72.7	20.0	
287.3	CARBONDALE	HERRIN	COAL	3.8	92.7	
283.6	CARBONDALE		ROCK	66.7	96.4	
216.8	CARBONDALE	BRIAR HILL	COAL	2.5	163.2	
214.3	CARBONDALE		ROCK	52.3	165.7	
162.1	CARBONDALE	SPRINGFIELD	COAL	5.1	217.9	
157.0	CARBONDALE		ROCK	2.3	223.0	

MAPID: 05902337000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1150' S line, 1325' W line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.277524 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.65371 **DATE COLLECTED:** 10 / 25 / 1958

SURFACE ELEVATION (FT.): 319.0 **LOGGED (FT.):** 319.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 152 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
319.0	PLEISTOCENE		SAND & GRAVEL	76.0	0.0	
243.0	PLEISTOCENE		CLAY	4.0	76.0	BROWN
239.0			BROWN SHALE	2.7	80.0	
236.3			DARK SHALE	5.5	82.7	
230.8			SHALE	35.3	88.2	
195.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	62.2	123.5	
133.3	CARBONDALE		SHALE	5.8	185.7	
127.5	CARBONDALE	BRERETON	LIMESTONE	4.5	191.5	
123.0	CARBONDALE	HERRIN	COAL	4.0	196.0	
119.0	CARBONDALE		SHALE	7.3	200.0	
111.7	CARBONDALE		SHALE	53.2	207.3	
58.5	CARBONDALE	BRIAR HILL	COAL	2.5	260.5	
56.0	CARBONDALE		DARK SHALE	46.3	263.0	
9.7	CARBONDALE		LIMESTONE	0.8	309.3	
8.9	CARBONDALE		SHALE	1.2	310.1	
7.7	CARBONDALE	ST. DAVID	LIMESTONE	1.1	311.3	
6.7	CARBONDALE	TURNER MINE	SHALE	0.3	312.3	
6.4	CARBONDALE	SPRINGFIELD	COAL	4.3	312.6	
2.2	CARBONDALE		SHALE	2.2	316.8	

MAPID: 05902337000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1150' S line, 1325' W line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.277524 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.65371 **DATE COLLECTED:** 10 / 25 / 1958
SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 319.0 **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
345.0			UNCONSOLIDATED	76.0	0.0	
269.0			ROCK	120.0	76.0	
149.0	CARBONDALE	HERRIN	COAL	4.0	196.0	
145.0	CARBONDALE		ROCK	60.5	200.0	
84.5	CARBONDALE	BRIAR HILL	COAL	2.5	260.5	
82.0	CARBONDALE		ROCK	49.6	263.0	
32.4	CARBONDALE	SPRINGFIELD	COAL	4.3	312.6	
28.2	CARBONDALE		ROCK	2.2	316.8	

MAPID: 05902456000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1250' S line, 800' W line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.270002 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.646653 **DATE COLLECTED:** 6 / 8 / 1959
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 219 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	5.5	0.0	BROWN
359.5	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	20.5	5.5	
339.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	32.9	26.0	
306.1	CARBONDALE		SHALE	1.3	58.9	
304.8	CARBONDALE	BRERETON	GRAY LIMESTONE	3.4	60.2	
301.4	CARBONDALE	ANNA	SHALE	1.2	63.6	
300.2	CARBONDALE	HERRIN	COAL	3.6	64.8	
296.7	CARBONDALE		UNDERCLAY	1.7	68.3	GRAY

MAPID: 05902456000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1250' S line, 800' W line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.270002 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.646653 **DATE COLLECTED:** 6 / 8 / 1959
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 70.0 **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
365.0			UNCONSOLIDATED	5.5	0.0	
359.5			ROCK	59.3	5.5	
300.2	CARBONDALE	HERRIN	COAL	3.6	64.8	
296.7	CARBONDALE		ROCK	1.7	68.3	

MAPID: 05903031000C **VERSION:** 1 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 1820' S line, 770' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.279444 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.648176 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 361.0 **LOGGED (FT.):** 78.0 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CORP 1156 **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.5	CARBONDALE	LAWSON	SANDSTONE	60.0	3.5	
297.5	CARBONDALE	LAWSON	SILTY SHALE	7.5	63.5	
290.0	CARBONDALE	BRERETON	LIMESTONE	3.5	71.0	
286.5	CARBONDALE	ANNA	BLACK SHALE	0.5	74.5	
286.0	CARBONDALE	HERRIN	COAL	3.0	75.0	

MAPID: 05923978000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** SW SW NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.276862 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.647311 **DATE COLLECTED:** 10 / 24 / 1978
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 104.0 **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	17.0	0.0	
343.0			ROCK	81.0	17.0	
262.0			COAL	3.0	98.0	
259.0			ROCK	64.0	101.0	
195.0			COAL	2.0	165.0	
193.0			ROCK	26.0	167.0	

MAPID: 05924021000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 13 **QUARTERS/FOOTAGES:** 130' S line, 700' E line of NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.27521 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.647216 **DATE COLLECTED:** 6 / 17 / 1965
SURFACE ELEVATION (FT.): 367.3 **LOGGED (FT.):** 227.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY COAL CO. 1174E **WELL TYPE:** Coal Test
COMMENT: EAGLE CREEK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
367.3	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0	
343.3	CARBONDALE	ANVIL ROCK	SANDSTONE	62.0	24.0	
281.3	CARBONDALE		GRAY SHALE	5.5	86.0	
275.8	CARBONDALE	BRERETON	LIMESTONE	4.5	91.5	
271.3	CARBONDALE	ANNA	BLACK SHALE	0.5	96.0	
270.8	CARBONDALE	HERRIN	COAL	3.0	96.5	
267.8	CARBONDALE	HERRIN	BLUE BAND	0.2	99.5	
267.6	CARBONDALE	HERRIN	COAL	0.7	99.7	
267.0	CARBONDALE		UNDERCLAY	3.7	100.3	
263.3	CARBONDALE		SANDSTONE	41.0	104.0	
222.3	CARBONDALE		SANDY SHALE	20.0	145.0	
202.3	CARBONDALE	BRIAR HILL	COAL	2.4	165.0	
199.9	CARBONDALE		SANDSTONE	3.6	167.4	
196.3	CARBONDALE		SANDY SHALE	45.5	171.0	
150.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	216.5	
148.3	CARBONDALE	TURNER MINE	LIMESTONE	1.0	219.0	
147.3	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	220.0	
146.8	CARBONDALE	SPRINGFIELD	COAL	5.0	220.5	
141.8	CARBONDALE		UNDERCLAY	2.0	225.5	

MAPID: 05900227100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SE NE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.28383 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.647286 **DATE COLLECTED:** 0 / 0 / 1964
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-LEAMINGTON C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 05900417700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** SW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.285548 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.644053 **DATE COLLECTED:** 0 / 0 / 1958
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-K. & W. C C MINE # 2 **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 05901292000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.286691 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.643132 **DATE COLLECTED:** 8 / 12 / 1952
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 15.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 407 **WELL TYPE:** Coal Test
COMMENT: GIBSONIA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
370.0	CARBONDALE	SPRINGFIELD	COAL	3.0	10.0	
367.0	CARBONDALE		UNDERCLAY	2.0	13.0	

MAPID: 05901293000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 165' S line, 1' W line of NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.291268 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.647274 **DATE COLLECTED:** 8 / 11 / 1952
SURFACE ELEVATION (FT.): 352.4 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 455 **WELL TYPE:** Coal Test
COMMENT: BOX 44 NO COAL BELOW #5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.4	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0	
299.4	CARBONDALE		GRAY SHALE	30.0	53.0	
269.4	CARBONDALE		LIMESTONE	2.0	83.0	

MAPID: 05901296000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' N line, 330' W line of NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.290113 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650514 **DATE COLLECTED:** 8 / 11 / 1952

SURFACE ELEVATION (FT.): 401.2 **LOGGED (FT.):** 24.4 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE 505B **WELL TYPE:** Coal Test

COMMENT: EAGLE CREEK BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
401.2	PLEISTOCENE		UNCONSOLIDATED	7.5	0.0	
393.7	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	7.5	
383.2	CARBONDALE		SOFT SHALE	1.0	18.0	
382.2	CARBONDALE	HERRIN	COAL	3.4	19.0	
378.8	CARBONDALE		UNDERCLAY	2.0	22.4	

MAPID: 05901297000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.286693 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650514 **DATE COLLECTED:** 8 / 11 / 1952

SURFACE ELEVATION (FT.): 379.9 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE 507 **WELL TYPE:** Coal Test

COMMENT: EAGLE CREEK BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.9	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
366.9	CARBONDALE	ANVIL ROCK	SANDSTONE	27.0	13.0	
339.9	CARBONDALE		DARK SHALE	3.0	40.0	
336.9	CARBONDALE	BRERETON	LIMESTONE	5.3	43.0	
331.6	CARBONDALE	ANNA	BLACK SHALE	0.7	48.3	
330.9	CARBONDALE	HERRIN	COAL	2.9	49.0	
328.0	CARBONDALE		UNDERCLAY	4.0	51.9	
324.0	CARBONDALE		LIMESTONE	1.1	55.9	

MAPID: 05902217000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 2400' S line, 1450' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.287153 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.649751 **DATE COLLECTED:** 4 / 2 / 1958

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 202.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	12.0	0.0	
378.0			ROCK	60.8	12.0	
317.2	CARBONDALE	HERRIN	COAL	3.7	72.8	
313.5	CARBONDALE		ROCK	60.8	76.5	
252.7	CARBONDALE	BRIAR HILL	COAL	2.5	137.3	
250.2	CARBONDALE		ROCK	55.3	139.8	
194.9	CARBONDALE	SPRINGFIELD	COAL	5.0	195.1	
189.9	CARBONDALE		ROCK	1.9	200.1	

MAPID: 05902217000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 2400' S line, 1450' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.287153 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.649751 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 80.7 **LOG TYPE:** Drillers Log

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.8	CARBONDALE	LAWSON	SANDSTONE	52.2	15.2	
322.7	CARBONDALE	LAWSON	GRAY SHALE	4.1	67.3	
318.6	CARBONDALE	BRERETON	LIMESTONE	4.8	71.4	
313.7	CARBONDALE	ANNA	BLACK SHALE	0.8	76.3	
313.0	CARBONDALE	HERRIN	COAL	3.7	77.0	

MAPID: 05902217000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 2400' S line, 1450' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.287153 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.649751 **DATE COLLECTED:** 4 / 2 / 1958

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 202.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 56 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	12.0	0.0	
378.0	CARBONDALE	ANVIL ROCK	BROWN SANDSTONE	21.0	12.0	
357.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	30.2	33.0	
326.8	CARBONDALE		SHALE	4.1	63.2	
322.7	CARBONDALE	BRERETON	GRAY LIMESTONE	4.8	67.3	
317.9	CARBONDALE	ANNA	SHALE	0.8	72.1	
317.2	CARBONDALE	HERRIN	COAL	3.7	72.8	
313.5	CARBONDALE		UNDERCLAY	4.0	76.5	
309.5	CARBONDALE		GRAY SANDSTONE	12.0	80.5	
297.5	CARBONDALE		SHALE	33.5	92.5	
264.0	CARBONDALE		GRAY SANDSTONE	11.3	126.0	
252.7	CARBONDALE	BRIAR HILL	COAL	2.5	137.3	
250.2	CARBONDALE		SHALE	50.6	139.8	
199.6	CARBONDALE	ST. DAVID	LIMESTONE	0.9	190.4	
198.7	CARBONDALE	TURNER MINE	SHALE	3.8	191.3	
194.9	CARBONDALE	SPRINGFIELD	COAL	5.0	195.1	
189.9	CARBONDALE		UNDERCLAY	1.9	200.1	

MAPID: 05990307000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 14 **QUARTERS/FOOTAGES:** 82' N line, 330' W line of NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.290113 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.650291 **DATE COLLECTED:** 8 / 11 / 1952

SURFACE ELEVATION (FT.): 393.7 **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE 480FB **WELL TYPE:** Coal Test

COMMENT: GIBSONIA-EAGLE CREEK BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
393.7	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
381.7	CARBONDALE		SANDSTONE	10.0	12.0	
371.7	CARBONDALE		LIMESTONE	10.0	22.0	
361.7	CARBONDALE		LIMESTONE & SHALE	35.0	32.0	SOFT

MAPID: 05900042000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.307381 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.644964 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 1190.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	26.0	0.0	
334.0			ROCK	34.4	26.0	
299.6			COAL	4.0	60.4	
295.6			ROCK	55.2	64.4	
240.3			COAL	2.5	119.7	
237.8			ROCK	59.8	122.2	
178.0			COAL	4.5	182.0	
173.5			ROCK	54.5	186.5	
119.0			COAL	1.8	241.0	
117.3			ROCK	33.3	242.7	
84.0			COAL	3.0	276.0	
81.0			ROCK	50.7	279.0	
30.4			COAL	0.3	329.6	
30.0			ROCK	52.2	330.0	
-22.1			COAL	3.7	382.1	
-25.8			ROCK	15.4	385.8	
-41.2			COAL	3.9	401.2	
-45.1			ROCK	43.8	405.1	
-89.0			COAL	0.6	449.0	
-89.5			ROCK	138.0	449.5	
-227.5			COAL	0.3	587.5	
-227.8			ROCK	169.0	587.8	
-396.8			COAL	0.5	756.8	
-397.3			ROCK	60.8	757.3	
-458.0			COAL	0.3	818.0	
-458.3			ROCK	371.7	818.3	

MAPID: 05900042000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.307381 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.644964 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 64.0 **LOG TYPE:** Drillers Log
SOURCE: **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
339.4	CARBONDALE	LAWSON	SANDSTONE	18.0	25.6	
321.4	CARBONDALE	LAWSON	CONGLOMERATE	1.0	43.6	
320.4	CARBONDALE	LAWSON	SILTY SHALE	2.0	44.6	
318.4	CARBONDALE	LAWSON	GRAY SHALE	8.0	46.6	
310.4	CARBONDALE	BRERETON	LIMESTONE	5.0	54.6	
305.4	CARBONDALE	ANNA	BLACK SHALE	0.4	59.6	
305.0	CARBONDALE	HERRIN	COAL	4.0	60.0	

MAPID: 05900042000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.307381 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.644964 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1190.0 **LOG TYPE:** Other Core Study
SOURCE: BYRD, A. R. & SONS, TAYLOR F K **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
124.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	241.0	
89.0	CARBONDALE	SURVANT	COAL	2.7	276.0	
35.0	CARBONDALE	COLCHESTER	COAL	0.3	330.0	
-17.0	CARBONDALE	DEKOVEN	COAL	3.0	382.0	
-17.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	382.0	
-36.0	CARBONDALE	DAVIS	COAL	4.0	401.0	
-84.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	449.0	62% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
-109.0	TRADEWATER	STONEFORT	LIMESTONE	1.0	474.0	

MAPID: 05900042000C **VERSION:** 4 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.307381 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.644964 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 1190.0 **LOG TYPE:** Drillers Log

SOURCE: A. R. BYRD & SON 13 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
365.0	PLEISTOCENE		SAND	26.0	0.0	
339.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	26.0	RED
332.0	CARBONDALE	ANVIL ROCK	SANDSTONE	11.0	33.0	LIGHT
321.0	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	44.0	CONGLOMERATE
320.0	CARBONDALE		SHALE	2.0	45.0	
318.0	CARBONDALE		BLUE SHALE	8.0	47.0	
310.0	CARBONDALE	BRERETON	LIMESTONE	5.0	55.0	HARD
305.0	CARBONDALE	ANNA	SHALE	0.4	60.0	
304.6	CARBONDALE	HERRIN	COAL	2.8	60.4	
301.7	CARBONDALE	HERRIN	CLAYSTONE & SILTSTONE	0.2	63.3	
301.6	CARBONDALE	HERRIN	COAL	1.0	63.4	
300.6	CARBONDALE		SHALE	2.6	64.4	
298.0	CARBONDALE		LIMESTONE	18.0	67.0	
280.0	CARBONDALE		BLUE SHALE	12.0	85.0	
268.0	CARBONDALE		SHALE	22.7	97.0	YELLOW BANDS; BLUE
245.3	CARBONDALE	BRIAR HILL	COAL	2.5	119.7	
242.8	CARBONDALE		SANDSTONE	21.8	122.2	SHALE BANDS
221.0	CARBONDALE		BLUE SHALE	34.0	144.0	
187.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	178.0	
186.0	CARBONDALE	TURNER MINE	SHALE	3.0	179.0	
183.0	CARBONDALE	SPRINGFIELD	COAL	4.5	182.0	
178.5	CARBONDALE	SPRINGFIELD	COAL	0.5	186.5	SHALE NOTED
178.0	CARBONDALE		UNDERCLAY	1.0	187.0	
177.0	CARBONDALE		SHALE	19.0	188.0	
158.0	CARBONDALE		BLUE SHALE	29.0	207.0	
129.0	CARBONDALE		LIMESTONE	2.0	236.0	
127.0	CARBONDALE		BLUE LIMESTONE	0.5	238.0	
126.5	CARBONDALE	EXCELLO	SHALE	2.5	238.5	
124.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	241.0	
122.2	CARBONDALE		UNDERCLAY	1.3	242.8	
121.0	CARBONDALE		LIMESTONE	16.0	244.0	
105.0	CARBONDALE		BLUE SHALE	16.0	260.0	
89.0	CARBONDALE	SURVANT	COAL	2.7	276.0	
86.3	CARBONDALE	SURVANT	COAL	0.3	278.7	BONEY
86.0	CARBONDALE		BLUE SHALE	1.0	279.0	
85.0	CARBONDALE		SHALE	35.0	280.0	
50.0	CARBONDALE		SANDSTONE	4.0	315.0	
46.0	CARBONDALE		SHALE	9.0	319.0	
37.0	CARBONDALE	MECCA QUARRY	SHALE	1.7	328.0	

35.3	CARBONDALE	COLCHESTER	COAL	0.3	329.7	
35.0	CARBONDALE		BLUE SHALE	3.0	330.0	
32.0	CARBONDALE		LIMESTONE	9.0	333.0	
23.0	CARBONDALE		SANDSTONE	5.0	342.0	
18.0	CARBONDALE		LIMESTONE	2.0	347.0	
16.0	CARBONDALE		SHALY SANDSTONE	17.0	349.0	BLUE
-1.0	CARBONDALE		SHALE	10.0	366.0	
-11.0	CARBONDALE		BLUE SHALE	6.2	376.0	
-17.2	CARBONDALE	DEKOVEN	COAL	0.6	382.2	
-17.8	CARBONDALE	DEKOVEN	SHALE	0.2	382.8	
-17.9	CARBONDALE	DEKOVEN	COAL	2.9	382.9	
-20.8	CARBONDALE		SANDSTONE	10.2	385.8	
-31.0	CARBONDALE		SHALE	5.3	396.0	
-36.3	CARBONDALE	DAVIS	COAL	3.9	401.3	
-40.2	TRADEWATER		SHALE	0.8	405.2	
-41.0	TRADEWATER		BLUE SHALE	2.0	406.0	
-43.0	TRADEWATER		SANDSTONE	8.0	408.0	
-51.0	TRADEWATER		SHALE	6.0	416.0	YELLOW BANDS; BLUE
-57.0	TRADEWATER		SANDSTONE	6.0	422.0	
-63.0	TRADEWATER		BLUE SHALE	9.0	428.0	
-72.0	TRADEWATER		BLUE SHALE	9.0	437.0	
-81.0	TRADEWATER		SHALE	3.0	446.0	
-84.0	TRADEWATER		COAL	0.6	449.0	
-84.6	TRADEWATER		BLUE SHALE	2.4	449.6	
-87.0	TRADEWATER		SHALE	20.0	452.0	
-107.0	TRADEWATER		BLUE SHALE	2.0	472.0	
-109.0	TRADEWATER		LIMESTONE	1.0	474.0	
-110.0	TRADEWATER		SHALE	5.0	475.0	
-115.0	TRADEWATER		SHALE	18.0	480.0	
-133.0	TRADEWATER		SANDSTONE	86.0	498.0	
-219.0	TRADEWATER		SANDSTONE	1.0	584.0	COAL PARTINGS
-220.0	TRADEWATER		SANDSTONE	2.6	585.0	
-222.6	TRADEWATER		COAL	0.3	587.6	
-222.8	TRADEWATER		BLUE SHALE	20.2	587.8	
-243.0	TRADEWATER		SHALY SANDSTONE	5.0	608.0	
-248.0	TRADEWATER		SANDSTONE	85.0	613.0	
-333.0	TRADEWATER		SHALE	12.0	698.0	
-345.0	TRADEWATER		SHALE	10.0	710.0	
-355.0	TRADEWATER		SHALE	22.0	720.0	
-377.0	TRADEWATER		SANDSTONE	14.8	742.0	
-391.8	TRADEWATER		COAL	0.5	756.8	
-392.3	TRADEWATER		LIMESTONE	0.7	757.3	
-393.0	TRADEWATER		SHALE	5.0	758.0	
-398.0	TRADEWATER		SANDSTONE	23.0	763.0	
-421.0	TRADEWATER		BLUE SHALE	14.0	786.0	
-435.0	TRADEWATER		SHALE	4.0	800.0	
-439.0	TRADEWATER		BLUE SHALE	6.0	804.0	
-445.0	TRADEWATER		SHALE	3.0	810.0	

-448.0	TRADEWATER	LIMESTONE	3.0	813.0	
-451.0	TRADEWATER	BLUE LIMESTONE	2.1	816.0	
-453.1	TRADEWATER	COAL	0.3	818.1	
-453.3	TRADEWATER	SHALE	14.7	818.3	
-468.0	TRADEWATER	BLUE SHALE	1.0	833.0	
-469.0	TRADEWATER	SHALE	2.0	834.0	
-471.0	TRADEWATER	BLUE SHALE	2.0	836.0	
-473.0	TRADEWATER	SHALE	10.0	838.0	
-483.0	TRADEWATER	SHALY SANDSTONE	8.0	848.0	
-491.0	TRADEWATER	SANDSTONE	8.0	856.0	
-499.0	TRADEWATER	SHALY SANDSTONE	29.0	864.0	
-528.0	TRADEWATER	SANDSTONE	12.0	893.0	
-540.0	TRADEWATER	SHALE	1.0	905.0	
-541.0	TRADEWATER	SANDSTONE	7.0	906.0	
-548.0	TRADEWATER	SHALY SANDSTONE	7.0	913.0	
-555.0	TRADEWATER	SHALY SANDSTONE	10.0	920.0	
-565.0	TRADEWATER	SANDSTONE	48.0	930.0	
-613.0	TRADEWATER	SANDSTONE	6.0	978.0	
-619.0	TRADEWATER	SHALE	2.0	984.0	SANDY
-621.0	TRADEWATER	SHALE WITH LIMESTONE	10.0	986.0	
-631.0	TRADEWATER	SHALY LIMESTONE	6.5	996.0	
-637.5	TRADEWATER	SANDSTONE	43.5	1002.5	
-681.0	TRADEWATER	SANDSTONE	37.0	1046.0	
-718.0	TRADEWATER	SHALE	8.0	1083.0	
-726.0	TRADEWATER	SANDSTONE	2.0	1091.0	
-728.0	TRADEWATER	SHALE	24.0	1093.0	
-752.0	TRADEWATER	SANDSTONE	7.0	1117.0	
-759.0	TRADEWATER	SANDSTONE	43.0	1124.0	
-802.0	TRADEWATER	SANDSTONE	23.0	1167.0	

MAPID: 05900227300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 660' S line, 990' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31301 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.652339 **DATE COLLECTED:** 0 / 0 / 1947

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 4.8 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-GREEN HILL MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.8		AVERAGE THICKNESS

MAPID: 05902214000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2200' S line, 160' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.300965 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.649176 **DATE COLLECTED:** 12 / 9 / 1957

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 150.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 51 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.0	PLEISTOCENE		CLAY	3.0	0.0	BROWN
360.0	PLEISTOCENE		CLAY	32.5	3.0	GRAY
327.5	PLEISTOCENE		SAND	39.5	35.5	GRAY
288.0	PLEISTOCENE		GRAVEL	6.5	75.0	
281.5			SHALE	3.5	81.5	PROBABLY BELOW DAVIS COAL -CGT
278.0			SHALE	1.4	85.0	
276.6			COAL	2.3	86.4	
274.2			SHALE	1.3	88.8	
273.0			SHALE	18.7	90.0	
254.3			GRAY LIMESTONE	0.7	108.7	
253.7			SHALE	5.7	109.3	
248.0			SHALE	20.0	115.0	
228.0			SHALE	7.5	135.0	
220.5			SHALE	4.3	142.5	
216.2			COAL	0.4	146.8	
215.7			SHALE	2.8	147.3	

MAPID: 05902214000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 2200' S line, 160' E line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.300965 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.649176 **DATE COLLECTED:** 12 / 9 / 1957

SURFACE ELEVATION (FT.): 363.0 **LOGGED (FT.):** 150.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.0			UNCONSOLIDATED	81.5	0.0	
281.5	CARBONDALE		ROCK	5.0	81.5	
276.5	CARBONDALE		COAL	2.3	86.5	
274.2	CARBONDALE		ROCK	58.1	88.8	
216.1	CARBONDALE	COLCHESTER	COAL	0.4	146.9	
215.7	CARBONDALE		ROCK	2.8	147.3	

MAPID: 05902459000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1175' N line, 650' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.302623 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.654679 **DATE COLLECTED:** 6 / 15 / 1959
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 222 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		CLAY	2.0	0.0	GRAY
358.0	PLEISTOCENE		CLAY	38.0	2.0	
320.0	PLEISTOCENE		SILT & SAND	44.5	40.0	
275.5			SHALE	15.5	84.5	

MAPID: 05903368000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** SE SE SW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.314771 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.650982 **DATE COLLECTED:** 0 / 0 / 1968
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 96.0 **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	40.0	0.0	
340.0			ROCK	31.0	40.0	
309.0			COAL	2.0	71.0	
307.0			ROCK	23.0	73.0	

MAPID: 05924192000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 330' N line, 830' E line of SE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.31256 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.645907 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 357.0 **LOGGED (FT.):** 1235.0 **LOG TYPE:** Electric Log
SOURCE: **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-878.0	BASE OF PENN.		UNCLASSIFIED	-	1235.0	

MAPID: 05924202000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1750' N line, 1940' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.312008 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653088 **DATE COLLECTED:** 12 / 1 / 1981
SURFACE ELEVATION (FT.): 469.0 **LOGGED (FT.):** 50.3 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
469.0	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
466.0	CARBONDALE		SANDSTONE	30.0	3.0	
436.0	CARBONDALE		SHALE	13.0	33.0	
423.0	CARBONDALE	BRIAR HILL	COAL	2.3	46.0	
420.7	CARBONDALE		UNDERCLAY	2.0	48.3	

MAPID: 05924203000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1460' N line, 2000' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.311779 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653886 **DATE COLLECTED:** 12 / 1 / 1981
SURFACE ELEVATION (FT.): 510.7 **LOGGED (FT.):** 20.8 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 2B **WELL TYPE:** Coal Test
COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
510.7	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
503.7	PLEISTOCENE		CLAY	9.0	7.0	
494.7	PLEISTOCENE		CLAY	1.0	16.0	DARK
493.7	CARBONDALE	HERRIN	COAL	3.8	17.0	

MAPID: 05924204000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1280' N line, 2000' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.311768 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654383 **DATE COLLECTED:** 12 / 1 / 1981
SURFACE ELEVATION (FT.): 525.7 **LOGGED (FT.):** 50.8 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. #3B **WELL TYPE:** Coal Test
COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
525.7	PLEISTOCENE		CLAY	10.0	0.0	
515.7	CARBONDALE		SANDSTONE	23.0	10.0	
492.7	CARBONDALE		SHALE	3.0	33.0	
489.7	CARBONDALE		BROWN SHALE	11.0	36.0	
478.7	CARBONDALE	HERRIN	COAL	3.8	47.0	

MAPID: 05924205000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1280' N line, 2550' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.309858 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654385 **DATE COLLECTED:** 12 / 1 / 1981
SURFACE ELEVATION (FT.): 511.2 **LOGGED (FT.):** 47.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 4B **WELL TYPE:** Coal Test
COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
511.2	PLEISTOCENE		CLAY	8.0	0.0	
503.2	CARBONDALE		SANDSTONE	21.0	8.0	
482.2	CARBONDALE		BROWN SHALE	1.0	29.0	
481.2	CARBONDALE		SHALE	13.0	30.0	BLUE
468.2	CARBONDALE	HERRIN	COAL	4.5	43.0	

MAPID: 05924206000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1300' N line, 2450' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.308876 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.65433 **DATE COLLECTED:** 12 / 1 / 1981
SURFACE ELEVATION (FT.): 482.9 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 5B **WELL TYPE:** Coal Test
COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
482.9	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
479.9	CARBONDALE		SANDSTONE	17.0	3.0	BROWN
462.9	CARBONDALE		SANDSTONE	2.0	20.0	GRAY
460.9	CARBONDALE		SHALE	19.8	22.0	
441.1	CARBONDALE	HERRIN	COAL	4.2	41.8	

MAPID: 05924207000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 800' N line, 2000' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.307301 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.655711 **DATE COLLECTED:** 12 / 2 / 1981
SURFACE ELEVATION (FT.): 433.5 **LOGGED (FT.):** 29.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 6B **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
433.5	PLEISTOCENE		CLAY	7.0	0.0	
426.5	CARBONDALE		SANDSTONE	13.0	7.0	
413.5	CARBONDALE		SANDSTONE	5.5	20.0	SOFT
408.0	CARBONDALE	HERRIN	COAL	3.5	25.5	

MAPID: 05924208000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 140' N line, 2300' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31065 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657532 **DATE COLLECTED:** 12 / 2 / 1981

SURFACE ELEVATION (FT.): 459.3 **LOGGED (FT.):** 55.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 7B **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
459.3	PLEISTOCENE		CLAY	7.0	0.0	
452.3			SANDSTONE	25.0	7.0	
427.3			SANDSTONE	3.0	32.0	GRAY
424.3			SANDSTONE	1.0	35.0	BROWN
423.3			SHALE	12.0	36.0	
411.3	CARBONDALE	BRERETON	LIMESTONE	3.5	48.0	
407.8			SHALE	0.5	51.5	
407.3	CARBONDALE	HERRIN	COAL	3.5	52.0	

MAPID: 05924209000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 85' N line, 633' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.316436 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657678 **DATE COLLECTED:** 12 / 2 / 1981

SURFACE ELEVATION (FT.): 478.9 **LOGGED (FT.):** 47.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 8B **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
478.9	PLEISTOCENE		CLAY	5.0	0.0	
473.9	CARBONDALE		SANDSTONE	31.0	5.0	
442.9	CARBONDALE		SHALE	6.0	36.0	
436.9	CARBONDALE		LIMESTONE	1.0	42.0	
435.9	CARBONDALE		SHALE	0.5	43.0	
435.4	CARBONDALE	HERRIN	COAL	4.0	43.5	

MAPID: 05924210000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1090' N line, 975' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.315315 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654905 **DATE COLLECTED:** 12 / 2 / 1981
SURFACE ELEVATION (FT.): 526.8 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 9B **WELL TYPE:** Coal Test
COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
526.8	PLEISTOCENE		CLAY	10.0	0.0	
516.8			SANDSTONE	28.0	10.0	
488.8	CARBONDALE		SHALE	6.0	38.0	
482.8	CARBONDALE		LIMESTONE	0.5	44.0	
482.3	CARBONDALE		SHALE	0.5	44.5	
481.8	CARBONDALE	HERRIN	COAL	4.0	45.0	

MAPID: 05924339000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981
SURFACE ELEVATION (FT.): 396.8 **LOGGED (FT.):** 46.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.8	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
386.8	PLEISTOCENE		CLAY	7.0	10.0	
379.8			SHALE	29.0	17.0	

MAPID: 05924340000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981
SURFACE ELEVATION (FT.): 402.1 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 2 **WELL TYPE:** Coal Test
COMMENT: PENCILED LOCATIONS ON LOG INCORRECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.1	PLEISTOCENE		CLAY	5.5	0.0	
396.6	CARBONDALE	BRIAR HILL	COAL	1.5	5.5	SMUTTY
395.1	CARBONDALE		UNDERCLAY	3.0	7.0	
392.1	CARBONDALE		SANDSTONE	0.5	10.0	
391.6	CARBONDALE		CLAYSTONE & SHALE	7.0	10.5	
384.6	CARBONDALE		SHALE	42.5	17.5	

MAPID: 05924341000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981
SURFACE ELEVATION (FT.): 412.2 **LOGGED (FT.):** 27.3 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 3 **WELL TYPE:** Coal Test
COMMENT: PENCILED LOCATIONS ON LOG INCORRCT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
412.2	PLEISTOCENE		UNCONSOLIDATED	14.5	0.0	
397.7	CARBONDALE		SHALE	7.5	14.5	
390.2	CARBONDALE	SPRINGFIELD	COAL	5.3	22.0	

MAPID: 05924342000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981
SURFACE ELEVATION (FT.): 408.3 **LOGGED (FT.):** 11.7 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 4 **WELL TYPE:** Coal Test
COMMENT: PENCILED LOCATIONS ON LOG INCORRECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
408.3	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
401.3	CARBONDALE		SHALE	1.0	7.0	
400.3	CARBONDALE	SPRINGFIELD	COAL	3.7	8.0	

MAPID: 05924343000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981
SURFACE ELEVATION (FT.): 404.4 **LOGGED (FT.):** 22.6 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 5 **WELL TYPE:** Coal Test
COMMENT: PENCILED LOCATIONS ON LOG INCORRECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.4	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
395.4	CARBONDALE		SHALE	4.5	9.0	
390.9	CARBONDALE	ST. DAVID	LIMESTONE	1.0	13.5	
389.9	CARBONDALE	TURNER MINE	SHALE	3.5	14.5	
386.4	CARBONDALE	SPRINGFIELD	COAL	4.6	18.0	

MAPID: 05924344000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981

SURFACE ELEVATION (FT.): 398.3 **LOGGED (FT.):** 12.3 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6 **WELL TYPE:** Coal Test

COMMENT: PENCILED LOCATIONS ON LOG INCORRECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
398.3	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
394.3	CARBONDALE		SHALE	2.5	4.0	BLUE
391.8	CARBONDALE	TURNER MINE	SHALE	1.7	6.5	
390.1	CARBONDALE	SPRINGFIELD	COAL	4.2	8.2	

MAPID: 05924345000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 13 / 1981

SURFACE ELEVATION (FT.): 437.0 **LOGGED (FT.):** 49.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 7 **WELL TYPE:** Coal Test

COMMENT: PENCILED LOCATIONS ON LOG INCORRECT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
437.0	CARBONDALE		SANDSTONE	20.0	0.0	
417.0	CARBONDALE		SHALE	24.8	20.0	
392.2	CARBONDALE	SPRINGFIELD	COAL	4.3	44.8	

MAPID: 05924346000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 14 / 1981

SURFACE ELEVATION (FT.): 435.7 **LOGGED (FT.):** 46.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 8 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
435.7	PLEISTOCENE		UNCONSOLIDATED	10.4	0.0	
425.3	CARBONDALE		SHALE	29.6	10.4	
395.7	CARBONDALE	SPRINGFIELD	COAL	4.5	40.0	
391.2	CARBONDALE		UNDERCLAY	2.0	44.5	

MAPID: 05924347000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.310706 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.653292 **DATE COLLECTED:** 10 / 14 / 1981

SURFACE ELEVATION (FT.): 467.4 **LOGGED (FT.):** 17.8 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
467.4	CARBONDALE		SANDSTONE	11.7	0.0	
455.7	CARBONDALE		SHALE	4.7	11.7	
451.1	CARBONDALE	SPRINGFIELD	COAL	1.5	16.3	

MAPID: 05924348000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 11 / 3 / 1981

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 101.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 1A **WELL TYPE:** Coal Test

COMMENT: PERMIT228 LOC 150YDS N-E END PIT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	11.0	0.0	
-	CARBONDALE		SHALE	27.0	11.0	
-	CARBONDALE	BRIAR HILL	COAL	2.2	38.0	
-	CARBONDALE		UNDERCLAY	0.8	40.2	
-	CARBONDALE		SHALE	3.0	41.0	
-	CARBONDALE		SANDSTONE/SHALE	3.0	44.0	
-	CARBONDALE		LIMESTONE	1.0	47.0	
-	CARBONDALE		SHALE	44.0	48.0	
-	CARBONDALE	ST. DAVID	LIMESTONE	0.5	92.0	
-	CARBONDALE	TURNER MINE	SHALE	4.0	92.5	
-	CARBONDALE	SPRINGFIELD	COAL	5.0	96.5	

MAPID: 05924349000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 11 / 3 / 1981

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 2A **WELL TYPE:** Coal Test

COMMENT: EXACT LOCATION NOT GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	CARBONDALE		SANDSTONE	9.0	0.0	
422.0	CARBONDALE		SHALE	22.0	9.0	
400.0	CARBONDALE		SANDY SHALE	3.0	31.0	
397.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	34.0	
396.2	CARBONDALE	TURNER MINE	SHALE	3.3	34.8	
392.8	CARBONDALE	SPRINGFIELD	COAL	4.8	38.2	

MAPID: 05924350000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 3 / 28 / 1974

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	PLEISTOCENE		CLAY	10.0	0.0	
421.0	CARBONDALE		SANDSTONE	29.0	10.0	
392.0	CARBONDALE		SHALE	5.0	39.0	
387.0	CARBONDALE	ANNA	SHALE	7.0	44.0	BLACK
380.0	CARBONDALE	HERRIN	COAL	4.0	51.0	
376.0	CARBONDALE		UNDERCLAY	4.0	55.0	
372.0	CARBONDALE		SANDSTONE	37.0	59.0	

MAPID: 05924351000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 3 / 29 / 1974

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 32.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	PLEISTOCENE		CLAY	8.0	0.0	
423.0	CARBONDALE		SANDSTONE	9.0	8.0	
414.0	CARBONDALE		CLAYSTONE & SHALE	8.0	17.0	
406.0	CARBONDALE	ANNA	SHALE	3.0	25.0	BLACK
403.0	CARBONDALE	HERRIN	COAL	4.0	28.0	

MAPID: 05924352000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 3 / 29 / 1974

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 58.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
421.0	CARBONDALE		SANDSTONE	7.0	10.0	
414.0	CARBONDALE		LIMESTONE	1.5	17.0	
412.5	CARBONDALE		SANDSTONE	8.5	18.5	
404.0	CARBONDALE		SHALE	16.0	27.0	
388.0	CARBONDALE	ANNA	SHALE	10.5	43.0	BLACK
377.5	CARBONDALE	HERRIN	COAL	5.0	53.5	

MAPID: 05924353000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 3 / 29 / 1974

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 21.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
424.0	CARBONDALE		SANDSTONE	6.0	7.0	WITH CLAY
418.0	CARBONDALE		SHALE	4.0	13.0	
414.0	CARBONDALE	ANNA	SHALE	3.0	17.0	BLACK
411.0	CARBONDALE	HERRIN	COAL	1.0	20.0	

MAPID: 05924354000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.314132 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654217 **DATE COLLECTED:** 10 / 14 / 1981

SURFACE ELEVATION (FT.): 431.0 **LOGGED (FT.):** 70.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 10 **WELL TYPE:** Coal Test

COMMENT: LOCATION NOT PLOTTED BY COMPANY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
431.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
426.0	CARBONDALE		SHALE	1.0	5.0	
425.0	CARBONDALE		SANDSTONE	7.5	6.0	
417.5	CARBONDALE		SHALE	1.5	13.5	
416.0	CARBONDALE		SANDSTONE	6.0	15.0	
410.0	CARBONDALE		SHALE	5.0	21.0	
405.0	CARBONDALE		SANDSTONE	9.0	26.0	
396.0	CARBONDALE		SHALE	25.0	35.0	
371.0	CARBONDALE	ST. DAVID	LIMESTONE	1.5	60.0	
369.5	CARBONDALE	TURNER MINE	SHALE	3.5	61.5	
366.0	CARBONDALE	SPRINGFIELD	COAL	5.0	65.0	

MAPID: 05924355000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1115' N line, 624' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.316535 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654835 **DATE COLLECTED:** 12 / 29 / 1981

SURFACE ELEVATION (FT.): 529.9 **LOGGED (FT.):** 183.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 1C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
529.9	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
520.9	CARBONDALE		SANDSTONE	32.0	9.0	
488.9			SANDSTONE	1.0	41.0	GRAY
487.9	CARBONDALE	HERRIN	COAL	2.5	42.0	
485.4	CARBONDALE		UNDERCLAY	2.5	44.5	
482.9	CARBONDALE		SANDSTONE	6.0	47.0	
476.9	CARBONDALE		LIMESTONE	1.0	53.0	
475.9	CARBONDALE		SHALE	10.0	54.0	WITH ROCK
465.9	CARBONDALE		UNDERCLAY	11.0	64.0	
454.9	CARBONDALE		SANDSTONE	6.0	75.0	
448.9	CARBONDALE		SHALE	36.5	81.0	(ROCK MIXED)
412.4	CARBONDALE	BRIAR HILL	COAL	1.5	117.5	
410.9	CARBONDALE		SHALE	8.0	119.0	
402.9	CARBONDALE		LIMESTONE	0.8	127.0	
402.1	CARBONDALE		SANDSTONE	10.3	127.8	
391.9	CARBONDALE		LIMESTONE	4.0	138.0	
387.9	CARBONDALE		SHALE	28.0	142.0	
359.9	CARBONDALE	TURNER MINE	SHALE	5.0	170.0	SLATE
354.9	CARBONDALE	SPRINGFIELD	COAL	5.0	175.0	
349.9	CARBONDALE		UNDERCLAY	3.0	180.0	

MAPID: 05924356000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 110' N line, 600' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.316552 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65761 **DATE COLLECTED:** 12 / 30 / 1981

SURFACE ELEVATION (FT.): 480.2 **LOGGED (FT.):** 162.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 2C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
480.2	PLEISTOCENE		CLAY	5.0	0.0	
475.2	CARBONDALE		SANDSTONE	31.0	5.0	
444.2	CARBONDALE		SHALE	6.0	36.0	
438.2	CARBONDALE		LIMESTONE	5.0	42.0	
433.2	CARBONDALE		SHALE	3.0	47.0	
430.2	CARBONDALE		LIMESTONE	2.0	50.0	
428.2	CARBONDALE		SHALE	11.0	52.0	
417.2	CARBONDALE		SANDSTONE	19.0	63.0	
398.2	CARBONDALE		SHALE	4.0	82.0	
394.2	CARBONDALE		SHALE	21.0	86.0	BLUE
373.2	CARBONDALE	BRIAR HILL	COAL	2.0	107.0	
371.2	CARBONDALE		ROCK	12.0	109.0	
359.2	CARBONDALE		SHALE	2.0	121.0	WITH ROCK
357.2	CARBONDALE		SHALE	4.0	123.0	
353.2	CARBONDALE		ROCK	11.0	127.0	
342.2	CARBONDALE		DARK SHALE	20.0	138.0	
322.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	158.0	
321.7	CARBONDALE	TURNER MINE	SHALE	3.5	158.5	
318.2	CARBONDALE	SPRINGFIELD	COAL	-	162.0	

MAPID: 05924357000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 950' N line, 1475' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.313569 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.655293 **DATE COLLECTED:** 12 / 31 / 1981

SURFACE ELEVATION (FT.): 516.4 **LOGGED (FT.):** 179.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 3C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
516.4	PLEISTOCENE		CLAY	8.0	0.0	
508.4	CARBONDALE		SANDSTONE	34.0	8.0	
474.4	CARBONDALE		COAL	0.5	42.0	
473.9	CARBONDALE		SHALE	5.5	42.5	
468.4	CARBONDALE	HERRIN	COAL	4.0	48.0	
464.4	CARBONDALE		UNDERCLAY	2.5	52.0	
461.9	CARBONDALE		SHALE	6.5	54.5	
455.4	CARBONDALE		SANDSTONE	10.0	61.0	
445.4	CARBONDALE		SHALE	29.0	71.0	
416.4	CARBONDALE		SHALE	13.0	100.0	
403.4	CARBONDALE	BRIAR HILL	COAL	1.8	113.0	
401.6	CARBONDALE		SHALE	13.3	114.8	
388.4	CARBONDALE		SANDSTONE	3.0	128.0	
385.4	CARBONDALE		SHALE	27.0	131.0	
358.4	CARBONDALE	ST. DAVID	LIMESTONE	11.0	158.0	
347.4	CARBONDALE	TURNER MINE	SHALE	5.0	169.0	SLATE
342.4	CARBONDALE	SPRINGFIELD	COAL	5.0	174.0	

MAPID: 05924358000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1400' N line, 1400' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.31386 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654051 **DATE COLLECTED:** 1 / 5 / 1982

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 86.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 4C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
450.0	PLEISTOCENE		CLAY	20.0	0.0	
430.0	CARBONDALE		SHALE	8.0	20.0	
422.0	CARBONDALE	BRIAR HILL	COAL	2.5	28.0	
419.5	CARBONDALE		UNDERCLAY	1.5	30.5	
418.0	CARBONDALE		ROCK	10.0	32.0	
408.0	CARBONDALE		SHALE	44.0	42.0	
364.0	CARBONDALE		SHALE	0.0	86.0	SLATE

MAPID: 05924359000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1250' N line, 2560' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.309256 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65447 **DATE COLLECTED:** 1 / 5 / 1982

SURFACE ELEVATION (FT.): 499.1 **LOGGED (FT.):** 183.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 5C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
499.1	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
484.1	CARBONDALE		SANDSTONE	23.0	15.0	
461.1	CARBONDALE		SHALE	6.5	38.0	
454.6	CARBONDALE	HERRIN	COAL	4.0	44.5	
450.6	CARBONDALE		UNDERCLAY	2.0	48.5	
448.6	CARBONDALE		SHALE	9.5	50.5	
439.1	CARBONDALE		SANDSTONE	36.0	60.0	
403.1	CARBONDALE		SHALE	19.0	96.0	
384.1	CARBONDALE	BRIAR HILL	COAL	2.0	115.0	
382.1	CARBONDALE		SHALE	9.0	117.0	
373.1	CARBONDALE		SANDSTONE	6.0	126.0	
367.1	CARBONDALE		SHALE	42.5	132.0	
324.6	CARBONDALE	TURNER MINE	SHALE	4.0	174.5	BLACK
320.6	CARBONDALE	SPRINGFIELD	COAL	5.0	178.5	

MAPID: 05900070901M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE NW SE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330544 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.652989 **DATE COLLECTED:** 2 / 9 / 1955

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 15.6 **LOG TYPE:**

SOURCE: MINE NOTES-J. SIMON, RANDALL C C **WELL TYPE:** Strip Mine

COMMENT: SAMPLE 100 YDS EAST OF TIPPLE #1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	10.7		
-	CARBONDALE	SPRINGFIELD	COAL	4.4		
-	CARBONDALE		ROCK	0.5		

MAPID: 05900070902M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.331096 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.653458 **DATE COLLECTED:** 3 / 2 / 1955
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 4.4 **LOG TYPE:**
SOURCE: MINE NOTES-J. SIMON, RANDALL C C **WELL TYPE:** Strip Mine
COMMENT: SAMPLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.4		

MAPID: 05900227600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** SE SW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.330508 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.654833 **DATE COLLECTED:** 0 / 0 / 1953
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 20.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DILLARD C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	15.0		
-	CARBONDALE	SPRINGFIELD	COAL	5.0		

MAPID: 05900227500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.324357 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.653367 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 4.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-LITTLE JOE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 05900227400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE SW SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.326071 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.652004 **DATE COLLECTED:** 0 / 0 / 1949
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 44.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DILARD C C, JENNINGS MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	40.0	0.0	
360.0	CARBONDALE	SPRINGFIELD	COAL	4.5	40.0	

MAPID: 05924211000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1100' N line, 100' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.319048 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654881 **DATE COLLECTED:** 7 / 27 / 1979
SURFACE ELEVATION (FT.): 530.4 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1 **WELL TYPE:** Coal Test
COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
530.4	PLEISTOCENE		CLAY	3.0	0.0	
527.4	CARBONDALE		SANDSTONE	22.0	3.0	
505.4	CARBONDALE		SHALE	11.5	25.0	BLUE
493.9	CARBONDALE	ANNA	SHALE	1.0	36.5	BLACK
492.9	CARBONDALE	HERRIN	COAL	4.0	37.5	
488.9	CARBONDALE		UNDERCLAY	1.5	41.5	

MAPID: 05924212000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1100' N line, 540' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.320575 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654899 **DATE COLLECTED:** 7 / 30 / 1979
SURFACE ELEVATION (FT.): 538.1 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
538.1	PLEISTOCENE		CLAY	7.0	0.0	
531.1	CARBONDALE		SANDSTONE	27.0	7.0	
504.1	CARBONDALE		SHALE	2.0	34.0	
502.1	CARBONDALE		SANDSTONE	1.0	36.0	
501.1	CARBONDALE		SHALE	4.0	37.0	
497.1	CARBONDALE		CLAYSTONE	3.0	41.0	WITH SANDSTONE
494.1	CARBONDALE		SHALE	1.0	44.0	SMUTTY
493.1	CARBONDALE	HERRIN	COAL	4.0	45.0	
489.1	CARBONDALE		UNDERCLAY	2.0	49.0	

MAPID: 05924213000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1500' N line, 1280' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.323173 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.653827 **DATE COLLECTED:** 7 / 30 / 1979
SURFACE ELEVATION (FT.): 501.4 **LOGGED (FT.):** 52.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
501.4	PLEISTOCENE		CLAY	3.0	0.0	
498.4	CARBONDALE		SANDSTONE	18.0	3.0	
480.4	CARBONDALE		SHALE	25.0	21.0	
455.4	CARBONDALE		SHALE	0.5	46.0	BLACK
454.9	CARBONDALE	BRIAR HILL	COAL	2.0	46.5	
452.9	CARBONDALE		UNDERCLAY	4.0	48.5	

MAPID: 05924214000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1300' N line, 940' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.321977 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654364 **DATE COLLECTED:** 7 / 31 / 1979

SURFACE ELEVATION (FT.): 525.8 **LOGGED (FT.):** 26.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 4 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
525.8	PLEISTOCENE		CLAY	3.0	0.0	
522.8	PLEISTOCENE		CLAY	7.0	3.0	WITH SANDSTONE
515.8	CARBONDALE		SANDSTONE	5.0	10.0	
510.8	CARBONDALE		CLAYSTONE & SHALE	5.5	15.0	
505.3	CARBONDALE		SHALE	0.5	20.5	SMUTTY
504.8	CARBONDALE	HERRIN	COAL	3.5	21.0	
501.3	CARBONDALE		UNDERCLAY	2.0	24.5	

MAPID: 05924215000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1040' N line, 940' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.321961 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.655082 **DATE COLLECTED:** 7 / 31 / 1979

SURFACE ELEVATION (FT.): 499.4 **LOGGED (FT.):** 18.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 5 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
499.4	PLEISTOCENE		CLAY	11.0	0.0	
488.4	CARBONDALE		SHALE	1.0	11.0	SMUTTY
487.4	CARBONDALE	HERRIN	COAL	4.0	12.0	
483.4	CARBONDALE		UNDERCLAY	2.0	16.0	

MAPID: 05924216000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 570' N line, 660' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.320958 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656369 **DATE COLLECTED:** 8 / 1 / 1979

SURFACE ELEVATION (FT.): 492.3 **LOGGED (FT.):** 35.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
492.3	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
488.3	CARBONDALE		SANDSTONE	16.0	4.0	
472.3	CARBONDALE		COAL	2.0	20.0	TRACE
470.3	CARBONDALE		SHALE	13.0	22.0	
457.3			MINE OPENING	-	35.0	OLD WORKS-MINED OUT

MAPID: 05924217000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1300' N line, 2200' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.326351 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65442 **DATE COLLECTED:** 8 / 8 / 1979

SURFACE ELEVATION (FT.): 484.3 **LOGGED (FT.):** 111.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 7 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
484.3	PLEISTOCENE		CLAY	4.0	0.0	
480.3	CARBONDALE		SANDSTONE	16.0	4.0	
464.3	CARBONDALE		SHALE	26.0	20.0	
438.3	CARBONDALE	BRIAR HILL	COAL	2.0	46.0	
436.3	CARBONDALE		UNDERCLAY	3.0	48.0	
433.3	CARBONDALE		SHALE	2.0	51.0	
431.3	CARBONDALE		SHALE	3.0	53.0	
428.3	CARBONDALE		LIMESTONE	1.0	56.0	
427.3	CARBONDALE		SHALE	13.0	57.0	WITH ROCK
414.3	CARBONDALE		ROCK	1.0	70.0	
413.3	CARBONDALE		SHALE	29.0	71.0	
384.3	CARBONDALE		ROCK	1.0	100.0	
383.3	CARBONDALE	TURNER MINE	SHALE	4.0	101.0	BLACK
379.3	CARBONDALE	SPRINGFIELD	COAL	4.0	105.0	
375.3	CARBONDALE		UNDERCLAY	2.0	109.0	

MAPID: 05924218000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 640' N line, 2040' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.325752 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656236 **DATE COLLECTED:** 8 / 9 / 1979
SURFACE ELEVATION (FT.): 448.8 **LOGGED (FT.):** 114.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 8 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
448.8	PLEISTOCENE		CLAY	3.0	0.0	
445.8	CARBONDALE		SANDSTONE	16.0	3.0	
429.8	CARBONDALE		SHALE	28.5	19.0	
401.3	CARBONDALE	BRIAR HILL	COAL	2.5	47.5	
398.8	CARBONDALE		UNDERCLAY	1.0	50.0	
397.8	CARBONDALE		SHALE	4.0	51.0	WITH ROCK
393.8	CARBONDALE		SANDSTONE	5.0	55.0	
388.8	CARBONDALE		SHALE	20.0	60.0	WITH ROCK
368.8	CARBONDALE		SHALE	23.0	80.0	
345.8	CARBONDALE	ST. DAVID	LIMESTONE	1.0	103.0	
344.8	CARBONDALE	TURNER MINE	SHALE	3.5	104.0	
341.3	CARBONDALE	SPRINGFIELD	COAL	5.0	107.5	
336.3	CARBONDALE		UNDERCLAY	2.0	112.5	

MAPID: 05924219000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1430' N line, 1020' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.333158 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654148 **DATE COLLECTED:** 8 / 17 / 1979
SURFACE ELEVATION (FT.): 393.5 **LOGGED (FT.):** 72.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.5	PLEISTOCENE		CLAY	24.0	0.0	
369.5	CARBONDALE		SANDSTONE	3.0	24.0	
366.5	CARBONDALE		SHALE	8.0	27.0	WITH SANDSTONE
358.5	CARBONDALE		SHALE	28.0	35.0	
330.5	CARBONDALE		LIMESTONE	1.5	63.0	
329.0	CARBONDALE		SHALE	3.5	64.5	
325.5	CARBONDALE		COAL	2.0	68.0	
323.5	CARBONDALE		UNDERCLAY	2.0	70.0	
321.5	CARBONDALE		LIMESTONE	-	72.0	

MAPID: 05924220000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2420' N line, 370' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335465 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.651444 **DATE COLLECTED:** 8 / 17 / 1979

SURFACE ELEVATION (FT.): 419.1 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
419.1	PLEISTOCENE		CLAY	15.0	0.0	
404.1	CARBONDALE		SHALE	21.0	15.0	
383.1	CARBONDALE		SHALE	5.0	36.0	BLACK
378.1	CARBONDALE		COAL	2.0	41.0	

MAPID: 05924221000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2110' N line, 370' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335448 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.652299 **DATE COLLECTED:** 8 / 17 / 1979

SURFACE ELEVATION (FT.): 483.9 **LOGGED (FT.):** 58.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
483.9	PLEISTOCENE		CLAY	6.0	0.0	
477.9	CARBONDALE		SANDY SHALE	11.0	6.0	
466.9	CARBONDALE		SANDSTONE	3.0	17.0	
463.9	CARBONDALE		SHALE	29.0	20.0	
434.9	CARBONDALE	TURNER MINE	SHALE	4.5	49.0	
430.4	CARBONDALE	SPRINGFIELD	COAL	4.5	53.5	

MAPID: 05924222000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 15' N line, 1830' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.324984 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657951 **DATE COLLECTED:** 8 / 9 / 1979

SURFACE ELEVATION (FT.): 404.7 **LOGGED (FT.):** 103.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 9 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.7	PLEISTOCENE		CLAY	3.0	0.0	
401.7	CARBONDALE		SHALE	36.0	3.0	
365.7	CARBONDALE	BRIAR HILL	COAL	2.5	39.0	
363.2	CARBONDALE		UNDERCLAY	1.5	41.5	
361.7	CARBONDALE		SHALE	27.0	43.0	
334.7	CARBONDALE		SANDSTONE	1.0	70.0	TRACE OF COAL
333.7	CARBONDALE		SANDSTONE	12.0	71.0	
321.7	CARBONDALE		SHALE	7.0	83.0	
314.7	CARBONDALE		SHALE	4.0	90.0	
310.7	CARBONDALE		ROCK	2.0	94.0	
308.7	CARBONDALE	SPRINGFIELD	COAL	5.0	96.0	
303.7	CARBONDALE		UNDERCLAY	2.0	101.0	

MAPID: 05924223000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 970' N line, 600' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.320774 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65526 **DATE COLLECTED:** 8 / 9 / 1979

SURFACE ELEVATION (FT.): 531.8 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 10 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
531.8	PLEISTOCENE		CLAY	10.0	0.0	
521.8	CARBONDALE		SANDSTONE	29.0	10.0	
492.8	CARBONDALE		CLAYSTONE & SILTSTONE	8.0	39.0	
484.8	CARBONDALE		SMUT	0.5	47.0	
484.3	CARBONDALE	HERRIN	COAL	3.0	47.5	
481.3	CARBONDALE		UNDERCLAY	4.5	50.5	
476.8	CARBONDALE		SHALE	4.0	55.0	
472.8	CARBONDALE		SANDSTONE	29.0	59.0	
443.8	CARBONDALE		SHALE	23.0	88.0	
420.8	CARBONDALE	BRIAR HILL	COAL	2.0	111.0	
418.8	CARBONDALE		UNDERCLAY	1.0	113.0	
417.8	CARBONDALE		SHALE	13.0	114.0	
404.8	CARBONDALE		SANDSTONE	2.0	127.0	
402.8	CARBONDALE		SHALE	20.0	129.0	
382.8	CARBONDALE	TURNER MINE	SHALE	3.0	149.0	
379.8	CARBONDALE	SPRINGFIELD	COAL	4.5	152.0	
375.3	CARBONDALE		UNDERCLAY	3.5	156.5	

MAPID: 05924224000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 15' N line, 630' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.320818 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.657897 **DATE COLLECTED:** 8 / 10 / 1979
SURFACE ELEVATION (FT.): 464.8 **LOGGED (FT.):** 164.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 11 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
464.8	PLEISTOCENE		CLAY	3.0	0.0	
461.8	CARBONDALE		SANDSTONE	21.0	3.0	
440.8	CARBONDALE		CLAYSTONE & SHALE	5.0	24.0	
435.8	CARBONDALE	HERRIN	COAL	5.0	29.0	
430.8	CARBONDALE		UNDERCLAY	5.0	34.0	
425.8	CARBONDALE		SANDSTONE	31.0	39.0	
394.8	CARBONDALE		SHALE	29.0	70.0	WITH ROCK
365.8	CARBONDALE	BRIAR HILL	COAL	2.5	99.0	
363.3	CARBONDALE		UNDERCLAY	1.5	101.5	
361.8	CARBONDALE		SHALE	7.0	103.0	
354.8	CARBONDALE		ROCK	3.0	110.0	
351.8	CARBONDALE		SHALE	11.0	113.0	
340.8	CARBONDALE		SHALE	32.0	124.0	WITH ROCK
308.8	CARBONDALE	TURNER MINE	SHALE	3.0	156.0	
305.8	CARBONDALE	SPRINGFIELD	COAL	5.0	159.0	

MAPID: 05924225000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 385' N line, 600' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.320738 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656875 **DATE COLLECTED:** 8 / 10 / 1979
SURFACE ELEVATION (FT.): 477.0 **LOGGED (FT.):** 34.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 12 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
477.0	CARBONDALE		SANDSTONE	28.0	0.0	
449.0	CARBONDALE	HERRIN	COAL	4.0	28.0	
445.0	CARBONDALE		UNDERCLAY	2.0	32.0	

MAPID: 05924226000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 63' N line, 186' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.319279 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.657746 **DATE COLLECTED:** 8 / 10 / 1979
SURFACE ELEVATION (FT.): 376.1 **LOGGED (FT.):** 74.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 13 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.1	PLEISTOCENE		CLAY	8.0	0.0	
368.1	CARBONDALE		SANDSTONE	15.0	8.0	WITH CLAY
353.1	CARBONDALE		SHALE	6.0	23.0	
347.1	CARBONDALE		SANDSTONE	6.0	29.0	
341.1	CARBONDALE		SHALE	28.0	35.0	
313.1	CARBONDALE	ST. DAVID	LIMESTONE	1.0	63.0	
312.1	CARBONDALE	TURNER MINE	SHALE	4.0	64.0	
308.1	CARBONDALE	SPRINGFIELD	COAL	5.0	68.0	
303.1	CARBONDALE		UNDERCLAY	1.0	73.0	

MAPID: 05924227000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1300' N line, 2050' W line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.329576 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654462 **DATE COLLECTED:** 8 / 16 / 1979
SURFACE ELEVATION (FT.): 500.5 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
500.5	PLEISTOCENE		CLAY	7.0	0.0	
493.5	CARBONDALE		SANDSTONE	19.0	7.0	
474.5	CARBONDALE		SANDSTONE/SHALE	7.0	26.0	
467.5	CARBONDALE		SHALE	32.0	33.0	
435.5	CARBONDALE	BRIAR HILL	COAL	2.0	65.0	
433.5	CARBONDALE		UNDERCLAY	3.0	67.0	
430.5	CARBONDALE		SHALE	44.0	70.0	
386.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	114.0	
385.5	CARBONDALE	TURNER MINE	SHALE	6.0	115.0	
379.5	CARBONDALE	SPRINGFIELD	COAL	5.0	121.0	
374.5	CARBONDALE		UNDERCLAY	1.0	126.0	

MAPID: 05924228000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 80' N line, 2370' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.328407 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657815 **DATE COLLECTED:** 8 / 16 / 1979

SURFACE ELEVATION (FT.): 470.6 **LOGGED (FT.):** 58.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
470.6	PLEISTOCENE		CLAY	7.0	0.0	
463.6	CARBONDALE		SANDSTONE	14.0	7.0	
449.6	CARBONDALE		SHALE	12.0	21.0	
437.6	CARBONDALE		COAL	4.0	33.0	
433.6	CARBONDALE		UNDERCLAY	3.0	37.0	
430.6	CARBONDALE		SHALE	7.0	40.0	
423.6	CARBONDALE		SANDSTONE	11.0	47.0	

MAPID: 05924229000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 680' N line, 1640' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330968 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65619 **DATE COLLECTED:** 8 / 16 / 1979

SURFACE ELEVATION (FT.): 383.9 **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
383.9	PLEISTOCENE		CLAY	16.0	0.0	
367.9	CARBONDALE		SANDSTONE	3.0	16.0	
364.9	CARBONDALE		SANDSTONE	6.0	19.0	WITH CLAY
358.9	CARBONDALE		SHALE	10.0	25.0	
348.9	CARBONDALE	TURNER MINE	SHALE	4.0	35.0	
344.9	CARBONDALE	SPRINGFIELD	COAL	5.0	39.0	

MAPID: 05924327000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1560' N line, 2180' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.3263 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.653702 **DATE COLLECTED:** 8 / 8 / 1979

SURFACE ELEVATION (FT.): 499.9 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
499.9	PLEISTOCENE		CLAY	5.0	0.0	
494.9	CARBONDALE		SANDSTONE	13.0	5.0	
481.9	CARBONDALE		SHALE	27.5	18.0	
454.4	CARBONDALE	BRIAR HILL	COAL	2.0	45.5	
452.4	CARBONDALE		UNDERCLAY	2.5	47.5	
449.9	CARBONDALE		SHALE	5.0	50.0	
444.9	CARBONDALE		ROCK	10.0	55.0	
434.9	CARBONDALE		SHALE	14.0	65.0	WITH ROCK
420.9	CARBONDALE		SHALE	23.0	79.0	
397.9	CARBONDALE	TURNER MINE	SHALE	4.0	102.0	
393.9	CARBONDALE	SPRINGFIELD	COAL	5.0	106.0	
388.9	CARBONDALE		UNDERCLAY	1.0	111.0	

MAPID: 05924328000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 880' N line, 2160' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.329175 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.655617 **DATE COLLECTED:** 8 / 16 / 1979

SURFACE ELEVATION (FT.): 510.5 **LOGGED (FT.):** 34.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
510.5	PLEISTOCENE		CLAY	3.0	0.0	
507.5			SANDSTONE	15.0	3.0	
492.5			CLAYSTONE & SHALE	3.0	18.0	DARK RED(WET)
489.5			SHALE	6.0	21.0	
483.5			CLAYSTONE & SHALE	3.0	27.0	WET
480.5	CARBONDALE		COAL	4.0	30.0	

MAPID: 05924329000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 1100' N line, 100' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.319048 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654881 **DATE COLLECTED:** 12 / 1 / 1979

SURFACE ELEVATION (FT.): 531.5 **LOGGED (FT.):** 42.8 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. PK1 **WELL TYPE:** Coal Test

COMMENT: LOCATION IS APPROXIMATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
531.5	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0	
508.5	CARBONDALE		SHALE	14.0	23.0	
494.5	CARBONDALE		SHALE	1.5	37.0	
493.0	CARBONDALE	HERRIN	COAL	4.0	38.5	
489.0	CARBONDALE		UNDERCLAY	0.3	42.5	

MAPID: 05924954000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2803' N line, 327' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.335631 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.650391 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 485.0 **LOGGED (FT.):** 128.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. BH-1 **WELL TYPE:** Coal Test

COMMENT: PERMIT 167; #4 MINE;ELEV. ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
485.0	PLEISTOCENE		CLAY	10.0	0.0	SILTY
475.0	CARBONDALE		SILTSTONE	10.5	10.0	
464.5	CARBONDALE		SHALE	36.6	20.5	SILTY, CARBONACEOUS, FINELY LAMINATED
427.9	CARBONDALE	TURNER MINE	SHALE	4.3	57.1	BLACK
423.6	CARBONDALE	SPRINGFIELD	COAL	4.7	61.4	
419.0	CARBONDALE		UNDERCLAY	1.0	66.0	
418.0	CARBONDALE		GRAY SHALE	45.3	67.0	
372.7	CARBONDALE	EXCELLO	SHALE	7.1	112.3	BLACK
365.6	CARBONDALE	HOUCHIN CREEK	COAL	3.6	119.4	HIT WATER
362.0	CARBONDALE		SHALE	5.0	123.0	CALCAREOUS; BLACK

MAPID: 05925418000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2624' S, 21' E, NW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.336682 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.650936 **DATE COLLECTED:** 6 / 14 / 2000

SURFACE ELEVATION (FT.): 405.5 **LOGGED (FT.):** 200.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 17EVG194 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
405.5			UNCONSOLIDATED	5.0	0.0	SPOIL - STRIP MINE
400.5			UNCONSOLIDATED	11.0	5.0	
389.5	CARBONDALE	PLEASANTVIEW	BROWN SANDSTONE	7.0	16.0	
382.5	CARBONDALE	PLEASANTVIEW	SANDSTONE	1.0	23.0	
381.5	CARBONDALE	PLEASANTVIEW	BROWN SANDSTONE	4.0	24.0	
377.5	CARBONDALE	PLEASANTVIEW	SANDSTONE	16.0	28.0	
361.5	CARBONDALE	SURVANT	COAL	2.1	44.0	
359.4	CARBONDALE		SANDY SHALE	6.9	46.1	
352.5	CARBONDALE		GRAY SHALE	10.0	53.0	
342.5	CARBONDALE		LIMESTONE	2.0	63.0	
340.5	CARBONDALE		SANDY SHALE	39.0	65.0	
301.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	104.0	
297.5	CARBONDALE	COLCHESTER	COAL	0.3	108.0	
297.2	CARBONDALE		SANDY SHALE	4.7	108.3	
292.5	CARBONDALE		SANDY SHALE	4.0	113.0	LIMEY
288.5	CARBONDALE		LIMESTONE	1.0	117.0	
287.5	CARBONDALE		SANDY SHALE	38.0	118.0	
249.5	CARBONDALE	DEKOVEN	COAL	2.9	156.0	
246.6	CARBONDALE		CLAYSTONE & SILTSTONE	1.1	158.9	
245.5	CARBONDALE		SANDY SHALE	7.0	160.0	
238.5	CARBONDALE		SANDSTONE	13.0	167.0	
225.5	CARBONDALE		SANDY SHALE	2.0	180.0	
223.5	CARBONDALE		BLACK SHALE	2.0	182.0	
221.5	CARBONDALE	DAVIS	COAL	3.6	184.0	
217.9	TRADEWATER		CLAYSTONE	7.4	187.6	
210.5	TRADEWATER		SANDY SHALE	2.0	195.0	
208.5	TRADEWATER		BLACK SHALE	1.0	197.0	
207.5	TRADEWATER		SANDY SHALE	2.0	198.0	

MAPID: 05925429000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2660' S, 1716' E, NW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.330832 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.650763 **DATE COLLECTED:** 6 / 14 / 2000

SURFACE ELEVATION (FT.): 372.7 **LOGGED (FT.):** 218.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 16EVG195 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
372.7			UNCONSOLIDATED	15.0	0.0	
357.7			BROWN SANDSTONE	5.0	15.0	
352.7			SANDSTONE	2.0	20.0	
350.7			SANDY SHALE	38.0	22.0	
312.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.0	60.0	
307.7	CARBONDALE		SANDY SHALE	36.0	65.0	
271.7	CARBONDALE	DEKOVEN	COAL	2.6	101.0	
269.1	CARBONDALE		SANDSTONE/SHALE	27.4	103.6	INTERBEDDED
241.7	CARBONDALE		BLACK SHALE	3.0	131.0	
238.7	CARBONDALE	DAVIS	COAL	3.6	134.0	
235.1	TRADEWATER		SANDSTONE	3.4	137.6	
231.7	TRADEWATER		SANDY SHALE	15.0	141.0	
216.7	TRADEWATER		LIMESTONE	1.0	156.0	
215.7	TRADEWATER		SANDY SHALE	18.0	157.0	
197.7	TRADEWATER	CARRIER MILLS	DARK SHALE	3.0	175.0	
194.7	TRADEWATER		COAL	0.3	178.0	
194.4	TRADEWATER		SANDY SHALE	1.7	178.3	
192.7	TRADEWATER		SANDSTONE	20.0	180.0	
172.7	TRADEWATER		SANDY SHALE	5.0	200.0	
167.7	TRADEWATER		BLACK SHALE	1.0	205.0	
166.7	TRADEWATER	STONEFORT	LIMESTONE	1.0	206.0	
165.7	TRADEWATER		BLACK SHALE	2.0	207.0	
163.7	TRADEWATER		DARK SHALE	2.0	209.0	
161.7	TRADEWATER	WISE RIDGE	COAL	0.6	211.0	
161.1	TRADEWATER		SANDY SHALE	6.4	211.6	

MAPID: 05900226600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NE SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.341733 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.654036 **DATE COLLECTED:** 0 / 0 / 1934
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 45.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PATTON C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.0	CARBONDALE		ROCK	40.0	0.0	
440.0	CARBONDALE	SPRINGFIELD	COAL	5.0	40.0	AVERAGE THICKNESS

MAPID: 05900227900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.344828 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.644388 **DATE COLLECTED:** 5 / 30 / 1938
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 14.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BARNETT MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
380.0	SPOON		ROCK	10.0	0.0	
370.0	SPOON	DAVIS	COAL	4.0	10.0	

MAPID: 05900228100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.349084 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.651794 **DATE COLLECTED:** 0 / 0 / 1939
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-YATES MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			UNKNOWN	0.0	0.0	

MAPID: 05900228200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SE SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342353 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.651737 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 34.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-MILLIGAN MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0	CARBONDALE		ROCK	30.0	0.0	
470.0	CARBONDALE	SPRINGFIELD	COAL	4.7	30.0	

MAPID: 05900228300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NW NE SE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.338379 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.654008 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-P & C CC **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 05900228000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW SE SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342929 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.651282 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PECK & PRICE C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNKNOWN	0.0	0.0	

MAPID: 05900419600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342876 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.653123 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 29.2 **LOG TYPE:**

SOURCE: MINE NOTES-WILLIAMS C C **WELL TYPE:** Strip Mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	25.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.2		

MAPID: 05903733000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NE NE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.33733 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.650311 **DATE COLLECTED:** 3 / 7 / 1973

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 175.0 **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			UNCONSOLIDATED	11.0	0.0	
389.0			ROCK	59.0	11.0	
330.0			COAL	1.0	70.0	
329.0			ROCK	51.0	71.0	
278.0	CARBONDALE	BRIAR HILL	COAL	3.0	122.0	
275.0	CARBONDALE		ROCK	28.0	125.0	
247.0	CARBONDALE	SPRINGFIELD	COAL	4.0	153.0	
243.0	CARBONDALE		ROCK	18.0	157.0	

MAPID: 05924230000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1220' N line, 560' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.338634 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654789 **DATE COLLECTED:** 10 / 17 / 1978

SURFACE ELEVATION (FT.): 379.4 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.4	PLEISTOCENE		CLAY	9.0	0.0	
370.4	CARBONDALE		SANDSTONE	3.0	9.0	
367.4	CARBONDALE		SMUT	2.0	12.0	
365.4	CARBONDALE		CLAYSTONE	4.0	14.0	BLUE
361.4	CARBONDALE		SHALE	8.0	18.0	
353.4	CARBONDALE		SHALE	19.0	26.0	BLUE
334.4	CARBONDALE		SHALE	6.0	45.0	
328.4	CARBONDALE	HOUCHIN CREEK	COAL	2.0	51.0	CORRELATION UNCERTAIN
326.4	CARBONDALE		UNDERCLAY	2.0	53.0	
324.4	CARBONDALE		SANDSTONE	52.0	55.0	
272.4	CARBONDALE	SURVANT	COAL	3.0	107.0	CORRELATION UNCERTAIN
269.4	CARBONDALE		UNDERCLAY	2.0	110.0	

MAPID: 05924231000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1300' N line, 830' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.339575 **GEOLOGIST:** MCCRACKNE
CONFIDENTIAL: N **LATITUDE:** 37.654575 **DATE COLLECTED:** 10 / 19 / 1978
SURFACE ELEVATION (FT.): 424.6 **LOGGED (FT.):** 137.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 4 **WELL TYPE:** Coal Test
COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
424.6	PLEISTOCENE		CLAY	9.0	0.0	
415.6	CARBONDALE		SANDSTONE	3.0	9.0	
412.6	CARBONDALE		SANDSTONE/SHALE	5.0	12.0	
407.6	CARBONDALE		BLUE SHALE	5.0	17.0	
402.6	CARBONDALE		SANDSTONE	5.0	22.0	
397.6	CARBONDALE		SHALE	24.0	27.0	
373.6	CARBONDALE		SANDSTONE	2.0	51.0	
371.6	CARBONDALE	TURNER MINE	SHALE	4.0	53.0	
367.6	CARBONDALE	SPRINGFIELD	COAL	4.5	57.0	
363.1	CARBONDALE		UNDERCLAY	11.0	61.5	
352.1	CARBONDALE		SANDY SHALE	39.5	72.5	
312.6	CARBONDALE		SHALE	1.0	112.0	
311.6	CARBONDALE		SHALE	4.0	113.0	
307.6	CARBONDALE	HOUCHIN CREEK	COAL	1.0	117.0	
306.6	CARBONDALE		SANDSTONE	19.0	118.0	

MAPID: 05924232000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1260' N line, 1040' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340302 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654692 **DATE COLLECTED:** 10 / 19 / 1978
SURFACE ELEVATION (FT.): 407.3 **LOGGED (FT.):** 39.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 5 **WELL TYPE:** Coal Test
COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
407.3	PLEISTOCENE		CLAY	4.0	0.0	
403.3	CARBONDALE		SANDSTONE	3.0	4.0	
400.3	CARBONDALE		SHALE	22.0	7.0	
378.3	CARBONDALE	TURNER MINE	SHALE	4.5	29.0	
373.8	CARBONDALE		CLAYSTONE & SILTSTONE	1.0	33.5	
372.8	CARBONDALE	SPRINGFIELD	COAL	5.0	34.5	

MAPID: 05924233000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1230' N line, 1170' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340752 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654777 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 396.3 **LOGGED (FT.):** 37.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.3	PLEISTOCENE		CLAY	9.0	0.0	
387.3	CARBONDALE		SANDSTONE	14.0	9.0	WITH CLAY
373.3	CARBONDALE		SHALE	5.5	23.0	BLUE
367.8	CARBONDALE		ROCK	1.0	28.5	
366.8	CARBONDALE	TURNER MINE	SHALE	3.5	29.5	
363.3	CARBONDALE	SPRINGFIELD	COAL	4.5	33.0	

MAPID: 05924234000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1260' N line, 1340' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.341343 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.6547 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 7 **WELL TYPE:** Coal Test

COMMENT: ELEV. ESTIMATED;PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
421.0	PLEISTOCENE		CLAY	9.0	0.0	
412.0	CARBONDALE		SANDSTONE	17.0	9.0	
395.0	CARBONDALE		SHALE	27.0	26.0	
368.0	CARBONDALE	ST. DAVID	ROCK	1.0	53.0	
367.0	CARBONDALE	TURNER MINE	SHALE	4.0	54.0	
363.0	CARBONDALE	SPRINGFIELD	COAL	5.0	58.0	

MAPID: 05924235000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1260' N line, 1640' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342385 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654708 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 35.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 8 **WELL TYPE:** Coal Test

COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.0	PLEISTOCENE		CLAY	7.0	0.0	
397.0	CARBONDALE		SANDSTONE	12.0	7.0	WITH CLAY
385.0	CARBONDALE		SHALE	6.0	19.0	
379.0	CARBONDALE	TURNER MINE	SHALE	5.0	25.0	
374.0	CARBONDALE	SPRINGFIELD	COAL	5.0	30.0	

MAPID: 05924236000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1260' N line, 2170' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344225 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654724 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 54.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 9 **WELL TYPE:** Coal Test

COMMENT: ELEV. IS ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
424.0	CARBONDALE		SANDSTONE	9.0	0.0	WITH CLAY
415.0	CARBONDALE		SANDSTONE/SHALE	11.0	9.0	
404.0	CARBONDALE		SHALE	25.0	20.0	
379.0	CARBONDALE	TURNER MINE	SHALE	4.0	45.0	
375.0	CARBONDALE	SPRINGFIELD	COAL	5.0	49.0	

MAPID: 05924237000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1260' N line, 2300' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344676 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.654726 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 405.5 **LOGGED (FT.):** 34.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 10 **WELL TYPE:** Coal Test

COMMENT: ELEV. IS ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
405.5	PLEISTOCENE		CLAY	10.0	0.0	
395.5	CARBONDALE		SANDSTONE	4.0	10.0	
391.5	CARBONDALE		SHALE	10.0	14.0	
381.5	CARBONDALE		SANDSTONE	2.0	24.0	
379.5	CARBONDALE	TURNER MINE	SHALE	3.5	26.0	
376.0	CARBONDALE	SPRINGFIELD	COAL	5.0	29.5	

MAPID: 05924238000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 770' N line, 2540' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345488 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656087 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 376.8 **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 11 **WELL TYPE:** Coal Test

COMMENT: ELEV. ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.8	PLEISTOCENE		CLAY	7.0	0.0	
369.8	CARBONDALE		SANDSTONE	5.0	7.0	
364.8	CARBONDALE		SHALE	20.0	12.0	
344.8	CARBONDALE		SANDSTONE/SHALE	13.0	32.0	
331.8	CARBONDALE	TURNER MINE	SHALE	4.0	45.0	
327.8	CARBONDALE	SPRINGFIELD	COAL	4.0	49.0	

MAPID: 05924239000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 160' N line, 2520' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345388 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65777 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 370.4 **LOGGED (FT.):** 60.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 12 **WELL TYPE:** Coal Test

COMMENT: ELEV. ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.4	PLEISTOCENE		CLAY	5.0	0.0	
365.4	CARBONDALE	BRIAR HILL	COAL	1.0	5.0	
364.4	CARBONDALE		UNDERCLAY	3.0	6.0	
361.4	CARBONDALE		SANDSTONE	15.0	9.0	
346.4	CARBONDALE		SHALE	1.0	24.0	
345.4	CARBONDALE		SANDSTONE/SHALE	16.0	25.0	
329.4	CARBONDALE		SHALE	11.0	41.0	
318.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	52.0	
317.4	CARBONDALE	TURNER MINE	SHALE	3.0	53.0	
314.4	CARBONDALE	SPRINGFIELD	COAL	4.5	56.0	

MAPID: 05924240000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 820' N line, 1560' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342088 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.65592 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 44.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 13 **WELL TYPE:** Coal Test

COMMENT: ELEV. ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	6.0	0.0	
374.0	CARBONDALE		SANDSTONE	19.0	6.0	
355.0	CARBONDALE		SHALE	9.0	25.0	
346.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	34.0	
345.0	CARBONDALE	TURNER MINE	SHALE	4.5	35.0	
340.5	CARBONDALE	SPRINGFIELD	COAL	4.5	39.5	

MAPID: 05924241000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 820' N line, 1180' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340768 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.655909 **DATE COLLECTED:** 10 / 21 / 1978

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 59.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 14 **WELL TYPE:** Coal Test

COMMENT: PERMIT 228; ELEV IS ESTIMATE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	8.0	0.0	
382.0	CARBONDALE		SANDSTONE	6.0	8.0	
376.0	CARBONDALE		SHALE	5.0	14.0	
371.0	CARBONDALE		SANDSTONE/SHALE	30.0	19.0	
341.0	CARBONDALE	TURNER MINE	SHALE	5.5	49.0	
335.5	CARBONDALE	SPRINGFIELD	COAL	4.5	54.5	

MAPID: 05924242000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 20' N line, 1200' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340799 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.658118 **DATE COLLECTED:** 10 / 21 / 1978

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 104.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 15 **WELL TYPE:** Coal Test

COMMENT: PERMIT 228;ELEV IS ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	5.0	0.0	
395.0	CARBONDALE		SANDSTONE	17.0	5.0	
378.0	CARBONDALE		SANDSTONE/SHALE	2.0	22.0	
376.0	CARBONDALE		SHALE	21.0	24.0	
355.0	CARBONDALE	BRIAR HILL	COAL	1.5	45.0	
353.5	CARBONDALE		SHALE	5.5	46.5	
348.0	CARBONDALE		SANDSTONE	7.0	52.0	
341.0	CARBONDALE		SHALE	3.0	59.0	
338.0	CARBONDALE		SANDSTONE/SHALE	30.5	62.0	
307.5	CARBONDALE	ST. DAVID	LIMESTONE	1.5	92.5	
306.0	CARBONDALE	TURNER MINE	SHALE	5.5	94.0	
300.5	CARBONDALE	SPRINGFIELD	COAL	5.0	99.5	

MAPID: 05924243000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 630' N line, 875' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.339698 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656425 **DATE COLLECTED:** 10 / 25 / 1978

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 26.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 16 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	8.0	0.0	
367.0			SANDSTONE	4.0	8.0	
363.0			CLAYSTONE & SHALE	14.0	12.0	

MAPID: 05924244000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 625' N line, 700' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.33909 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656436 **DATE COLLECTED:** 10 / 21 / 1978

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 45.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 17 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	7.0	0.0	
368.0	CARBONDALE		SANDSTONE	6.0	7.0	WITH CLAY
362.0	CARBONDALE		SHALE	22.0	13.0	
340.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	35.0	
339.0	CARBONDALE	TURNER MINE	SHALE	4.0	36.0	
335.0	CARBONDALE	SPRINGFIELD	COAL	5.0	40.0	

MAPID: 05924245000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 310' N line, 180' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.33727 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.65729 **DATE COLLECTED:** 10 / 24 / 1978
SURFACE ELEVATION (FT.): 388.2 **LOGGED (FT.):** 72.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 18 **WELL TYPE:** Coal Test
COMMENT: ELEV. IS ESTIMATED;PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.2	PLEISTOCENE		CLAY	4.0	0.0	
384.2	CARBONDALE		SANDSTONE	2.0	4.0	
382.2	CARBONDALE		CLAYSTONE & SHALE	11.0	6.0	
371.2	CARBONDALE		SANDSTONE	8.0	17.0	
363.2	CARBONDALE		ROCK	2.0	25.0	
361.2	CARBONDALE		SHALE	35.0	27.0	
326.2	CARBONDALE	ST. DAVID	LIMESTONE	0.5	62.0	
325.7	CARBONDALE	TURNER MINE	SHALE	5.0	62.5	
320.7	CARBONDALE	SPRINGFIELD	COAL	5.0	67.5	

MAPID: 05924246000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 820' N line, 1040' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340282 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.655907 **DATE COLLECTED:** 10 / 20 / 1978
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 49.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 17 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	8.0	0.0	
370.0	CARBONDALE		SANDSTONE	6.0	8.0	
364.0	CARBONDALE	BRIAR HILL	COAL	1.5	14.0	
362.5	CARBONDALE		UNDERCLAY	1.0	15.5	
361.5	CARBONDALE		SANDY SHALE	22.5	16.5	
339.0	CARBONDALE	TURNER MINE	SHALE	5.5	39.0	
333.5	CARBONDALE	SPRINGFIELD	COAL	5.0	44.5	

MAPID: 05924247000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 650' N line, 980' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340063 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656374 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 20 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	9.0	0.0	
369.0	CARBONDALE		SHALE	3.0	9.0	
366.0	CARBONDALE		SANDSTONE	9.0	12.0	
357.0	CARBONDALE		SHALE	4.0	21.0	
353.0	CARBONDALE		SANDSTONE	2.0	25.0	
351.0	CARBONDALE		SANDSTONE/SHALE	1.0	27.0	
350.0	CARBONDALE	BRIAR HILL	COAL	0.5	28.0	
349.5	CARBONDALE		UNDERCLAY	1.0	28.5	
348.5	CARBONDALE		SHALE	26.0	29.5	
322.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	55.5	
321.5	CARBONDALE	TURNER MINE	SHALE	4.0	56.5	
317.5	CARBONDALE	SPRINGFIELD	COAL	4.5	60.5	

MAPID: 05924248000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 970' N line, 1640' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342372 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.655508 **DATE COLLECTED:** 10 / 30 / 1978

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 21 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0	
354.0	PLEISTOCENE		CLAY	14.0	24.0	WITH SANDSTONE
340.0			CLAYSTONE & SHALE	3.0	38.0	
337.0			SHALE	7.5	41.0	
329.5			LIMESTONE	0.5	48.5	
329.0			SHALE	26.0	49.0	

MAPID: 05924249000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 630' N line, 1660' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342423 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656448 **DATE COLLECTED:** 10 / 31 / 1978

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 49.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 22 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		CLAY	5.0	0.0	
370.0	CARBONDALE		SANDSTONE	5.0	5.0	
365.0	CARBONDALE		SHALE	2.0	10.0	
363.0	CARBONDALE		SANDSTONE	8.0	12.0	
355.0	CARBONDALE		SHALE	18.0	20.0	
337.0	CARBONDALE	ST. DAVID	LIMESTONE	2.5	38.0	
334.5	CARBONDALE	TURNER MINE	SHALE	4.0	40.5	
330.5	CARBONDALE	SPRINGFIELD	COAL	5.0	44.5	

MAPID: 05924251000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 275' N line, 1820' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342963 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657433 **DATE COLLECTED:** 11 / 2 / 1978

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 53.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0	
354.0	CARBONDALE		ROCK	4.0	24.0	BROKEN
350.0	CARBONDALE		CLAYSTONE & SHALE	2.0	28.0	
348.0	CARBONDALE		SANDSTONE	1.0	30.0	
347.0	CARBONDALE		SHALE	13.5	31.0	
333.5	CARBONDALE	TURNER MINE	SHALE	4.0	44.5	
329.5	CARBONDALE	SPRINGFIELD	COAL	5.0	48.5	

MAPID: 05924252000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 630' N line, 1820' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342979 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656453 **DATE COLLECTED:** 11 / 2 / 1978
SURFACE ELEVATION (FT.): 386.1 **LOGGED (FT.):** 42.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 26 **WELL TYPE:** Coal Test
COMMENT: ELEV. IS ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
386.1	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	
353.1	CARBONDALE	ST. DAVID	LIMESTONE	0.5	33.0	
352.6	CARBONDALE	TURNER MINE	SHALE	3.5	33.5	
349.1	CARBONDALE	SPRINGFIELD	COAL	5.0	37.0	

MAPID: 05924253000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 850' N line, 1820' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342992 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.655846 **DATE COLLECTED:** 11 / 3 / 1978
SURFACE ELEVATION (FT.): 394.7 **LOGGED (FT.):** 38.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 27 **WELL TYPE:** Coal Test
COMMENT: ELEV ESTIMATED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
394.7	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0	
368.7	CARBONDALE		SANDSTONE	2.5	26.0	
366.2	CARBONDALE	TURNER MINE	SHALE	4.5	28.5	
361.7	CARBONDALE	SPRINGFIELD	COAL	5.0	33.0	

MAPID: 05924254000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 720' N line, 850' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.339615 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656176 **DATE COLLECTED:** 11 / 3 / 1978
SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 47.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 28 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	10.0	0.0	
368.0	CARBONDALE		SANDSTONE	7.0	10.0	WITH CLAY
361.0	CARBONDALE		SANDSTONE	4.0	17.0	
357.0	CARBONDALE		CLAYSTONE & SHALE	9.0	21.0	
348.0	CARBONDALE		UNDERCLAY	10.0	30.0	WITH SANDSTONE
338.0	CARBONDALE	TURNER MINE	SHALE	3.0	40.0	
335.0	CARBONDALE	SPRINGFIELD	COAL	4.5	43.0	

MAPID: 05924255000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 720' N line, 250' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.337532 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656161 **DATE COLLECTED:** 11 / 6 / 1978
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 30.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 29 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
355.0	CARBONDALE		SANDSTONE	4.0	20.0	BROKEN
351.0	CARBONDALE	TURNER MINE	SHALE	2.0	24.0	
349.0	CARBONDALE	SPRINGFIELD	COAL	4.5	26.0	

MAPID: 05924256000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 850' N line, 240' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.337506 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.655801 **DATE COLLECTED:** 11 / 6 / 1978
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 18.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 30 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.0	PLEISTOCENE		CLAY	8.0	0.0	
369.0	CARBONDALE		CLAY	4.0	8.0	WITH SANDSTONE
365.0	CARBONDALE		CLAYSTONE & SHALE	2.0	12.0	
363.0	CARBONDALE	TURNER MINE	SHALE	1.5	14.0	
361.5	CARBONDALE	SPRINGFIELD	COAL	3.0	15.5	

MAPID: 05924257000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 460' N line, 2600' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.345679 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.656942 **DATE COLLECTED:** 11 / 6 / 1978
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 31 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0	
322.0	CARBONDALE	TURNER MINE	SHALE	3.0	53.0	
319.0	CARBONDALE	SPRINGFIELD	COAL	5.0	56.0	

MAPID: 05924258000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 750' N line, 300' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337707 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656079 **DATE COLLECTED:** 11 / 1 / 1977

SURFACE ELEVATION (FT.): 376.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 1A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.0	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0	
334.0	CARBONDALE		SANDSTONE	1.0	42.0	WITH CLAY
333.0	CARBONDALE		SANDSTONE	8.0	43.0	
325.0	CARBONDALE		SHALE	3.0	51.0	
322.0	CARBONDALE		SHALE	11.0	54.0	BLUE

MAPID: 05924259000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 570' N line, 300' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337699 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.656576 **DATE COLLECTED:** 11 / 1 / 1977

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 55.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 2A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	44.0	0.0	
331.0	CARBONDALE		SANDSTONE	1.0	44.0	BROKEN
330.0	CARBONDALE		SHALE	4.0	45.0	WITH SMUT
326.0	CARBONDALE	TURNER MINE	SHALE	1.0	49.0	
325.0	CARBONDALE	SPRINGFIELD	COAL	5.0	50.0	

MAPID: 05924260000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 270' N line, 190' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337303 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.6574 **DATE COLLECTED:** 11 / 3 / 1977

SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 3A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.0	PLEISTOCENE		CLAY	10.0	0.0	
375.0	PLEISTOCENE		CLAY	3.0	10.0	WITH SANDSTONE
372.0	CARBONDALE		SANDSTONE	5.0	13.0	
367.0	CARBONDALE		CLAYSTONE & SHALE	12.0	18.0	
355.0	CARBONDALE		SANDSTONE	15.0	30.0	
340.0	CARBONDALE	BRIAR HILL	SMUT	1.0	45.0	
339.0	CARBONDALE		SHALE	4.0	46.0	
335.0	CARBONDALE		ROCK	1.0	50.0	
334.0	CARBONDALE		SHALE	15.0	51.0	
319.0	CARBONDALE		ROCK	9.0	66.0	

MAPID: 05924261000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 90' N line, 250' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.337504 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.657899 **DATE COLLECTED:** 11 / 3 / 1977

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 58.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 4A **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	10.0	0.0	
372.0	CARBONDALE		SANDSTONE	6.0	10.0	
366.0	CARBONDALE		SHALE	2.0	16.0	
364.0	CARBONDALE		SANDSTONE	4.0	18.0	
360.0	CARBONDALE		SANDSTONE/SHALE	27.0	22.0	
333.0	CARBONDALE	ST. DAVID	ROCK	1.0	49.0	
332.0	CARBONDALE	TURNER MINE	SHALE	3.5	50.0	
328.5	CARBONDALE	SPRINGFIELD	COAL	5.0	53.5	

MAPID: 05924262000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 40' N line, 550' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.338543 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.658045 **DATE COLLECTED:** 11 / 5 / 1977
SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 61.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 5A **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
375.0	PLEISTOCENE		MUD	29.0	0.0	
346.0	PLEISTOCENE		GRAVEL	28.0	29.0	
318.0	CARBONDALE	SPRINGFIELD	COAL	4.0	57.0	TOP ERODED

MAPID: 05924263000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 560' S line, 1460' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.341933 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.644986 **DATE COLLECTED:** 10 / 16 / 1978
SURFACE ELEVATION (FT.): 405.0 **LOGGED (FT.):** 53.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 1JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.0	PLEISTOCENE		CLAY	16.0	0.0	
389.0	SPOON	DEKOVEN	COAL	2.5	16.0	TOP ERODED
386.5	SPOON		UNDERCLAY	3.5	18.5	
383.0	SPOON		SANDSTONE	9.0	22.0	
374.0	SPOON		SHALE	4.0	31.0	
370.0	SPOON		SANDSTONE	5.0	35.0	
365.0	SPOON		SHALE	6.0	40.0	
359.0	SPOON		SHALE	2.5	46.0	
356.5	SPOON	DAVIS	COAL	3.0	48.5	
353.5	SPOON		UNDERCLAY	1.5	51.5	

MAPID: 05924264000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 360' S line, 1460' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.341942 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.644434 **DATE COLLECTED:** 10 / 16 / 1978
SURFACE ELEVATION (FT.): 392.0 **LOGGED (FT.):** 26.3 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 2JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.0	PLEISTOCENE		CLAY	7.0	0.0	
385.0	SPOON		SANDSTONE	7.0	7.0	
378.0	SPOON		SHALE	6.5	14.0	
371.5	SPOON		SHALE	2.0	20.5	
369.5	SPOON	DAVIS	COAL	3.8	22.5	

MAPID: 05924265000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 480' S line, 1310' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.341416 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.64476 **DATE COLLECTED:** 10 / 16 / 1978
SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 18.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 3JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.0	PLEISTOCENE		CLAY	14.0	0.0	
381.0	SPOON	DAVIS	COAL	4.0	14.0	TOP ERODED

MAPID: 05924266000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 620' S line, 1130' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340785 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.64514 **DATE COLLECTED:** 10 / 16 / 1978
SURFACE ELEVATION (FT.): 397.0 **LOGGED (FT.):** 14.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 4JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
397.0	PLEISTOCENE		CLAY	12.0	0.0	
385.0			SMUT	1.0	12.0	
384.0	SPOON	DEKOVEN	COAL	1.0	13.0	TOP ERODED

MAPID: 05924267000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 730' S line, 990' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340294 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.645441 **DATE COLLECTED:** 10 / 16 / 1978

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 13.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 5JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	8.0	0.0	
392.0			SHALE	1.0	8.0	
391.0			SMUT	1.0	9.0	
390.0	SPOON	DAVIS	COAL	3.5	10.0	

MAPID: 05924268000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 740' S line, 840' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.339773 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.645464 **DATE COLLECTED:** 10 / 16 / 1978

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 40.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 6JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	13.0	0.0	
377.0			SANDSTONE	1.0	13.0	
376.0			SHALE	19.0	14.0	
357.0			ROCK	7.0	33.0	

MAPID: 05924269000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 850' S line, 790' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.339591 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.645765 **DATE COLLECTED:** 10 / 7 / 1978
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 60.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 7JB **WELL TYPE:** Coal Test
COMMENT: PERMIT #228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	10.0	0.0	
372.0	SPOON	DEKOVEN	COAL	3.5	10.0	TOP ERODED
368.5	SPOON		UNDERCLAY	2.5	13.5	
366.0	SPOON		SANDSTONE	9.0	16.0	
357.0	SPOON		SHALE	15.0	25.0	
342.0	SPOON		SHALE	16.0	40.0	
326.0	SPOON		SHALE	3.0	56.0	
323.0	SPOON	DAVIS	COAL	1.0	59.0	

MAPID: 05924270000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1250' N line, 300' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.337732 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.654699 **DATE COLLECTED:** 10 / 17 / 1978
SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 20.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.0	PLEISTOCENE		CLAY	11.0	0.0	
370.0			SANDSTONE	9.0	11.0	WITH CLAY
361.0			NO RECORD	-	20.0	INCOMPLETE

MAPID: 05924271000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1200' S line, 800' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.33961 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.646732 **DATE COLLECTED:** 10 / 18 / 1978

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 8JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.0	PLEISTOCENE		CLAY	16.0	0.0	
365.0	SPOON		SANDSTONE	4.0	16.0	
361.0	SPOON		SANDSTONE	4.0	20.0	
357.0	SPOON		SANDSTONE	2.0	24.0	
355.0	SPOON		SHALE	13.0	26.0	
342.0	SPOON		SHALE	1.0	39.0	
341.0	SPOON	DAVIS	COAL	3.0	40.0	

MAPID: 05924272000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1300' S line, 1060' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340508 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.647014 **DATE COLLECTED:** 10 / 18 / 1978

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 65.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 9JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
407.0	PLEISTOCENE		CLAY	9.0	0.0	
398.0			SMUT	0.5	9.0	
397.5	SPOON		UNDERCLAY	1.5	9.5	
396.0	SPOON		SHALE	15.0	11.0	
381.0	SPOON		SANDSTONE	9.0	26.0	
372.0	SPOON		LIMESTONE	1.5	35.0	
370.5	SPOON		SHALE	25.5	36.5	
345.0	SPOON	DEKOVEN	COAL	3.0	62.0	

MAPID: 05924273000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 725' S line, 1580' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.342342 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.645446 **DATE COLLECTED:** 10 / 18 / 1978
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 43.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 10JB **WELL TYPE:** Coal Test
COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
412.0	PLEISTOCENE		CLAY	10.0	0.0	
402.0	SPOON		SANDSTONE	17.0	10.0	
385.0	SPOON		SANDY SHALE	11.5	27.0	
373.5	SPOON		SHALE	1.5	38.5	
372.0	SPOON	DAVIS	COAL	3.5	40.0	

MAPID: 05924274000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 470' S line, 1800' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.343117 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.644749 **DATE COLLECTED:** 10 / 18 / 1978
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 14.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 11JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0	PLEISTOCENE		CLAY	9.0	0.0	
379.0	SPOON		SHALE	1.0	9.0	WITH SMUT
378.0	SPOON	DAVIS	COAL	4.0	10.0	

MAPID: 05924275000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 480' S line, 2160' E line
QUADRANGLE: EQUALITY **LONGITUDE:** -88.344366 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 37.644787 **DATE COLLECTED:** 10 / 19 / 1978
SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 20.5 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. 12JB **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	8.0	0.0	
374.0	SPOON		SHALE	7.0	8.0	
367.0	SPOON		SHALE	1.5	15.0	
365.5	SPOON	DAVIS	COAL	4.0	16.5	

MAPID: 05924276000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 660' S line, 2180' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344428 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.645284 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 382.0 **LOGGED (FT.):** 35.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 13JB **WELL TYPE:** Coal Test

COMMENT: PERMIT 228

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.0	PLEISTOCENE		CLAY	17.0	0.0	
365.0	SPOON		SHALE	3.0	17.0	
362.0	SPOON		SANDSTONE	5.0	20.0	
357.0	SPOON		SHALE	4.0	25.0	
353.0	SPOON		SHALE	2.0	29.0	
351.0	SPOON	DAVIS	COAL	4.0	31.0	

MAPID: 05924277000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 900' S line, 2180' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344414 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.645947 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 396.0 **LOGGED (FT.):** 54.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 14JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.0	PLEISTOCENE		CLAY	18.0	0.0	
378.0	SPOON	DEKOVEN	SMUT	1.5	18.0	TOP ERODED
376.5	SPOON		UNDERCLAY	3.5	19.5	
373.0	SPOON		SHALE	3.0	23.0	
370.0	SPOON		SANDSTONE	8.0	26.0	
362.0	SPOON		SANDSTONE/SHALE	15.0	34.0	
347.0	SPOON		SHALE	1.5	49.0	
345.5	SPOON	DAVIS	COAL	4.0	50.5	

MAPID: 05924278000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1150' S line, 2480' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345444 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.646647 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 399.0 **LOGGED (FT.):** 60.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 15JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.0	PLEISTOCENE		CLAY	12.0	0.0	
387.0	SPOON		SHALE	15.0	12.0	
372.0	SPOON	DEKOVEN	COAL	3.0	27.0	
369.0	SPOON		UNDERCLAY	1.0	30.0	
368.0	SPOON		SANDSTONE	13.0	31.0	
355.0	SPOON		SANDSTONE/SHALE	10.0	44.0	
345.0	SPOON		SHALE	2.5	54.0	
342.5	SPOON	DAVIS	COAL	4.0	56.5	

MAPID: 05924279000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1160' S line, 2620' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.34593 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.64668 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 52.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 16JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.0	PLEISTOCENE		CLAY	16.0	0.0	
379.0	SPOON		SANDSTONE	4.0	16.0	
375.0	SPOON		SHALE	30.0	20.0	
345.0	SPOON	DAVIS	COAL	2.5	50.0	

MAPID: 05924280000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1290' S line, 2040' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.343911 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.647021 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 95.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 17JB **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.0	PLEISTOCENE		CLAY	10.0	0.0	
420.0	CARBONDALE		SANDSTONE	9.0	10.0	
411.0	CARBONDALE		SHALE	27.5	19.0	
383.5	CARBONDALE		SHALE	1.0	46.5	
382.5	CARBONDALE	COLCHESTER	COAL	0.5	47.5	
382.0	SPOON		UNDERCLAY	2.0	48.0	
380.0	SPOON		SANDY SHALE	6.0	50.0	
374.0	SPOON		SANDSTONE	9.0	56.0	
365.0	SPOON		SHALE	27.0	65.0	
338.0	SPOON	DEKOVEN	COAL	3.0	92.0	

MAPID: 05925029000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 800' N line, 1100' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.34049 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.655961 **DATE COLLECTED:** 10 / 21 / 1978

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 59.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 40 **WELL TYPE:** Water Well

COMMENT: PERMIT 11;MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0	PLEISTOCENE		CLAY	8.0	0.0	
382.0	CARBONDALE		SANDSTONE	6.0	8.0	
376.0	CARBONDALE		SHALE	5.0	14.0	
371.0	CARBONDALE		SANDSTONE/SHALE	30.0	19.0	
341.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.5	49.0	
335.5	CARBONDALE	SPRINGFIELD	COAL	4.5	54.5	

MAPID: 05925030000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 28' N line, 1050' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340279 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658093 **DATE COLLECTED:** 10 / 21 / 1978

SURFACE ELEVATION (FT.): 403.2 **LOGGED (FT.):** 104.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 52 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
403.2	PLEISTOCENE		CLAY	5.0	0.0	
398.2	CARBONDALE		SANDSTONE	17.0	5.0	
381.2	CARBONDALE		SANDSTONE/SHALE	2.0	22.0	
379.2	CARBONDALE		SHALE	21.0	24.0	
358.2	CARBONDALE	BRIAR HILL	COAL	1.5	45.0	
356.7	CARBONDALE	CANTON	SHALE	5.5	46.5	
351.2	CARBONDALE	CANTON	SANDSTONE	7.0	52.0	
344.2	CARBONDALE	CANTON	SHALE	3.0	59.0	
341.2	CARBONDALE	CANTON	SANDSTONE/SHALE	30.5	62.0	
310.7	CARBONDALE	ST. DAVID	LIMESTONE	1.5	92.5	
309.2	CARBONDALE	TURNER MINE	BLACK SHALE	5.5	94.0	
303.7	CARBONDALE	SPRINGFIELD	COAL	5.0	99.5	

MAPID: 05925031000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1150' N line, 500' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.338422 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.65498 **DATE COLLECTED:** 10 / 17 / 1978

SURFACE ELEVATION (FT.): 379.4 **LOGGED (FT.):** 111.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 55 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.4	PLEISTOCENE		CLAY	9.0	0.0	
370.4	CARBONDALE		SANDSTONE	3.0	9.0	
367.4	CARBONDALE		SMUT	2.0	12.0	
365.4	CARBONDALE		SHALE	4.0	14.0	BLUE
361.4	CARBONDALE		SHALE	8.0	18.0	SOFT
353.4	CARBONDALE		SHALE	19.0	26.0	BLUE
334.4	CARBONDALE	EXCELLO	BLACK SHALE	5.0	45.0	
329.4	CARBONDALE	HOUCHIN CREEK	COAL	2.0	50.0	CORRELATION FROM LOG
327.4	CARBONDALE		UNDERCLAY	2.0	52.0	
325.4	CARBONDALE	PLEASANTVIEW	SANDSTONE	52.0	54.0	
273.4	CARBONDALE	SURVANT	COAL	3.0	106.0	
270.4	CARBONDALE		UNDERCLAY	2.0	109.0	

MAPID: 05925032000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1250' N line, 800' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.339468 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.654712 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 424.6 **LOGGED (FT.):** 137.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 56 **WELL TYPE:** Water Well

COMMENT: PERMIT 11;MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.6	PLEISTOCENE		CLAY	9.0	0.0	
415.6	CARBONDALE		SANDSTONE	3.0	9.0	RED
412.6	CARBONDALE		SANDSTONE/SHALE	5.0	12.0	
407.6	CARBONDALE		SHALE	5.0	17.0	BLUE
402.6	CARBONDALE		SANDSTONE	5.0	22.0	
397.6	CARBONDALE		SHALE	24.0	27.0	
373.6	CARBONDALE		SANDSTONE	2.0	51.0	
371.6	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	53.0	
367.6	CARBONDALE	SPRINGFIELD	COAL	4.5	57.0	CORR FROM LOG
363.1	CARBONDALE		UNDERCLAY	11.0	61.5	
352.1	CARBONDALE		SANDY SHALE	39.5	72.5	
312.6	CARBONDALE		SANDSTONE	1.0	112.0	
311.6	CARBONDALE	EXCELLO	BLACK SHALE	4.0	113.0	
307.6	CARBONDALE	HOUCHIN CREEK	COAL	1.0	117.0	
306.6	CARBONDALE		SANDSTONE	19.0	118.0	

MAPID: 05925033000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1200' N line, 998' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340153 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.654857 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 407.3 **LOGGED (FT.):** 39.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 57 **WELL TYPE:** Water Well

COMMENT: PERMIT 11;MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
407.3	PLEISTOCENE		CLAY	4.0	0.0	
403.3	CARBONDALE		SANDSTONE	3.0	4.0	
400.3	CARBONDALE	CANTON	SHALE	22.0	7.0	
378.3	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	29.0	
373.8	CARBONDALE		SHALE	1.0	33.5	
372.8	CARBONDALE	SPRINGFIELD	COAL	5.0	34.5	

MAPID: 05925034000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1100' N line, 1118' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340566 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.655134 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 396.3 **LOGGED (FT.):** 37.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 58 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.3	PLEISTOCENE		CLAY	9.0	0.0	
387.3	CARBONDALE		SANDSTONE	14.0	9.0	
373.3	CARBONDALE		SHALE	5.5	23.0	BLUE
367.8	CARBONDALE		ROCK	1.0	28.5	
366.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	29.5	
363.3	CARBONDALE	SPRINGFIELD	COAL	4.5	33.0	

MAPID: 05925035000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1200' N line, 1298' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.341195 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.654864 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 421.0 **LOGGED (FT.):** 63.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 59 **WELL TYPE:** Water Well

COMMENT: PERMIT 11;MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
421.0	PLEISTOCENE		CLAY	9.0	0.0	
412.0	CARBONDALE		SANDSTONE	17.0	9.0	
395.0	CARBONDALE	CANTON	SHALE	27.0	26.0	
368.0	CARBONDALE		ROCK	1.0	53.0	
367.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	54.0	
363.0	CARBONDALE	SPRINGFIELD	COAL	5.0	58.0	

MAPID: 05925036000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1250' N line, 1589' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.342207 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.654734 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 404.0 **LOGGED (FT.):** 35.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 60 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
404.0	PLEISTOCENE		CLAY	7.0	0.0	
397.0	CARBONDALE		SANDSTONE	12.0	7.0	
385.0	CARBONDALE	CANTON	SHALE	6.0	19.0	
379.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	25.0	
374.0	CARBONDALE	SPRINGFIELD	COAL	5.0	30.0	

MAPID: 05925037000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:**

QUADRANGLE: EQUALITY **LONGITUDE:** -88.345749 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.650844 **DATE COLLECTED:** 10 / 19 / 1978

SURFACE ELEVATION (FT.): 424.0 **LOGGED (FT.):** 54.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 61 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
424.0	PLEISTOCENE		CLAY	9.0	0.0	WITH SAND
415.0	CARBONDALE	CANTON	SHALE	11.0	9.0	WITH SANDSTONE
404.0	CARBONDALE	CANTON	SHALE	25.0	20.0	
379.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	45.0	
375.0	CARBONDALE	SPRINGFIELD	COAL	5.0	49.0	

MAPID: 05925038000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1150' N line, 2220' E line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344394 **GEOLOGIST:** J. MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.655026 **DATE COLLECTED:** 10 / 20 / 1978

SURFACE ELEVATION (FT.): 405.5 **LOGGED (FT.):** 34.5 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 62 **WELL TYPE:** Water Well

COMMENT: PERMIT 11; MINE #4

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
405.5	PLEISTOCENE		CLAY	10.0	0.0	
395.5	CARBONDALE		SANDSTONE	4.0	10.0	
391.5	CARBONDALE		SHALE	10.0	14.0	
381.5	CARBONDALE		SANDSTONE	2.0	24.0	
379.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	26.0	
376.0	CARBONDALE	SPRINGFIELD	COAL	5.0	29.5	

MAPID: 05925419000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2505' S, 2237' W, NE/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.344477 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.651324 **DATE COLLECTED:** 6 / 13 / 2000

SURFACE ELEVATION (FT.): 395.1 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 17EVG201 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.1			UNCONSOLIDATED	8.0	0.0	
387.1			UNCONSOLIDATED	37.0	8.0	
350.1	CARBONDALE	PLEASANTVIEW	BROWN SANDSTONE	3.0	45.0	
347.1	CARBONDALE	PLEASANTVIEW	SANDSTONE	3.0	48.0	
344.1	CARBONDALE	PLEASANTVIEW	SANDY SHALE	5.0	51.0	
339.1	CARBONDALE	PLEASANTVIEW	SANDSTONE	9.0	56.0	
330.1	CARBONDALE	SURVANT	COAL	1.9	65.0	
328.2	CARBONDALE		SANDY SHALE	16.1	66.9	
312.1	CARBONDALE		SANDSTONE	1.0	83.0	
311.1	CARBONDALE		SANDSTONE/LIMESTONE	2.0	84.0	
309.1	CARBONDALE		SANDY SHALE	9.0	86.0	
300.1	CARBONDALE		LIMESTONE	0.5	95.0	
299.6	CARBONDALE		SANDSTONE/LIMESTONE	3.5	95.5	
296.1	CARBONDALE		SANDY SHALE	26.0	99.0	
270.1	CARBONDALE		BLACK SHALE	2.0	125.0	
268.1	CARBONDALE	COLCHESTER	COAL	0.2	127.0	
267.9	CARBONDALE		SANDY SHALE	11.8	127.2	
256.1	CARBONDALE		SHALE/SANDSTONE/LIMESTONE	16.0	139.0	
240.1	CARBONDALE		SANDY SHALE	18.5	155.0	
221.6	CARBONDALE		BLACK SHALE	0.5	173.5	
221.1	CARBONDALE	DEKOVEN	COAL	2.7	174.0	
218.4	CARBONDALE		SANDY SHALE	9.3	176.7	
209.1	CARBONDALE		SHALE/SANDSTONE/LIMESTONE	3.0	186.0	
206.1	CARBONDALE		SANDSTONE	17.9	189.0	
188.2	CARBONDALE		DARK SHALE	2.1	206.9	
186.1	CARBONDALE		BLACK SHALE	1.7	209.0	
184.4	CARBONDALE	DAVIS	COAL	4.0	210.7	
180.4	TRADEWATER		CLAYSTONE & SILTSTONE	5.3	214.7	
175.1	TRADEWATER		SANDSTONE	1.0	220.0	
174.1	TRADEWATER		SANDY SHALE	9.0	221.0	

MAPID: 05925422000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2646' S, 1384' E, NW/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.349953 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.650983 **DATE COLLECTED:** 6 / 12 / 2000

SURFACE ELEVATION (FT.): 435.8 **LOGGED (FT.):** 247.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 17EVG200 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
435.8			UNCONSOLIDATED	13.0	0.0	
422.8			RED SHALE	18.0	13.0	
404.8			GRAY SHALE	15.0	31.0	
389.8			BLACK SHALE	2.0	46.0	
387.8			LIMESTONE	2.0	48.0	
385.8	CARBONDALE	EXCELLO	BLACK SHALE	1.0	50.0	
384.8	CARBONDALE	HOUCHIN CREEK	COAL	0.7	51.0	
384.1	CARBONDALE		CLAYSTONE & SILTSTONE	0.3	51.7	
383.8	CARBONDALE	PLEASANTVIEW	SANDSTONE/LIMESTONE	3.0	52.0	
380.8	CARBONDALE	PLEASANTVIEW	LIMESTONE	3.0	55.0	
377.8	CARBONDALE	PLEASANTVIEW	SANDSTONE	3.0	58.0	
374.8	CARBONDALE		SANDY SHALE	28.0	61.0	
346.8	CARBONDALE		BLACK SHALE	0.5	89.0	
346.3	CARBONDALE	SURVANT	COAL	1.9	89.5	
344.4	CARBONDALE		SANDY SHALE	24.6	91.4	
319.8	CARBONDALE		LIMESTONE	1.0	116.0	
318.8	CARBONDALE		SANDY SHALE	32.0	117.0	
286.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	149.0	
284.8	CARBONDALE	COLCHESTER	COAL	0.2	151.0	
284.6	CARBONDALE		SANDY SHALE	10.8	151.2	
273.8	CARBONDALE		SANDSTONE	3.0	162.0	
270.8	CARBONDALE		SANDY SHALE	29.0	165.0	
241.8	CARBONDALE		DARK SHALE	2.0	194.0	
239.8	CARBONDALE	DEKOVEN	COAL	2.6	196.0	
237.2	CARBONDALE		SANDY SHALE	28.9	198.6	
208.3	CARBONDALE		BLACK SHALE	1.5	227.5	
206.8	CARBONDALE	DAVIS	RASH	0.3	229.0	
206.5	CARBONDALE	DAVIS	COAL	3.9	229.3	
202.6	TRADEWATER		CLAYSTONE & SILTSTONE	2.0	233.2	
200.6	TRADEWATER		SANDY SHALE	11.1	235.2	
189.5	TRADEWATER		LIMESTONE	0.4	246.3	
189.1	TRADEWATER		CLAYSTONE & SILTSTONE	0.3	246.7	

MAPID: 05925423000C **VERSION:** 1 **PROJECT:** NCRDS

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2554' S, 1071' W, NE/c

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340453 **GEOLOGIST:** LOUCHIOS

CONFIDENTIAL: N **LATITUDE:** 37.651158 **DATE COLLECTED:** 6 / 9 / 2000

SURFACE ELEVATION (FT.): 405.8 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log

SOURCE: BLACK BEAUTY COAL CO. 17EVG202 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.8			UNCONSOLIDATED	28.0	0.0	
377.8	CARBONDALE	PLEASANTVIEW	BROWN SANDSTONE	1.0	28.0	
376.8	CARBONDALE	PLEASANTVIEW	SANDSTONE	27.0	29.0	
349.8	CARBONDALE	SURVANT	COAL	2.5	56.0	
347.3	CARBONDALE		DARK SHALE	4.5	58.5	
342.8	CARBONDALE		SANDY SHALE	12.0	63.0	
330.8	CARBONDALE		SANDSTONE/LIMESTONE	4.0	75.0	
326.8	CARBONDALE		SANDY SHALE	14.0	79.0	
312.8	CARBONDALE		LIMESTONE	1.0	93.0	
311.8	CARBONDALE		SANDY SHALE	19.0	94.0	
292.8	CARBONDALE		DARK SHALE	4.0	113.0	
288.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	117.0	
285.8	CARBONDALE	COLCHESTER	COAL	0.3	120.0	
285.5	CARBONDALE		SANDY SHALE	0.2	120.3	
285.3	CARBONDALE		UNDERCLAY	1.5	120.5	
283.8	CARBONDALE		DARK SHALE	17.0	122.0	
266.8	CARBONDALE		SHALE WITH LIMESTONE	5.0	139.0	
261.8	CARBONDALE		DARK SHALE	27.0	144.0	
234.8	CARBONDALE	DEKOVEN	COAL	2.8	171.0	
232.0	CARBONDALE		SANDSTONE/SHALE	22.2	173.8	INTERBEDDED
209.8	CARBONDALE		BLACK SHALE	2.6	196.0	
207.2	CARBONDALE	DAVIS	PYRITE	0.1	198.6	
207.1	CARBONDALE	DAVIS	COAL	3.6	198.7	
203.5	TRADEWATER		CLAYSTONE & SILTSTONE	1.7	202.3	
201.8	TRADEWATER		SANDY SHALE	10.0	204.0	
191.8	TRADEWATER		DARK SHALE	2.0	214.0	

MAPID: 05990028000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 250' S line, 250' W line of SE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.347241 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.647864 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 395.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG17-12 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.0	PLEISTOCENE		SOIL	8.0	0.0	
387.0	PLEISTOCENE		SANDY CLAY	2.0	8.0	BROWN
385.0	CARBONDALE		SANDSTONE	20.0	10.0	RED-BROWN
365.0	CARBONDALE		SANDSTONE	6.0	30.0	BROWN
359.0	CARBONDALE		SANDY SHALE	1.0	36.0	
358.0	CARBONDALE	MECCA QUARRY	DARK SHALE	2.0	37.0	
356.0	CARBONDALE	COLCHESTER	COAL	1.0	39.0	APPROXIMATE THICKNESS
355.0	CARBONDALE		SHALY LIMESTONE	4.5	40.0	
350.5	CARBONDALE		COAL	0.5	44.5	APPROXIMATE THICKNESS
350.0	CARBONDALE		LIMESTONE	1.0	45.0	
349.0	CARBONDALE		GRAY SHALE	0.5	46.0	
348.5	CARBONDALE	PALZO	SANDSTONE	19.5	46.5	
329.0	CARBONDALE	PALZO	SANDY SHALE	4.0	66.0	
325.0	CARBONDALE	PALZO	SANDSTONE	2.0	70.0	
323.0	CARBONDALE	PALZO	SANDY SHALE	3.0	72.0	
320.0	CARBONDALE	PALZO	SANDSTONE	4.0	75.0	
316.0	CARBONDALE	PALZO	SHALY SANDSTONE	2.0	79.0	
314.0	CARBONDALE	PALZO	SANDSTONE	2.0	81.0	
312.0	CARBONDALE		SANDY SHALE	3.0	83.0	
309.0	CARBONDALE		GRAY SHALE	6.0	86.0	
303.0	CARBONDALE		SANDY SHALE	6.5	92.0	
296.5	CARBONDALE	DEKOVEN	COAL	3.5	98.5	APPROXIMATE THICKNESS
293.0	CARBONDALE		UNDERCLAY	2.0	102.0	
291.0	CARBONDALE		SANDSTONE	14.0	104.0	START CORE; GRAY
277.0	CARBONDALE		BLACK SHALE	3.2	118.0	
273.9	CARBONDALE	DAVIS	COAL	3.3	121.1	APPROXIMATE THICKNESS
270.6	TRADEWATER		UNDERCLAY	1.0	124.4	
269.6	TRADEWATER		SANDSTONE	9.6	125.4	

MAPID: 05990029000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 250' S line, 200' E line of NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346482 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.6497 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 182.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-17-11 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
383.0	PLEISTOCENE		SOIL	4.0	0.0	
379.0	PLEISTOCENE		CLAY	18.0	4.0	RED
361.0	CARBONDALE		SANDY SHALE	13.0	22.0	
348.0	CARBONDALE		DARK GRAY SHALE	7.0	35.0	
341.0	CARBONDALE		SANDSTONE	4.0	42.0	
337.0	CARBONDALE		SANDY SHALE	8.0	46.0	
329.0	CARBONDALE		SANDSTONE	3.0	54.0	
326.0	CARBONDALE		SANDY SHALE	31.0	57.0	
295.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	88.0	
293.5	CARBONDALE	COLCHESTER	COAL	0.5	89.5	APPROXIMATE THICKNESS
293.0	CARBONDALE		SANDSTONE	1.0	90.0	
292.0	CARBONDALE		SANDY SHALE	8.0	91.0	
284.0	CARBONDALE		SANDSTONE	1.0	99.0	BROWN
283.0	CARBONDALE		SANDY SHALE	2.0	100.0	
281.0	CARBONDALE		SANDSTONE	1.0	102.0	BROWN
280.0	CARBONDALE		SANDY SHALE	5.0	103.0	
275.0	CARBONDALE		SANDY SHALE	2.0	108.0	
273.0	CARBONDALE		SANDY SHALE	2.0	110.0	
271.0	CARBONDALE		DARK GRAY SHALE	21.5	112.0	
249.5	CARBONDALE	DEKOVEN	COAL	2.5	133.5	APPROXIMATE THICKNESS
247.0	CARBONDALE		UNDERCLAY	2.0	136.0	
245.0	CARBONDALE		GRAY SHALE	2.0	138.0	
243.0	CARBONDALE		SANDY SHALE	5.0	140.0	
238.0	CARBONDALE		SANDSTONE	26.2	145.0	START CORE
211.8	CARBONDALE		BLACK SHALE	1.9	171.2	
209.9	CARBONDALE	DAVIS	COAL	3.7	173.1	
206.3	TRADEWATER		UNDERCLAY	1.8	176.7	
204.5	TRADEWATER		SHALY SANDSTONE	3.5	178.5	

MAPID: 05990031000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 300' N line, 250' E line of SE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346708 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.648184 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 387.0 **LOGGED (FT.):** 178.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-17-10 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
387.0	PLEISTOCENE		SOIL	4.0	0.0	
383.0	PLEISTOCENE		CLAY	10.0	4.0	RED
373.0	CARBONDALE		SANDSTONE	2.0	14.0	
371.0	CARBONDALE		SANDY SHALE	13.0	16.0	
358.0	CARBONDALE		SANDY SHALE	17.0	29.0	
341.0	CARBONDALE		SANDSTONE	2.0	46.0	
339.0	CARBONDALE		GRAY SHALE	3.0	48.0	
336.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	51.0	
332.0	CARBONDALE		SANDY SHALE	8.0	55.0	
324.0	CARBONDALE		SANDSTONE	2.0	63.0	
322.0	CARBONDALE		SANDY SHALE	2.0	65.0	
320.0	CARBONDALE		SANDSTONE	5.0	67.0	
315.0	CARBONDALE		SANDY SHALE	6.0	72.0	
309.0	CARBONDALE		GRAY SHALE	1.0	78.0	
308.0	CARBONDALE		SANDY SHALE	4.0	79.0	
304.0	CARBONDALE		DARK GRAY SHALE	26.5	83.0	
277.5	CARBONDALE	DEKOVEN	COAL	2.5	109.5	APPROXIMATE THICKNESS
275.0	CARBONDALE		UNDERCLAY	2.0	112.0	
273.0	CARBONDALE		SANDY SHALE	4.0	114.0	
269.0	CARBONDALE		SANDSTONE	11.5	118.0	CORE START
257.5	CARBONDALE		BLACK SHALE	4.1	129.5	
253.4	CARBONDALE	DAVIS	COAL	2.4	133.6	
251.0	TRADEWATER		UNDERCLAY	1.0	136.0	
250.0	TRADEWATER		GRAY SHALE	4.0	137.0	
246.0	TRADEWATER		SANDY SHALE	12.0	141.0	
234.0	TRADEWATER		SANDY SHALE	25.0	153.0	

MAPID: 05990032000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 200' S line, 200' E line of SE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.346549 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.647719 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 386.0 **LOGGED (FT.):** 141.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO SCG-17-9 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
386.0	PLEISTOCENE		SOIL	5.0	0.0	
381.0	PLEISTOCENE		CLAY	11.0	5.0	RED
370.0	PLEISTOCENE		CLAY	8.0	16.0	RED-GRAY
362.0	CARBONDALE		SANDY SHALE	13.0	24.0	
349.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	37.0	#2 MISSING
345.0	CARBONDALE		SANDSTONE	2.0	41.0	
343.0	CARBONDALE		SANDY SHALE	2.0	43.0	
341.0	CARBONDALE		SANDY SHALE	1.0	45.0	
340.0	CARBONDALE		SANDSTONE	2.0	46.0	
338.0	CARBONDALE		SANDY SHALE	2.0	48.0	
336.0	CARBONDALE		SANDSTONE	6.0	50.0	
330.0	CARBONDALE		SANDY SHALE	3.0	56.0	
327.0	CARBONDALE		SANDSTONE	1.0	59.0	
326.0	CARBONDALE		GRAY SHALE	6.0	60.0	
320.0	CARBONDALE		SANDY SHALE	8.0	66.0	
312.0	CARBONDALE		GRAY SHALE	5.0	74.0	
307.0	CARBONDALE		SANDY SHALE	11.0	79.0	
296.0	CARBONDALE		DARK GRAY SHALE	9.0	90.0	
287.0	CARBONDALE	DEKOVEN	COAL	3.5	99.0	CORE #1
283.5	CARBONDALE		UNDERCLAY	0.9	102.5	
282.6	CARBONDALE		SHALY SANDSTONE	2.1	103.4	
280.5	CARBONDALE		SANDSTONE	10.8	105.5	
269.7	CARBONDALE		DARK GRAY SHALE	3.2	116.3	
266.5	CARBONDALE		BLACK SHALE	3.0	119.5	
263.5	CARBONDALE	DAVIS	COAL	2.7	122.5	
260.8	TRADEWATER		UNDERCLAY	1.9	125.2	
259.0	TRADEWATER		SANDY SHALE	10.0	127.0	
249.0	TRADEWATER		DARK GRAY SHALE	4.0	137.0	

MAPID: 05990033000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 100' S line, 100' W line of NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.347708 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.649296 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO #SCG-17-8 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
393.0	PLEISTOCENE		SOIL	3.0	0.0	
390.0	PLEISTOCENE		SANDY CLAY	9.0	3.0	
381.0	CARBONDALE		SANDSTONE	9.0	12.0	BROWN
372.0	CARBONDALE		CLAYSTONE	2.0	21.0	GRAY
370.0	CARBONDALE		SANDSTONE	4.0	23.0	GRAY
366.0	CARBONDALE		SANDY SHALE	1.0	27.0	
365.0	CARBONDALE		SANDSTONE	3.0	28.0	
362.0	CARBONDALE		SANDY SHALE	2.0	31.0	
360.0	CARBONDALE		CALCAREOUS SANDSTONE	2.0	33.0	
358.0	CARBONDALE		SANDY SHALE	31.0	35.0	
327.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	66.0	
324.0	CARBONDALE		SANDY SHALE	4.0	69.0	
320.0	CARBONDALE		SANDSTONE	7.0	73.0	
313.0	CARBONDALE		CALCAREOUS SANDSTONE	4.0	80.0	
309.0	CARBONDALE		SANDSTONE	4.0	84.0	
305.0	CARBONDALE		SANDY DARK SHALE	2.0	88.0	
303.0	CARBONDALE		SANDSTONE	12.0	90.0	
291.0	CARBONDALE		SANDY SHALE	13.0	102.0	
278.0	CARBONDALE	DEKOVEN	COAL	2.5	115.0	APPROXIMATE THICKNESS
275.5	CARBONDALE		UNDERCLAY	1.5	117.5	
274.0	CARBONDALE		SANDY SHALE	1.0	119.0	
273.0	CARBONDALE		SANDSTONE	5.0	120.0	LIMEY
268.0	CARBONDALE		SANDY SHALE	4.0	125.0	
264.0	CARBONDALE		SANDSTONE	18.0	129.0	
246.0	CARBONDALE		BLACK SHALE	2.0	147.0	
244.0	CARBONDALE	DAVIS	COAL	4.0	149.0	APPROXIMATE THICKNESS
240.0	TRADEWATER		UNDERCLAY	3.0	153.0	
237.0	TRADEWATER		SANDSTONE	8.0	156.0	
229.0	TRADEWATER		BLACK SHALE	1.2	164.0	
227.8	TRADEWATER	SEAHORNE LS	LIMESTONE	0.6	165.2	
227.2	TRADEWATER		SANDSTONE	2.0	165.8	
225.2	TRADEWATER		SANDY SHALE	7.6	167.8	
217.6	TRADEWATER		SANDSTONE	0.8	175.4	
216.8	TRADEWATER		SANDY SHALE	7.8	176.2	

MAPID: 05990077000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 150' S line, 150' W line of NW SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340866 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.645687 **DATE COLLECTED:** 5 / 0 / 1985
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 66.0 **LOG TYPE:** Drillers Log
SOURCE: SUGAR CAMP COAL CO. OB-5 **WELL TYPE:** Coal Test
COMMENT: PERMIT #127 EAGLE VALLEY MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
423.0	PLEISTOCENE		CLAY	20.0	0.0	
403.0	CARBONDALE		BLACK SHALE	2.5	20.0	
400.5	CARBONDALE		COAL	3.0	22.5	
397.5	CARBONDALE		UNDERCLAY	2.8	25.5	
394.7	CARBONDALE		SANDSTONE	4.6	28.3	
390.1	CARBONDALE		GRAY SHALE	1.1	32.9	
389.0	CARBONDALE		SANDSTONE	12.0	34.0	
377.0	CARBONDALE		GRAY SHALE	6.0	46.0	
371.0	CARBONDALE		BLACK SHALE	5.0	52.0	
366.0	CARBONDALE	DAVIS	COAL	4.5	57.0	
361.5	TRADEWATER		UNDERCLAY	1.5	61.5	
360.0	TRADEWATER		GRAY SHALE	1.5	63.0	
358.5	TRADEWATER	SEAHORNE LS	LIMESTONE	1.5	64.5	

MAPID: 05990080000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 17 **QUARTERS/FOOTAGES:** 500' N line, 175' W line of SE SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340775 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.645736 **DATE COLLECTED:** 5 / 1 / 1985
SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 66.0 **LOG TYPE:** Drillers Log
SOURCE: JADER FUEL CO. BH 2 **WELL TYPE:** Coal Test
COMMENT: MINE #4 PERMIT 325

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
423.0	PLEISTOCENE		CLAY	20.0	0.0	
403.0	CARBONDALE		BLACK SHALE	2.5	20.0	
400.5	CARBONDALE	DEKOVEN	COAL	3.0	22.5	
397.5	CARBONDALE		UNDERCLAY	2.8	25.5	
394.7	CARBONDALE		SANDSTONE	4.6	28.3	
390.1	CARBONDALE		GRAY SHALE	1.1	32.9	
389.0	CARBONDALE		SANDSTONE	12.0	34.0	
377.0	CARBONDALE		GRAY SHALE	6.0	46.0	
371.0	CARBONDALE		BLACK SHALE	5.0	52.0	
366.0	CARBONDALE	DAVIS	COAL	4.5	57.0	
361.5	TRADEWATER		UNDERCLAY	1.5	61.5	
360.0	TRADEWATER		GRAY SHALE	1.5	63.0	
358.5	TRADEWATER		LIMESTONE	1.5	64.5	

MAPID: 05900023000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SE NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.360365 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.648727 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-BOOTEN C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNKNOWN	0.0	0.0	

MAPID: 05900065901M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.360994 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.648283 **DATE COLLECTED:** 8 / 24 / 1943
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 5.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CADY, COLBERT MINE **WELL TYPE:** Underground mine
COMMENT: SAMPLE 2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	0.2		
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 05900065900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 1700' S line, 2300' E line of SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.362848 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.648487 **DATE COLLECTED:** 8 / 24 / 1943
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 52.8 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CADY-THURMOND CC-COLBERT MINE **WELL TYPE:** Underground mine
COMMENT: SAMPLED 400' FROM OPENING #1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	48.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.8		

MAPID: 05900228400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE NW NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.367689 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.64976 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 400.0 **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
400.0			UNKNOWN	0.0	0.0	

MAPID: 05900228502M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SW SW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.363915 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.652406 **DATE COLLECTED:** 0 / 0 / 1981
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 50.0 **LOG TYPE:**
SOURCE: MINE NOTES-NELSON, BENNETT C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	BRIAR HILL	COAL	-		WEATHERED REMNANTS
-	CARBONDALE		ROCK	50.0		
-	CARBONDALE	SPRINGFIELD	COAL	-		

MAPID: 05900228500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW NE NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.361555 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.649658 **DATE COLLECTED:** 0 / 0 / 1981
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 30.0 **LOG TYPE:**
SOURCE: MINE NOTES-NELSON, BENNETT C C STRIP **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	30.0		

MAPID: 05900228501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW NE NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.361555 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.649658 **DATE COLLECTED:** 0 / 0 / 1981
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 66.9 **LOG TYPE:**
SOURCE: MINE NOTES-NELSON, BENNETT C C **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	35.0		NOT ALL EXPOSED
-	CARBONDALE	BRIAR HILL	COAL	1.9		
-	CARBONDALE		ROCK	30.0		

MAPID: 05902227000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.3694 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.654697 **DATE COLLECTED:** 4 / 24 / 1958
SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 231.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 116 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.0	PLEISTOCENE		SAND	56.0	0.0	GRAY
321.0	CARBONDALE		BLUE SHALE	16.1	56.0	
304.9	CARBONDALE	EXCELLO	SHALE	3.9	72.1	
301.0	CARBONDALE	HOUCHIN CREEK	COAL	1.2	76.0	
299.8	CARBONDALE		DARK SHALE	36.3	77.2	
263.5	CARBONDALE	SURVANT	COAL	1.6	113.5	
261.9	CARBONDALE		SHALE	68.3	115.1	
193.7	CARBONDALE	COLCHESTER	COAL	0.3	183.3	
193.3	CARBONDALE		SHALY SANDSTONE	9.4	183.7	
183.9	CARBONDALE		SHALE	9.2	193.1	
174.7	CARBONDALE		BLUE SHALE	29.3	202.3	

MAPID: 05902227000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.3694 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.654697 **DATE COLLECTED:** 4 / 24 / 1958

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 231.5 **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
375.0			UNCONSOLIDATED	56.0	0.0	
319.0			ROCK	20.0	56.0	
299.0			COAL	1.2	76.0	
297.8			ROCK	36.3	77.2	
261.5			COAL	1.6	113.5	
259.9			ROCK	68.3	115.1	
191.7			COAL	0.3	183.3	
191.3			ROCK	47.8	183.7	

MAPID: 05902237000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 150' N line, 100' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364694 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.657855 **DATE COLLECTED:** 6 / 5 / 1958

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 184.0 **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
475.0			UNCONSOLIDATED	12.3	0.0	
462.7			ROCK	39.7	12.3	
423.0	CARBONDALE	HERRIN	COAL	3.3	52.0	
419.7	CARBONDALE		ROCK	62.8	55.3	
356.8	CARBONDALE	BRIAR HILL	COAL	1.9	118.2	
355.0	CARBONDALE		ROCK	54.8	120.0	
300.1	CARBONDALE	SPRINGFIELD	COAL	5.0	174.9	
295.1	CARBONDALE		ROCK	4.2	179.9	

MAPID: 05902237000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 150' N line, 100' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364694 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.657855 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 55.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
455.0	CARBONDALE	LAWSON	SANDSTONE	32.0	20.0	
423.0	CARBONDALE	HERRIN	COAL	3.3	52.0	

MAPID: 05902237000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 150' N line, 100' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.364694 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.657855 **DATE COLLECTED:** 6 / 5 / 1958

SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 127 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
475.0	PLEISTOCENE		CLAY	12.3	0.0	
462.7	CARBONDALE	ANVIL ROCK	SANDSTONE	39.5	12.3	
423.2	CARBONDALE	HERRIN	COAL	0.1	51.8	
423.1	CARBONDALE	HERRIN	SANDSTONE	0.2	51.9	
422.9	CARBONDALE	HERRIN	COAL	1.4	52.1	
421.5	CARBONDALE	HERRIN	PYRITE	0.1	53.5	
421.4	CARBONDALE	HERRIN	COAL	0.2	53.6	
421.2	CARBONDALE	HERRIN	PYRITE	0.2	53.8	
421.1	CARBONDALE	HERRIN	COAL	0.4	53.9	
420.7	CARBONDALE	HERRIN	SHALE	0.1	54.3	
420.6	CARBONDALE	HERRIN	COAL	0.7	54.4	
419.9	CARBONDALE	HERRIN	PYRITE	0.1	55.1	
419.8	CARBONDALE	HERRIN	COAL	0.1	55.2	
419.7	CARBONDALE		SHALE	3.8	55.3	
416.0	CARBONDALE		SANDSTONE	0.6	59.0	
415.4	CARBONDALE		SHALE	9.7	59.6	
405.7	CARBONDALE		SANDSTONE	10.0	69.3	
395.7	CARBONDALE		SHALE	8.1	79.3	
387.7	CARBONDALE		SHALE	31.8	87.3	
355.8	CARBONDALE	BRIAR HILL	COAL	1.0	119.2	
354.8	CARBONDALE		SHALE & SANDSTONE	3.6	120.2	
351.2	CARBONDALE		SHALE	5.1	123.8	
346.2	CARBONDALE		GRAY SANDSTONE	9.2	128.8	
337.0	CARBONDALE		SHALY SANDSTONE	3.3	138.0	
333.7	CARBONDALE		SILTY SHALE	27.9	141.3	
305.7	CARBONDALE	ST. DAVID	LIMESTONE	1.3	169.3	
304.5	CARBONDALE	TURNER MINE	SHALE	4.3	170.5	
300.2	CARBONDALE	SPRINGFIELD	COAL	5.0	174.8	
295.2	CARBONDALE		SHALE	4.2	179.8	

MAPID: 059274A0018F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.363978 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.650601 **DATE COLLECTED:** 0 / 0 / 1932

SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 11.8 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-WANLESS&BENSON,COAL DRIFT **WELL TYPE:** Underground mine

COMMENT: ABD MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	8.3		
-	CARBONDALE	SPRINGFIELD	COAL	3.5		

MAPID: 05990034000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 162' N line, 135' W line of NW SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35936 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646892 **DATE COLLECTED:** 4 / 19 / 1989

SURFACE ELEVATION (FT.): 492.7 **LOGGED (FT.):** 195.0 **LOG TYPE:** Drillers Log

SOURCE: SUGAR CAMP COAL CO #37 **WELL TYPE:** Coal Test

COMMENT: PERMIT 127

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
492.7	PLEISTOCENE		CLAY	5.0	0.0	BROWN
487.7	PLEISTOCENE		SAND	5.0	5.0	RED-WHITE
482.7	PLEISTOCENE		CLAY	20.0	10.0	GRAY-BROWN
462.7	PLEISTOCENE		CLAY	5.0	30.0	GRAY
457.7	CARBONDALE		GRAY SHALE	11.5	35.0	
446.2	CARBONDALE	SURVANT	COAL	2.5	46.5	APPROXIMATE THICKNESS
443.7	CARBONDALE		UNDERCLAY	1.0	49.0	
442.7	CARBONDALE		GRAY SHALE	10.0	50.0	
432.7	CARBONDALE		SANDSTONE	30.0	60.0	WITH SHALE
402.7	CARBONDALE		SHALE	5.0	90.0	WITH SANDSTONE
397.7	CARBONDALE		GRAY SHALE	10.0	95.0	
387.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.0	105.0	TRACE OF COAL & UCLY
382.7	CARBONDALE	PALZO	SANDSTONE	10.0	110.0	WITH GRAY SHALE
372.7	CARBONDALE	PALZO	SANDSTONE	10.0	120.0	WHITE
362.7	CARBONDALE		SHALE	24.0	130.0	
338.7	CARBONDALE	DEKOVEN	COAL	3.0	154.0	APPROXIMATE THICKNESS
335.7	CARBONDALE		UNDERCLAY	1.0	157.0	
334.7	CARBONDALE		SANDSTONE	7.0	158.0	WHITE
327.7	CARBONDALE		SANDSTONE	10.0	165.0	WITH SHALE; WHITE
317.7	CARBONDALE		SHALE	10.0	175.0	
307.7	CARBONDALE		BLACK SHALE	3.0	185.0	
304.7	CARBONDALE	DAVIS	COAL	2.0	188.0	APPROXIMATE THICKNESS
302.7	TRADEWATER		UNDERCLAY	1.0	190.0	
301.7	TRADEWATER		SANDSTONE	4.0	191.0	WHITE

MAPID: 05990081000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 18 **QUARTERS/FOOTAGES:** 162' N line, 135' W line of SE SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.35936 **GEOLOGIST:** NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646892 **DATE COLLECTED:** 4 / 19 / 1989

SURFACE ELEVATION (FT.): 492.7 **LOGGED (FT.):** 195.0 **LOG TYPE:** Drillers Log

SOURCE: JADER FUEL CO. 37 **WELL TYPE:** Coal Test

COMMENT: MINE #4 PERMIT 325

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
492.7	PLEISTOCENE		CLAY	5.0	0.0	
487.7	PLEISTOCENE		SAND	5.0	5.0	
482.7	PLEISTOCENE		CLAY	25.0	10.0	
457.7	CARBONDALE		GRAY SHALE	11.5	35.0	
446.2	CARBONDALE	COLCHESTER	COAL	2.5	46.5	
443.7	CARBONDALE		UNDERCLAY	1.0	49.0	
442.7	CARBONDALE		GRAY SHALE	10.0	50.0	
432.7	CARBONDALE	PALZO	SHALY SANDSTONE	35.0	60.0	
397.7	CARBONDALE		GRAY SHALE	10.0	95.0	
387.7	CARBONDALE		BLACK SHALE	5.0	105.0	UCLY WITH COAL TRACES
382.7	CARBONDALE		SHALY SANDSTONE	10.0	110.0	
372.7	CARBONDALE		SANDSTONE	10.0	120.0	WHITE
362.7	CARBONDALE		SHALE	25.0	130.0	
337.7	CARBONDALE	DEKOVEN	COAL	2.0	155.0	
335.7	CARBONDALE		UNDERCLAY	1.0	157.0	
334.7	CARBONDALE		SANDSTONE	7.0	158.0	WHITE
327.7	CARBONDALE		SHALY SANDSTONE	10.0	165.0	WHITE
317.7	CARBONDALE		SHALE	10.0	175.0	
307.7	CARBONDALE		BLACK SHALE	3.0	185.0	
304.7	CARBONDALE	DAVIS	COAL	2.0	188.0	
302.7	TRADEWATER		UNDERCLAY	1.0	190.0	
301.7	TRADEWATER		SANDSTONE	4.0	191.0	WHITE

MAPID: 05900043000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.357731 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.638078 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 289.0 **LOG TYPE:** Drillers Log

SOURCE: F.K. TAYLOR **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
378.0	PLEISTOCENE		CLAY	12.0	0.0	
366.0	PLEISTOCENE		GRAVEL	55.0	12.0	SANDY
311.0	TRADEWATER		UNCLASSIFIED	2.0	67.0	BROKEN LEDGE NOTED
309.0	TRADEWATER		SANDSTONE	10.0	69.0	
299.0	TRADEWATER		COAL	2.0	79.0	
297.0	TRADEWATER		UNDERCLAY	4.0	81.0	
293.0	TRADEWATER		SHALE	25.0	85.0	
268.0	TRADEWATER		DARK SHALE	20.0	110.0	
248.0	TRADEWATER		COAL	1.5	130.0	
246.5	TRADEWATER		DARK SHALE	4.5	131.5	
242.0	TRADEWATER		COAL	0.4	136.0	
241.6	TRADEWATER		UNDERCLAY	3.6	136.4	
238.0	TRADEWATER		SHALE	15.0	140.0	
223.0	TRADEWATER		SHALY SANDSTONE	37.0	155.0	
186.0	TRADEWATER		DARK SHALE	4.0	192.0	
182.0	TRADEWATER		SHALE	3.0	196.0	
179.0	TRADEWATER		SANDSTONE	22.0	199.0	
157.0	TRADEWATER		SANDSTONE	16.0	221.0	
141.0	TRADEWATER		DARK SHALE	2.0	237.0	
139.0	TRADEWATER		COAL	0.5	239.0	
138.5	TRADEWATER		UNDERCLAY	3.5	239.5	
135.0	TRADEWATER		LIMESTONE	2.0	243.0	
133.0	TRADEWATER		SANDSTONE	35.8	245.0	
97.2	TRADEWATER		COAL	2.2	280.8	
95.0	TRADEWATER		SHALY SANDSTONE	0.7	283.0	
94.3	TRADEWATER		DARK SHALE	5.3	283.7	

MAPID: 05900043000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.357731 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.638078 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 289.0 **LOG TYPE:** Survey Core Study

SOURCE: F. K. TAYLOR CO **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
378.0			UNCONSOLIDATED	67.0	0.0	
311.0			ROCK	12.0	67.0	
299.0	CARBONDALE	HERRIN	COAL	2.0	79.0	
297.0	CARBONDALE		ROCK	49.0	81.0	
248.0	CARBONDALE	BRIAR HILL	COAL	1.5	130.0	
246.5	CARBONDALE		ROCK	4.5	131.5	
242.0			COAL	0.4	136.0	
241.6			ROCK	102.6	136.4	
139.0			COAL	0.5	239.0	
138.5			ROCK	41.3	239.5	
97.2			COAL	2.2	280.8	
95.0			ROCK	6.0	283.0	

MAPID: 05900417500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.37394 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.643647 **DATE COLLECTED:** 0 / 0 / 1967

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: MINE NOTES-JO-LOR C C **WELL TYPE:** Strip Mine

COMMENT:

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

MAPID: 05902218000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 900' N line, 800' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.36767 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.641448 **DATE COLLECTED:** 4 / 7 / 1958
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 57.0 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 57 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
470.0	PLEISTOCENE		CLAY	9.5	0.0	BROWN
460.5	CARBONDALE		BROWN SANDSTONE	3.5	9.5	
457.0	CARBONDALE		BROWN SHALE	3.7	13.0	
453.3	CARBONDALE		BROWN SANDSTONE	4.5	16.7	
448.8	CARBONDALE		SHALE	13.1	21.2	HARD
435.7	CARBONDALE	DEKOVEN	COAL	3.3	34.3	
432.4	CARBONDALE		UNDERCLAY	4.4	37.6	GRAY
428.0	CARBONDALE		SHALE	13.0	42.0	
415.0	CARBONDALE		GRAY SANDSTONE	2.0	55.0	

MAPID: 05902218000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 900' N line, 800' E line of NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.36767 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.641448 **DATE COLLECTED:** 5 / 7 / 1958
SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 57.0 **LOG TYPE:** Survey Core Study
SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
470.0			UNCONSOLIDATED	9.5	0.0	
460.5			ROCK	24.8	9.5	
435.7	SPOON	DEKOVEN	COAL	3.3	34.3	
432.4	SPOON		ROCK	19.4	37.6	

MAPID: 05902219000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1200' S line, 800' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.367721 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.63974 **DATE COLLECTED:** 4 / 10 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 196.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 58 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0	PLEISTOCENE		CLAY	6.0	0.0	BROWN
394.0	PLEISTOCENE		CLAY	22.8	6.0	GRAY
371.2			SHALE	16.7	28.8	PROBABLY BELOW SPRINGFIELD COAL -CGT
354.5			SHALE	1.7	45.5	
352.8			GRAY SANDSTONE	44.8	47.2	
308.1			COAL	2.0	91.9	
306.1			SHALE	27.1	93.9	
279.0			SHALE	16.2	121.0	
262.8			COAL	0.7	137.2	BONY
262.2			SHALE	2.2	137.8	
260.0			SHALE	14.2	140.0	
245.8			COAL	0.5	154.2	
245.3			SHALE	2.3	154.7	
243.0			SHALE	3.0	157.0	
240.0			SHALY SANDSTONE	36.0	160.0	

MAPID: 05902219000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** 1200' S line, 800' E line of NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.367721 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.63974 **DATE COLLECTED:** 4 / 10 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 196.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	28.8	0.0	
371.2			ROCK	63.1	28.8	
308.1			COAL	2.0	91.9	
306.1			ROCK	43.3	93.9	
262.8			COAL	0.7	137.2	
262.2			ROCK	16.3	137.8	
245.8			COAL	0.5	154.2	
245.3			ROCK	41.3	154.7	

MAPID: 05903581000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374027 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639863 **DATE COLLECTED:** 4 / 12 / 1972
SURFACE ELEVATION (FT.): 420.0 **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
420.0			UNCONSOLIDATED	18.0	0.0	
402.0			ROCK	5.0	18.0	
397.0			COAL	1.0	23.0	
396.0			ROCK	56.0	24.0	

MAPID: 059274A0021F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE NW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.360612 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.64233 **DATE COLLECTED:** 6 / 28 / 1954
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 16.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-H. B. STONEHOUSE **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		ROCK	3.0		
-	SPOON	DEKOVEN	COAL	2.9		
-	SPOON		ROCK	9.3		
-	SPOON	DAVIS	COAL	1.7		

MAPID: 059274A0019F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.359365 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.643226 **DATE COLLECTED:** 0 / 0 / 1927
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 28.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-FULLER **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	13.0		
-			COAL	3.5		
-			ROCK	12.0		

MAPID: 059274A0025F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.374005 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640809 **DATE COLLECTED:** 0 / 0 / 1932
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 48.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-H. R. WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			ROCK	42.3	0.0	
357.7			COAL	1.0	42.3	
356.7			ROCK	5.0	43.3	

MAPID: 05900044000C **VERSION:** 1 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.340405 **GEOLOGIST:** WEIBEL
CONFIDENTIAL: N **LATITUDE:** 37.640658 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 342.0 **LOG TYPE:** Drillers Log
SOURCE: F.K. TAYLOR **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	78.0	0.0	
292.0			SANDSTONE	17.0	78.0	
275.0			SHALE	5.0	95.0	
270.0			SANDSTONE	2.0	100.0	
268.0			UNDERCLAY	2.0	102.0	
266.0			SHALE	2.0	104.0	
264.0			LIMESTONE	2.0	106.0	
262.0			SHALE	43.7	108.0	
218.3	ABBOTT	WILLIS	COAL	1.7	151.7	UNCERTAIN CORRELATION
216.7			SHALE	14.7	153.3	
202.0			SANDSTONE	15.0	168.0	
187.0			SHALE	21.0	183.0	
166.0			SANDSTONE	33.0	204.0	
133.0			SHALE	7.0	237.0	
126.0			SANDSTONE	46.0	244.0	
80.0			BONE COAL	1.0	290.0	
79.0			SHALE	17.7	291.0	
61.3			COAL	1.0	308.7	
60.3			SANDSTONE	65.3	309.7	
-5.0			SHALE	54.0	375.0	
-59.0			SANDSTONE	48.0	429.0	

MAPID: 05900044000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340405 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.640658 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 500.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	78.0	0.0	
292.0			ROCK	212.0	78.0	
80.0			COAL	1.0	290.0	"DIRTY"
79.0			ROCK	17.0	291.0	
62.0			COAL	1.0	308.0	
61.0			ROCK	190.3	309.0	

MAPID: 05900044000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.340405 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.640658 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 500.0 **LOG TYPE:** Drillers Log

SOURCE: F.K. TAYLOR 11 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	78.0	0.0	
292.0	TRADEWATER		SANDSTONE	17.0	78.0	
275.0	TRADEWATER		SANDSTONE	1.0	95.0	
274.0	TRADEWATER		BLUE SHALE	4.0	96.0	
270.0	TRADEWATER		SANDSTONE	2.0	100.0	
268.0	TRADEWATER		UNDERCLAY	2.0	102.0	
266.0	TRADEWATER		SHALY LIMESTONE	2.0	104.0	
264.0	TRADEWATER		LIMESTONE	2.0	106.0	
262.0	TRADEWATER		SHALY LIMESTONE	12.0	108.0	
250.0	TRADEWATER		DARK SHALE	20.0	120.0	
230.0	TRADEWATER		BLUE SHALE	11.7	140.0	
218.3	TRADEWATER		COAL	1.7	151.7	SULFUR PARTINGS
216.7	TRADEWATER		BLUE SHALE	14.7	153.3	
202.0	TRADEWATER		SHALE & SANDSTONE	15.0	168.0	
187.0	TRADEWATER		SHALE	21.0	183.0	
166.0	TRADEWATER		SANDSTONE	33.0	204.0	
133.0	TRADEWATER		BLUE SHALE	7.0	237.0	
126.0	TRADEWATER		SANDSTONE	8.0	244.0	
118.0	TRADEWATER		SANDSTONE	38.0	252.0	LIGHT
80.0	TRADEWATER		COAL	1.0	290.0	DIRTY
79.0	TRADEWATER		SHALE	1.0	291.0	
78.0	TRADEWATER		BLUE SHALE	16.7	292.0	
61.3	TRADEWATER		COAL	1.0	308.7	
60.3	TRADEWATER		DARK SANDSTONE	14.3	309.7	
46.0	TRADEWATER		SANDSTONE	51.0	324.0	LIGHT
-5.0	TRADEWATER		SHALE	35.0	375.0	
-40.0	TRADEWATER		SHALY SANDSTONE	19.0	410.0	
-59.0	TRADEWATER		GRAY SANDSTONE	48.0	429.0	
-107.0	TRADEWATER		SANDSTONE	23.0	477.0	

MAPID: 05923979000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.345817 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.632862 **DATE COLLECTED:** 8 / 3 / 1978
SURFACE ELEVATION (FT.): 410.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	9.0	0.0	
401.0			ROCK	78.0	9.0	
323.0			COAL	3.0	87.0	
320.0			ROCK	20.0	90.0	

MAPID: 05900045000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.33599 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.636922 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 368.7 **LOGGED (FT.):** 342.0 **LOG TYPE:** Drillers Log
SOURCE: FRANK TAYLOR 7 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.7	PLEISTOCENE		CLAY	22.0	0.0	
346.7	TRADEWATER		SANDSTONE	10.0	22.0	
336.7	TRADEWATER		BLUE SHALE	2.0	32.0	
334.7	TRADEWATER		CLAYSTONE	0.5	34.0	
334.2	TRADEWATER		LIMESTONE	3.5	34.5	
330.7	TRADEWATER		SHALE	55.0	38.0	
275.7	TRADEWATER		BLUE SHALE	3.0	93.0	
272.7	TRADEWATER		SANDSTONE	17.0	96.0	
255.7	TRADEWATER		SANDSTONE	1.0	113.0	CONGLOMERATE
254.7	TRADEWATER		SANDSTONE	29.0	114.0	
225.7	TRADEWATER		SANDSTONE	30.0	143.0	
195.7	TRADEWATER		COAL	1.8	173.0	
193.9	TRADEWATER		BLUE SHALE	18.2	174.8	
175.7	TRADEWATER		SANDSTONE	31.0	193.0	
144.7	TRADEWATER		SANDSTONE	20.0	224.0	
124.7	TRADEWATER		SHALY SANDSTONE	11.0	244.0	
113.7	TRADEWATER		SHALY SANDSTONE	8.0	255.0	
105.7	TRADEWATER		SANDSTONE	28.0	263.0	
77.7	TRADEWATER		BLUE SHALE	3.0	291.0	
74.7	TRADEWATER		SHALY SANDSTONE	19.0	294.0	
55.7	TRADEWATER		SANDSTONE	23.0	313.0	
32.7	TRADEWATER		SHALE	6.0	336.0	

MAPID: 05900045000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.33599 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.636922 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 369.0 **LOGGED (FT.):** 342.0 **LOG TYPE:** Survey Core Study

SOURCE: BYRD & SON **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
369.0			UNCONSOLIDATED	22.0	0.0	
347.0			ROCK	151.0	22.0	
196.0			COAL	1.8	173.0	
194.2			ROCK	167.2	174.8	

MAPID: 05902216000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1400' N line, 1500' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.30574 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.639247 **DATE COLLECTED:** 1 / 14 / 1958

SURFACE ELEVATION (FT.): 423.0 **LOGGED (FT.):** 170.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 53 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
423.0	PLEISTOCENE		CLAY	10.0	0.0	BROWN
413.0			SHALE	12.5	10.0	BROWN; PROBABLY BELOW DAVIS COAL -CGT
400.5			SHALE	15.7	22.5	
384.8			SHALE	0.4	38.2	
384.4			SHALE	3.6	38.6	
380.8			COAL	0.6	42.2	
380.2			SHALE	1.3	42.8	
378.9			COAL	0.3	44.1	
378.6			SHALE	0.2	44.4	
378.4			COAL	0.8	44.6	
377.6			BROWN SHALE	16.6	45.4	
361.0			SHALE	5.5	62.0	
355.5			GRAY SANDSTONE	47.5	67.5	
308.0			SHALY SANDSTONE	3.0	115.0	
305.0			GRAY SANDSTONE	52.0	118.0	

MAPID: 05902216000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 22 **QUARTERS/FOOTAGES:** 1400' N line, 1500' E line of NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.30574 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.639247 **DATE COLLECTED:** 1 / 14 / 1958

SURFACE ELEVATION (FT.): 423.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
423.0			UNCONSOLIDATED	10.0	0.0	
413.0			ROCK	32.2	10.0	
380.8			COAL	0.6	42.2	
380.3			ROCK	1.3	42.7	
378.9			COAL	1.3	44.1	
377.6			ROCK	124.6	45.4	

MAPID: 05900025900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NE NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.282682 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.64268 **DATE COLLECTED:** 0 / 0 / 1909

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-R. BLACK MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0			UNKNOWN	0.0	0.0	

MAPID: 05900071201M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** SW NW NE NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.286135 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.641756 **DATE COLLECTED:** 3 / 30 / 1955

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 5.7 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-H.B. STONEHOUSE,SUN VALLEY CC **WELL TYPE:** Underground mine

COMMENT: SAMPLE #1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	0.3		
-	CARBONDALE	SPRINGFIELD	COAL	4.9		
-	CARBONDALE		ROCK	0.5		

MAPID: 05900071205M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.283845 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640851 **DATE COLLECTED:** 0 / 0 / 1956
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: MINE NOTES-ACME COAL & STONE CO **WELL TYPE:** Strip Mine
COMMENT:

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

MAPID: 05900071203M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE NW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284977 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.642675 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 5.6 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-H.B. STONEHOUSE,SUN VALLEY CC **WELL TYPE:** Underground mine
COMMENT: SAMPLE #3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	0.3		
-	CARBONDALE	SPRINGFIELD	COAL	4.8		
-	CARBONDALE		ROCK	0.5		

MAPID: 05900071202M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.285554 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.642217 **DATE COLLECTED:** 3 / 30 / 1955
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 5.6 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-H.B. STONEHOUSE,SUN VALLEY CC **WELL TYPE:** Underground mine
COMMENT: SAMPLE #2

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	1.0		
-	CARBONDALE	SPRINGFIELD	COAL	4.6		

MAPID: 05900071200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 23 **QUARTERS/FOOTAGES:** NE SW NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.284994 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640847 **DATE COLLECTED:** 0 / 0 / 1937
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 33.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES- SUN VALLEY C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		ROCK	28.0		
-	CARBONDALE	SPRINGFIELD	COAL	5.0		AVERAGED THICKNESS

MAPID: 05900074600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NE NE SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.273404 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639078 **DATE COLLECTED:** 0 / 0 / 1952
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 44.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-OAK HILL C C **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0	CARBONDALE		ROCK	40.0	0.0	
360.0	CARBONDALE	SPRINGFIELD	COAL	4.5	40.0	

MAPID: 05900228700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW SE NE NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.265228 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640944 **DATE COLLECTED:** 0 / 0 / 1959
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 21.7 **LOG TYPE:**
SOURCE: MINE NOTES-RICHARDSON C C **WELL TYPE:** Strip Mine
COMMENT: STRIPPED BOTH 5 AND 6 COAL SEAMS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNKNOWN	0.0	0.0	

MAPID: 05900228701M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** NW NW NW NE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.272196 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.642734 **DATE COLLECTED:** 8 / 7 / 1956
SURFACE ELEVATION (FT.): 360.0 **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		ROCK	16.7		
-	CARBONDALE	HERRIN	COAL	3.8		
-	CARBONDALE		ROCK	0.2		BLUE BAND
-	CARBONDALE	HERRIN	COAL	0.9		
-	CARBONDALE		ROCK	0.2		

MAPID: 05900228800M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** SE SE NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.273392 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.639989 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SAM BLACK MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNKNOWN	0.0	0.0	

MAPID: 05901290000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.277467 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.640425 **DATE COLLECTED:** 8 / 11 / 1952
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 361-C **WELL TYPE:** Coal Test
COMMENT: GIBSONIA AREA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		UNCONSOLIDATED	1.0	0.0	
459.0	CARBONDALE		SANDSTONE	27.0	1.0	
432.0	CARBONDALE		SANDY SHALE	11.0	28.0	
421.0	CARBONDALE	BRIAR HILL	COAL	2.8	39.0	
418.2	CARBONDALE		UNDERCLAY	1.0	41.8	
417.2	CARBONDALE		SANDY SHALE	4.3	42.8	

MAPID: 05901291000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' S line, 1' E line of NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.272808 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.640446 **DATE COLLECTED:** 8 / 11 / 1952
SURFACE ELEVATION (FT.): 510.0 **LOGGED (FT.):** 37.0 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 363C **WELL TYPE:** Coal Test
COMMENT: GIBSONIA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
510.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
501.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.5	9.0	
490.5	CARBONDALE	ANNA	BLACK SHALE	1.5	19.5	
489.0	CARBONDALE	HERRIN	COAL	0.5	21.0	
488.5	CARBONDALE	HERRIN	CLAYSTONE	0.8	21.5	
487.7	CARBONDALE	HERRIN	COAL	1.2	22.3	
486.5	CARBONDALE		UNDERCLAY	5.0	23.5	
481.5	CARBONDALE		SANDSTONE	8.5	28.5	

MAPID: 05901662000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 25 **QUARTERS/FOOTAGES:** SW NE
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.270545 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.623079 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 35.0 **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
400.0			CLAYSTONE	10.0	0.0	
390.0			SANDSTONE	0.0	10.0	

MAPID: 05900227200M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW NE SW NE
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.307008 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.624198 **DATE COLLECTED:** 8 / 9 / 1933
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 8.0 **LOG TYPE:**
SOURCE: FLD NOTES-WANLESS, PATTON COAL BANK **WELL TYPE:** Strip Mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	6.0		
-	ABBOTT	WILLIS	COAL	1.5		
-			ROCK	0.5		

MAPID: 05900099000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** SE NE NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.347131 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.627326 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 67.0 **LOG TYPE:** Drillers Log

SOURCE: TAYLOR;BYRD&SON 9 **WELL TYPE:** Coal Test

COMMENT: NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
-			SANDSTONE	14.0	15.0	
-			SANDSTONE & CONGLOMERATE	2.0	29.0	
-			SANDSTONE	7.0	31.0	
-			SANDSTONE & CONGLOMERATE	8.0	38.0	
-			SANDSTONE	10.0	46.0	
-			SANDSTONE & CONGLOMERATE	2.0	56.0	
-			SANDSTONE	9.0	58.0	

MAPID: 05924286000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 29 **QUARTERS/FOOTAGES:** 330' S line, 530' W line of SE SE

QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.340349 **GEOLOGIST:** GK MAYNOR

CONFIDENTIAL: N **LATITUDE:** 37.614727 **DATE COLLECTED:** 11 / 30 / 1982

SURFACE ELEVATION (FT.): 698.0 **LOGGED (FT.):** 1205.0 **LOG TYPE:** Survey Sample Study

SOURCE: EAGLE OIL, INC. **WELL TYPE:** Dry Hole

COMMENT: SAMPLE TOPS-GK MAYNOR 5/87

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
680.0			SANDSTONE	502.0	18.0	SAMPLES START AT 18'.
178.0				0.0	520.0	
178.0	MISSISSIPPIAN	KINKAID	LIMESTONE	120.0	520.0	TOP OF GOREVILLE
58.0	MISSISSIPPIAN	DEGONIA	SHALE & SILTSTONE	50.0	640.0	
8.0	MISSISSIPPIAN	CLORE	CALCAREOUS SHALE	70.0	690.0	
-62.0	MISSISSIPPIAN	PALESTINE	SANDSTONE	50.0	760.0	
-112.0	MISSISSIPPIAN	MENARD	LIMESTONE	120.0	810.0	TOP OF ALLARD
-232.0	MISSISSIPPIAN	WALTERSBURG	SANDSTONE/SHALE	50.0	930.0	
-282.0	MISSISSIPPIAN	VIENNA	LIMESTONE	10.0	980.0	
-292.0	MISSISSIPPIAN	TAR SPRINGS	SANDSTONE/SHALE	130.0	990.0	
-422.0			LIMESTONE	30.0	1120.0	
-452.0	MISSISSIPPIAN	HARDINSBURG	SHALE & SILTSTONE	0.0	1150.0	

MAPID: 05901663000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.280882 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.607366 **DATE COLLECTED:** 0 / 0 / 1938
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 141.0 **LOG TYPE:** Survey Sample Study
SOURCE: LANCASTER ALBERT **WELL TYPE:** Water Well
COMMENT: SAMPLE TOPS-GK MAYNOR 5/87

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
480.0			CLAYSTONE	20.0	0.0	
460.0			SANDSTONE/SHALE	0.0	20.0	

MAPID: 05901664000C **VERSION:** 1 **PROJECT:** CUS-PILOT

COUNTY: GALLATIN **TWP/RNG:** 10S 8E **SECTION:** 36 **QUARTERS/FOOTAGES:** NW SW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.279734 **GEOLOGIST:** GK MAYNOR
CONFIDENTIAL: N **LATITUDE:** 37.604624 **DATE COLLECTED:** 0 / 0 / 1941
SURFACE ELEVATION (FT.): 550.0 **LOGGED (FT.):** 126.0 **LOG TYPE:** Survey Sample Study
SOURCE: U.S. FOREST SERVICE **WELL TYPE:** Water Well
COMMENT: SAMPLE STUDY-EC COCKRUM 4/41.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
550.0			CLAYSTONE	15.0	0.0	
535.0			SANDSTONE	0.0	15.0	

MAPID: 05902197000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 516' N line, 156' W line of NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.161227 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.687754 **DATE COLLECTED:** 3 / 21 / 1958

SURFACE ELEVATION (FT.): 354.1 **LOGGED (FT.):** 568.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 501 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.1	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0	
291.1			SANDY SHALE	157.0	63.0	
134.1			GRAY SHALE	20.5	220.0	
113.6			SANDSTONE	2.0	240.5	
111.6			GRAY SHALE	5.0	242.5	
106.6			SANDSTONE	13.3	247.5	
93.3			CALCAREOUS SILTSTONE	7.7	260.8	ROOF SEQ. OF COAL? NO COAL PRESENT
85.6			SANDSTONE	24.5	268.5	
61.1			GRAY SHALE	9.5	293.0	SILTY LAMS
51.6			SHALE	1.9	302.5	DARK; SLICKS; NO COALY MATL
49.7			CARBONACEOUS SHALE	4.9	304.4	
44.8			SANDSTONE	5.7	309.3	
39.1			SILTY SHALE	2.6	315.0	
36.5			SANDSTONE	10.9	317.6	
25.6			SHALE	3.9	328.5	
21.7			SHALE	1.7	332.4	GRAY-BLACK
20.0			SHALE	0.2	334.1	V. COALY; SOFT; FRIABLE
19.8			SANDSTONE	0.1	334.3	V. COALY
19.7			SIDERITE	0.2	334.4	SIDERITE
19.5			SANDSTONE	3.4	334.6	
16.1			CLAYSTONE	3.0	338.0	SANDY LAMS; SID. NODS.
13.1			GRAY SHALE	3.0	341.0	
10.1			COAL	0.5	344.0	BADLY BROKEN
9.6			SANDSTONE	5.5	344.5	
4.1			SILTY SHALE	11.0	350.0	
-6.9			COAL	0.5	361.0	SILTY TO BONY
-7.4			SANDSTONE	93.2	361.5	SOME CARB. MATL.
-100.6			GRAY SHALE	24.9	454.7	1/4" PYRITE & COAL BAND AT BASE
-125.5			COAL	0.3	479.6	
-125.8			CLAYSTONE	3.1	479.9	
-128.9			SHALE & SANDSTONE	28.3	483.0	
-157.2			SANDSTONE	15.2	511.3	COAL SPRS IN BOTTOM 8"; 1/8" BAND
-172.4			SILTY SHALE	1.7	526.5	
-174.1			SANDSTONE	39.8	528.2	

MAPID: 05902230000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** 310' S line, 52' W line of SW NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.170608 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.685975 **DATE COLLECTED:** 3 / 26 / 1958

SURFACE ELEVATION (FT.): 384.9 **LOGGED (FT.):** 235.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 502 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
384.9	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0	
320.9	CARBONDALE		GRAY SHALE	13.4	64.0	8" LS LENS AT 76.2'
307.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	77.4	
304.9	CARBONDALE	SPRINGFIELD	COAL	4.2	80.0	
300.7	CARBONDALE		UNDERCLAY	4.5	84.2	
296.2	CARBONDALE		GRAY SHALE	2.0	88.7	
294.2	CARBONDALE		NO RECORD	1.8	90.7	ADJUST FOR MARKER
292.4	CARBONDALE		SANDSTONE	20.7	92.5	
271.7	CARBONDALE		SILTSTONE	0.8	113.2	
270.9	CARBONDALE		NO RECORD	2.0	114.0	ADJUST FOR MARKER
268.9	CARBONDALE		COAL	0.2	116.0	
268.7	CARBONDALE		SILTY SHALE	36.3	116.2	
232.4	CARBONDALE		NO RECORD	2.0	152.5	ADJUST FOR MARKER
230.4	CARBONDALE		CORE LOSS	3.5	154.5	
226.9	CARBONDALE	EXCELLO	BLACK SHALE	3.7	158.0	FE-STONE CONG. AT 158.6'
223.2	CARBONDALE	HOUCHIN CREEK	PYRITE	0.0	161.7	
223.2	CARBONDALE	HOUCHIN CREEK	COAL	1.9	161.7	
221.3	CARBONDALE		CLAYSTONE	4.4	163.6	
216.9	CARBONDALE		SILTY SHALE	17.0	168.0	
199.9	CARBONDALE		GRAY SHALE	10.0	185.0	
189.9	CARBONDALE		BLACK SHALE	7.0	195.0	
182.9	CARBONDALE	SURVANT	COAL	2.2	202.0	CORRELATION UNCERTAIN
180.7	CARBONDALE		UNDERCLAY	1.4	204.2	
179.3	CARBONDALE		GRAY SHALE	7.6	205.6	
171.7	CARBONDALE		NO RECORD	2.2	213.2	ADJUST FOR MARKER
169.5	CARBONDALE		BLACK SHALE	1.2	215.4	
168.3	CARBONDALE		SANDSTONE	5.1	216.6	
163.2	CARBONDALE		GRAY SHALE	3.3	221.7	
159.9	CARBONDALE		SILTSTONE	4.2	225.0	
155.7	CARBONDALE		SANDSTONE	5.8	229.2	

MAPID: 05902545000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.165427 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.68208 **DATE COLLECTED:** 11 / 21 / 1960

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 832.7 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 530 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0	PLEISTOCENE		UNCONSOLIDATED	79.5	0.0	
265.5			GRAY SHALE	2.0	79.5	
263.5			LIMESTONE	0.5	81.5	
263.0	MODESTO		FOSSILIFEROUS SHALE	0.5	82.0	
262.5	MODESTO		BLACK SHALE	2.2	82.5	
260.3	MODESTO	MACOUPIN	LIMESTONE	1.2	84.7	
259.2	MODESTO		GRAY SHALE	20.9	85.8	
238.3	MODESTO	WOMAC	COAL	0.7	106.7	
237.6	MODESTO		UNDERCLAY	2.1	107.4	
235.5	MODESTO		GRAY SHALE	13.3	109.5	
222.2	MODESTO		SANDSTONE	6.2	122.8	
216.0	MODESTO		NO RECORD	10.5	129.0	MISSING CORE
205.5	MODESTO		SANDSTONE	1.6	139.5	
203.9	MODESTO		SILTSTONE	2.0	141.1	
201.9	MODESTO		LAMINATED SILTSTONE	18.4	143.1	LAM. SILTST/SH/SS
183.5	MODESTO		GRAY SHALE	49.5	161.5	
134.0	MODESTO		CORE LOSS	1.7	211.0	CORE LOSS
132.3	MODESTO	CHAPEL	COAL	1.6	212.7	
130.7	MODESTO		SHALE & CLAYSTONE	7.7	214.3	
123.0	MODESTO		SANDSTONE	9.0	222.0	
114.0	MODESTO		SILTSTONE	11.0	231.0	
103.0	MODESTO		SANDSTONE	28.7	242.0	
74.3	MODESTO		GRAY SHALE	1.7	270.7	
72.6	MODESTO	WEST FRANKLIN	LIMESTONE	4.2	272.4	
68.4	MODESTO		GRAY SHALE	2.9	276.6	
65.5	MODESTO		SHALE & SANDSTONE	10.2	279.5	
55.3	MODESTO		GRAY SHALE	30.5	289.7	
24.8	MODESTO		SHALE	0.3	320.2	1/16" COALY FILM AT BASE-CUTLER RIDER
24.5	MODESTO		UNDERCLAY	0.1	320.5	
24.4	MODESTO		SILTSTONE	14.0	320.6	
10.4	MODESTO		SANDSTONE	76.7	334.6	ABRUPT CONTACT AT BASE
-66.3	CARBONDALE	DANVILLE	COAL	1.3	411.3	
-67.5	CARBONDALE		UNDERCLAY	0.5	412.5	
-68.0	CARBONDALE		CLAYSTONE	2.7	413.0	
-70.7	CARBONDALE		SILTSTONE	5.5	415.7	
-76.2	CARBONDALE		GRAY SHALE	8.3	421.2	
-84.5	CARBONDALE		BLACK SHALE	0.3	429.5	
-84.8	CARBONDALE		BONE COAL	0.2	429.8	ALLENBY HORIZON?
-85.0	CARBONDALE		UNDERCLAY	4.2	430.0	

-89.2	CARBONDALE		CLAYSTONE & SILTY SHALE	1.0	434.2	
-90.2	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	435.2	
-96.2	CARBONDALE		UNDERCLAY	0.5	441.2	
-96.7	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	441.7	
-108.2	CARBONDALE		GRAY SHALE	10.0	453.2	
-118.2	CARBONDALE	BRERETON	LIMESTONE	1.8	463.2	
-120.0	CARBONDALE	ANNA	BLACK SHALE	3.4	465.0	
-123.4	CARBONDALE	HERRIN	COAL	0.4	468.4	
-123.8	CARBONDALE	HERRIN	SHALE	0.3	468.8	
-124.1	CARBONDALE	HERRIN	COAL	0.8	469.1	
-124.9	CARBONDALE	HERRIN	SHALE	0.2	469.9	"BLUE BAND"
-125.1	CARBONDALE	HERRIN	COAL	0.6	470.1	
-125.7	CARBONDALE		UNDERCLAY	2.6	470.7	
-128.3	CARBONDALE		SILTSTONE	17.9	473.3	
-146.2	CARBONDALE		NO RECORD	1.3	491.2	ADJUST FOR MARKER
-147.5	CARBONDALE		GRAY SHALE	19.2	492.5	
-166.7	CARBONDALE	BRIAR HILL	BONE COAL	0.0	511.7	
-166.7	CARBONDALE	BRIAR HILL	COAL	1.4	511.7	
-168.1	CARBONDALE		UNDERCLAY	0.6	513.1	
-168.7	CARBONDALE		SILTSTONE	58.5	513.7	W/SS LAMS.
-227.2	CARBONDALE		GRAY SHALE	3.0	572.2	
-230.2	CARBONDALE	ST. DAVID	LIMESTONE	0.2	575.2	
-230.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	575.4	
-233.4	CARBONDALE	SPRINGFIELD	COAL	4.7	578.4	
-238.1	CARBONDALE		UNDERCLAY	1.1	583.1	
-239.2	CARBONDALE		SHALE & CLAYSTONE	1.9	584.2	
-241.1	CARBONDALE		SILTSTONE	28.3	586.1	1' GRAYSH AT 588.7'
-269.4	CARBONDALE		GRAY SHALE	1.6	614.4	
-271.0	CARBONDALE		SILTSTONE	13.7	616.0	
-284.7	CARBONDALE		GRAY SHALE	20.6	629.7	
-305.3	CARBONDALE	HANOVER	LIMESTONE	0.4	650.3	
-305.7	CARBONDALE	EXCELLO	BLACK SHALE	5.0	650.7	
-310.7	CARBONDALE	HOUCHIN CREEK	COAL	2.0	655.7	
-312.7	CARBONDALE		SILTSTONE	2.0	657.7	
-314.1	CARBONDALE		CONGLOMERATE	0.4	659.1	CLAY PEBBLE CONGLOM.
-315.5	CARBONDALE		GRAY SHALE	33.7	660.5	
-349.2	CARBONDALE	SURVANT	COAL	0.7	694.2	
-349.9	CARBONDALE		UNDERCLAY	1.5	694.9	
-351.4	CARBONDALE		SHALE & CLAYSTONE	1.8	696.4	
-353.2	CARBONDALE		SILTSTONE	7.5	698.2	
-360.7	CARBONDALE		SILTSTONE/SANDSTONE	32.3	705.7	INTERLAM SILTST/SS
-393.0	CARBONDALE		GRAY SHALE	6.0	738.0	
-399.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.9	744.0	
-399.9	CARBONDALE	COLCHESTER	COAL	0.2	744.9	
-400.1	CARBONDALE		SANDSTONE	2.9	745.1	
-403.0	CARBONDALE		SILTSTONE	45.1	748.0	
-448.1	CARBONDALE		NO RECORD	0.8	793.1	GAP IN CORE

-448.9	CARBONDALE		SILTSTONE	8.1	793.9	
-457.0	CARBONDALE	DEKOVEN	COAL	3.0	802.0	
-460.0	CARBONDALE		SILTSTONE	4.9	805.0	
-464.9	CARBONDALE		SANDSTONE	5.4	809.9	
-470.3	CARBONDALE		SILTSTONE	1.5	815.3	
-471.8	CARBONDALE		GRAY SHALE	8.4	816.8	
-480.2	CARBONDALE		BLACK SHALE	2.4	825.2	
-482.6	CARBONDALE		NO RECORD	-0.9	827.6	ADJUST FOR MARKER
-481.5	CARBONDALE	DAVIS	COAL	4.1	826.5	
-485.6	TRADEWATER		UNDERCLAY	0.7	830.6	
-486.3	TRADEWATER		SILTSTONE	1.4	831.3	

MAPID: 05902545000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 1 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.165427 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.68208 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: STONEFORT COAL CORP 530 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-311.0	CARBONDALE	HOUCHIN CREEK	COAL	1.3	656.0	
-349.0	CARBONDALE	SURVANT	COAL	0.4	694.0	
-400.0	CARBONDALE	COLCHESTER	COAL	0.1	745.0	
-457.0	CARBONDALE	DEKOVEN	COAL	3.0	802.0	
-457.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	802.0	
-482.0	CARBONDALE	DAVIS	COAL	4.0	827.0	16% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902147000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2335' S line, 2000' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17768 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.679567 **DATE COLLECTED:** 8 / 0 / 1957

SURFACE ELEVATION (FT.): 357.8 **LOGGED (FT.):** 530.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 19K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
357.8	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
292.8	MODESTO		GRAY SHALE	5.0	65.0	
287.8	MODESTO		SANDY SHALE	12.0	70.0	
275.8	MODESTO		SANDSTONE	6.0	82.0	
269.8	MODESTO		LIMESTONE	2.0	88.0	
267.8	MODESTO		SANDY SHALE	47.0	90.0	
220.8	MODESTO		GRAY SHALE	32.0	137.0	
188.8	MODESTO		BLACK SHALE	3.0	169.0	
185.8	MODESTO		GRAY SHALE	3.0	172.0	
182.8	MODESTO		SANDY SHALE	14.0	175.0	
168.8	MODESTO		SANDSTONE	5.0	189.0	
163.8	MODESTO		SANDY SHALE	14.0	194.0	
149.8	MODESTO		SHALY SANDSTONE	16.0	208.0	
133.8	MODESTO		LIMESTONE	3.5	224.0	
130.3	MODESTO		SANDY SHALE	52.5	227.5	
77.8	MODESTO		BLACK SHALE	3.0	280.0	
74.8	MODESTO		GRAY SHALE	5.0	283.0	
69.8	MODESTO		COAL	0.7	288.0	
69.1	MODESTO		GRAY SHALE	1.3	288.7	
67.8	MODESTO		SANDSTONE	6.0	290.0	
61.8	MODESTO		DARK SHALE	15.0	296.0	
46.8	MODESTO		SANDY SHALE	23.0	311.0	
23.8	MODESTO		BLACK SHALE	5.0	334.0	
18.8	MODESTO		GRAY SHALE	4.0	339.0	
14.8	MODESTO		SANDY SHALE	7.0	343.0	
7.8	MODESTO		SHALE	3.0	350.0	
4.8	CARBONDALE	DANVILLE	COAL	1.0	353.0	
3.8	CARBONDALE		SHALE	3.0	354.0	
0.8	CARBONDALE	ANVIL ROCK	SANDSTONE	52.0	357.0	
-51.2	CARBONDALE		DARK SHALE	3.5	409.0	
-54.7	CARBONDALE	BRERETON	LIMESTONE	2.0	412.5	
-56.7	CARBONDALE	ANNA	BLACK SHALE	0.5	414.5	
-57.2	CARBONDALE	ANNA	LIMESTONE	0.7	415.0	
-57.9	CARBONDALE	ANNA	BLACK SHALE	1.8	415.7	
-59.7	CARBONDALE	HERRIN	COAL	2.7	417.5	
-62.4	CARBONDALE		GREEN SHALE	3.8	420.2	
-66.2	CARBONDALE		SANDY SHALE	10.0	424.0	
-76.2	CARBONDALE		DARK SHALE	4.0	434.0	
-80.2	CARBONDALE	BRIAR HILL	COAL	2.3	438.0	

-82.5	CARBONDALE		GRAY SHALE	11.7	440.3
-94.2	CARBONDALE		SANDSTONE	46.0	452.0
-140.2	CARBONDALE		DARK SHALE	17.2	498.0
-157.4	CARBONDALE		FOSSILIFEROUS SHALE	1.5	515.2
-158.9	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	516.7
-162.5	CARBONDALE	SPRINGFIELD	COAL	4.7	520.3
-167.2	CARBONDALE		SANDY SHALE	5.0	525.0

MAPID: 05902147000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 2335' S line, 2000' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17768 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.679567 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 359.0 **LOGGED (FT.):** 422.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 19-K **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
3.7	CARBONDALE	DANVILLE	COAL	1.0	355.3	
2.7	CARBONDALE	LAWSON	SHALE	3.0	356.3	
-0.3	CARBONDALE	LAWSON	SANDSTONE	52.0	359.3	
-52.3	CARBONDALE	LAWSON	GRAY SHALE	3.5	411.3	
-55.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.3	414.8	
-59.2	CARBONDALE	ANNA	BLACK SHALE	1.8	418.2	
-61.0	CARBONDALE	HERRIN	COAL	2.8	420.0	

MAPID: 05902232000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 720' S line, 476' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.182875 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.683056 **DATE COLLECTED:** 4 / 2 / 1958

SURFACE ELEVATION (FT.): 389.5 **LOGGED (FT.):** 265.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 503 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
389.5	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0	FROM DRILLER'S LOG
350.5	CARBONDALE		SANDSTONE	3.0	39.0	FROM DRILLER'S LOG
347.5	CARBONDALE		SANDSTONE	38.0	42.0	CORING STARTED
309.5	CARBONDALE		SILTSTONE	39.0	80.0	DIP=20-30; SLICKENSIDES
270.5	CARBONDALE		SANDSTONE	9.0	119.0	
261.5	CARBONDALE		GRAY SHALE	9.7	128.0	
251.8	CARBONDALE	BRERETON	LIMESTONE	0.6	137.7	
251.2	CARBONDALE	ANNA	BLACK SHALE	1.4	138.3	
249.8	CARBONDALE		NO RECORD	0.3	139.7	ADJUST FOR MARKER
249.5	CARBONDALE	HERRIN	COAL	2.7	140.0	
246.8	CARBONDALE		UNDERCLAY	0.8	142.7	
246.0	CARBONDALE	HIGGINSVILLE	LIMESTONE	1.0	143.5	
245.0	CARBONDALE		SILTSTONE	0.5	144.5	
244.5	CARBONDALE		NO RECORD	1.5	145.0	ADJUST FOR MARKER
243.0	CARBONDALE		SILTSTONE	2.0	146.5	
241.0	CARBONDALE		LIMESTONE	0.8	148.5	
240.2	CARBONDALE		GRAY SHALE	31.9	149.3	
208.3	CARBONDALE		SHALE	0.2	181.2	
208.1	CARBONDALE	BRIAR HILL	COAL	1.5	181.4	
206.6	CARBONDALE		UNDERCLAY	0.5	182.9	
206.1	CARBONDALE		SANDSTONE	1.3	183.4	
204.8	CARBONDALE		SILTY SHALE	9.3	184.7	
195.5	CARBONDALE		SANDSTONE	5.0	194.0	
190.5	CARBONDALE		SILTY SHALE	52.0	199.0	
138.5	CARBONDALE		FOSSILIFEROUS SHALE	3.2	251.0	
135.3	CARBONDALE		SHALE	0.6	254.2	W/ 1/4" BEDS OF LS
134.7	CARBONDALE	ST. DAVID	LIMESTONE	0.3	254.8	
134.4	CARBONDALE		NO RECORD	0.4	255.1	ADJUST FOR MARKER
134.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	255.5	
132.0	CARBONDALE	SPRINGFIELD	COAL	4.0	257.5	
128.0	CARBONDALE		UNDERCLAY	3.0	261.5	
125.0	CARBONDALE		SANDSTONE	0.5	264.5	FROM DRILLER'S LOG

MAPID: 05902239000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1888' N line, 1193' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.174916 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.683875 **DATE COLLECTED:** 6 / 11 / 1958

SURFACE ELEVATION (FT.): 377.6 **LOGGED (FT.):** 296.9 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 511 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.6	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0	FROM DRILLER'S LOG
345.6	MODESTO		SANDSTONE	45.7	32.0	FROM DRILLER'S LOG
299.9	MODESTO		SANDSTONE	35.3	77.7	CORING STARTED
264.6	CARBONDALE	DANVILLE	COAL	1.7	113.0	
262.9	CARBONDALE		UNDERCLAY	3.0	114.7	
259.9	CARBONDALE		GRAY SHALE	5.0	117.7	
254.9	CARBONDALE	ALLENBY	BLACK SHALE	0.8	122.7	ALMOST CANNELOID
254.1	CARBONDALE		UNDERCLAY	0.5	123.5	
253.6	CARBONDALE		GRAY SHALE	4.8	124.0	W/SILTST
248.8	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	128.8	
243.0	CARBONDALE		SHALE	0.5	134.6	
242.5	CARBONDALE	ANVIL ROCK	SILTSTONE	1.4	135.1	
241.1	CARBONDALE		NO RECORD	2.0	136.5	ADJUST FOR MARKER
239.1	CARBONDALE	ANVIL ROCK	SANDSTONE	9.3	138.5	
229.8	CARBONDALE		GRAY SHALE	8.5	147.8	
221.3	CARBONDALE	BRERETON	LIMESTONE	0.9	156.3	
220.4	CARBONDALE	ANNA	BLACK SHALE	1.1	157.2	
219.3	CARBONDALE	ANNA	LIMESTONE	1.8	158.3	CONCRETION?
217.5	CARBONDALE	ANNA	BLACK SHALE	0.2	160.1	
217.3	CARBONDALE		NO RECORD	0.4	160.3	ADJUST FOR MARKER
216.9	CARBONDALE	HERRIN	COAL	1.5	160.7	
215.4	CARBONDALE	HERRIN	CLAYSTONE	0.3	162.2	BLUE BAND
215.1	CARBONDALE	HERRIN	COAL	0.7	162.5	
214.4	CARBONDALE		UNDERCLAY	3.8	163.2	
210.6	CARBONDALE		SILTSTONE	5.7	167.0	
204.9	CARBONDALE		SANDSTONE	33.8	172.7	SHARP BASAL CONTACT
171.1	CARBONDALE		SHALE	2.5	206.5	
168.6	CARBONDALE		NO RECORD	-0.5	209.0	ADJUST FOR MARKER
169.1	CARBONDALE	BRIAR HILL	COAL	2.0	208.5	
167.1	CARBONDALE		SANDY CLAYSTONE	1.7	210.5	
165.4	CARBONDALE		SILTSTONE	1.2	212.2	
164.2	CARBONDALE		SANDSTONE	25.6	213.4	
138.6	CARBONDALE		SILTY SHALE	42.2	239.0	
96.4	CARBONDALE	ST. DAVID	LIMESTONE	0.7	281.2	
95.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	281.9	
93.0	CARBONDALE	SPRINGFIELD	COAL	4.3	284.6	
88.7	CARBONDALE		UNDERCLAY	2.3	288.9	
86.4	CARBONDALE		CLAYSTONE	0.9	291.2	

85.5	CARBONDALE	SILTSTONE	4.5	292.1	
81.0	CARBONDALE	NO RECORD	0.3	296.6	ADJUST FOR T.D.

MAPID: 05902239000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 1888' N line, 1193' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.174916 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.683875 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 378.0 **LOGGED (FT.):** 162.3 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 511 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
261.7	CARBONDALE	DANVILLE	COAL	1.8	116.3	
259.9	CARBONDALE		GRAY SHALE	5.3	118.1	
254.7	CARBONDALE	ALLENBY	BONE COAL	0.8	123.3	
253.8	CARBONDALE		SHALE & SILTSTONE	5.3	124.2	
248.6	CARBONDALE	BANKSTON FORK	LIMESTONE	5.8	129.4	
242.8	CARBONDALE	LAWSON	CLAYSTONE	0.5	135.2	
242.3	CARBONDALE	LAWSON	SILTSTONE	1.4	135.7	
240.9	CARBONDALE	LAWSON	SANDSTONE	9.3	137.1	
231.6	CARBONDALE	LAWSON	GRAY SHALE	9.5	146.4	
222.1	CARBONDALE	BRERETON	LIMESTONE	0.9	155.9	
221.2	CARBONDALE	ANNA	BLACK SHALE	3.2	156.8	
218.0	CARBONDALE	HERRIN	COAL	2.3	160.0	

MAPID: 05902283000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 609' S line, 30' E line of NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180021 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.678796 **DATE COLLECTED:** 9 / 2 / 1958

SURFACE ELEVATION (FT.): 382.9 **LOGGED (FT.):** 598.9 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 527 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.9	PLEISTOCENE		UNCONSOLIDATED	62.0	0.0	FROM DRILLER'S LOG
320.9	MODESTO		GRAY SHALE	20.0	62.0	FROM DRILLER'S LOG
300.9	MODESTO		SANDY SHALE	63.0	82.0	FROM DRILLER'S LOG
237.9	MODESTO	WOMAC	COAL	1.0	145.0	FROM DRILLER'S LOG
236.9	MODESTO		SANDSTONE	25.0	146.0	FROM DRILLER'S LOG
211.9	MODESTO		SANDY SHALE	39.0	171.0	FROM DRILLER'S LOG
172.9	MODESTO		GRAY SHALE	30.0	210.0	W/SDYSH; DRILLER'S LOG
142.9	MODESTO		SANDY SHALE	50.0	240.0	SANDY SHALE
92.9	MODESTO		GRAY SHALE	15.2	290.0	W/SILST; DRILLER'S LOG
77.7	MODESTO		COAL	0.0	305.2	FROM DRILLER'S LOG
77.7	MODESTO		CLAYSTONE	0.9	305.2	
76.8	CARBONDALE		SILTSTONE	4.9	306.1	
71.9	CARBONDALE		SILTY SHALE	2.5	311.0	
269.4	CARBONDALE		NO RECORD	-0.5	113.5	ADJUST FOR MARKER
69.9	CARBONDALE		GRAY SHALE	17.0	313.0	
52.9	CARBONDALE		BLACK SHALE	0.9	330.0	COAL HORIZON
52.0	CARBONDALE		NO RECORD	0.0	330.9	CORE CONTENTS SUGGEST THIN OR NO COAL
52.0	CARBONDALE		UNDERCLAY	1.5	330.9	
50.5	CARBONDALE		SILTSTONE	0.6	332.4	
49.9	CARBONDALE		SHALE & SANDSTONE	40.0	333.0	INTERBEDDED
9.9	CARBONDALE		SANDSTONE	10.0	373.0	1/2" ZONE OF COAL CHIPS AT 380'
-0.1	CARBONDALE		SANDSTONE	42.0	383.0	FROM DRILLER'S LOG
-42.1	CARBONDALE		GRAY SHALE	2.0	425.0	FROM DRILLER'S LOG
-44.1	CARBONDALE	DANVILLE	COAL	2.0	427.0	FROM DRILLER'S LOG
-46.1	CARBONDALE		SANDY SHALE	18.0	429.0	FROM DRILLER'S LOG
-64.1	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	447.0	FROM DRILLER'S LOG
-94.1	CARBONDALE		GRAY SHALE	3.0	477.0	FROM DRILLER'S LOG
-97.1	CARBONDALE	HERRIN	COAL	2.5	480.0	
-99.6	CARBONDALE		UNDERCLAY	4.0	482.5	
-103.6	CARBONDALE		SANDY SHALE	20.0	486.5	
-123.6	CARBONDALE		GRAY SHALE	14.5	506.5	
-138.1	CARBONDALE	BRIAR HILL	COAL	1.5	521.0	
-139.6	CARBONDALE		SANDY SHALE	52.2	522.5	
-191.8	CARBONDALE		GRAY SHALE	16.0	574.7	
-207.8	CARBONDALE	ST. DAVID	LIMESTONE	1.1	590.7	
-208.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	591.8	
-211.7	CARBONDALE	SPRINGFIELD	COAL	4.3	594.6	

MAPID: 05902315000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 14' S line, 525' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.181751 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.681107 **DATE COLLECTED:** 9 / 16 / 1958

SURFACE ELEVATION (FT.): 384.6 **LOGGED (FT.):** 493.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 528 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
384.6	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	FROM DRILLER'S LOG
304.6	MODESTO		GRAY SHALE	14.0	80.0	FROM DRILLER'S LOG
290.6	MODESTO	WOMAC	COAL	1.0	94.0	SOFT; FROM DRILLER'S LOG
289.6	MODESTO		SANDSTONE	25.0	95.0	FROM DRILLER'S LOG
264.6	MODESTO		SANDY SHALE	35.0	120.0	FROM DRILLER'S LOG
229.6	MODESTO		SANDY SHALE	30.0	155.0	W/GRAYSH STREAKS; FROM DRILLER'S LOG
199.6	MODESTO		SANDSTONE	100.0	185.0	W/SDYSH; FROM DRILLER'S LOG
99.6	MODESTO		SANDY SHALE	25.0	285.0	FROM DRILLER'S LOG
74.6	CARBONDALE	DANVILLE	COAL	1.5	310.0	FROM DRILLER'S LOG
73.1	CARBONDALE		SANDY SHALE	20.0	311.5	FROM DRILLER'S LOG
53.1	CARBONDALE	ANVIL ROCK	SANDSTONE	30.5	331.5	FROM DRILLER'S LOG
22.6	CARBONDALE		CALCAREOUS SHALE	2.0	362.0	BRER & ANNA NOT SEPARATED BY DRILLERS
20.6	CARBONDALE	HERRIN	COAL	2.7	364.0	FROM DRILLER'S LOG
17.9	CARBONDALE		UNDERCLAY	3.0	366.7	FROM DRILLER'S LOG
14.9	CARBONDALE		SANDY SHALE	24.0	369.7	FROM DRILLER'S LOG
-9.1	CARBONDALE		GRAY SHALE	13.3	393.7	FROM DRILLER'S LOG
-22.4	CARBONDALE	BRIAR HILL	COAL	2.0	407.0	FROM DRILLER'S LOG
-24.4	CARBONDALE		SANDY SHALE	29.0	409.0	W/SS; FROM DRILLER'S LOG
-53.4	CARBONDALE		SANDY SHALE	43.0	438.0	FROM CORE BEG. 458'
-96.4	CARBONDALE	ST. DAVID	FOSSILIFEROUS BLACK SHALE	1.8	481.0	FROM CORE BEG. 458'
-98.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	482.8	FROM CORE BEG. 458'
-100.4	CARBONDALE	SPRINGFIELD	COAL	4.5	485.0	FROM CORE BEG. 458'
-104.9	CARBONDALE		UNDERCLAY	0.6	489.5	FROM CORE BEG. 458'
-105.5	CARBONDALE		CLAYSTONE	1.0	490.1	FROM CORE BEG. 458'
-106.5	CARBONDALE		UNDERCLAY	0.4	491.1	FROM CORE BEG. 458'
-106.9	CARBONDALE		LIMESTONE	1.5	491.5	FROM DRILLER'S LOG

MAPID: 05902316000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 300' N line, 221' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180693 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.680242 **DATE COLLECTED:** 9 / 22 / 1958

SURFACE ELEVATION (FT.): 379.5 **LOGGED (FT.):** 460.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 529 **WELL TYPE:** Coal Test

COMMENT: GEO. FROM DRILLER'S LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.5	PLEISTOCENE		UNCONSOLIDATED	91.0	0.0	
288.5			SANDY SHALE	20.0	91.0	
268.5			SANDSTONE	25.0	111.0	
243.5			SANDY SHALE	30.0	136.0	
213.5			SANDSTONE	24.0	166.0	W/SDYSH
189.5			SANDY SHALE	30.0	190.0	W/GRAYSH
159.5			SANDSTONE	45.0	220.0	W/SDYSH
114.5			SANDY SHALE	42.0	265.0	
72.5			SHALE & SANDSTONE	44.0	307.0	
28.5	MODESTO		SANDSTONE	49.0	351.0	
-20.5	MODESTO		GRAY SHALE	2.0	400.0	
-22.5	CARBONDALE	DANVILLE	COAL	1.5	402.0	
-24.0	CARBONDALE		SANDY SHALE	15.0	403.5	
-39.0	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	418.5	
-63.0	CARBONDALE		CALCAREOUS SHALE	2.5	442.5	BRER & ANNA NOT SEPARATED BY DRILLERS
-65.5	CARBONDALE	HERRIN	COAL	2.7	445.0	
-68.2	CARBONDALE		UNDERCLAY	4.0	447.7	
-72.2	CARBONDALE		SANDY SHALE	9.0	451.7	

MAPID: 05902532000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** NE SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.185679 **GEOLOGIST:** J MCBETH
CONFIDENTIAL: N **LATITUDE:** 37.683991 **DATE COLLECTED:** 12 / 20 / 1960
SURFACE ELEVATION (FT.): 398.0 **LOGGED (FT.):** 120.3 **LOG TYPE:** Survey Core Study
SOURCE: STONEFORT COAL CORP. 534 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
398.0	PLEISTOCENE		UNCONSOLIDATED	77.0	0.0	FROM DRILLER'S LOG
321.0	CARBONDALE		SILTY SHALE	11.8	77.0	CORING STARTED AT 80.5'
309.2	CARBONDALE		CORE LOSS	2.2	88.8	
307.0	CARBONDALE		SILTY SHALE	9.5	91.0	W/CRINOIDS
297.5	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	0.7	100.5	
296.8	CARBONDALE	ST. DAVID	LIMESTONE	0.3	101.2	
296.5	CARBONDALE	ST. DAVID	FOSSILIFEROUS SHALE	0.2	101.5	GRADES TO BKSH
296.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	101.7	SOME PYRITIZED FOSSILS
294.0	CARBONDALE	SPRINGFIELD	COAL	4.3	104.0	
289.7	CARBONDALE		NO RECORD	2.7	108.3	ADJUST FOR MARKER
287.0	CARBONDALE		SILTSTONE	9.3	111.0	

MAPID: 05903319000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** SE SE SE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180506 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.681565 **DATE COLLECTED:** 9 / 2 / 1967
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log
SOURCE: J. RIDER, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			ROCK	73.0	0.0	
317.0			COAL	4.0	73.0	
313.0			ROCK	31.0	77.0	

MAPID: 05923789000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.18107 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.680158 **DATE COLLECTED:** 9 / 0 / 1975
SURFACE ELEVATION (FT.): 383.0 **LOGGED (FT.):** 1942.0 **LOG TYPE:** Electric Log
SOURCE: UNITED STATES OIL, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-1559.0	BASE OF PENN.		UNCLASSIFIED	-	1942.0	

MAPID: 05923833000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 2 **QUARTERS/FOOTAGES:** 990' N line, 2640' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.179936 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.678337 **DATE COLLECTED:** 1 / 17 / 1971

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 600.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4330 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	46.5	0.0	
328.5	MODESTO		SANDY SHALE	40.5	46.5	
288.0	MODESTO		SHALE	4.7	87.0	
283.3	MODESTO		SHALE	3.5	91.7	
279.8	MODESTO		SHALE	19.3	95.2	
260.5	MODESTO		COAL	1.2	114.5	
259.3	MODESTO		SHALE	7.3	115.7	
252.0	MODESTO		SANDY SHALE	12.0	123.0	
240.0	MODESTO		SANDSTONE	5.0	135.0	
235.0	MODESTO		SANDY SHALE	31.0	140.0	
204.0	MODESTO		SANDSTONE	2.7	171.0	
201.3	MODESTO		SANDY SHALE	7.3	173.7	
194.0	MODESTO		SHALE	1.5	181.0	
192.5	MODESTO		SHALE & SANDSTONE	32.3	182.5	
160.2	MODESTO		SHALE	1.1	214.8	
159.1	MODESTO	CHAPEL	COAL	1.6	215.9	
157.5	MODESTO		SHALE	1.5	217.5	
156.0	MODESTO		SHALE & SANDSTONE	98.1	219.0	
57.9	MODESTO		SHALE	0.4	317.1	
57.5	MODESTO		SANDY SHALE	18.0	317.5	
39.5	MODESTO		SANDSTONE/SHALE	77.0	335.5	
-37.5	MODESTO		SHALE	2.3	412.5	
-39.8	CARBONDALE	DANVILLE	COAL	2.5	414.8	
-42.3	CARBONDALE		SANDY SHALE	15.7	417.3	
-58.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.5	433.0	
-63.5	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	29.0	438.5	
-92.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.5	467.5	
-107.0	CARBONDALE		SHALE	0.8	482.0	
-107.8	CARBONDALE	BRERETON	LIMESTONE	1.2	482.8	
-109.0	CARBONDALE	HERRIN	COAL	2.9	484.0	
-111.9	CARBONDALE		UNDERCLAY	1.1	486.9	
-113.0	CARBONDALE		SANDSTONE/SHALE	28.0	488.0	
-141.0	CARBONDALE		SHALE	6.6	516.0	
-147.6	CARBONDALE	BRIAR HILL	COAL	1.8	522.6	
-149.4	CARBONDALE		SHALE	1.6	524.4	
-151.0	CARBONDALE		SANDSTONE/SHALE	62.3	526.0	
-213.3	CARBONDALE		SHALE	2.6	588.3	
-215.9	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.9	590.9	
-216.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	591.8	

-219.0	CARBONDALE	SPRINGFIELD	COAL	4.1	594.0
-223.1	CARBONDALE		UNDERCLAY	1.9	598.1

MAPID: 05902233000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 504' S line, 565' W line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.19648 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.682386 **DATE COLLECTED:** 0 / 0 / 1958

SURFACE ELEVATION (FT.): 404.1 **LOGGED (FT.):** 241.6 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 504 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
404.1	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0	FROM DRILLER'S LOG
380.1	CARBONDALE		SANDSTONE	31.0	24.0	FROM DRILLER'S LOG
349.1	CARBONDALE		SANDY SHALE	25.0	55.0	FROM DRILLER'S LOG
324.1	CARBONDALE	ANVIL ROCK	SANDSTONE	12.8	80.0	CORING STARTED AT 88'
311.3	CARBONDALE	ANVIL ROCK	SILTSTONE	5.0	92.8	
306.3	CARBONDALE		GRAY SHALE	8.0	97.8	
298.3	CARBONDALE		NO RECORD	2.2	105.8	ADJUST FOR MARKER
296.1	CARBONDALE	BRERETON	LIMESTONE	5.1	108.0	
291.0	CARBONDALE	ANNA	BLACK SHALE	0.5	113.1	FROM DRILLER'S LOG
290.5	CARBONDALE	HERRIN	COAL	3.3	113.6	FROM DRILLER'S LOG
287.2	CARBONDALE		UNDERCLAY	4.7	116.9	FROM DRILLER'S LOG
282.5	CARBONDALE		SANDY SHALE	26.5	121.6	FROM DRILLER'S LOG
256.0	CARBONDALE		GRAY SHALE	9.5	148.1	FROM DRILLER'S LOG
246.5	CARBONDALE	BRIAR HILL	COAL	2.0	157.6	FROM DRILLER'S LOG
244.5	CARBONDALE		SILTY SHALE	72.5	159.6	
172.0	CARBONDALE	ST. DAVID	LIMESTONE	1.1	232.1	
170.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	233.2	
168.7	CARBONDALE		NO RECORD	0.4	235.4	ADJUST FOR MARKER
168.3	CARBONDALE	SPRINGFIELD	COAL	4.0	235.8	
164.3	CARBONDALE		UNDERCLAY	1.8	239.8	

MAPID: 05902251000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 553' S line, 354' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.201873 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.682473 **DATE COLLECTED:** 4 / 17 / 1958

SURFACE ELEVATION (FT.): 406.7 **LOGGED (FT.):** 189.2 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 505 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
406.7	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
378.7	CARBONDALE	ANVIL ROCK	SANDSTONE	39.0	28.0	CORING STARTED AT 57.5'
339.7	CARBONDALE	ANNA	BLACK SHALE	0.1	67.0	
339.6	CARBONDALE	ANNA	PYRITE	0.1	67.1	NODULE
339.5	CARBONDALE	HERRIN	COAL	3.2	67.2	
336.3	CARBONDALE		UNDERCLAY	4.0	70.4	FROM DRILLER'S LOG
332.3	CARBONDALE		SANDY SHALE	21.0	74.4	FROM DRILLER'S LOG
311.3	CARBONDALE		GRAY SHALE	15.5	95.4	FROM DRILLER'S LOG
295.8	CARBONDALE	BRIAR HILL	COAL	2.0	110.9	FROM DRILLER'S LOG
293.8	CARBONDALE		SANDY SHALE	64.7	112.9	FROM DRILLER'S LOG
229.1	CARBONDALE		GRAY SHALE	2.0	177.6	FROM DRILLER'S LOG
227.1	CARBONDALE	ST. DAVID	LIMESTONE	0.8	179.6	FROM DRILLER'S LOG
226.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	180.4	FROM DRILLER'S LOG
224.1	CARBONDALE	SPRINGFIELD	COAL	4.6	182.6	FROM DRILLER'S LOG
219.5	CARBONDALE		UNDERCLAY	2.0	187.2	FROM DRILLER'S LOG

MAPID: 05902252000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 750' S line, 87' E line of SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.189419 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.683131 **DATE COLLECTED:** 4 / 18 / 1958

SURFACE ELEVATION (FT.): 401.4 **LOGGED (FT.):** 264.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 506 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
401.4	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
382.4	CARBONDALE		SANDSTONE	49.0	19.0	
333.4	CARBONDALE	ANVIL ROCK	SANDY SHALE	53.0	68.0	
280.4	CARBONDALE		GRAY SHALE	7.0	121.0	
273.4	CARBONDALE	BRERETON	LIMESTONE	4.0	128.0	
269.4	CARBONDALE	HERRIN	COAL	3.0	132.0	
266.4	CARBONDALE		UNDERCLAY	4.0	135.0	
262.4	CARBONDALE		SANDY SHALE	22.0	139.0	
240.4	CARBONDALE		GRAY SHALE	17.0	161.0	
223.4	CARBONDALE	BRIAR HILL	COAL	2.0	178.0	
221.4	CARBONDALE		SANDY SHALE	71.0	180.0	
150.4	CARBONDALE		GRAY SHALE	2.0	251.0	
148.4	CARBONDALE	ST. DAVID	LIMESTONE	0.8	253.0	
147.6	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	253.8	
146.1	CARBONDALE	SPRINGFIELD	COAL	4.0	255.3	
142.1	CARBONDALE		UNDERCLAY	3.5	259.3	
138.6	CARBONDALE		SANDSTONE	1.5	262.8	

MAPID: 05902253000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 460' N line, 487' W line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.201419 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.687478 **DATE COLLECTED:** 4 / 25 / 1958

SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 200.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 507 **WELL TYPE:** Coal Test

COMMENT: NO COAL; TRADEWATER? BELOW #5?

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	FROM DRILLER'S LOG
415.0			SANDSTONE	16.0	15.0	FROM DRILLER'S LOG
399.0			GRAY SHALE	6.5	31.0	FROM DRILLER'S LOG
392.5			SANDY SHALE	29.0	37.5	FROM DRILLER'S LOG
363.5			SANDSTONE	40.5	66.5	FROM DRILLER'S LOG
323.0			SILTY SHALE	1.5	107.0	ABRUPT BASAL CONT; COAL HORIZON?
321.5			CONGLOMERATE	0.5	108.5	SID. NODS & SH PEBBLES IN CLAYST
321.0			SANDSTONE	10.0	109.0	FROM DRILLER'S LOG
311.0			GRAY SHALE	22.0	119.0	FROM DRILLER'S LOG
289.0			SANDSTONE	51.0	141.0	FROM DRILLER'S LOG
238.0			SANDY SHALE	8.0	192.0	FROM DRILLER'S LOG

MAPID: 05902254000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 78' S line, 617' W line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200965 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.685068 **DATE COLLECTED:** 4 / 30 / 1958

SURFACE ELEVATION (FT.): 413.5 **LOGGED (FT.):** 81.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 508 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESC.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
413.5	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0	
375.5	CARBONDALE		SANDSTONE	10.0	38.0	
365.5	CARBONDALE		SANDY SHALE	21.3	48.0	
344.2	CARBONDALE		GRAY SHALE	4.0	69.3	
340.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	73.3	
338.2	CARBONDALE	SPRINGFIELD	COAL	4.0	75.3	
334.2	CARBONDALE		UNDERCLAY	2.0	79.3	

MAPID: 05902255000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 352' N line, 617' W line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200962 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.683881 **DATE COLLECTED:** 0 / 0 / 1958

SURFACE ELEVATION (FT.): 409.4 **LOGGED (FT.):** 132.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 512 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESCRIP.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
409.4	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
394.4	CARBONDALE		SANDSTONE/SHALE	64.0	15.0	
330.4	CARBONDALE		SANDY SHALE	44.5	79.0	
285.9	CARBONDALE		LIMESTONE & SHALE	2.5	123.5	BKSH W/LS - NO BREAKDOWN
283.4	CARBONDALE	SPRINGFIELD	COAL	4.0	126.0	CORRELATION UNCERTAIN
279.4	CARBONDALE		UNDERCLAY	2.5	130.0	

MAPID: 05902258000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 632' N line, 66' E line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.198673 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.683124 **DATE COLLECTED:** 0 / 0 / 1958

SURFACE ELEVATION (FT.): 406.4 **LOGGED (FT.):** 84.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 515 **WELL TYPE:** Coal Test

COMMENT: CORE INCLINED APPROX. 15 DEGS.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
406.4	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	
348.4	CARBONDALE		GRAY SHALE	22.7	58.0	
325.7	CARBONDALE	BRIAR HILL	COAL	1.7	80.7	
324.0	CARBONDALE		SANDY SHALE	2.1	82.4	

MAPID: 05902259000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 250' N line, 150' E line of SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.189642 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.684238 **DATE COLLECTED:** 6 / 26 / 1958

SURFACE ELEVATION (FT.): 440.9 **LOGGED (FT.):** 104.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 516 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.9	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0	FROM DRILLER'S LOG
419.9	CARBONDALE	ANVIL ROCK	SANDSTONE	22.0	21.0	FROM DRILLER'S LOG
397.9	CARBONDALE	ANVIL ROCK	GRAY SHALE	5.0	43.0	FROM DRILLER'S LOG
392.9	CARBONDALE	ANVIL ROCK	SANDSTONE	1.0	48.0	FROM DRILLER'S LOG
391.9	CARBONDALE	ANNA	BLACK SHALE	1.5	49.0	NUMEROUS PYRT'D FOSSILS
390.4	CARBONDALE	HERRIN	COAL	2.5	50.5	FROM DRILLER'S LOG
387.9	CARBONDALE		UNDERCLAY	4.0	53.0	FROM DRILLER'S LOG
383.9	CARBONDALE		SANDY SHALE	22.0	57.0	FROM DRILLER'S LOG
361.9	CARBONDALE		GRAY SHALE	17.0	79.0	FROM DRILLER'S LOG
344.9	CARBONDALE	BRIAR HILL	COAL	1.5	96.0	EQUIV. TO COAL AT 80' IN D.H. #515?
343.4			UNDERCLAY	1.3	97.5	FROM CORE
342.1			SANDSTONE	4.7	98.8	FROM CORE
337.4			SILTSTONE	1.0	103.5	FROM CORE

MAPID: 05902529000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.194948 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.68392 **DATE COLLECTED:** 11 / 29 / 1960

SURFACE ELEVATION (FT.): 464.7 **LOGGED (FT.):** 75.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 531 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
464.7	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	FROM DRILLER'S LOG
452.7	CARBONDALE	ANVIL ROCK	SANDSTONE	14.5	12.0	FROM DRILLER'S LOG
438.2	CARBONDALE	HERRIN	COAL	3.5	26.5	FROM DRILLER'S LOG
434.7	CARBONDALE		UNDERCLAY	2.5	30.0	FROM DRILLER'S LOG
432.2	CARBONDALE		SANDY SHALE	2.5	32.5	FROM DRILLER'S LOG
429.7	CARBONDALE		SANDSTONE	0.3	35.0	FROM CORE
429.4	CARBONDALE		GRAY SHALE	4.1	35.3	FROM CORE
425.3	CARBONDALE		SANDSTONE	12.9	39.4	FROM CORE
412.4	CARBONDALE		SILTSTONE	11.4	52.3	FROM CORE
401.0	CARBONDALE		GRAY SHALE	5.3	63.7	BEDDING INCLINED ABOUT 15 DEG
395.6	CARBONDALE		VARRIGATED SHALE	2.0	69.1	BEDDING INCLINED
393.6	CARBONDALE	BRIAR HILL	COAL	2.3	71.1	FROM CORE
391.3	CARBONDALE		SANDSTONE	1.6	73.4	FROM CORE

MAPID: 05902530000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** SW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.197283 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.685849 **DATE COLLECTED:** 12 / 1 / 1960

SURFACE ELEVATION (FT.): 436.2 **LOGGED (FT.):** 84.2 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 532 **WELL TYPE:** Coal Test

COMMENT: DRILLER REPORTS COAL AS POSSIBLE DEKOVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
436.2	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	FROM DRILLER'S LOG
421.2			GRAY SHALE	15.0	15.0	FROM DRILLER'S LOG
406.2			SANDSTONE	30.2	30.0	FROM CORE
376.0			GRAY SHALE	17.5	60.2	FROM CORE
358.5			COAL	4.0	77.7	FROM DRILLER'S LOG
354.5			UNDERCLAY	2.5	81.7	FROM DRILLER'S LOG

MAPID: 05902531000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 350' S line, 330' E line of SW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.197262 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.685843 **DATE COLLECTED:** 12 / 2 / 1960

SURFACE ELEVATION (FT.): 472.9 **LOGGED (FT.):** 155.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 533 **WELL TYPE:** Coal Test

COMMENT: NO COAL; TRADEWATER?

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
472.9	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
461.9			SANDSTONE	46.0	11.0	
415.9			GRAY SHALE	1.2	57.0	5 DEG. DIP OR LESS
414.7			SANDSTONE	22.0	58.2	
392.7			SIDERITE	0.2	80.2	SIDERITE BAND
392.5			GRAY SHALE	21.4	80.4	SLICKS AT 45 DEGS IN TOP 1'; BEDS<10DEGS
371.1			SANDSTONE	53.7	101.8	

MAPID: 05902547000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 1360' S line, 630' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200618 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.676918 **DATE COLLECTED:** 0 / 0 / 1960

SURFACE ELEVATION (FT.): 388.5 **LOGGED (FT.):** 587.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 537 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESCRIPTIONS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
388.5	PLEISTOCENE		UNCONSOLIDATED	78.0	0.0	
310.5	MODESTO		SANDSTONE	17.0	78.0	
293.5	MODESTO		SANDY SHALE	33.0	95.0	
260.5	MODESTO		BLACK SHALE	4.0	128.0	
256.5	MODESTO		GRAY SHALE	3.2	132.0	
253.3	MODESTO		LIMESTONE	0.3	135.2	
253.0	MODESTO		GRAY SHALE	14.5	135.5	
238.5	MODESTO		BLACK SHALE	2.3	150.0	
236.2	CARBONDALE	DANVILLE	COAL	1.7	152.3	
234.5	CARBONDALE		SHALE & SANDSTONE	5.0	154.0	
229.5	CARBONDALE		GRAY SHALE	2.5	159.0	
227.0	CARBONDALE	ALLENBY	COAL	0.2	161.5	
226.8	CARBONDALE	ANVIL ROCK	SHALE & SANDSTONE	32.3	161.7	
194.5	CARBONDALE		GRAY SHALE	6.2	194.0	
188.3	CARBONDALE	BRERETON	LIMESTONE	5.3	200.2	
183.0	CARBONDALE	ANNA	BLACK SHALE	1.0	205.5	
182.0	CARBONDALE	HERRIN	COAL	2.3	206.5	
179.7	CARBONDALE	HERRIN	SHALE	0.2	208.8	BLUE BAND
179.5	CARBONDALE	HERRIN	COAL	0.5	209.0	
179.0	CARBONDALE		UNDERCLAY	2.0	209.5	
177.0	CARBONDALE		SANDY SHALE	37.5	211.5	
139.5	CARBONDALE		BLACK SHALE	1.0	249.0	
138.5	CARBONDALE	BRIAR HILL	COAL	1.5	250.0	
137.0	CARBONDALE		SHALE & SANDSTONE	66.5	251.5	
70.5	CARBONDALE		GRAY SHALE	3.0	318.0	
67.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	321.0	
66.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	322.0	
64.5	CARBONDALE	SPRINGFIELD	COAL	4.5	324.0	
60.0	CARBONDALE		UNDERCLAY	2.0	328.5	
58.0	CARBONDALE		LIMESTONE	3.6	330.5	
54.4	CARBONDALE		SANDSTONE/SHALE	55.0	334.1	
-0.6	CARBONDALE		BLACK SHALE	1.0	389.1	
-1.6	CARBONDALE	HANOVER	LIMESTONE	2.0	390.1	
-3.6	CARBONDALE	EXCELLO	BLACK SHALE	2.0	392.1	
-5.6	CARBONDALE	HOUCHIN CREEK	COAL	2.0	394.1	
-7.6	CARBONDALE		UNDERCLAY	2.0	396.1	
-9.6	CARBONDALE		SANDSTONE	9.5	398.1	
-19.1	CARBONDALE		SANDY SHALE	22.5	407.6	
-41.6	CARBONDALE		GRAY SHALE	5.5	430.1	

-47.1	CARBONDALE	SURVANT	COAL	1.7	435.6
-48.8	CARBONDALE		SHALE	2.7	437.3
-51.5	CARBONDALE		SANDY SHALE	15.0	440.0
-66.5	CARBONDALE		SANDSTONE	10.0	455.0
-76.5	CARBONDALE		SANDY SHALE	20.0	465.0
-96.5	CARBONDALE		GRAY SHALE	8.0	485.0
-104.5	CARBONDALE	COLCHESTER	COAL	0.5	493.0
-105.0	CARBONDALE		UNDERCLAY	3.5	493.5
-108.5	CARBONDALE	PALZO	SANDSTONE	53.0	497.0
-161.5	CARBONDALE		SANDY SHALE	2.0	550.0
-163.5	CARBONDALE	DEKOVEN	COAL	3.0	552.0
-166.5	CARBONDALE		SHALE & SANDSTONE	14.0	555.0
-180.5	CARBONDALE		GRAY SHALE	8.5	569.0
-189.0	CARBONDALE		BLACK SHALE	2.0	577.5
-191.0	CARBONDALE	DAVIS	COAL	4.5	579.5
-195.5	TRADEWATER		UNDERCLAY	3.0	584.0

MAPID: 05923806000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 990' S line, 1980' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200887 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.675894 **DATE COLLECTED:** 11 / 5 / 1971

SURFACE ELEVATION (FT.): 384.5 **LOGGED (FT.):** 246.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4345-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
384.5	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0	
321.5			SHALE	15.0	63.0	
306.5	CARBONDALE	ANVIL ROCK	SANDSTONE	38.7	78.0	
267.8	CARBONDALE	BRERETON	LIMESTONE	2.5	116.7	
265.3	CARBONDALE	ANNA	BLACK SHALE	0.3	119.2	
265.0	CARBONDALE	HERRIN	COAL	3.3	119.5	
261.7	CARBONDALE		UNDERCLAY	3.0	122.8	
258.7	CARBONDALE		SANDSTONE	17.2	125.8	
241.5	CARBONDALE		SANDY SHALE	23.2	143.0	
218.3	CARBONDALE	BRIAR HILL	COAL	1.8	166.2	
216.5	CARBONDALE		SANDSTONE	3.0	168.0	
213.5	CARBONDALE		SANDY SHALE	3.0	171.0	
210.5	CARBONDALE		SANDSTONE	38.5	174.0	
172.0	CARBONDALE		SANDY SHALE	19.8	212.5	
152.2	CARBONDALE		SHALE	2.9	232.3	
149.3	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.7	235.2	
148.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	235.9	
146.0	CARBONDALE	SPRINGFIELD	COAL	4.3	238.5	
141.7	CARBONDALE		UNDERCLAY	2.8	242.8	
138.9	CARBONDALE		SANDSTONE	1.3	245.6	

MAPID: 05923815000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 660' S line, 2310' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.199739 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.675 **DATE COLLECTED:** 11 / 2 / 1971

SURFACE ELEVATION (FT.): 381.0 **LOGGED (FT.):** 247.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4344-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.0	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
311.0	MODESTO		SHALE	7.0	70.0	
304.0	CARBONDALE	DANVILLE	COAL	1.0	77.0	SOFT
303.0	CARBONDALE		UNDERCLAY	3.0	78.0	
300.0	CARBONDALE	ANVIL ROCK	SANDSTONE	26.0	81.0	
274.0	CARBONDALE		SHALE	8.7	107.0	
265.3	CARBONDALE	BRERETON	LIMESTONE	5.3	115.7	
260.0	CARBONDALE	ANNA	BLACK SHALE	0.7	121.0	
259.3	CARBONDALE	HERRIN	COAL	3.4	121.7	
255.9	CARBONDALE		UNDERCLAY	3.4	125.1	
252.5	CARBONDALE		SANDSTONE/SHALE	16.5	128.5	
236.0	CARBONDALE		SANDY SHALE	22.5	145.0	
213.5	CARBONDALE	BRIAR HILL	COAL	1.8	167.5	
211.7	CARBONDALE		SANDSTONE	53.7	169.3	
158.0	CARBONDALE		SANDY SHALE	10.0	223.0	
148.0	CARBONDALE		SHALE	2.6	233.0	
145.4	CARBONDALE	ST. DAVID	LIMESTONE	0.8	235.6	
144.6	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	236.4	
142.4	CARBONDALE	SPRINGFIELD	COAL	4.2	238.6	
138.2	CARBONDALE		UNDERCLAY	3.1	242.8	
135.1	CARBONDALE		SANDSTONE	1.1	245.9	

MAPID: 05923856000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 3 **QUARTERS/FOOTAGES:** 330' N line, 330' E line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.199595 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.687844 **DATE COLLECTED:** 10 / 0 / 1975

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 660.0 **LOG TYPE:** Electric Log

SOURCE: UNITED STATES OIL, INC. **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-180.0	BASE OF PENN.		UNCLASSIFIED	-	660.0	

MAPID: 05900416300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 90' S line, 420' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.20922 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.673321 **DATE COLLECTED:** 7 / 0 / 1958

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 188.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-BOWLESVILLE MINE **WELL TYPE:** Underground mine

COMMENT: SOURCE:COAL REPT1882/MAG REPT69/MINENOTE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			ROCK	60.0	0.0	DATA FROM COAL REPT 1882-VIA MAG.ARTICL
340.0	CARBONDALE	HERRIN	COAL	5.0	60.0	
335.0	CARBONDALE		ROCK	120.0	65.0	
215.0	CARBONDALE	SPRINGFIELD	COAL	3.0	185.0	

MAPID: 05901263000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 660' E line of NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214602 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.676979 **DATE COLLECTED:** 8 / 15 / 1952

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 50.5 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
465.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
450.0	CARBONDALE		SANDSTONE	11.0	15.0	
439.0	CARBONDALE		GRAY SHALE	1.0	26.0	
438.0	CARBONDALE	BRIAR HILL	COAL	1.5	27.0	
436.5	CARBONDALE		UNDERCLAY	4.0	28.5	
432.5	CARBONDALE		SANDSTONE	12.0	32.5	
420.5	CARBONDALE		SHALE	1.0	44.5	
419.5	CARBONDALE		SANDSTONE	5.0	45.5	

MAPID: 05902083000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 400' E line of NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213702 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.676977 **DATE COLLECTED:** 3 / 28 / 1957

SURFACE ELEVATION (FT.): 457.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 24 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
457.0			UNCLASSIFIED	35.0	0.0	CORE STARTS AT 35.0'
422.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.5	35.0	SOME COAL FRAGS IN BOT. 6"
416.5	CARBONDALE		GRAY SHALE	0.3	40.5	W/CARB & COALY PLANT MAT'L
416.2	CARBONDALE		LIMESTONE CONCRETION	1.6	40.8	DOLOMITIC CONCRETION?
414.6	CARBONDALE	BRERETON	LIMESTONE	2.5	42.4	
412.1	CARBONDALE	HERRIN	COAL	-	44.9	TOP OF HERRIN?

MAPID: 05902084000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.208901 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.679907 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 389.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 25 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
389.0			UNCLASSIFIED	54.0	0.0	
335.0	CARBONDALE	ANVIL ROCK	SANDSTONE	2.1	54.0	START OF AVAIL CORE
332.9	CARBONDALE	ANVIL ROCK	GRAY SHALE	0.3	56.1	
332.6	CARBONDALE	ANVIL ROCK	SANDSTONE	21.2	56.4	ABRUPT CHANGE AT BASE
311.4	CARBONDALE		SHALE	0.5	77.6	BOTTOM 4" = CALCAREOUS
310.9	CARBONDALE		LIMESTONE	2.0	78.1	CONCRETION?
308.9	CARBONDALE		BLACK SHALE	0.5	80.1	SL. CALCAREOUS
308.4	CARBONDALE	BRERETON	LIMESTONE	2.5	80.6	
305.9	CARBONDALE		NO RECORD	0.9	83.1	ADJUST FOR MARKER
305.0	CARBONDALE	HERRIN	COAL	-	84.0	TOP #6; NO THICK GIVEN

MAPID: 05902085000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** NW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.211177 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.676005 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 423.3 **LOGGED (FT.):** 166.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 65 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
423.3	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0	FROM DRILLER'S LOG
402.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	21.0	FROM DRILLER'S LOG
392.3	CARBONDALE		GRAY SHALE	4.0	31.0	FROM DRILLER'S LOG
388.3	CARBONDALE	BRERETON	LIMESTONE	6.0	35.0	CORING STARTED AT 36.0'
382.3	CARBONDALE	ANNA	BLACK SHALE	0.3	41.0	FROM DRILLER'S LOG
382.0	CARBONDALE	HERRIN	COAL	3.5	41.3	COAL REMOVED BY COMPANY
378.5	CARBONDALE		UNDERCLAY	2.7	44.8	FROM DRILLER'S LOG
375.8	CARBONDALE		SILTSTONE	7.2	47.5	
368.6	CARBONDALE		GRAY SHALE	2.7	54.7	
365.9	CARBONDALE		NO RECORD	1.1	57.4	ADJUST FOR MARKER
364.8	CARBONDALE		SILTSTONE	6.0	58.5	
358.8	CARBONDALE		GRAY SHALE	4.0	64.5	
354.8	CARBONDALE		SILTSTONE	2.0	68.5	
352.8	CARBONDALE		GRAY SHALE	10.5	70.5	
342.3	CARBONDALE		BLACK SHALE	3.5	81.0	
338.8	CARBONDALE	BRIAR HILL	COAL	2.2	84.5	
336.6	CARBONDALE		SILTSTONE	21.8	86.7	
314.8	CARBONDALE		GRAY SHALE	12.0	108.5	
302.8	CARBONDALE		SILTSTONE	19.6	120.5	
283.2	CARBONDALE		GRAY SHALE	14.2	140.1	
269.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	154.3	V. ARGILL & V. FOSSILIF
268.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	155.1	
265.8	CARBONDALE	SPRINGFIELD	COAL	4.5	157.5	
261.3	CARBONDALE		UNDERCLAY	2.5	162.0	
258.8	CARBONDALE		LIMESTONE	1.5	164.5	

MAPID: 05902086000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 400' N line, 30' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.207872 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.679785 **DATE COLLECTED:** 3 / 0 / 1957

SURFACE ELEVATION (FT.): 402.3 **LOGGED (FT.):** 168.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 38 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
402.3	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	
377.3	CARBONDALE	ANVIL ROCK	SANDSTONE	19.0	25.0	CORING STARTED AT 36'
358.3	CARBONDALE	HERRIN	COAL	3.5	44.0	MAY BE 4" OF BLACK SHALE ABOVE COAL
354.8	CARBONDALE		UNDERCLAY	3.0	47.5	
351.8	CARBONDALE		SILTSTONE	2.7	50.5	
349.1	CARBONDALE		DOLOMITE	0.4	53.2	
348.7	CARBONDALE		SANDSTONE	8.4	53.6	
340.3	CARBONDALE		SILTSTONE	5.0	62.0	
335.3	CARBONDALE		GRAY SHALE	22.5	67.0	CORING STOPPED AT 77.0"
312.8	CARBONDALE	BRIAR HILL	COAL	2.0	89.5	
310.8	CARBONDALE		SANDY SHALE	67.0	91.5	CORING STARTED AT 138.5'
243.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	158.5	FOSSILIFEROUS
243.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	159.0	
241.5	CARBONDALE	TURNER MINE	LIMESTONE	0.5	160.8	GRAYSH BLK; HARD
241.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.2	161.3	W/ABUNDANT PYRT'D FOSSILS
239.8	CARBONDALE	SPRINGFIELD	COAL	4.5	162.5	
235.3	CARBONDALE		UNDERCLAY	1.5	167.0	

MAPID: 05902979000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 20' S line, 210' W line of NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216129 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.677029 **DATE COLLECTED:** 12 / 3 / 1964

SURFACE ELEVATION (FT.): 488.9 **LOGGED (FT.):** 42.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 1141 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
488.9	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0	
465.9	CARBONDALE	ANVIL ROCK	SANDSTONE	13.0	23.0	
452.9	CARBONDALE		SHALE	2.0	36.0	
450.9	CARBONDALE	HERRIN	COAL	3.8	38.0	
447.1	CARBONDALE		UNDERCLAY	0.5	41.8	

MAPID: 05902980000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 220' S line, 180' W line of NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.21623 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.677583 **DATE COLLECTED:** 12 / 2 / 1964

SURFACE ELEVATION (FT.): 461.8 **LOGGED (FT.):** 58.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 1140 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
461.8	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
421.8	CARBONDALE		BLACK SHALE	3.5	40.0	
418.3	CARBONDALE	BRIAR HILL	COAL	2.5	43.5	
415.8	CARBONDALE		UNDERCLAY	2.0	46.0	
413.8	CARBONDALE		SANDSTONE	10.0	48.0	W/SH STREAKS

MAPID: 05903236000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 625' S line, 250' E line of SE NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213175 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.6787 **DATE COLLECTED:** 2 / 1 / 1967

SURFACE ELEVATION (FT.): 464.6 **LOGGED (FT.):** 157.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1606 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
464.6	PLEISTOCENE		UNCONSOLIDATED	15.4	0.0	
449.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.7	15.4	
445.5	CARBONDALE	ANVIL ROCK	SANDSTONE	9.7	19.1	
435.8	CARBONDALE		CLAYSTONE & SILTSTONE	2.4	28.8	
433.4	CARBONDALE		UNCLASSIFIED	1.4	31.2	
432.0	CARBONDALE		CLAYSTONE	0.1	32.6	
431.9	CARBONDALE	BRERETON	LIMESTONE	0.3	32.7	
431.6	CARBONDALE	HERRIN	COAL	3.7	33.0	
427.9	CARBONDALE		SHALE	2.8	36.7	
425.1	CARBONDALE		SANDSTONE	21.4	39.5	
403.7	CARBONDALE		SHALE	17.7	60.9	
386.0	CARBONDALE	BRIAR HILL	COAL	1.7	78.6	
384.3	CARBONDALE		SANDSTONE/SHALE	25.5	80.3	
358.8	CARBONDALE		SANDSTONE	2.4	105.8	
356.4	CARBONDALE		SANDY SHALE	39.0	108.2	
317.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	147.1	
315.0	CARBONDALE	SPRINGFIELD	COAL	4.8	149.6	
310.2	CARBONDALE		UNDERCLAY	3.0	154.4	

MAPID: 05903251000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.225995 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.673184 **DATE COLLECTED:** 4 / 18 / 1967

SURFACE ELEVATION (FT.): 390.2 **LOGGED (FT.):** 200.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1689 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.2	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0	
347.2	CARBONDALE	ANVIL ROCK	SANDSTONE	30.2	43.0	
317.0	CARBONDALE		SHALE	0.3	73.2	
316.7	CARBONDALE	BRERETON	LIMESTONE	4.1	73.5	
312.6	CARBONDALE	ANNA	SHALE	0.2	77.6	
312.4	CARBONDALE	HERRIN	COAL	3.3	77.8	
309.1	CARBONDALE		UNDERCLAY	2.9	81.1	
306.2	CARBONDALE		SANDSTONE	13.0	84.0	
293.2	CARBONDALE		SHALE	26.3	97.0	
266.9	CARBONDALE	BRIAR HILL	COAL	1.8	123.3	
265.1	CARBONDALE		SANDSTONE	24.9	125.1	
240.2	CARBONDALE		SANDY SHALE	38.7	150.0	
201.5	CARBONDALE		SHALE	1.6	188.7	
199.9	CARBONDALE	ST. DAVID	LIMESTONE	1.0	190.3	
198.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	191.3	SOFT
196.2	CARBONDALE	SPRINGFIELD	COAL	4.4	194.0	
191.8	CARBONDALE		UNDERCLAY	2.0	198.4	

MAPID: 05903464000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 970' S line, 670' W line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214539 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.675786 **DATE COLLECTED:** 9 / 21 / 1966

SURFACE ELEVATION (FT.): 428.4 **LOGGED (FT.):** 114.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1220 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
428.4	PLEISTOCENE		UNCONSOLIDATED	33.5	0.0	
394.9	CARBONDALE		SHALE	1.2	33.5	
393.7	CARBONDALE	BRIAR HILL	COAL	2.2	34.7	
391.5	CARBONDALE		COAL	2.1	36.9	
389.4	CARBONDALE		SANDY SHALE	65.6	39.0	
323.8	CARBONDALE		SHALE	1.0	104.6	
322.8	CARBONDALE	ST. DAVID	LIMESTONE	0.7	105.6	
322.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	106.3	
319.9	CARBONDALE	SPRINGFIELD	COAL	4.3	108.5	
315.6	CARBONDALE		UNDERCLAY	2.0	112.8	

MAPID: 05903475000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.207764 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.676706 **DATE COLLECTED:** 11 / 17 / 1970

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 211.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4316-C **WELL TYPE:** Coal Test

COMMENT: OTHER CORE DESCRIPTIONS ON FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0	
341.0	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	47.0	BROWN
335.0	CARBONDALE	ANVIL ROCK	SANDSTONE	25.8	53.0	GRAY
309.2	CARBONDALE		SHALE	0.4	78.8	
308.9	CARBONDALE	BRERETON	LIMESTONE	5.7	79.1	
303.1	CARBONDALE	ANNA	SHALE	0.5	84.9	
302.7	CARBONDALE	ANNA	BLACK SHALE	0.2	85.3	WITH PYRITE
302.5	CARBONDALE	HERRIN	COAL	3.2	85.5	
299.3	CARBONDALE		UNDERCLAY	4.8	88.7	LOG NOTES "LOST 1-7"
294.5	CARBONDALE		SANDY SHALE	5.5	93.5	
289.0	CARBONDALE		SHALE	2.5	99.0	
286.5	CARBONDALE		SANDSTONE	6.0	101.5	
280.5	CARBONDALE		SANDY SHALE	18.5	107.5	
262.0	CARBONDALE		LIMESTONE	0.2	126.0	
261.8	CARBONDALE		BLACK SHALE	4.4	126.2	
257.4	CARBONDALE	BRIAR HILL	COAL	1.9	130.6	
255.5	CARBONDALE		SANDSTONE/SHALE	64.0	132.5	
191.5	CARBONDALE		SHALE	2.6	196.5	
188.9	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.4	199.1	
188.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	199.5	
186.1	CARBONDALE	TURNER MINE	LIMESTONE	0.3	201.9	
185.8	CARBONDALE		COAL	4.2	202.2	
181.7	CARBONDALE		UNDERCLAY	5.3	206.3	LOG NOTES "LOST 2.0"

MAPID: 05903475000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1320' S line, 0' E line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.207764 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.676706 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 89.0 **LOG TYPE:** Survey Core Study
SOURCE: PEABODY COAL CO. 4316C **WELL TYPE:** Coal Test
COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.5	CARBONDALE	LAWSON	SANDSTONE	31.7	47.5	
308.8	CARBONDALE	LAWSON	CLAYSTONE	0.3	79.2	
308.5	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	5.8	79.5	
302.7	CARBONDALE	ANNA	BLACK SHALE	0.7	85.3	
302.0	CARBONDALE	HERRIN	COAL	3.0	86.0	

MAPID: 05990305000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 4 **QUARTERS/FOOTAGES:** 1' S line, 660' E line of NW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.214602 **GEOLOGIST:** STRAAYER
CONFIDENTIAL: N **LATITUDE:** 37.676979 **DATE COLLECTED:** 8 / 15 / 1952
SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 50.5 **LOG TYPE:** Drillers Log
SOURCE: AYRSHIRE 11 **WELL TYPE:** Coal Test
COMMENT: BOWLESVILLE AREA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0	PLEISTOCENE		CLAY	15.0	0.0	
445.0	CARBONDALE		SANDSTONE	11.0	15.0	HARD
434.0	CARBONDALE		GRAY SHALE	1.0	26.0	
433.0	CARBONDALE	BRIAR HILL	COAL	1.5	27.0	
431.5	CARBONDALE		UNDERCLAY	4.0	28.5	
427.5	CARBONDALE		SANDSTONE	12.0	32.5	HARD
415.5	CARBONDALE		SHALE	1.0	44.5	
414.5	CARBONDALE		SANDSTONE	5.0	45.5	HARD

MAPID: 05900229000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** SW SW SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244596 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.68091 **DATE COLLECTED:** 0 / 0 / 1951
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-HINES BROS MNG CO **WELL TYPE:** Underground mine
COMMENT: COAL PRODUCED FROM '38 TO 51

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNKNOWN	0.0	0.0	

MAPID: 05902260000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** NW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234275 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.687126 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 98.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 303 **WELL TYPE:** Coal Test

COMMENT: NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
-			SANDSTONE	23.0	17.0	
-			SANDY SHALE	58.5	40.0	

MAPID: 05903465000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 5 **QUARTERS/FOOTAGES:** 25' N line, 495' W line of NW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.236038 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.659622 **DATE COLLECTED:** 8 / 7 / 1968

SURFACE ELEVATION (FT.): 408.3 **LOGGED (FT.):** 192.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1365 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
408.3	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
343.3	CARBONDALE		SHALE	8.0	65.0	
335.3	CARBONDALE	HERRIN	COAL	3.8	73.0	
331.5	CARBONDALE		UNDERCLAY	3.0	76.8	
328.5	CARBONDALE		SANDSTONE	13.0	79.8	
315.5	CARBONDALE		SANDY SHALE	17.2	92.8	
298.3	CARBONDALE		SHALE	13.0	110.0	
285.3	CARBONDALE	BRIAR HILL	COAL	2.9	123.0	
282.4	CARBONDALE		SANDY SHALE	37.0	125.9	
245.4	CARBONDALE		SHALE	20.0	162.9	
225.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	182.9	
222.7	CARBONDALE	SPRINGFIELD	COAL	4.6	185.6	
218.1	CARBONDALE		UNDERCLAY	2.0	190.2	

MAPID: 05902220000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246379 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.670428 **DATE COLLECTED:** 12 / 10 / 1957

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 230.5 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 101 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
465.0	PLEISTOCENE		SAND	66.5	0.0	
398.5	CARBONDALE		BROWN SANDSTONE	1.5	66.5	
397.0	CARBONDALE		SHALE	4.3	68.0	YELLOW
392.7	CARBONDALE		BLUE SHALE	26.6	72.3	
366.2	CARBONDALE		BLUE SHALE	7.2	98.8	
359.0	CARBONDALE	SPRINGFIELD	COAL	3.3	106.0	
355.7	CARBONDALE		SHALY SANDSTONE	32.2	109.3	
323.6	CARBONDALE		BLUE SHALE	17.8	141.4	
305.7	CARBONDALE	HOUCHIN CREEK	COAL	0.7	159.3	
305.1	CARBONDALE		LIMESTONE	1.5	159.9	
303.6	CARBONDALE		SHALE	58.1	161.4	
245.5	CARBONDALE		SHALE	3.5	219.5	
242.0	CARBONDALE		LIMESTONE	1.3	223.0	
240.7	CARBONDALE		BLUE SHALE	2.4	224.3	
238.2	CARBONDALE	SURVANT	COAL	0.3	226.8	
237.9	CARBONDALE		SHALE	3.4	227.1	

MAPID: 05902220000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246379 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.670428 **DATE COLLECTED:** 12 / 10 / 1957

SURFACE ELEVATION (FT.): 465.0 **LOGGED (FT.):** 230.5 **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
465.0			UNCONSOLIDATED	66.0	0.0	
399.0			ROCK	40.0	66.0	
359.0	CARBONDALE	SPRINGFIELD	COAL	3.3	106.0	
355.7			ROCK	50.0	109.3	
305.7	CARBONDALE	HOUCHIN CREEK	COAL	0.7	159.3	
305.1			ROCK	66.8	159.9	
238.2			COAL	0.3	226.8	
237.9			ROCK	3.4	227.1	

MAPID: 05902272000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 15' S line, 1013' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248691 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658458 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.3 **LOGGED (FT.):** 240.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 520 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.3	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0	
298.3	CARBONDALE	ANVIL ROCK	SANDSTONE	46.7	54.0	CORE STARTS AT 97.5'
251.6	CARBONDALE		SHALE & SANDSTONE	4.8	100.7	
246.8	CARBONDALE		GRAY SHALE	7.6	105.5	
239.2	CARBONDALE	BRERETON	LIMESTONE	3.8	113.1	
235.4	CARBONDALE	BRERETON	FOSSILIFEROUS SHALE	0.6	116.9	ABUNDANT SM. BRACHS; ALMOST A COQUINA
234.8	CARBONDALE	HERRIN	COAL	2.5	117.5	
232.3	CARBONDALE	HERRIN	SHALE	0.0	120.0	
232.3	CARBONDALE	HERRIN	COAL	0.7	120.0	
231.6	CARBONDALE	HERRIN	SHALE	0.1	120.7	BLUE BAND
231.5	CARBONDALE	HERRIN	COAL	0.7	120.8	
230.8	CARBONDALE		UNDERCLAY	3.6	121.5	
227.2	CARBONDALE		UNDERCLAY	0.7	125.1	
226.5	CARBONDALE		SILTSTONE	5.3	125.8	END CORE = 131.1'
221.2	CARBONDALE		SANDSTONE	4.4	131.1	
216.8	CARBONDALE		SHALE & SANDSTONE	34.5	135.5	
182.3	CARBONDALE		BLACK SHALE	3.0	170.0	
179.3	CARBONDALE	BRIAR HILL	COAL	3.2	173.0	
176.1	CARBONDALE		SHALE & SANDSTONE	50.1	176.2	CORING AGAIN AT 211'
126.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	226.3	
125.2	CARBONDALE	TURNER MINE	BLACK SHALE	4.1	227.1	
121.1	CARBONDALE	SPRINGFIELD	COAL	4.6	231.2	
116.5	CARBONDALE		UNDERCLAY	2.7	235.8	
113.8	CARBONDALE		CLAYSTONE	2.3	238.5	

MAPID: 05902273000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 15' S line, 30' E line of SE SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245278 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658437 **DATE COLLECTED:** 7 / 0 / 1958

SURFACE ELEVATION (FT.): 361.6 **LOGGED (FT.):** 191.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 517 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.6	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
351.6	CARBONDALE	ANVIL ROCK	SANDSTONE	58.0	10.0	
293.6	CARBONDALE		GRAY SHALE	4.0	68.0	
289.6	CARBONDALE	HERRIN	COAL	3.7	72.0	
285.9	CARBONDALE		SHALE	3.5	75.7	
282.4	CARBONDALE		SANDSTONE	20.0	79.2	
262.4	CARBONDALE		SANDY SHALE	26.0	99.2	
236.4	CARBONDALE		BLACK SHALE	4.5	125.2	
231.9	CARBONDALE	BRIAR HILL	COAL	3.0	129.7	
228.9	CARBONDALE		SANDSTONE	28.2	132.7	
200.7	CARBONDALE		SANDY SHALE	21.5	160.9	
179.2	CARBONDALE	ST. DAVID	LIMESTONE	0.7	182.4	
178.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	183.1	
175.2	CARBONDALE	SPRINGFIELD	COAL	4.8	186.4	

MAPID: 05902311000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 15' S line, 246' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246028 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658442 **DATE COLLECTED:** 8 / 23 / 1958

SURFACE ELEVATION (FT.): 357.1 **LOGGED (FT.):** 81.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 522 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
357.1	PLEISTOCENE		UNCONSOLIDATED	51.0	0.0	
306.1	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	51.0	
281.1	CARBONDALE	BRERETON	LIMESTONE	1.5	76.0	
279.6	CARBONDALE	HERRIN	COAL	3.5	77.5	

MAPID: 05902312000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 15' S line, 368' E line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246451 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658444 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 355.6 **LOGGED (FT.):** 143.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 523 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.6	PLEISTOCENE		UNCONSOLIDATED	81.0	0.0	
274.6	CARBONDALE		SANDSTONE	56.0	81.0	
218.6	CARBONDALE		BLACK SHALE	3.0	137.0	
215.6	CARBONDALE	BRIAR HILL	COAL	3.0	140.0	

MAPID: 05902408000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** NW NW NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.249183 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.665346 **DATE COLLECTED:** 8 / 20 / 1958

SURFACE ELEVATION (FT.): 358.8 **LOGGED (FT.):** 256.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 525 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.8	PLEISTOCENE		UNCONSOLIDATED	74.0	0.0	
284.8	CARBONDALE	ANVIL ROCK	SANDSTONE	38.0	74.0	CORE STARTS AT 106.0'
246.8	CARBONDALE		GRAY SHALE	10.0	112.0	
236.8	CARBONDALE	BRERETON	LIMESTONE	4.0	122.0	SHARP CONTACT
232.8	CARBONDALE	HERRIN	COAL	4.0	126.0	
228.8	CARBONDALE		UNDERCLAY	3.5	130.0	
225.3	CARBONDALE		SANDSTONE	44.5	133.5	NO CORE 138'-205'
180.8	CARBONDALE		SHALE	3.0	178.0	
177.8	CARBONDALE	BRIAR HILL	COAL	3.0	181.0	
174.8	CARBONDALE		SANDSTONE	41.0	184.0	
133.8	CARBONDALE		GRAY SHALE	16.5	225.0	
117.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	241.5	
116.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	242.5	
113.8	CARBONDALE	SPRINGFIELD	COAL	4.5	245.0	
109.3	CARBONDALE		UNDERCLAY	0.7	249.5	
108.6	CARBONDALE		CLAYSTONE	6.3	250.2	

MAPID: 05902986000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 10' N line, 15' W line of SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254225 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.665787 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 288.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.0	PLEISTOCENE		UNCONSOLIDATED	112.0	0.0	
240.0			GRAY SHALE	10.0	112.0	
230.0			SANDY SHALE	23.0	122.0	
207.0			GRAY SHALE	24.0	145.0	
183.0			BLACK SHALE	7.0	169.0	#7 HORIZON?
176.0			SHALE	44.0	176.0	
132.0	CARBONDALE	ANVIL ROCK	SANDSTONE	50.0	220.0	
82.0	CARBONDALE		SANDY SHALE	6.5	270.0	
75.5	CARBONDALE	BRERETON	LIMESTONE	3.0	276.5	
72.5	CARBONDALE	HERRIN	COAL	3.5	279.5	2" BLUE BAND - NO DEPTH GIVEN
69.0	CARBONDALE		UNDERCLAY	5.0	283.0	

MAPID: 05902987000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 15' S line, 100' E line of NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250092 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.662159 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 354.2 **LOGGED (FT.):** 158.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 541 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.2	PLEISTOCENE		UNCONSOLIDATED	106.0	0.0	
248.2	CARBONDALE		SHALE	10.5	106.0	
237.7	CARBONDALE		LIMESTONE	2.0	116.5	
235.7	CARBONDALE		SHALE	9.5	118.5	
226.2	CARBONDALE	ANVIL ROCK	SANDSTONE	11.5	128.0	
214.7	CARBONDALE		GRAY SHALE	10.0	139.5	
204.7	CARBONDALE	BRERETON	LIMESTONE	4.0	149.5	
200.7	CARBONDALE	HERRIN	COAL	3.5	153.5	
197.2	CARBONDALE		UNDERCLAY	1.0	157.0	

MAPID: 05903242000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 20' S line, 30' W line of SW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.25419 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.662187 **DATE COLLECTED:** 3 / 7 / 1967

SURFACE ELEVATION (FT.): 348.0 **LOGGED (FT.):** 390.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1676-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.0	PLEISTOCENE		UNCONSOLIDATED	109.4	0.0	
238.6	MODESTO		SANDSTONE	18.5	109.4	
220.1	MODESTO		SHALE	21.5	127.9	
198.6	MODESTO		SHALE	2.8	149.4	LOG NOTES "SLATE"
195.8			SANDY SHALE	21.6	152.2	
174.2	CARBONDALE	ANVIL ROCK	SANDSTONE	79.0	173.8	
95.2	CARBONDALE	ANVIL ROCK	SANDY SHALE	14.1	252.8	
81.1	CARBONDALE	BRERETON	LIMESTONE	2.9	266.9	
78.2	CARBONDALE	HERRIN	COAL	3.0	269.8	
75.2	CARBONDALE	HERRIN	CLAYSTONE & SILTSTONE	0.1	272.8	
75.1	CARBONDALE	HERRIN	COAL	0.7	272.9	
74.4	CARBONDALE		SANDY SHALE	2.3	273.6	
72.1	CARBONDALE		SANDSTONE	35.1	275.9	
37.0	CARBONDALE		SANDY SHALE	18.2	311.0	
18.8	CARBONDALE	BRIAR HILL	COAL	2.1	329.2	
16.7	CARBONDALE		SANDSTONE	15.2	331.3	
1.5	CARBONDALE		SANDY SHALE	35.3	346.5	
-33.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	381.8	"SLATE"
-36.5	CARBONDALE	SPRINGFIELD	COAL	4.6	384.5	
-41.1	CARBONDALE		UNDERCLAY	1.4	389.1	

MAPID: 05903371000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 0' S line, 2640' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254279 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.658447 **DATE COLLECTED:** 3 / 8 / 1967

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 346.9 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1677-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
353.0	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0	
323.0	PLEISTOCENE		CLAY	34.5	30.0	
288.5	MODESTO		SANDY SHALE	41.0	64.5	
247.5	MODESTO		SHALE	1.5	105.5	
246.0	MODESTO		SANDSTONE	82.0	107.0	
164.0	MODESTO		SHALE	1.0	189.0	
163.0	CARBONDALE		SHALE	7.5	190.0	
155.5	CARBONDALE	ANVIL ROCK	SANDSTONE	3.5	197.5	
152.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	11.0	201.0	
141.0	CARBONDALE	ANVIL ROCK	SHALE	21.0	212.0	
120.0	CARBONDALE	HERRIN	COAL	2.7	233.0	
117.3	CARBONDALE	HERRIN	SHALE	0.1	235.7	
117.2	CARBONDALE	HERRIN	COAL	0.9	235.8	
116.3	CARBONDALE		UNDERCLAY	4.3	236.7	
112.0	CARBONDALE		SANDSTONE	35.0	241.0	
77.0	CARBONDALE		SANDY SHALE	11.0	276.0	
66.0	CARBONDALE	BRIAR HILL	COAL	2.6	287.0	
63.4	CARBONDALE		SANDSTONE	10.0	289.6	
53.4	CARBONDALE		SANDY SHALE	38.4	299.6	
15.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	338.0	
12.5	CARBONDALE	SPRINGFIELD	COAL	4.4	340.5	
8.1	CARBONDALE		SHALE	1.0	344.9	
7.1	CARBONDALE		SANDY SHALE	1.0	345.9	

MAPID: 05903371000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 0' S line, 2640' W line

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254279 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.658447 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 353.0 **LOGGED (FT.):** 236.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1677C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
164.0	CARBONDALE	DANVILLE	COAL	1.0	189.0	
163.0	CARBONDALE	LAWSON	GRAY SHALE	7.5	190.0	
155.5	CARBONDALE	LAWSON	SANDSTONE	3.5	197.5	
152.0	CARBONDALE	LAWSON	SILTY SHALE	11.0	201.0	
141.0	CARBONDALE	LAWSON	GRAY SHALE	21.0	212.0	
120.0	CARBONDALE	HERRIN	COAL	3.7	233.0	

MAPID: 059275B0008F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** 1200' N line, 350' E line of NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246465 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.66989 **DATE COLLECTED:** 10 / 28 / 1981

SURFACE ELEVATION (FT.): 470.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-BERGGREN,ABD DRIFT MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
470.0			UNKNOWN	0.0	0.0	

MAPID: 059275B0007F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 7 **QUARTERS/FOOTAGES:** NE SE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245819 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.670891 **DATE COLLECTED:** 10 / 28 / 1981

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 1.5 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-BERGGREN **WELL TYPE:** Outcrop

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0			UNCONSOLIDATED	-	0.0	
-	CARBONDALE	HERRIN	COAL	1.5		EXPOSED IN SOUTH BANK OF CREEK
-			ROCK	-		

MAPID: 05900088401M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23086 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669478 **DATE COLLECTED:** 0 / 0 / 1974
SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES PEABODY C C,EAGLE #1 UNDG. **WELL TYPE:** Underground mine
COMMENT: MAIN SHAFT LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	-		3 SAMPLES TAKEN

MAPID: 05900088404M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 600' S line, 1' W line of NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.235665 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.667436 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 4.7 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-PEABODY C C UNGRD **WELL TYPE:** Underground mine
COMMENT: SAMPLE # 3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	SPRINGFIELD	COAL	4.7		

MAPID: 05900229400M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE NE NE NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.236239 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.672732 **DATE COLLECTED:** 0 / 0 / 1952
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-SHAWNEE C C **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05900229100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227406 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.661127 **DATE COLLECTED:** 0 / 0 / 1936
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES- PRICE C C **WELL TYPE:** Underground mine
COMMENT: MINED FROM '34-'41.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNKNOWN	0.0	0.0	

MAPID: 05902082000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1650' N line, 330' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227229 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.668626 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 579.7 **LOGGED (FT.):** 206.7 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 26 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
579.7	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0	FROM DRILLER'S LOG
556.7	CARBONDALE		SANDSTONE/SHALE	25.5	23.0	FROM DRILLER'S LOG
531.2	CARBONDALE	ANVIL ROCK	SANDSTONE	29.5	48.5	CORE STARTS AT 48.5'
501.7	CARBONDALE		GRAY SHALE	5.0	78.0	
496.7	CARBONDALE	BRERETON	LIMESTONE	5.5	83.0	
491.2	CARBONDALE	ANNA	BLACK SHALE	0.5	88.5	
490.7	CARBONDALE	HERRIN	COAL	2.0	89.0	NO BLUE BAND NOTED
488.7	CARBONDALE		SHALE	0.2	91.0	
488.5	CARBONDALE		CLOD	0.1	91.2	PROB. COAL BALL
488.4	CARBONDALE		NO RECORD	1.7	91.3	ADJUST FOR MARKER
486.7	CARBONDALE		SHALE & CLAYSTONE	2.0	93.0	
484.7	CARBONDALE		SILTSTONE	6.0	95.0	
478.7	CARBONDALE		GRAY SHALE	2.0	101.0	
476.7	CARBONDALE		NO RECORD	1.0	103.0	ADJUST FOR MARKER
475.7	CARBONDALE		GRAY SHALE	7.4	104.0	
468.3	CARBONDALE		SILTSTONE	5.4	111.4	
462.9	CARBONDALE		GRAY SHALE	15.2	116.8	W/SOME CARB PLANT IMPRESSIONS
447.7	CARBONDALE		BLACK SHALE	4.6	132.0	
443.1	CARBONDALE	BRIAR HILL	COAL	2.5	136.6	
440.6	CARBONDALE		SILTSTONE	4.9	139.1	
435.7	CARBONDALE		SHALE & SANDSTONE	10.0	144.0	
425.7	CARBONDALE		SANDSTONE	1.7	154.0	
424.0	CARBONDALE		SILTSTONE	7.8	155.7	
416.2	CARBONDALE		GRAY SHALE	35.1	163.5	
381.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.4	198.6	
377.7	CARBONDALE	SPRINGFIELD	COAL	4.7	202.0	

MAPID: 05902082000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1650' N line, 330' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227229 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.668626 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 91.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 26 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
531.4	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	29.5	48.6	
501.9	CARBONDALE	LAWSON	GRAY SHALE	5.0	78.1	
496.9	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	5.5	83.1	
491.5	CARBONDALE	ANNA	BLACK SHALE	0.5	88.5	
491.0	CARBONDALE	HERRIN	COAL	2.0	89.0	

MAPID: 05902094000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 50' S line, 80' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226543 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.658481 **DATE COLLECTED:** 5 / 9 / 1957

SURFACE ELEVATION (FT.): 430.5 **LOGGED (FT.):** 174.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 13-K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	FROM DRILLER'S LOG
411.5	CARBONDALE	ANVIL ROCK	SANDSTONE	11.2	19.0	FROM DRILLER'S LOG
400.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	10.7	30.2	FROM DRILLER'S LOG
389.6	CARBONDALE	BRERETON	LIMESTONE	0.7	40.9	FROM DRILLER'S LOG
388.9	CARBONDALE	ANNA	SHALE	5.6	41.6	SOFT; FROM DRILL LOG
383.3	CARBONDALE	HERRIN	COAL	3.2	47.2	FROM DRILLER'S LOG
380.1	CARBONDALE		UNDERCLAY	6.2	50.4	FROM DRILLER'S LOG
373.9	CARBONDALE		SANDSTONE/SHALE	40.0	56.6	FROM DRILLER'S LOG
333.9	CARBONDALE	BRIAR HILL	COAL	2.4	96.6	FROM DRILLER'S LOG
331.5	CARBONDALE		CALCARIOUS SANDY SHALE	2.0	99.0	FROM DRILLER'S LOG
329.5	CARBONDALE		SANDSTONE	44.0	101.0	FROM DRILLER'S LOG
285.5	CARBONDALE		GRAY SHALE	8.0	145.0	CORE STARTS AT 145.0'
277.5	CARBONDALE		SILTSTONE	6.3	153.0	
271.2	CARBONDALE		GRAY SHALE	3.7	159.3	
267.5	CARBONDALE	ST. DAVID	LIMESTONE	0.7	163.0	
266.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	163.7	
263.9	CARBONDALE	SPRINGFIELD	COAL	4.5	166.6	
259.4	CARBONDALE		UNDERCLAY	3.7	171.1	

MAPID: 05902095000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 40' N line, 40' W line of SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.230812 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.661952 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 480.6 **LOGGED (FT.):** 172.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 14-K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
480.6	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	FROM DRILLER'S LOG
466.6	CARBONDALE	ANVIL ROCK	SANDSTONE	24.0	14.0	FROM DRILLER'S LOG
442.6	CARBONDALE	ANNA	BLACK SHALE	2.5	38.0	FROM DRILLER'S LOG
440.1	CARBONDALE	HERRIN	COAL	3.5	40.5	FROM DRILLER'S LOG
436.6	CARBONDALE		SANDY SHALE	4.0	44.0	FROM DRILLER'S LOG
432.6	CARBONDALE		SANDSTONE	14.0	48.0	W/LIME; FROM DRILL LOG
418.6	CARBONDALE		SANDY SHALE	32.0	62.0	W/SS; FROM DRILL LOG
386.6	CARBONDALE	BRIAR HILL	COAL	2.5	94.0	FROM DRILLER'S LOG
384.1	CARBONDALE		SANDSTONE	60.0	96.5	W/SDYSH SEAMS
324.1	CARBONDALE		GRAY SHALE	2.3	156.5	CORE STARTS AT 101.7'
321.8	CARBONDALE	ST. DAVID	LIMESTONE	0.7	158.8	
321.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	159.5	
318.1	CARBONDALE	SPRINGFIELD	COAL	4.7	162.5	
313.4	CARBONDALE		SHALE	4.8	167.2	

MAPID: 05902106000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241639 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.663016 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 430.9 **LOGGED (FT.):** 193.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 15K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
430.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	FROM DRILLER'S LOG
415.9	CARBONDALE	ANVIL ROCK	SANDSTONE	52.0	15.0	FROM DRILLER'S LOG
363.9	CARBONDALE	ANNA	DARK SHALE	0.5	67.0	FROM DRILLER'S LOG
363.4	CARBONDALE	HERRIN	COAL	3.5	67.5	FROM DRILLER'S LOG
359.9	CARBONDALE		SANDY SHALE	5.0	71.0	W/SEEMS; FROM DRILL LOG
354.9	CARBONDALE		SANDSTONE	16.0	76.0	FROM DRILLER'S LOG
338.9	CARBONDALE		SANDY SHALE	33.7	92.0	W/SEAMS; FROM DRILL LOG
305.2	CARBONDALE	BRIAR HILL	COAL	2.3	125.7	FROM DRILLER'S LOG
302.9	CARBONDALE		SANDSTONE/SHALE	55.2	128.0	CORE DESC. STARTS AT 172.0'
247.7	CARBONDALE	ST. DAVID	LIMESTONE	0.9	183.2	
246.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	184.1	
243.6	CARBONDALE	SPRINGFIELD	COAL	4.3	187.3	
239.3	CARBONDALE		UNDERCLAY	1.4	191.6	

MAPID: 05902165000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.238656 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.667176 **DATE COLLECTED:** 7 / 18 / 1957

SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 182.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING 37 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0	PLEISTOCENE		UNCONSOLIDATED	24.3	0.0	
475.7	CARBONDALE		SANDSTONE	28.0	24.3	
447.7	CARBONDALE		SHALE	1.6	52.3	
446.1	CARBONDALE	BRERETON	LIMESTONE	5.6	53.9	
440.5	CARBONDALE	HERRIN	COAL	0.7	59.5	
439.8	CARBONDALE		UNDERCLAY	1.2	60.2	
438.6	CARBONDALE		LIMESTONE	4.6	61.4	
434.0	CARBONDALE		SHALE	0.6	66.0	
433.4	CARBONDALE		LIMESTONE	6.0	66.6	
427.4	CARBONDALE		SHALE	43.1	72.6	
384.3	CARBONDALE	BRIAR HILL	COAL	1.0	115.7	
383.3	CARBONDALE		SHALE	1.2	116.7	
382.2	CARBONDALE		BLACK SHALE	59.5	117.8	
322.7	CARBONDALE	SPRINGFIELD	COAL	3.3	177.3	
319.3	CARBONDALE		UNDERCLAY	0.4	180.7	
319.0	CARBONDALE		SHALE	1.0	181.0	

MAPID: 05902165000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** NE SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.238656 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.667176 **DATE COLLECTED:** 7 / 18 / 1957

SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 182.0 **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
500.0			UNCONSOLIDATED	24.3	0.0	
475.7			ROCK	35.2	24.3	CORE BEGINS
440.5	CARBONDALE	HERRIN	COAL	0.7	59.5	
439.8	CARBONDALE		ROCK	55.5	60.2	
384.3	CARBONDALE	BRIAR HILL	COAL	1.0	115.7	
383.3	CARBONDALE		ROCK	60.7	116.7	
322.7	CARBONDALE	SPRINGFIELD	COAL	3.3	177.3	
319.3	CARBONDALE		ROCK	1.3	180.7	

MAPID: 05902275000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 134' N line, 10' W line of SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245158 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.661729 **DATE COLLECTED:** 8 / 23 / 1958

SURFACE ELEVATION (FT.): 374.5 **LOGGED (FT.):** 192.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 519 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESCRIPTION AVAIL.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.5	PLEISTOCENE		UNCONSOLIDATED	102.0	0.0	
272.5	CARBONDALE		SANDSTONE	10.0	102.0	
262.5	CARBONDALE		SANDY SHALE	15.0	112.0	
247.5	CARBONDALE	BRIAR HILL	COAL	2.0	127.0	
245.5	CARBONDALE		SANDSTONE/SHALE	55.0	129.0	
190.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	184.0	
186.5	CARBONDALE	SPRINGFIELD	COAL	4.6	188.0	

MAPID: 05902976000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 350' N line, 1' E line of SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226088 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.668503 **DATE COLLECTED:** 11 / 18 / 1964

SURFACE ELEVATION (FT.): 534.8 **LOGGED (FT.):** 143.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 1144 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESCRIPTIONS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
534.8	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
531.8	CARBONDALE	ANVIL ROCK	SANDSTONE	19.5	3.0	
512.3	CARBONDALE	HERRIN	COAL	2.5	22.5	
509.8	CARBONDALE		UNDERCLAY	2.0	25.0	
507.8	CARBONDALE		SHALE & CLAYSTONE	6.0	27.0	
501.8	CARBONDALE		SHALE	36.5	33.0	
465.3	CARBONDALE		DARK SHALE	4.0	69.5	
461.3	CARBONDALE	BRIAR HILL	COAL	2.5	73.5	
458.8	CARBONDALE		UNDERCLAY	1.0	76.0	
457.8	CARBONDALE		SANDSTONE/SHALE	58.5	77.0	
399.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	135.5	
397.3	CARBONDALE	SPRINGFIELD	COAL	4.8	137.5	
392.5	CARBONDALE		UNDERCLAY	1.0	142.3	

MAPID: 05902977000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226071 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.669466 **DATE COLLECTED:** 12 / 17 / 1964

SURFACE ELEVATION (FT.): 479.4 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 1143 **WELL TYPE:** Coal Test

COMMENT: DRILLER INTO #5 OPENING

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
479.4	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
461.4	CARBONDALE		SANDSTONE	4.0	18.0	
457.4	CARBONDALE		SANDY SHALE	9.0	22.0	
448.4	CARBONDALE		SANDSTONE	6.0	31.0	
442.4	CARBONDALE		SANDY SHALE	40.0	37.0	
402.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	77.0	
399.9	CARBONDALE	SPRINGFIELD	MINE OPENING	-	79.5	OPENING #5

MAPID: 05902978000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 20' N line, 100' E line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226351 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.673124 **DATE COLLECTED:** 12 / 16 / 1964

SURFACE ELEVATION (FT.): 398.7 **LOGGED (FT.):** 216.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 1142 **WELL TYPE:** Coal Test

COMMENT: NO CORE DESCRIPTIONS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
398.7	PLEISTOCENE		UNCONSOLIDATED	42.6	0.0	
356.1	CARBONDALE	HOUCHIN CREEK	COAL	0.5	42.6	
355.7	CARBONDALE		UNDERCLAY	2.0	43.0	
353.7	CARBONDALE		SHALE & CLAYSTONE	12.0	45.0	
341.7	CARBONDALE		GRAY SHALE	29.0	57.0	
312.7	CARBONDALE	SURVANT	COAL	2.8	86.0	
309.9	CARBONDALE		GRAY SHALE	17.2	88.8	
292.7	CARBONDALE		SANDSTONE	15.0	106.0	W/SH
277.7	CARBONDALE		GRAY SHALE	23.5	121.0	
254.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	144.5	
251.2	CARBONDALE	COLCHESTER	COAL	0.5	147.5	
250.7	CARBONDALE		GRAY SHALE	3.0	148.0	
247.7	CARBONDALE		SANDSTONE	20.0	151.0	
227.7	CARBONDALE		SANDY SHALE	21.0	171.0	
206.7	CARBONDALE	DEKOVEN	COAL	3.5	192.0	
203.2	CARBONDALE		SANDY SHALE	8.0	195.5	
195.2	CARBONDALE		GRAY SHALE	5.0	203.5	
190.2	CARBONDALE		BLACK SHALE	3.0	208.5	
187.2	CARBONDALE	DAVIS	COAL	4.2	211.5	
183.0	TRADEWATER		UNDERCLAY	0.5	215.7	

MAPID: 05903260000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226271 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.658342 **DATE COLLECTED:** 10 / 10 / 1966

SURFACE ELEVATION (FT.): 417.6 **LOGGED (FT.):** 159.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1218-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
417.6	PLEISTOCENE		UNCONSOLIDATED	14.3	0.0	
403.3	CARBONDALE	ANVIL ROCK	SANDSTONE	10.6	14.3	
392.7	CARBONDALE		SHALE	5.0	24.9	
387.7	CARBONDALE	ANNA	DARK SHALE	3.2	29.9	
384.5	CARBONDALE	HERRIN	COAL	3.0	33.1	
381.5	CARBONDALE	HERRIN	SHALE	0.2	36.1	
381.3	CARBONDALE	HERRIN	COAL	0.4	36.3	
380.9	CARBONDALE		SHALE	2.8	36.7	
378.1	CARBONDALE		LIMESTONE	2.3	39.5	
375.8	CARBONDALE		SHALE	0.6	41.8	
375.2	CARBONDALE		SANDSTONE	23.9	42.4	
351.3	CARBONDALE		SANDY SHALE	15.2	66.3	
336.1	CARBONDALE		SHALE	1.8	81.5	"SLATE"
334.3	CARBONDALE	BRIAR HILL	COAL	1.7	83.3	
332.6	CARBONDALE		SHALE	0.5	85.0	
332.1	CARBONDALE		SANDSTONE/SHALE	63.9	85.5	
268.2	CARBONDALE		SHALE	1.2	149.4	DARK
267.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	150.6	
266.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.1	151.1	"SLATE"
263.4	CARBONDALE	SPRINGFIELD	COAL	4.6	154.2	
258.8	CARBONDALE		UNDERCLAY	1.0	158.8	

MAPID: 05903265000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23099 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.658359 **DATE COLLECTED:** 10 / 4 / 1966

SURFACE ELEVATION (FT.): 435.5 **LOGGED (FT.):** 165.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1217-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
435.5	PLEISTOCENE		UNCONSOLIDATED	19.9	0.0	
415.6	CARBONDALE	ANVIL ROCK	SANDSTONE	9.9	19.9	
405.7	CARBONDALE		SHALE	5.8	29.8	
399.9	CARBONDALE	BRERETON	LIMESTONE	4.3	35.6	
395.6	CARBONDALE	ANNA	BLACK SHALE	0.2	39.9	
395.4	CARBONDALE	HERRIN	COAL	3.5	40.1	
391.9	CARBONDALE		SHALE	3.8	43.6	
388.1	CARBONDALE		SANDSTONE	17.4	47.4	
370.7	CARBONDALE		SANDY SHALE	27.9	64.8	
342.8	CARBONDALE	BRIAR HILL	COAL	2.0	92.7	
340.8	CARBONDALE		SANDSTONE	28.7	94.7	
312.1	CARBONDALE		SHALY SANDSTONE	29.7	123.4	
282.4	CARBONDALE		SHALE	1.3	153.1	
281.1	CARBONDALE	ST. DAVID	LIMESTONE	0.7	154.4	
280.4	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	155.1	"SLATE"
275.4	CARBONDALE	SPRINGFIELD	COAL	4.6	160.1	
270.8	CARBONDALE		UNDERCLAY	0.3	164.7	

MAPID: 05903454000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 70' S line, 35' E line of SE SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226251 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.665954 **DATE COLLECTED:** 8 / 15 / 1966

SURFACE ELEVATION (FT.): 537.2 **LOGGED (FT.):** 183.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1370 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
537.2	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
520.2	CARBONDALE	ANVIL ROCK	SANDSTONE	34.0	17.0	
486.2	CARBONDALE		SHALE	9.0	51.0	
477.2	CARBONDALE	BRERETON	LIMESTONE	1.3	60.0	
475.9	CARBONDALE	ANNA	LIMESTONE & SHALE	0.5	61.3	BLACK
475.4	CARBONDALE	HERRIN	COAL	2.2	61.8	
473.2	CARBONDALE		UNDERCLAY	3.0	64.0	
470.2	CARBONDALE		SANDSTONE	13.0	67.0	
457.2	CARBONDALE		SANDY SHALE	20.0	80.0	
437.2	CARBONDALE		SHALE	10.0	100.0	HARD
427.2	CARBONDALE	BRIAR HILL	COAL	2.4	110.0	
424.8	CARBONDALE		SANDY SHALE	37.6	112.4	
387.2	CARBONDALE		SHALE	22.0	150.0	
365.2	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.2	172.0	
364.0	CARBONDALE		BLACK SHALE	3.8	173.2	
360.2	CARBONDALE	SPRINGFIELD	COAL	4.5	177.0	
355.7	CARBONDALE		UNDERCLAY	2.0	181.5	

MAPID: 05903456000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 445' N line, 245' W line of NW SW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234813 **GEOLOGIST:** C KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.668257 **DATE COLLECTED:** 8 / 11 / 1966
SURFACE ELEVATION (FT.): 519.7 **LOGGED (FT.):** 185.5 **LOG TYPE:** Drillers Log
SOURCE: PEABODY 1364 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
519.7	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
504.7	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	15.0	
472.7	CARBONDALE	ANVIL ROCK	SANDY SHALE	3.5	47.0	
469.2	CARBONDALE		SHALE WITH LIMESTONE	4.2	50.5	
465.0	CARBONDALE	BRERETON	LIMESTONE	5.0	54.7	
460.0	CARBONDALE	ANNA	BLACK SHALE	0.3	59.7	
459.7	CARBONDALE	HERRIN	COAL	3.6	60.0	
456.1	CARBONDALE		UNDERCLAY	5.0	63.6	
451.1	CARBONDALE		SANDSTONE	10.4	68.6	
440.7	CARBONDALE		SANDY SHALE	18.0	79.0	
422.7	CARBONDALE		SHALE	16.0	97.0	DARK
406.7	CARBONDALE	BRIAR HILL	COAL	2.4	113.0	
404.3	CARBONDALE		CALCAREOUS SHALE	5.1	115.4	
399.2	CARBONDALE		SANDY SHALE	52.8	120.5	
346.4	CARBONDALE		SHALE	2.2	173.3	
344.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	175.5	
343.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	176.5	
340.7	CARBONDALE	SPRINGFIELD	COAL	4.5	179.0	
336.2	CARBONDALE		UNDERCLAY	2.0	183.5	

MAPID: 05923865000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:** 330' S line, 330' E line of NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227263 **GEOLOGIST:**
CONFIDENTIAL: N **LATITUDE:** 37.666674 **DATE COLLECTED:** 1 / 0 / 1976
SURFACE ELEVATION (FT.): 512.0 **LOGGED (FT.):** 1604.0 **LOG TYPE:** Electric Log
SOURCE: UNITED STATES OIL, INC. **WELL TYPE:** Producer-Oil and Gas
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-1092.0	BASE OF PENN.		UNCLASSIFIED	-	1604.0	

MAPID: 05999999000C **VERSION:** 1 **PROJECT:** LUMP

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 8 **QUARTERS/FOOTAGES:**
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.235676 **GEOLOGIST:** NORTH
CONFIDENTIAL: N **LATITUDE:** 37.665782 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. **WELL TYPE:**
COMMENT: PERMIT 38 EAGLE SURFACE

MAPID: 05900025501M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.221504 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669465 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): **LOGGED (FT.):** 60.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WALLACE LEE,STRONG MINE **WELL TYPE:** Underground mine
COMMENT: LISTED ON MAP AIR SHAFT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	18.0	0.0	
-			ROCK	42.0	18.0	
-	CARBONDALE	HERRIN	COAL	-	60.0	

MAPID: 05900025502M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NE SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223241 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.668082 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 186.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WALLACE LEE,STRONG MINE **WELL TYPE:** Underground mine
COMMENT: MAINSHAFT LOCATION SAME AS M0590255

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
490.0			ROCK	181.0	0.0	
309.0	CARBONDALE	HERRIN	COAL	5.0	181.0	THICKNESS FROM MINER

MAPID: 05900025503M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NE SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223225 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.669003 **DATE COLLECTED:** 11 / 22 / 1915
SURFACE ELEVATION (FT.): 475.0 **LOGGED (FT.):** 3.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-W. LEE, STRONG MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	-		
-	CARBONDALE	HERRIN	COAL	3.3		
-	CARBONDALE		ROCK	0.2		

MAPID: 05900025500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** SW NE SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223241 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.668082 **DATE COLLECTED:** 0 / 0 / 1919
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 5.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES (CADY FLD NOTES) STRONG MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	1.0		
-	CARBONDALE	HERRIN	COAL	4.0		

MAPID: 05900088402M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 200' N line, 100' W line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216668 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.665244 **DATE COLLECTED:** 8 / 2 / 1968
SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CLEGG, PEABODY CC,EAGLE UNGRD **WELL TYPE:** Underground mine
COMMENT: SAMPLE 1

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

MAPID: 05900088403M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 700' N line, 700' E line of SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.219471 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.663854 **DATE COLLECTED:** 8 / 2 / 1968
SURFACE ELEVATION (FT.): 430.0 **LOGGED (FT.):** 4.5 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CLEGG, PEABODY C C UNGRD **WELL TYPE:** Underground mine
COMMENT: SAMPLE 2

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

MAPID: 05901288000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 165' N line, 1' E line of NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216891 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.672665 **DATE COLLECTED:** 8 / 15 / 1952

SURFACE ELEVATION (FT.): 585.0 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE 12 **WELL TYPE:** Coal Test

COMMENT: BOWLESVILLE AREA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
585.0	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
578.0	CARBONDALE		SANDSTONE	18.0	7.0	
560.0	CARBONDALE		SANDSTONE	4.0	25.0	
556.0	CARBONDALE		BLACK SHALE	1.3	29.0	
554.7	CARBONDALE		COAL	0.3	30.3	
554.5	CARBONDALE		UNDERCLAY	2.5	30.5	
552.0	CARBONDALE		SANDSTONE	38.0	33.0	

MAPID: 05902081000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213007 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.666266 **DATE COLLECTED:** 3 / 20 / 1957

SURFACE ELEVATION (FT.): 434.5 **LOGGED (FT.):** 418.3 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 41 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
434.5	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	FROM DRILLER'S LOG
414.5	CARBONDALE	ANVIL ROCK	SANDSTONE	21.5	20.0	FROM DRILLER'S LOG
393.0	CARBONDALE	BRERETON	LIMESTONE	2.0	41.5	FROM DRILLER'S LOG
391.0	CARBONDALE	BRERETON	BLACK SHALE	0.5	43.5	FROM DRILLER'S LOG
390.5	CARBONDALE	BRERETON	LIMESTONE	1.5	44.0	FROM DRILLER'S LOG
389.0	CARBONDALE	HERRIN	COAL	3.5	45.5	FROM DRILLER'S LOG
385.5	CARBONDALE		UNDERCLAY	5.0	49.0	FROM DRILLER'S LOG
380.5	CARBONDALE		SHALE & SANDSTONE	26.5	54.0	FROM DRILLER'S LOG
354.0	CARBONDALE		GRAY SHALE	15.0	80.5	FROM DRILLER'S LOG
339.0	CARBONDALE	BRIAR HILL	COAL	1.5	95.5	FROM DRILLER'S LOG
337.5	CARBONDALE		SANDY SHALE	67.5	97.0	CORE STARTS AT 128.5'
270.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	164.5	
266.0	CARBONDALE	SPRINGFIELD	COAL	4.5	168.5	
261.5	CARBONDALE		UNDERCLAY	2.0	173.0	
259.5	CARBONDALE		SHALE & CLAYSTONE	1.2	175.0	
258.3	CARBONDALE		SILTSTONE	5.3	176.2	W/SH
253.0	CARBONDALE		GRAY SHALE	50.2	181.5	
202.8	CARBONDALE		BLACK SHALE	0.8	231.7	BOT. CONTACT INCLINED 15 DEGS.
202.0	CARBONDALE	HANOVER	LIMESTONE	2.3	232.5	
199.7	CARBONDALE	EXCELLO	BLACK SHALE	1.9	234.8	
197.8	CARBONDALE	HOUCHIN CREEK	PYRITE	0.1	236.7	W/THIN COAL STREAKS
197.7	CARBONDALE	HOUCHIN CREEK	COAL	1.4	236.8	
196.3	CARBONDALE		SANDY SHALE	6.2	238.2	
190.1	CARBONDALE		GRAY SHALE	35.0	244.4	
155.1	CARBONDALE	SURVANT	COAL	2.7	279.4	
152.4	CARBONDALE		GRAY SHALE	4.2	282.1	
148.2	CARBONDALE		SANDSTONE	6.0	286.3	
142.2	CARBONDALE		SANDY SHALE	44.5	292.3	
97.7	CARBONDALE	OAK GROVE	LIMESTONE	1.0	336.8	
96.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.5	337.8	
96.2	CARBONDALE	COLCHESTER	COAL	0.5	338.3	
95.7	CARBONDALE		UNDERCLAY	1.0	338.8	
94.7	CARBONDALE		SHALE & CLAYSTONE	4.0	339.8	
90.7	CARBONDALE		SANDSTONE	28.5	343.8	
62.2	CARBONDALE		SANDY SHALE	10.5	372.3	
51.7	CARBONDALE	DEKOVEN	COAL	3.5	382.8	
48.2	CARBONDALE		UNDERCLAY	1.6	386.3	
46.6	CARBONDALE		SANDSTONE	8.5	387.9	

38.1	CARBONDALE		GRAY SHALE	10.0	396.4
28.1	CARBONDALE		BLACK SHALE	2.0	406.4
26.1	CARBONDALE	DAVIS	COAL	3.7	408.4
22.4	TRADEWATER		UNDERCLAY	2.2	412.1
20.2	TRADEWATER		SHALE	4.0	414.3

MAPID: 05902081000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** SE SE SW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.213007 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.666266 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 434.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: STONEFORT COAL CORP 41 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
197.5	CARBONDALE	HOUCHIN CREEK	COAL	1.7	236.5	
154.5	CARBONDALE	SURVANT	COAL	3.0	279.5	
95.5	CARBONDALE	COLCHESTER	COAL	0.6	338.5	
51.0	CARBONDALE	DEKOVEN	COAL	3.3	383.0	
51.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	383.0	
25.5	CARBONDALE	DAVIS	COAL	3.8	408.5	23% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902210000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 900' N line, 1320' E line
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212384 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.670607 **DATE COLLECTED:** 11 / 11 / 1957
SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 138.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 47 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
412.0	PLEISTOCENE		CLAY	8.0	0.0	BROWN
404.0	PLEISTOCENE		CLAY	22.7	8.0	BROWN
381.3	CARBONDALE		BROWN SHALE	3.8	30.7	
377.5	CARBONDALE		SHALE	16.9	34.5	
360.6	CARBONDALE		SHALE	2.3	51.4	
358.3	CARBONDALE	BRIAR HILL	COAL	0.8	53.7	
357.5	CARBONDALE		GRAY SANDSTONE	41.5	54.5	
316.0	CARBONDALE		SHALE	34.0	96.0	
282.0	CARBONDALE	ST. DAVID	GRAY LIMESTONE	1.5	130.0	
280.5	CARBONDALE	TURNER MINE	SHALE	2.5	131.5	
278.0	CARBONDALE	SPRINGFIELD	COAL	3.8	134.0	
274.2	CARBONDALE		UNDERCLAY	0.7	137.8	

MAPID: 05902210000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 900' N line, 1320' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212384 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.670607 **DATE COLLECTED:** 11 / 11 / 1957

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 138.5 **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
412.0			UNCONSOLIDATED	30.7	0.0	
381.3			ROCK	23.0	30.7	
358.3	CARBONDALE	BRIAR HILL	COAL	0.8	53.7	
357.5	CARBONDALE		ROCK	79.5	54.5	
278.0	CARBONDALE	SPRINGFIELD	COAL	3.8	134.0	
274.2	CARBONDALE		ROCK	0.7	137.8	

MAPID: 05903254000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212463 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.665804 **DATE COLLECTED:** 4 / 27 / 1967

SURFACE ELEVATION (FT.): 432.5 **LOGGED (FT.):** 174.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1692 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
432.5	PLEISTOCENE		UNCONSOLIDATED	21.5	0.0	
411.0	CARBONDALE	ANVIL ROCK	SANDSTONE	21.8	21.5	
389.2	CARBONDALE		SHALE	0.2	43.3	DARK
389.0	CARBONDALE	BRERETON	LIMESTONE	4.0	43.5	
385.0	CARBONDALE	ANNA	DARK SHALE	0.5	47.5	
384.5	CARBONDALE	HERRIN	COAL	3.3	48.0	
381.2	CARBONDALE		UNDERCLAY	4.7	51.3	
376.5	CARBONDALE		SANDSTONE	22.0	56.0	
354.5	CARBONDALE		SHALE	18.5	78.0	
336.0	CARBONDALE	BRIAR HILL	COAL	2.3	96.5	
333.7	CARBONDALE		SANDSTONE	39.2	98.8	
294.5	CARBONDALE		SANDY SHALE	26.7	138.0	
267.8	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.6	164.7	
267.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	165.2	
264.9	CARBONDALE	TURNER MINE	DARK SHALE	0.5	167.6	
264.5	CARBONDALE	SPRINGFIELD	COAL	4.4	168.0	
260.1	CARBONDALE		UNDERCLAY	2.2	172.4	

MAPID: 05903254000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212463 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.665804 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 433.0 **LOGGED (FT.):** 51.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 1692 **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
411.5	CARBONDALE	LAWSON	SANDSTONE	21.8	21.5	
389.7	CARBONDALE	LAWSON	GRAY SHALE	0.2	43.3	
389.5	CARBONDALE	BRERETON	LIMESTONE	4.0	43.5	
385.5	CARBONDALE	ANNA	BLACK SHALE	0.5	47.5	
385.0	CARBONDALE	HERRIN	COAL	3.3	48.0	

MAPID: 05903268000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.220316 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.672223 **DATE COLLECTED:** 12 / 20 / 1966

SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 188.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1566-C **WELL TYPE:** Coal Test

COMMENT: CO. REPTS SURFELV 392.3FT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
560.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0	
527.0	CARBONDALE	ANVIL ROCK	SANDSTONE	21.8	33.0	
505.2	CARBONDALE		SHALE	0.9	54.8	
504.3	CARBONDALE	BRERETON	LIMESTONE	4.2	55.7	
500.1	CARBONDALE	ANNA	BLACK SHALE	0.7	59.9	
499.4	CARBONDALE	HERRIN	COAL	3.2	60.6	
496.2	CARBONDALE	HERRIN	SHALE	0.2	63.8	
496.0	CARBONDALE	HERRIN	COAL	0.6	64.0	
495.4	CARBONDALE		SHALE	4.7	64.6	
490.7	CARBONDALE		SANDSTONE	21.8	69.3	
468.9	CARBONDALE		SHALE	19.6	91.1	
449.3	CARBONDALE	BRIAR HILL	COAL	2.0	110.7	
447.3	CARBONDALE		SANDSTONE	40.2	112.7	
407.1	CARBONDALE		SANDY SHALE	21.3	152.9	
385.8	CARBONDALE		SHALE	3.3	174.2	
382.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	177.5	"SLATE"
379.6	CARBONDALE	SPRINGFIELD	COAL	4.6	180.4	
375.0	CARBONDALE		UNDERCLAY	3.2	185.0	

MAPID: 05903270000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217136 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.658472 **DATE COLLECTED:** 12 / 29 / 1966

SURFACE ELEVATION (FT.): 413.8 **LOGGED (FT.):** 174.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1575-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
413.8	PLEISTOCENE		UNCONSOLIDATED	22.4	0.0	
391.4	CARBONDALE	ANVIL ROCK	SANDSTONE	13.9	22.4	BROWN
377.5	CARBONDALE		SHALE	8.4	36.3	
369.1	CARBONDALE	BRERETON	LIMESTONE	4.7	44.7	
364.4	CARBONDALE	ANNA	BLACK SHALE	0.8	49.4	
363.6	CARBONDALE	HERRIN	COAL	3.7	50.2	
359.9	CARBONDALE		SHALE	2.7	53.9	
357.2	CARBONDALE		SANDSTONE	37.2	56.6	
320.0	CARBONDALE		SHALE	4.2	93.8	
315.8	CARBONDALE		SHALE	2.6	98.0	DARK
313.2	CARBONDALE	BRIAR HILL	COAL	2.4	100.6	
310.8	CARBONDALE		SANDSTONE	35.9	103.0	
274.9	CARBONDALE		SANDY SHALE	26.1	138.9	
248.8	CARBONDALE	ST. DAVID	LIMESTONE	0.5	165.0	
248.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	165.5	"SLATE"
245.7	CARBONDALE	SPRINGFIELD	COAL	4.6	168.1	
241.1	CARBONDALE		UNDERCLAY	2.1	172.7	

MAPID: 05903458000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 650' N line, 150' W line of NW SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.211892 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.667659 **DATE COLLECTED:** 8 / 6 / 1966

SURFACE ELEVATION (FT.): 381.3 **LOGGED (FT.):** 167.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1362 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.3	PLEISTOCENE		UNCONSOLIDATED	83.0	0.0	
298.3	CARBONDALE		SHALE	13.5	83.0	
284.8	CARBONDALE		SHALE	3.0	96.5	
281.8	CARBONDALE	BRIAR HILL	COAL	2.8	99.5	
279.0	CARBONDALE		SANDY SHALE	38.0	102.3	
241.0	CARBONDALE		SHALE	17.7	140.3	
223.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	158.0	
220.3	CARBONDALE	SPRINGFIELD	COAL	4.8	161.0	
215.5	CARBONDALE		UNDERCLAY	2.0	165.8	

MAPID: 05990306000C **VERSION:** 1 **PROJECT:** NCRDS02

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 9 **QUARTERS/FOOTAGES:** 660' S line, 1' W line of SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226098 **GEOLOGIST:** STRAAYER

CONFIDENTIAL: N **LATITUDE:** 37.667583 **DATE COLLECTED:** 8 / 15 / 1952

SURFACE ELEVATION (FT.): 550.0 **LOGGED (FT.):** 38.0 **LOG TYPE:** Drillers Log

SOURCE: AYRSHIRE 13 **WELL TYPE:** Coal Test

COMMENT: BOWLESVILLE AREA BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
550.0	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
539.0			SANDSTONE	21.0	11.0	HARD
518.0			GRAY SANDSTONE	6.0	32.0	HARD

MAPID: 05902032000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1240' N line, 1170' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193181 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.669851 **DATE COLLECTED:** 10 / 5 / 1956

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 405.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. D.H.-SH **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.0	PLEISTOCENE		CLAY	15.0	0.0	FROM DRILLER'S LOG
365.0	MODESTO		SHALE	46.0	15.0	FROM DRILLER'S LOG
319.0	MODESTO		SANDSTONE	16.0	61.0	FROM DRILLER'S LOG
303.0	MODESTO		UNKNOWN	2.0	77.0	
301.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.7	79.0	FROM DRILLER'S LOG
296.3	MODESTO		SHALE	111.8	83.7	W/SS SEAMS
184.5	MODESTO		DARK SHALE	11.7	195.5	FROM DRILLER'S
172.8	CARBONDALE	DANVILLE	COAL	1.0	207.2	FROM DRILLER'S LOG
171.8	CARBONDALE		UNDERCLAY	1.3	208.2	FROM DRILLER'S LOG
170.5	CARBONDALE		SANDSTONE/SHALE	35.0	209.5	CORING AT 235.1'
135.5	CARBONDALE	ANVIL ROCK	SANDSTONE	34.0	244.5	
101.5	CARBONDALE	ANNA	BLACK SHALE	0.7	278.5	
100.8	CARBONDALE	HERRIN	BONE COAL	0.5	279.2	
100.3	CARBONDALE	HERRIN	COAL	1.7	279.7	
98.6	CARBONDALE	HERRIN	SHALE	0.0	281.4	
98.6	CARBONDALE	HERRIN	COAL	0.6	281.4	
98.0	CARBONDALE	HERRIN	SHALE	0.1	282.0	BLUE BAND
97.9	CARBONDALE	HERRIN	COAL	0.6	282.1	
97.3	CARBONDALE		SHALE	2.1	282.7	
95.2	CARBONDALE		CLAYSTONE	1.9	284.8	
93.3	CARBONDALE		LIMESTONE	0.6	286.7	
92.7	CARBONDALE		SILTY SHALE	23.2	287.3	
69.5	CARBONDALE		SHALE	12.0	310.5	NUM SID NODS; SOMEWHAT SLATY
57.5	CARBONDALE	BRIAR HILL	COAL	2.5	322.5	
55.0	CARBONDALE		SILTSTONE	2.3	325.0	
52.7	CARBONDALE		SHALE	3.3	327.3	
49.4	CARBONDALE		SANDSTONE	30.3	330.6	W/SH SEAMS
19.1	CARBONDALE		SILTSTONE	13.7	360.9	
5.4	CARBONDALE		GRAY SHALE	16.6	374.6	
-11.2	CARBONDALE	ST. DAVID	SHALE	1.2	391.2	LS NODS ALMOST SLATY; ABUND FOSSILS
-12.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	392.4	
-14.3	CARBONDALE	SPRINGFIELD	COAL	4.7	394.3	
-19.0	CARBONDALE		UNDERCLAY	4.2	399.0	
-23.2	CARBONDALE		SILTSTONE	2.3	403.2	

MAPID: 05902032000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1240' N line, 1170' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.193181 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.669851 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 282.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP DD-5H **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
172.2	CARBONDALE	DANVILLE	COAL	1.0	207.8	
171.2	CARBONDALE	LAWSON	CLAYSTONE	1.3	208.8	
170.0	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	35.0	210.0	
135.0	CARBONDALE	LAWSON	SANDSTONE	33.8	245.0	
101.2	CARBONDALE	ANNA	BLACK SHALE	1.2	278.8	
100.0	CARBONDALE	HERRIN	COAL	2.8	280.0	

MAPID: 05902117000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** NE NE NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.194421 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.665409 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 413.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			ROCK	123.0		L-CORE BEGINS AT 52'
-			COAL	1.5		
-			ROCK	12.8		
-			COAL	0.4		
-			ROCK	57.3		
-	CARBONDALE	HERRIN	COAL	2.9		
-	CARBONDALE		ROCK	45.8		
-	CARBONDALE	BRIAR HILL	COAL	2.3		
-	CARBONDALE		ROCK	69.5		
-	CARBONDALE	SPRINGFIELD	COAL	4.3		
-	CARBONDALE		ROCK	41.3		

MAPID: 05902278000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 15' N line, 5' E line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.189104 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.673288 **DATE COLLECTED:** 5 / 15 / 1958

SURFACE ELEVATION (FT.): 381.1 **LOGGED (FT.):** 463.5 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 509 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.1	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0	FROM DRILLER'S LOG
346.1	MODESTO		SHALE	151.0	35.0	FROM DRILLER'S LOG
195.1	MODESTO		SANDSTONE/SHALE	21.5	186.0	FROM DRILLER'S LOG
173.6	MODESTO		SANDSTONE	10.0	207.5	CORING STARTED AT 200.0'
163.6	MODESTO		SILTSTONE	10.0	217.5	
153.6	MODESTO		GRAY SHALE	7.0	227.5	
146.6	MODESTO		CLAYSTONE & SANDSTONE	0.0	234.5	MAY REPRESENT COAL HORIZON
146.6	MODESTO		SILTSTONE	3.5	234.5	
143.1	MODESTO		SHALE	9.5	238.0	
133.6	MODESTO		FOSSILIFEROUS SHALE	3.7	247.5	SID NODULES
129.9	MODESTO		BLACK SHALE	6.6	251.2	
123.3	MODESTO		GRAY SHALE	17.2	257.8	
106.1	CARBONDALE	DANVILLE	COAL	2.0	275.0	
104.1	CARBONDALE		UNDERCLAY	3.0	277.0	
101.1	CARBONDALE		SILTSTONE	9.0	280.0	
92.1	CARBONDALE		SHALE	0.1	289.0	A FEW COAL CHIPS; POSSIBLE COAL HORIZON
92.0	CARBONDALE		UNDERCLAY	2.2	289.1	
89.8	CARBONDALE		SILTSTONE	5.0	291.3	
84.8	CARBONDALE		LIMESTONE	0.6	296.3	
84.2	CARBONDALE	ANVIL ROCK	SILTSTONE	9.1	296.9	
75.1	CARBONDALE	ANVIL ROCK	SANDSTONE	32.0	306.0	
43.1	CARBONDALE		GRAY SHALE	0.8	338.0	
42.3	CARBONDALE	ANNA	BLACK SHALE	1.2	338.8	
41.1	CARBONDALE	HERRIN	COAL	3.0	340.0	
38.1	CARBONDALE		UNDERCLAY	2.5	343.0	
35.6	CARBONDALE		SANDY SHALE	25.0	345.5	NO CORE AVAIL 343'-433'
10.6	CARBONDALE		GRAY SHALE	14.5	370.5	FROM DRILLER'S LOG
-3.9	CARBONDALE	BRIAR HILL	COAL	2.0	385.0	
-5.9	CARBONDALE		SANDY SHALE	64.8	387.0	
-70.7	CARBONDALE	ST. DAVID	LIMESTONE	0.8	451.8	
-71.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	452.6	
-73.5	CARBONDALE	SPRINGFIELD	COAL	4.5	454.6	
-78.0	CARBONDALE		UNDERCLAY	2.0	459.1	
-80.0	CARBONDALE		SANDSTONE	2.4	461.1	

MAPID: 05902544000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 100' N line, 960' E line of NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.197092 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.672941 **DATE COLLECTED:** 3 / 29 / 1961

SURFACE ELEVATION (FT.): 377.1 **LOGGED (FT.):** 247.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP. 538 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.1	PLEISTOCENE		UNCONSOLIDATED	83.0	0.0	
294.1	MODESTO		SANDSTONE	27.0	83.0	
267.1	MODESTO		SHALE	44.0	110.0	
223.1	MODESTO		BLACK SHALE	3.5	154.0	
219.6	MODESTO		GRAY SHALE	20.0	157.5	
199.6	CARBONDALE	DANVILLE	COAL	1.8	177.5	
197.8	CARBONDALE		GRAY SHALE	7.2	179.3	
190.6	CARBONDALE	ALLENBY	COAL	0.5	186.5	
190.1	CARBONDALE		UNDERCLAY	1.0	187.0	
189.1	CARBONDALE	ANVIL ROCK	SANDY SHALE	40.5	188.0	
148.6	CARBONDALE		GRAY SHALE	6.7	228.5	
141.9	CARBONDALE	BRERETON	LIMESTONE	1.2	235.2	
140.7	CARBONDALE	ANNA	BLACK SHALE	1.5	236.4	
139.2	CARBONDALE	HERRIN	COAL	0.6	237.9	
138.6	CARBONDALE	HERRIN	PYRITE	0.1	238.5	
138.5	CARBONDALE	HERRIN	COAL	1.6	238.6	
136.9	CARBONDALE	HERRIN	SHALE	0.1	240.2	BLUE BAND
136.8	CARBONDALE	HERRIN	COAL	0.6	240.3	
136.2	CARBONDALE		UNDERCLAY	2.6	240.9	
133.6	CARBONDALE		LIMESTONE	0.8	243.5	
132.8	CARBONDALE		SANDY SHALE	2.7	244.3	

MAPID: 05923807000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 10 **QUARTERS/FOOTAGES:** 1' N line, 2310' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.199738 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.673175 **DATE COLLECTED:** 10 / 21 / 1971

SURFACE ELEVATION (FT.): 377.7 **LOGGED (FT.):** 259.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4343-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.7	PLEISTOCENE		UNCONSOLIDATED	66.5	0.0	
311.2	MODESTO		SHALE	11.5	66.5	
299.7	CARBONDALE	DANVILLE	COAL	2.0	78.0	
297.7	CARBONDALE		UNDERCLAY	1.5	80.0	
296.2	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	39.0	81.5	
257.2	CARBONDALE		SHALE	8.3	120.5	
248.9	CARBONDALE	BRERETON	LIMESTONE	3.5	128.8	
245.4	CARBONDALE	ANNA	BLACK SHALE	0.5	132.3	
244.9	CARBONDALE	HERRIN	COAL	3.5	132.8	
241.4	CARBONDALE		UNDERCLAY	2.7	136.3	
238.7	CARBONDALE		SANDSTONE	2.5	139.0	
236.2	CARBONDALE		SHALE	4.5	141.5	
231.7	CARBONDALE		SANDSTONE	11.5	146.0	
220.2	CARBONDALE		SANDY SHALE	21.2	157.5	
199.0	CARBONDALE	BRIAR HILL	COAL	2.0	178.7	
197.0	CARBONDALE		SANDSTONE	50.0	180.7	
147.0	CARBONDALE		SANDY SHALE	17.9	230.7	
129.1	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.5	248.6	
128.6	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	249.1	
126.7	CARBONDALE	SPRINGFIELD	COAL	4.3	251.0	
122.4	CARBONDALE		UNDERCLAY	3.0	255.3	
119.4	CARBONDALE		SANDSTONE	0.9	258.3	

MAPID: 05902119000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.179355 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.665244 **DATE COLLECTED:** 5 / 18 / 1957

SURFACE ELEVATION (FT.): 362.5 **LOGGED (FT.):** 856.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 17K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.5	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0	
327.5	MODESTO		SANDY SHALE	63.0	35.0	W/SS
264.5	MODESTO		SHALE	10.5	98.0	
254.0	MODESTO		FOSSILIFEROUS LIMESTONE	0.8	108.5	ARGILACEOUS
253.2	MODESTO		BLACK SHALE	2.9	109.3	
250.3	MODESTO		LIMESTONE	0.2	112.2	
250.1	MODESTO		SHALE	8.8	112.4	
241.3	MODESTO		LIMESTONE	0.5	121.2	
240.8	MODESTO		GRAY SHALE	11.7	121.7	
229.1	MODESTO		BLACK SHALE	0.3	133.4	
228.8	MODESTO	WOMAC	COAL	0.9	133.7	
227.9	MODESTO		SHALE	1.8	134.6	FROM DRILLER'S LOG
226.1	MODESTO		SHALE & SANDSTONE	96.0	136.4	
130.1	MODESTO		FOSSILIFEROUS SHALE	0.3	232.4	FROM DRILLER'S LOG
129.8	MODESTO		BLACK SHALE	1.1	232.7	FROM DRILLER'S LOG
128.7	MODESTO		FOSSILIFEROUS SHALE	0.2	233.8	FROM DRILLER'S LOG
128.5	MODESTO	CHAPEL	COAL	0.5	234.0	FROM DRILLER'S LOG
128.0	MODESTO		BLACK SHALE	2.0	234.5	FROM DRILLER'S LOG
126.0	MODESTO		SHALE	7.0	236.5	W/LIME CHUNKS; FROM DRILLER'S LOG
119.0	MODESTO	TRIVOLI	SANDSTONE	43.7	243.5	FROM DRILLER'S LOG
75.3	MODESTO		SHALE	0.5	287.2	FROM DRILLER'S LOG
74.8	MODESTO		LIMESTONE	3.5	287.7	FROM DRILLER'S LOG
71.3	MODESTO		SANDY SHALE	22.8	291.2	FROM DRILLER'S LOG
48.5	MODESTO		SHALE	11.3	314.0	W/LIME CHUNKS; FROM DRILLER'S LOG
37.2	MODESTO		SANDSTONE	58.7	325.3	W/SH; FROM DRILL LOG
-21.5	MODESTO		BLACK SHALE	33.5	384.0	W/SID BANDS; FROM DRILL LOG
-55.0	CARBONDALE	DANVILLE	COAL	1.8	417.5	FROM DRILLER'S LOG
-56.8	CARBONDALE		UNDERCLAY	0.4	419.3	FROM CORE
-57.2	CARBONDALE		NO RECORD	6.5	419.7	ADJUST FOR MARKER
-63.7	CARBONDALE		GRAY SHALE	0.2	426.2	
-63.9	CARBONDALE		BLACK SHALE	0.2	426.4	
-64.1	CARBONDALE	ALLENBY	COAL	0.2	426.6	
-64.3	CARBONDALE	ALLENBY	COAL	0.1	426.8	
-64.4	CARBONDALE	ALLENBY	UNDERCLAY	0.4	426.9	
-64.8	CARBONDALE	ALLENBY	COAL	0.0	427.3	
-64.8	CARBONDALE		UNDERCLAY	0.6	427.3	
-65.4	CARBONDALE		SANDSTONE	3.7	427.9	

-69.1	CARBONDALE		GRAY SHALE	0.6	431.6	
-69.7	CARBONDALE		SANDSTONE/LIMESTONE	4.4	432.2	MIXED; B.F. POSITION
-74.1	CARBONDALE	ANVIL ROCK	SANDSTONE	38.8	436.6	
-112.9	CARBONDALE		GRAY SHALE	3.7	475.4	
-116.6	CARBONDALE	BRERETON	LIMESTONE	1.8	479.1	
-118.4	CARBONDALE	ANNA	BLACK SHALE	2.2	480.9	
-120.6	CARBONDALE	ANNA	LIMESTONE	0.7	483.1	CONCRETION
-121.3	CARBONDALE	ANNA	BLACK SHALE & COAL	0.7	483.8	PARTLY FOLLISIF
-122.0	CARBONDALE	ANNA	GRAY SHALE	0.5	484.5	DENSE; DARK
-122.5	CARBONDALE	HERRIN	COAL	2.9	485.0	
-125.4	CARBONDALE	HERRIN	SHALE & CLAYSTONE	0.1	487.9	
-125.5	CARBONDALE	HERRIN	COAL	0.7	488.0	
-126.2	CARBONDALE		UNDERCLAY	1.5	488.7	
-127.7	CARBONDALE		SHALE & CLAYSTONE	2.0	490.2	
-129.7	CARBONDALE		SILTSTONE	1.2	492.2	HIGHLY CALCAREOUS
-130.9	CARBONDALE		SANDSTONE/SHALE	23.6	493.4	
-154.5	CARBONDALE		SHALE	12.3	517.0	W/SID
-166.8	CARBONDALE	BRIAR HILL	COAL	2.4	529.3	
-169.2	CARBONDALE		UNDERCLAY	0.7	531.7	
-169.9	CARBONDALE		SILTSTONE	51.6	532.4	
-221.5	CARBONDALE		SHALE	8.9	584.0	
-230.4	CARBONDALE	ST. DAVID	FOSSILIFEROUS BLACK SHALE	0.2	592.9	
-230.6	CARBONDALE	ST. DAVID	LIMESTONE	0.3	593.1	V. SHALY
-230.9	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	593.4	FOSSILIF IN TOP 2" & BOT. 3/4"
-232.8	CARBONDALE	SPRINGFIELD	COAL	1.2	595.3	
-234.0	CARBONDALE	SPRINGFIELD	FUSAIN	0.0	596.5	
-234.0	CARBONDALE	SPRINGFIELD	COAL	2.8	596.5	
-236.8	CARBONDALE		UNDERCLAY	2.5	599.3	
-239.3	CARBONDALE		LIMESTONE	3.2	601.8	
-242.5	CARBONDALE		SILTSTONE	4.0	605.0	
-246.5	CARBONDALE		GRAY SHALE	16.0	609.0	
-262.5	CARBONDALE		SILTSTONE	9.8	625.0	
-272.3	CARBONDALE		SHALE	32.4	634.8	
-304.7	CARBONDALE		BLACK SHALE	2.0	667.2	
-306.7	CARBONDALE		LIMESTONE	0.2	669.2	NODULE
-306.9	CARBONDALE		BLACK SHALE	0.5	669.4	
-307.4	CARBONDALE		LIMESTONE	0.4	669.9	NODULE?
-307.8	CARBONDALE	EXCELLO	BLACK SHALE	1.5	670.3	
-309.3	CARBONDALE	HOUCHIN CREEK	COAL	1.7	671.8	
-311.0	CARBONDALE	HOUCHIN CREEK	BLACK SHALE	0.1	673.5	
-311.1	CARBONDALE	HOUCHIN CREEK	COAL	0.1	673.6	
-311.2	CARBONDALE		UNDERCLAY	4.3	673.7	
-315.5	CARBONDALE		SHALE	25.5	678.0	
-341.0	CARBONDALE		BLACK SHALE	9.7	703.5	
-350.7	CARBONDALE	SURVANT	COAL	0.1	713.2	
-350.8	CARBONDALE	SURVANT	SILTY SHALE	0.0	713.3	
-350.8	CARBONDALE	SURVANT	COAL	1.7	713.3	

-352.5	CARBONDALE	SURVANT	SHALE	0.1	715.0	
-352.6	CARBONDALE	SURVANT	COAL	0.7	715.1	
-353.3	CARBONDALE		SILTY SHALE	14.7	715.8	
-368.0	CARBONDALE		SANDSTONE	13.4	730.5	
-381.4	CARBONDALE		SILTSTONE	2.5	743.9	
-383.9	CARBONDALE		NO RECORD	1.1	746.4	ADJUST FOR MARKER
-385.0	CARBONDALE		SHALE	11.6	747.5	
-396.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	7.1	759.1	BOT 3.5' = FOSSILIF
-403.7	CARBONDALE		BLACK SHALE & COAL	1.8	766.2	SLATY; #2 HORIZON - NO COAL
-405.5	CARBONDALE		UNDERCLAY	2.8	768.0	
-408.3	CARBONDALE		SILTSTONE	42.4	770.8	
-450.7	CARBONDALE	PALZO	SANDSTONE	5.5	813.2	
-456.2	CARBONDALE		SILTY SHALE	4.6	818.7	
-460.8	CARBONDALE	DEKOVEN	COAL	4.4	823.3	
-465.2	CARBONDALE		SILTSTONE	8.5	827.7	
-473.7	CARBONDALE		FOSSILIFEROUS SHALE	5.8	836.2	OCC. SID. NODS.
-479.5	CARBONDALE		FOSSILIFEROUS BLACK SHALE	4.7	842.0	BOTTOM 1" PYRITIC AND VERY FOSSILIFEROUS
-484.2	CARBONDALE	DAVIS	COAL	4.2	846.7	
-488.4	TRADEWATER		CLAYSTONE	5.1	850.9	

MAPID: 05902163000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17931 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.672684 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 843.0 **LOG TYPE:** Multiple log types

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-291.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	661.0	
-334.0	CARBONDALE	SURVANT	COAL	1.3	704.0	
-386.0	CARBONDALE	COLCHESTER	COAL	0.1	756.0	
-437.5	CARBONDALE	DEKOVEN	COAL	3.7	807.5	
-437.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	807.5	
-465.0	CARBONDALE	DAVIS	COAL	5.4	835.0	

MAPID: 05902163000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17931 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.672684 **DATE COLLECTED:** 10 / 14 / 1957

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 843.2 **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
370.0			UNKNOWN	108.0	0.0	
262.0			ROCK	119.8	108.0	L-CORE BEGINS
142.2			COAL	0.5	227.8	
141.7			ROCK	106.0	228.3	
35.7	MODESTO	LAKE CREEK	COAL	0.9	334.3	CLAY PARTING .42'
34.8			ROCK	76.7	335.2	
-41.8			COAL	1.8	411.8	
-43.7			ROCK	8.2	413.7	
-51.8			COAL	0.2	421.8	
-52.0			ROCK	53.7	422.0	
-105.6	CARBONDALE	HERRIN	COAL	2.1	475.6	SHALE PARTING .08'
-107.7	CARBONDALE		ROCK	40.8	477.7	
-148.5	CARBONDALE	BRIAR HILL	COAL	0.4	518.5	
-148.9	CARBONDALE		ROCK	67.1	518.9	
-216.0	CARBONDALE	SPRINGFIELD	COAL	4.1	586.0	
-220.1	CARBONDALE		ROCK	71.4	590.1	
-291.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	661.5	
-293.0	CARBONDALE		ROCK	41.0	663.0	
-334.0	CARBONDALE		COAL	1.3	704.0	
-335.3	CARBONDALE		ROCK	51.2	705.3	
-386.5	CARBONDALE	COLCHESTER	COAL	0.2	756.5	
-386.6	SPOON		ROCK	49.3	756.6	
-436.0	SPOON	DEKOVEN	COAL	3.6	806.0	
-439.6	SPOON		ROCK	23.8	809.6	
-463.4	SPOON	DAVIS	COAL	5.4	833.4	
-468.8			ROCK	3.8	838.8	

MAPID: 05902163000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** NW NW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.17931 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.672684 **DATE COLLECTED:** 10 / 14 / 1957

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 843.2 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING 43 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			NO RECORD	108.0	0.0	
262.0	PLEISTOCENE		GLACIAL DRIFT	0.3	108.0	
261.7			SHALE	24.7	108.3	THICKNESS AS PER LOG
237.0			SILTSTONE	9.3	133.0	
227.7			SANDSTONE	8.8	142.3	
218.8			SILTSTONE	14.8	151.2	
204.0			SHALE	60.8	166.0	
143.2			BLACK SHALE	1.0	226.8	
142.2	MODESTO	CHAPEL	COAL	0.5	227.8	
141.7	MODESTO		UNDERCLAY	0.5	228.3	
141.2	MODESTO		CLAYSTONE & SHALE	1.3	228.8	
139.9	MODESTO		SHALE	5.4	230.1	
134.5	MODESTO		SILTSTONE	1.0	235.5	
133.5	MODESTO		SANDSTONE	1.8	236.5	
131.7	MODESTO		SILTSTONE	1.5	238.3	
130.2	MODESTO		SHALE	14.1	239.8	
116.2	MODESTO		SANDSTONE	6.1	253.8	
110.1	MODESTO		SANDSTONE/SHALE	21.2	259.9	
88.9	MODESTO		SANDSTONE	0.3	281.1	
88.7	MODESTO		BLACK SHALE	0.4	281.3	
88.2	MODESTO	WEST FRANKLIN	LIMESTONE	3.4	281.8	
84.8	MODESTO		SHALE	2.7	285.2	
82.2	MODESTO		SILTSTONE	7.8	287.8	
74.4	MODESTO		SHALE	22.6	295.6	
51.8	MODESTO		BLACK SHALE	0.3	318.2	ALMOST BONE COAL
51.6	MODESTO		SHALE	14.8	318.4	
36.7			BLACK SHALE	1.0	333.3	
35.7			COAL	0.3	334.3	EITHER LAKE CREEK OR POND CREEK
35.4			UNDERCLAY	0.5	334.6	
34.9			COAL	0.1	335.1	BONEY
34.8			UNDERCLAY	2.4	335.2	
32.4			CLAYSTONE & SHALE	2.3	337.6	
30.2			SILTSTONE	3.5	339.8	
26.7			SHALE	7.7	343.3	
19.0			SANDSTONE	24.2	351.0	
-5.2			BLACK SHALE	15.8	375.2	
-21.0			SANDSTONE	7.8	391.0	
-28.8			SILTSTONE	6.4	398.8	
-35.2			SANDSTONE	2.4	405.2	

-37.6			BLACK SHALE	4.3	407.6	
-41.8			COAL	1.8	411.8	
-43.7			UNDERCLAY	2.5	413.7	
-46.2			SHALE	5.4	416.2	
-51.6			BLACK SHALE	0.3	421.6	
-51.8	CARBONDALE	DANVILLE	COAL	0.2	421.8	
-52.0	CARBONDALE		UNDERCLAY	0.6	422.0	
-52.6	CARBONDALE		SANDSTONE	2.6	422.6	
-55.2	CARBONDALE		SILTSTONE	5.8	425.2	
-60.9	CARBONDALE	ANVIL ROCK	SANDSTONE	38.3	430.9	
-99.3	CARBONDALE		BLACK SHALE	1.5	469.3	
-100.8	CARBONDALE	BRERETON	LIMESTONE	0.8	470.8	
-101.6	CARBONDALE	ANNA	BLACK SHALE	4.1	471.6	
-105.7	CARBONDALE	HERRIN	COAL	2.1	475.7	DISCREPANCY IN THICKNESS ON LOG
-107.8	CARBONDALE		UNDERCLAY	1.3	477.8	
-109.0	CARBONDALE		SHALE	0.7	479.0	
-109.7	CARBONDALE		SILTSTONE	17.4	479.7	
-127.1	CARBONDALE		SHALE	16.5	497.1	
-143.6	CARBONDALE		NO RECORD	4.9	513.6	
-148.5	CARBONDALE	BRIAR HILL	COAL	0.4	518.5	
-148.9	CARBONDALE		UNDERCLAY	0.3	518.9	
-149.3	CARBONDALE		SILTSTONE	1.4	519.3	
-150.7	CARBONDALE		SANDSTONE	1.6	520.7	
-152.3	CARBONDALE		SHALE	1.3	522.3	
-153.6	CARBONDALE		SILTSTONE	2.0	523.6	
-155.6	CARBONDALE		SANDSTONE	23.4	525.6	
-179.0	CARBONDALE		SILTSTONE	32.0	549.0	
-211.0	CARBONDALE		BLACK SHALE	1.8	581.0	
-212.8	CARBONDALE		BLACK LIMESTONE	0.3	582.8	
-213.0	CARBONDALE		LIMESTONE	0.1	583.0	
-213.1	CARBONDALE		BLACK LIMESTONE	0.3	583.1	
-213.4	CARBONDALE	TURNER MINE	BLACK SHALE	1.8	583.4	
-215.3	CARBONDALE	TURNER MINE	BLACK LIMESTONE	0.3	585.3	
-215.5	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	585.5	THICKNESS AS PER LOG
-216.0	CARBONDALE	SPRINGFIELD	COAL	4.1	586.0	
-220.1	CARBONDALE		SHALE	0.9	590.1	THICKNESS AS PER LOG
-221.0	CARBONDALE		CLAYSTONE & SILTSTONE	2.3	591.0	
-223.3	CARBONDALE		SILTSTONE	1.9	593.3	DOLOMITE
-225.3	CARBONDALE		SILTSTONE	4.6	595.3	
-229.8	CARBONDALE		SHALE	7.2	599.8	THICKNESS AS PER LOG
-237.0	CARBONDALE		SILTSTONE	24.9	607.0	WITH SHALE
-261.9	CARBONDALE		SHALE	23.6	631.9	
-285.5	CARBONDALE	EXCELLO	BLACK SHALE	3.2	655.5	
-288.7	CARBONDALE	EXCELLO	ROCK	2.2	658.7	
-290.8	CARBONDALE	EXCELLO	BLACK SHALE	0.7	660.8	
-291.5	CARBONDALE	HOUCHIN CREEK	COAL	1.5	661.5	
-293.0	CARBONDALE		SILTSTONE	9.0	663.0	THICKNESS AS PER LOG

-302.0	CARBONDALE		SHALE	32.0	672.0	THICKNESS AS PER LOG
-334.0	CARBONDALE	SURVANT	COAL	1.3	704.0	
-335.3	CARBONDALE		UNDERCLAY	2.8	705.3	
-338.2	CARBONDALE		SILTSTONE	3.8	708.2	
-341.9	CARBONDALE		SHALE	4.5	711.9	
-346.4	CARBONDALE		NO RECORD	0.6	716.4	
-347.0	CARBONDALE		SANDSTONE	3.2	717.0	
-350.2	CARBONDALE		SILTSTONE	17.2	720.2	WITH SHALE
-367.3	CARBONDALE		SILTSTONE	8.5	737.3	
-375.8	CARBONDALE		SHALE	6.7	745.8	
-382.5	CARBONDALE		BLACK SHALE	4.0	752.5	
-386.5	CARBONDALE	COLCHESTER	COAL	0.2	756.5	
-386.7	SPOON		SILTSTONE	28.3	756.7	
-415.0	SPOON		SHALE	4.8	785.0	
-419.8	SPOON		SANDSTONE	3.8	789.8	
-423.6	SPOON		SHALE	13.9	793.6	THICKNESS AS PER LOG
-437.5	SPOON	DEKOVEN	COAL	3.6	807.5	
-441.1	SPOON		SILTSTONE	10.6	811.1	
-451.7	SPOON		SHALE	8.3	821.7	THICKNESS AS PER LOG
-460.0	SPOON		BLACK SHALE	4.9	830.0	THICKNESS AS PER LOG
-464.9	SPOON	DAVIS	COAL	5.4	834.9	
-470.3	SPOON		UNDERCLAY	2.8	840.3	

MAPID: 05902238000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 60' N line, 2380' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180825 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.673011 **DATE COLLECTED:** 6 / 5 / 1958

SURFACE ELEVATION (FT.): 367.3 **LOGGED (FT.):** 598.6 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 510 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.3	PLEISTOCENE		UNCONSOLIDATED	106.0	0.0	
261.3	MODESTO		SANDY SHALE	19.0	106.0	
242.3	MODESTO		COAL	1.0	125.0	
241.3	MODESTO		SANDY SHALE	64.0	126.0	
177.3	MODESTO		SANDSTONE	60.0	190.0	
117.3	MODESTO		SANDY SHALE	31.0	250.0	
86.3	MODESTO		LIMESTONE	3.2	281.0	CORE STARTS 283.0'
83.1	MODESTO		GRAY SHALE	3.1	284.2	
80.0	MODESTO		SILTSTONE	9.7	287.3	
70.3	MODESTO		SILTY SHALE	17.0	297.0	
53.3	MODESTO		BLACK SHALE	0.7	314.0	
52.6	MODESTO		SILTSTONE	2.5	314.7	UCLY?
50.1	MODESTO		SHALE	12.1	317.2	
38.0	MODESTO		BLACK SHALE & COAL	1.2	329.3	LAKECREEK OR POND CREEK?
36.8	MODESTO		UNDERCLAY	1.3	330.5	
35.5	MODESTO		SILTSTONE	31.4	331.8	
4.1	MODESTO		SANDSTONE	44.3	363.2	W/SILTST
-40.2	MODESTO		CONGLOMERATE	2.0	407.5	SIDERITE & CLAY PEBBLES
-42.2	CARBONDALE	DANVILLE	COAL	1.5	409.5	
-43.7	CARBONDALE		UNDERCLAY	1.0	411.0	
-44.7	CARBONDALE		SILTY SHALE	8.0	412.0	2" SID BAND AT BASE
-52.7	CARBONDALE	ALLENBY	COAL	0.5	420.0	
-53.2	CARBONDALE		UNDERCLAY	1.5	420.5	
-54.7	CARBONDALE		SILTSTONE	5.2	422.0	
-59.9	CARBONDALE	ANVIL ROCK	SANDSTONE	42.8	427.2	BOT 3" = DISCONFORM; SS/CHERTY MAT'L
-102.7	CARBONDALE	ANNA	BLACK SHALE	1.5	470.0	UNCERTAIN CORRELATION
-104.2	CARBONDALE	ANNA	LIMESTONE	0.3	471.5	NODULAR?
-104.5	CARBONDALE	ANNA	BLACK SHALE	1.5	471.8	
-106.0	CARBONDALE		NO RECORD	0.7	473.3	ADJUST FOR MARKER
-106.7	CARBONDALE	HERRIN	COAL	1.6	474.0	
-108.3	CARBONDALE	HERRIN	SHALE	0.1	475.6	BLUE BAND
-108.4	CARBONDALE	HERRIN	COAL	1.0	475.7	
-109.4	CARBONDALE		UNDERCLAY	3.0	476.7	
-112.4	CARBONDALE		SANDY SHALE	19.3	479.7	
-131.7	CARBONDALE		GRAY SHALE	15.0	499.0	
-146.7	CARBONDALE	BRIAR HILL	COAL	2.0	514.0	
-148.7	CARBONDALE		SANDY SHALE	67.5	516.0	
-216.2	CARBONDALE	ST. DAVID	LIMESTONE	1.3	583.5	

-217.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	584.8
-219.4	CARBONDALE	SPRINGFIELD	COAL	4.4	586.7
-223.8	CARBONDALE		UNDERCLAY	2.0	591.1
-225.8	CARBONDALE		SHALE	5.5	593.1

MAPID: 05902238000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 11 **QUARTERS/FOOTAGES:** 60' N line, 2380' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180825 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.673011 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 476.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 510 **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-44.4	CARBONDALE	DANVILLE	COAL	1.5	411.4	
-45.9	CARBONDALE		SHALE & SILTSTONE	9.2	412.9	
-55.1	CARBONDALE	ALLENBY	BONE COAL	0.5	422.1	
-55.6	CARBONDALE		SHALE & SILTSTONE	6.4	422.6	
-62.0	CARBONDALE	LAWSON	SANDSTONE	0.5	429.0	
-62.5	CARBONDALE	LAWSON	CONGLOMERATE	0.3	429.5	
-62.8	CARBONDALE	LAWSON	SANDSTONE	40.8	429.8	
-103.7	CARBONDALE		BLACK SHALE	1.5	470.7	
-105.2	CARBONDALE	BRERETON	NODULAR LIMESTONE	0.3	472.2	
-105.5	CARBONDALE	ANNA	BLACK SHALE	1.5	472.5	
-107.0	CARBONDALE	HERRIN	COAL	2.8	474.0	

MAPID: 05902138000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.165524 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.672493 **DATE COLLECTED:** 8 / 16 / 1957

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 759.0 **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
350.0			UNKNOWN	110.9	0.0	
239.1			ROCK	188.6	110.9	L-CORE BEGINS
50.5			COAL	0.9	299.5	
49.6			ROCK	99.2	300.4	
-49.6			COAL	0.7	399.6	
-50.3			ROCK	182.7	400.3	
-233.0			COAL	1.0	583.0	
-			ROCK	52.4		
-	CARBONDALE	HERRIN	COAL	2.2		SHALE PARTING, .08'
-	CARBONDALE		ROCK	45.4		
-	CARBONDALE	BRIAR HILL	COAL	1.9		
-	CARBONDALE		ROCK	61.8		
-	CARBONDALE	SPRINGFIELD	COAL	3.9		
-			ROCK	7.4		

MAPID: 05902138000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.165524 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.672493 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 638.2 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-237.5	CARBONDALE	DANVILLE	COAL	1.0	577.5	
-238.5	CARBONDALE		SHALE & SANDSTONE	22.8	578.5	
-261.3	CARBONDALE	BANKSTON FORK	LIMESTONE	5.9	601.3	
-267.3	CARBONDALE	LAWSON	CLAYSTONE	0.9	607.3	
-268.2	CARBONDALE	LAWSON	SILTSTONE	1.8	608.2	
-269.9	CARBONDALE	LAWSON	SANDSTONE	5.3	609.9	
-275.3	CARBONDALE	LAWSON	GRAY SHALE	7.0	615.3	
-282.3	CARBONDALE	ANNA	BLACK SHALE	13.8	622.3	
-296.0	CARBONDALE	HERRIN	COAL	2.2	636.0	

MAPID: 05902138000C **VERSION:** 3 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** NW NW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.165524 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.672493 **DATE COLLECTED:** 8 / 16 / 1957

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 759.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANDFORD MINING 39 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0			NO RECORD	110.9	0.0	
239.1	PLEISTOCENE		CLAY	4.0	110.9	
235.1			NO RECORD	0.2	114.9	CORE SPIN
234.9			LIMESTONE	0.2	115.1	
234.7			SHALE	0.5	115.3	
234.2			LIMESTONE	0.2	115.8	
234.1			SHALE	22.8	115.9	
211.3			LIMESTONE	7.3	138.7	
204.0			SHALE	3.5	146.0	
200.5			SANDSTONE	5.2	149.5	INTERLAMINATED DARK SH
195.3			SHALE	7.2	154.7	
188.2			DARK SHALE	6.5	161.8	
181.7			COAL	0.1	168.3	
181.6			SHALE	0.1	168.4	WITH SOME COAL ZONES
181.5			UNDERCLAY	0.5	168.5	
180.9			CLAYSTONE & SILTSTONE	0.9	169.1	
180.0			SHALE	1.0	170.0	THICKNESS AS PER LOG
179.0			SILTSTONE	7.5	171.0	
171.5			SHALE	16.3	178.5	
155.2			SANDSTONE	0.9	194.8	
154.3			SHALE	26.3	195.7	WITH SILTSTONE
128.0			SILTSTONE	5.0	222.0	THICKNESS AS PER LOG
123.0			SHALE	4.8	227.0	
118.2			SILTSTONE	13.5	231.8	
104.7			SHALE	27.8	245.3	
77.0			BLACK SHALE	1.0	273.0	
76.0			LIMESTONE	0.4	274.0	
75.6			BLACK SHALE	2.8	274.4	
72.7			LIMESTONE	0.8	277.3	
72.0			CLAYSTONE & SILTSTONE	4.0	278.0	THICKNESS AS PER LOG
68.0			SILTSTONE	0.4	282.0	
67.6			LIMESTONE	1.1	282.4	
66.5			CLAYSTONE & SHALE	0.5	283.5	
66.0			SHALE	15.5	284.0	
50.5			COAL	0.9	299.5	
49.6			SHALE	13.2	300.4	
36.4			SILTSTONE	13.9	313.6	
22.5			SHALE	71.3	327.5	
-48.8			BLACK SHALE	0.9	398.8	

-49.7			COAL	0.7	399.7	
-50.3			UNDERCLAY	2.5	400.3	
-52.8			CLAYSTONE & SHALE	3.4	402.8	
-56.3			SILTSTONE	3.1	406.3	
-59.3			SANDSTONE/SHALE	8.3	409.3	
-67.7			SILTSTONE	37.4	417.7	
-105.1			BLACK SHALE	1.2	455.1	
-106.3			LIMESTONE	3.5	456.3	
-109.8			SHALE	4.3	459.8	
-114.0			SILTSTONE	7.5	464.0	WITH SHALE
-121.5			SILTSTONE	8.0	471.5	THICKNESS AS PER LOG
-129.5			SHALE	29.8	479.5	
-159.3			BLACK SHALE	0.9	509.3	
-160.3			CLAYSTONE & SILTSTONE	8.6	510.3	THICKNESS AS PER LOG
-168.8			SHALE	9.3	518.8	
-178.2			SILTSTONE	4.5	528.2	
-182.7			SANDSTONE	5.2	532.7	
-187.8			SILTSTONE	7.2	537.8	
-195.0			SANDSTONE	1.7	545.0	
-196.7			SHALE	12.7	546.7	
-209.3			SANDSTONE	16.0	559.3	WITH INTERBEDDED SILTSTONE
-225.3			SANDSTONE	6.2	575.3	
-231.5			SANDSTONE & CONGLOMERATE	1.5	581.5	
-233.0	CARBONDALE	DANVILLE	COAL	1.0	583.0	
-234.0	CARBONDALE		SHALE	10.9	584.0	
-244.9	CARBONDALE		BLACK SHALE	0.3	594.9	
-245.3	CARBONDALE		SHALE	0.2	595.3	
-245.4	CARBONDALE		CLAYSTONE & SHALE	0.5	595.4	
-245.9	CARBONDALE		SANDSTONE	4.1	595.9	
-250.0	CARBONDALE		SHALE	2.2	600.0	
-252.2	CARBONDALE		CLAYSTONE & SILTSTONE	4.7	602.2	
-256.8	CARBONDALE		LIMESTONE	5.9	606.8	
-262.8	CARBONDALE		SHALE	1.1	612.8	
-263.8	CARBONDALE		SILTSTONE	2.8	613.8	
-266.7	CARBONDALE		SANDSTONE	5.3	616.7	AS PER SURVEY
-272.0	CARBONDALE		SHALE	5.3	622.0	AS PER SURVEY
-277.3	CARBONDALE		NO RECORD	0.7	627.3	AS PER SURVEY
-278.0	CARBONDALE	ANNA	BLACK SHALE	8.4	628.0	AS PER COMPANY
-286.4	CARBONDALE	HERRIN	COAL	2.2	636.4	AS PER COMPANY
-288.6	CARBONDALE		SHALE	7.4	638.6	AS PER COMPANY
-296.0	CARBONDALE		CLAYSTONE & SHALE	2.4	646.0	AS PER SURVEY
-298.4	CARBONDALE		LIMESTONE	1.8	648.4	AS PER SURVEY
-300.3	CARBONDALE		CLAYSTONE & SILTSTONE	1.8	650.3	AS PER SURVEY
-302.0	CARBONDALE		SHALE	16.1	652.0	
-318.1	CARBONDALE		SANDSTONE	3.3	668.1	THICKNESS AS PER LOG
-321.3	CARBONDALE		BLACK SHALE	12.7	671.3	

-334.0	CARBONDALE	BRIAR HILL	COAL	2.0	684.0	
-336.0	CARBONDALE		SHALE	2.0	686.0	
-338.0	CARBONDALE		UNDERCLAY	1.3	688.0	
-339.3	CARBONDALE		SHALE	1.3	689.3	
-340.6	CARBONDALE		SANDSTONE	9.0	690.6	
-349.6	CARBONDALE		SHALE	10.4	699.6	
-360.0	CARBONDALE		SANDSTONE	7.9	710.0	
-367.9	CARBONDALE		SHALE	29.8	717.9	GRADES TO BLACK WITH DEPTH
-397.8	CARBONDALE	SPRINGFIELD	COAL	3.9	747.8	
-401.6	CARBONDALE		SHALE	7.4	751.6	

MAPID: 05923835000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' N line, 1980' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.160108 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.672924 **DATE COLLECTED:** 8 / 3 / 1970

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 903.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4311-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
345.0	PLEISTOCENE		UNCONSOLIDATED	78.7	0.0	
266.3	BOND		COAL	0.6	78.7	
265.7	BOND		SANDY SHALE	43.1	79.3	
222.6	BOND		SANDSTONE	25.6	122.4	
197.0	BOND		SHALE	2.3	148.0	
194.7	BOND		SHALE/COAL	0.5	150.3	
194.2	BOND		SHALE	7.1	150.8	
187.1	BOND		LIMESTONE	1.7	157.9	
185.4	BOND		SANDY SHALE	15.6	159.6	
169.8	BOND		SHALE	9.1	175.2	DARK
160.7	BOND		SHALE/COAL	0.3	184.3	
160.4	BOND		SHALE	33.2	184.6	
127.2	BOND		LIMESTONE	1.7	217.8	
125.5	BOND		SANDY SHALE	24.5	219.5	
101.0	BOND	CARTHAGE	LIMESTONE	9.1	244.0	
91.9	MODESTO		SHALE	32.0	253.1	
59.9	MODESTO		SANDSTONE	10.0	285.1	
49.9	MODESTO		SHALE	8.9	295.1	
41.0	MODESTO		SANDSTONE	20.0	304.0	
21.0	MODESTO		SHALE & SANDSTONE	51.0	324.0	
-30.0	MODESTO		LIMESTONE	0.6	375.0	
-30.6	MODESTO		SHALE	1.6	375.6	DARK
-32.2	MODESTO		SHALE/COAL	1.7	377.2	
-33.9	MODESTO		SHALE	3.2	378.9	
-37.1	MODESTO		SANDSTONE	7.3	382.1	
-44.4	MODESTO		SANDY SHALE	9.3	389.4	
-53.7	MODESTO		SHALE	2.3	398.7	
-56.0	MODESTO	CHAPEL	COAL	1.5	401.0	
-57.5	MODESTO		SHALE	5.3	402.5	
-62.8	MODESTO		SANDSTONE	14.9	407.8	
-77.7	MODESTO		SHALE	6.2	422.7	
-83.9	MODESTO		SANDSTONE	17.2	428.9	
-101.1	MODESTO		SHALE	53.5	446.1	DARK
-154.6	MODESTO		COAL	0.7	499.6	
-155.3	MODESTO		SHALE	4.2	500.3	
-159.5	MODESTO		SANDSTONE	17.9	504.5	
-177.4	MODESTO		SHALE	15.9	522.4	
-193.3	MODESTO		LIMESTONE	0.7	538.3	
-194.0	MODESTO		SANDY SHALE	17.6	539.0	

-211.6	MODESTO		SANDSTONE	1.5	556.6	
-213.1	MODESTO		SHALE	3.6	558.1	
-216.7	MODESTO		SANDY LIMESTONE	3.4	561.7	
-220.1	MODESTO		SHALE	13.5	565.1	
-233.6	MODESTO		SANDY SHALE	50.5	578.6	
-284.1	MODESTO		SANDSTONE	14.2	629.1	
-298.3	MODESTO		SHALE	9.6	643.3	
-307.9	MODESTO		SANDY SHALE	18.5	652.9	
-326.4	MODESTO		LIMESTONE	1.1	671.4	
-327.5	MODESTO		SANDSTONE	14.6	672.5	
-342.1	CARBONDALE	DANVILLE	COAL	2.7	687.1	
-344.8	CARBONDALE		SHALE	4.8	689.8	
-349.6	CARBONDALE		DARK SHALE	1.1	694.6	
-350.7	CARBONDALE		SANDY SHALE	5.6	695.7	
-356.3	CARBONDALE	BANKSTON FORK	LIMESTONE	3.9	701.3	
-360.2	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	23.7	705.2	
-383.9	CARBONDALE	ANNA	BLACK SHALE	5.2	728.9	"SLATE"
-389.1	CARBONDALE	HERRIN	COAL	1.8	734.1	
-390.9	CARBONDALE		UNDERCLAY	1.9	735.9	
-392.8	CARBONDALE		SANDSTONE	3.8	737.8	
-396.6	CARBONDALE		SANDSTONE/LIMESTONE	8.1	741.6	
-404.7	CARBONDALE		SANDY SHALE	18.2	749.7	
-422.9	CARBONDALE		SHALE	7.7	767.9	DARK
-430.6	CARBONDALE		SHALE	0.4	775.6	
-431.0	CARBONDALE	BRIAR HILL	COAL	2.3	776.0	
-433.3	CARBONDALE		UNDERCLAY	2.0	778.3	
-435.3	CARBONDALE		SANDSTONE	44.1	780.3	
-479.4	CARBONDALE		SANDY SHALE	17.0	824.4	
-496.4	CARBONDALE		SHALE	1.9	841.4	DARK
-498.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.9	843.3	
-500.2	CARBONDALE	SPRINGFIELD	COAL	3.7	845.2	
-503.9	CARBONDALE		UNDERCLAY	2.0	848.9	
-505.9	CARBONDALE		SHALE	8.8	850.9	
-514.7	CARBONDALE		SANDSTONE	43.3	859.7	

MAPID: 05923836000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 1' S line, 1980' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.163864 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.658019 **DATE COLLECTED:** 12 / 9 / 1970

SURFACE ELEVATION (FT.): 330.0 **LOGGED (FT.):** 878.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4317 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
330.0	PLEISTOCENE		UNCONSOLIDATED	95.0	0.0	
235.0	BOND		SHALE	9.0	95.0	
226.0	BOND		LIMESTONE	6.0	104.0	
220.0	BOND		SANDSTONE	28.0	110.0	
192.0	BOND		SHALY SANDSTONE	31.0	138.0	
161.0	BOND		COAL	0.5	169.0	
160.5	BOND		SHALE	8.0	169.5	
152.5	BOND		LIMESTONE	3.8	177.5	
148.7	BOND		SHALE	19.2	181.3	
129.5	BOND		COAL	1.0	200.5	
128.5	BOND		SANDY SHALE	26.0	201.5	
102.5	BOND		COAL	0.5	227.5	
102.0	BOND		SHALE	4.5	228.0	
97.5	BOND		SANDSTONE/SHALE	34.5	232.5	
63.0	BOND	CARTHAGE	LIMESTONE	10.0	267.0	
53.0	MODESTO		SANDSTONE/SHALE	80.5	277.0	
-27.5	MODESTO		SANDY SHALE	47.5	357.5	
-75.0	MODESTO		COAL	1.0	405.0	
-76.0	MODESTO		SANDY SHALE	17.4	406.0	
-93.4	MODESTO		COAL	1.1	423.4	
-94.5	MODESTO		SANDSTONE/SHALE	20.5	424.5	
-115.0	MODESTO		SANDY SHALE	71.0	445.0	
-186.0	MODESTO	CHAPEL	COAL	0.8	516.0	
-186.8	MODESTO		UNDERCLAY	2.2	516.8	
-189.0	MODESTO		SANDSTONE/SHALE	161.0	519.0	
-350.0	MODESTO		SHALE	7.3	680.0	
-357.3	MODESTO		SHALE	6.1	687.3	DARK
-363.4	MODESTO		SHALE	16.3	693.4	
-379.7	CARBONDALE	DANVILLE	COAL	1.3	709.7	
-381.0	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	55.5	711.0	
-436.5	CARBONDALE		SHALE	4.3	766.5	
-440.8	CARBONDALE	BRERETON	LIMESTONE	2.0	770.8	
-442.8	CARBONDALE	HERRIN	COAL	1.0	772.8	
-443.8	CARBONDALE		UNDERCLAY	3.7	773.8	
-447.5	CARBONDALE		SHALY SANDSTONE	15.0	777.5	
-462.5	CARBONDALE		SANDY SHALE	15.5	792.5	
-478.0	CARBONDALE	BRIAR HILL	COAL	1.5	808.0	
-479.5	CARBONDALE		SANDY SHALE	48.0	809.5	
-527.5	CARBONDALE		SHALE	10.0	857.5	

-537.5	CARBONDALE	ST. DAVID	LIMESTONE	0.5	867.5
-538.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	868.0
-542.0	CARBONDALE	SPRINGFIELD	COAL	4.5	872.0
-546.5	CARBONDALE		SANDY SHALE	1.7	876.5

MAPID: 05923853000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 12 **QUARTERS/FOOTAGES:** 2640' S line, 1' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.170705 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.665401 **DATE COLLECTED:** 11 / 24 / 1970

SURFACE ELEVATION (FT.): 349.0 **LOGGED (FT.):** 765.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4307-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
349.0	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	
327.0	BOND		SANDY SHALE	17.5	22.0	
309.5	BOND		COAL	0.5	39.5	
309.0	BOND		SHALE	7.5	40.0	
301.5	BOND		LIMESTONE	2.0	47.5	
299.5	BOND		LIMESTONE & SHALE	2.5	49.5	
297.0	BOND		SHALE	25.5	52.0	
271.5	BOND		SANDY SHALE	18.5	77.5	
253.0	BOND		COAL	0.5	96.0	
252.5	BOND		UNDERCLAY	4.0	96.5	
248.5	BOND		SANDY SHALE	5.5	100.5	
243.0	BOND		SHALE & SANDSTONE	30.0	106.0	
213.0	BOND	CARTHAGE	LIMESTONE	8.7	136.0	
204.3	BOND	CARTHAGE	SHALE	1.5	144.7	
202.8	BOND	CARTHAGE	LIMESTONE	1.4	146.2	
201.4	MODESTO		SANDY SHALE	2.4	147.6	
199.0	MODESTO		SHALE	11.0	150.0	
188.0	MODESTO	NEW HAVEN	COAL	0.5	161.0	
187.5	MODESTO		UNDERCLAY	1.0	161.5	
186.5	MODESTO		SANDSTONE	17.5	162.5	
169.0	MODESTO		SANDY SHALE	14.3	180.0	
154.7	MODESTO		LIMESTONE	2.0	194.3	
152.7	MODESTO		SHALE & SANDSTONE	79.2	196.3	
73.5	MODESTO		SHALE	2.0	275.5	
71.5	MODESTO		SHALE	4.0	277.5	
67.5	MODESTO		SANDY SHALE	18.8	281.5	
48.7	MODESTO	CHAPEL	COAL	1.0	300.3	
47.7	MODESTO		UNDERCLAY	3.4	301.3	
44.3	MODESTO		SANDSTONE	14.3	304.7	
30.0	MODESTO		SANDY SHALE	28.5	319.0	
1.5	MODESTO		SANDSTONE	5.0	347.5	
-3.5	MODESTO		SHALE	51.7	352.5	
-55.2	MODESTO		LIMESTONE	1.8	404.2	
-57.0	MODESTO		SANDSTONE/LIMESTONE	11.5	406.0	
-68.5	MODESTO		SHALE	3.5	417.5	
-72.0	MODESTO		LIMESTONE	1.5	421.0	
-73.5	MODESTO		SANDY SHALE	36.2	422.5	
-109.7	MODESTO		LIMESTONE	3.4	458.7	
-113.1	MODESTO		SANDSTONE	11.4	462.1	

-124.5	MODESTO		SANDY SHALE	40.0	473.5
-164.5	MODESTO		SHALE	5.8	513.5
-170.3	MODESTO	WEST FRANKLIN	LIMESTONE	3.4	519.3
-173.7	MODESTO		SANDSTONE/SHALE	39.3	522.7
-213.0	MODESTO		SANDY SHALE	21.4	562.0
-234.4	CARBONDALE	DANVILLE	COAL	1.4	583.4
-235.8	CARBONDALE	ANVIL ROCK	SANDSTONE	64.9	584.8
-300.7	CARBONDALE	ANNA	BLACK SHALE	4.0	649.7
-304.7	CARBONDALE	HERRIN	COAL	2.5	653.7
-307.2	CARBONDALE		UNDERCLAY	2.0	656.2
-309.2	CARBONDALE		LIMESTONE	2.3	658.2
-311.5	CARBONDALE		SANDSTONE/SHALE	18.5	660.5
-330.0	CARBONDALE		SANDY SHALE	15.0	679.0
-345.0	CARBONDALE	BRIAR HILL	COAL	2.0	694.0
-347.0	CARBONDALE		UNDERCLAY	1.0	696.0
-348.0	CARBONDALE		SANDSTONE/SHALE	38.0	697.0
-386.0	CARBONDALE		SHALE	22.3	735.0
-408.3	CARBONDALE	ST. DAVID	LIMESTONE	0.5	757.3
-408.8	CARBONDALE	TURNER MINE	SHALE	2.5	757.8
-411.3	CARBONDALE	SPRINGFIELD	COAL	4.1	760.3
-415.4	CARBONDALE		SHALE	1.0	764.4

MAPID: 05900046000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.169825 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.653395 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 925.0 **LOG TYPE:** Drillers Log

SOURCE: SULLIVAN MACHINE,FKTAYLOR,BYRD19 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.0	PLEISTOCENE		CLAY	20.0	0.0	
342.0	PLEISTOCENE		SAND	23.0	20.0	
319.0	PLEISTOCENE		SAND & GRAVEL	17.0	43.0	
302.0	PLEISTOCENE		CLAY & GRAVEL	13.0	60.0	
289.0	BOND		LIMESTONE	2.0	73.0	
287.0	BOND		SHALY LIMESTONE	2.0	75.0	
285.0	BOND		DARK SHALE	18.7	77.0	
266.3	BOND		COAL	1.1	95.7	
265.2	BOND		SHALE	24.5	96.8	
240.7	BOND		COAL	0.3	121.3	
240.4	BOND		UNDERCLAY	2.4	121.6	
238.0	BOND		SHALE	2.0	124.0	
236.0	BOND		SHALE	19.0	126.0	
217.0	BOND		SHALE	16.5	145.0	
200.5	BOND	CARTHAGE	LIMESTONE	9.5	161.5	
191.0	MODESTO		SHALE	12.0	171.0	
179.0	MODESTO		SHALE	5.0	183.0	
174.0	MODESTO		SANDSTONE	29.0	188.0	
145.0	MODESTO		SHALE	4.0	217.0	
141.0	MODESTO		SHALY SANDSTONE	34.0	221.0	
107.0	MODESTO		SHALE	40.0	255.0	
67.0	MODESTO		DARK SHALE	7.0	295.0	
60.0	MODESTO		SHALE	4.0	302.0	
56.0	MODESTO		SHALE	1.0	306.0	
55.0	MODESTO		SHALE	20.5	307.0	
34.5	MODESTO		COAL	0.8	327.5	SHALE NOTED
33.7	MODESTO		SHALE	11.7	328.3	
22.0	MODESTO		SANDSTONE	5.0	340.0	
17.0	MODESTO		SANDSTONE	29.0	345.0	
-12.0	MODESTO		SHALE	19.0	374.0	
-31.0	MODESTO		SHALE	32.6	393.0	HARD BANDS
-63.6	MODESTO		COAL	0.6	425.6	
-64.2	MODESTO		SHALE	2.8	426.2	
-67.0	MODESTO		DARK SHALE	4.0	429.0	
-71.0	MODESTO		SANDSTONE	3.0	433.0	
-74.0	MODESTO		SHALE	22.0	436.0	
-96.0	MODESTO		SHALY SANDSTONE	12.0	458.0	
-108.0	MODESTO		SHALE	10.0	470.0	
-118.0	MODESTO		DARK SHALE	2.0	480.0	

-120.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	482.0
-123.0	MODESTO		SHALE	3.0	485.0
-126.0	MODESTO		SANDSTONE	1.0	488.0
-127.0	MODESTO		SHALY SANDSTONE	6.0	489.0
-133.0	MODESTO		DARK SHALE	14.0	495.0
-147.0	MODESTO		SHALE	9.0	509.0
-156.0	MODESTO		DARK SHALE	13.0	518.0
-169.0	MODESTO		SHALY SANDSTONE	2.0	531.0
-171.0	MODESTO		SANDSTONE	21.0	533.0
-192.0	MODESTO		SHALE	22.0	554.0
-214.0	MODESTO		DARK SHALE	6.5	576.0
-220.5	MODESTO		SHALE	6.5	582.5
-227.0	MODESTO		DARK SHALE	20.5	589.0
-247.5	MODESTO		SHALE	0.8	609.5
-248.3	CARBONDALE	DANVILLE	COAL	1.3	610.3
-249.6	CARBONDALE		UNDERCLAY	0.4	611.6
-250.0	CARBONDALE		SHALY SANDSTONE	6.8	612.0
-256.8	CARBONDALE	ALLENBY	COAL	0.3	618.8
-257.2	CARBONDALE		SHALY SANDSTONE	3.8	619.2
-261.0	CARBONDALE	BANKSTON FORK	SHALY LIMESTONE	2.0	623.0
-263.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	625.0
-266.0	CARBONDALE	ANVIL ROCK	SANDSTONE	41.0	628.0
-307.0	CARBONDALE		DARK SHALE	1.0	669.0
-308.0	CARBONDALE		SHALE	7.3	670.0
-315.3	CARBONDALE	HERRIN	COAL	0.3	677.3
-315.6	CARBONDALE		SHALE	2.4	677.6
-318.0	CARBONDALE		LIMESTONE	1.0	680.0
-319.0	CARBONDALE		LIMESTONE	4.0	681.0
-323.0	CARBONDALE		SHALE WITH LIMESTONE	6.0	685.0
-329.0	CARBONDALE		SHALY LIMESTONE	8.0	691.0
-337.0	CARBONDALE		DARK SHALE	12.0	699.0
-349.0	CARBONDALE		SHALE	0.8	711.0
-349.8	CARBONDALE	BRIAR HILL	COAL	2.4	711.8
-352.2	CARBONDALE		SHALE	0.8	714.2
-353.0	CARBONDALE		SHALY SANDSTONE	19.0	715.0
-372.0	CARBONDALE		SHALE	8.0	734.0
-380.0	CARBONDALE		SANDSTONE	8.0	742.0
-388.0	CARBONDALE		SHALY SANDSTONE	11.0	750.0
-399.0	CARBONDALE		DARK SHALE	20.0	761.0
-419.0	CARBONDALE	TURNER MINE	SHALE	4.8	781.0
-423.8	CARBONDALE	SPRINGFIELD	COAL	4.2	785.8
-428.0	CARBONDALE		UNDERCLAY	2.0	790.0
-430.0	CARBONDALE		DARK SHALE	19.0	792.0
-449.0	CARBONDALE		SHALY SANDSTONE	9.0	811.0
-458.0	CARBONDALE		DARK SHALE	38.0	820.0
-496.0	CARBONDALE	EXCELLO	SHALE	4.0	858.0
-500.0	CARBONDALE	HOUCHIN CREEK	COAL	1.3	862.0
-501.3	CARBONDALE		SHALE	6.7	863.3

-508.0	CARBONDALE		DARK SHALE	31.0	870.0
-539.0	CARBONDALE	SURVANT	COAL	1.7	901.0
-540.7	CARBONDALE		SHALE	2.3	902.7
-543.0	CARBONDALE		DARK SHALE	12.0	905.0
-555.0	CARBONDALE		SANDSTONE	6.0	917.0
-561.0	CARBONDALE		DARK SHALE	2.0	923.0

MAPID: 05900046000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 13 **QUARTERS/FOOTAGES:** NW SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.169825 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.653395 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 925.0 **LOG TYPE:** Survey Core Study

SOURCE: SULLIVAN MACHINE CO, F. K. TAYLOR **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0			UNCONSOLIDATED	73.0	0.0	
289.0			ROCK	22.7	73.0	
266.3			COAL	1.1	95.7	
265.3			ROCK	24.5	96.7	
240.8			COAL	0.3	121.2	
240.4			ROCK	205.9	121.6	
34.5			COAL	0.8	327.5	
33.7			ROCK	97.3	328.3	
-63.6			COAL	0.6	425.6	
-64.1			ROCK	184.1	426.1	
-248.2	CARBONDALE	DANVILLE	COAL	1.3	610.2	
-249.6	CARBONDALE		ROCK	7.3	611.6	
-256.8	CARBONDALE		COAL	0.3	618.8	
-257.2	CARBONDALE		ROCK	58.2	619.2	
-315.3	CARBONDALE	HERRIN	COAL	0.3	677.3	
-315.6	CARBONDALE		ROCK	34.4	677.6	
-350.0	CARBONDALE	BRIAR HILL	COAL	2.4	712.0	
-352.4	CARBONDALE		ROCK	71.7	714.4	
-424.1	CARBONDALE	SPRINGFIELD	COAL	4.2	786.1	
-428.2	CARBONDALE		ROCK	72.0	790.2	
-500.2			COAL	1.3	862.2	
-501.6			ROCK	37.7	863.6	
-539.2			COAL	1.7	901.2	
-540.9			ROCK	22.3	902.9	

MAPID: 05925150000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 14 **QUARTERS/FOOTAGES:** 82' N line, 210' E line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.180935 **GEOLOGIST:** J MCBETH

CONFIDENTIAL: N **LATITUDE:** 37.650631 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 363.4 **LOGGED (FT.):** 688.0 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP. 18K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
363.4	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0	FROM DRILLER'S LOG
300.4	MODESTO		COAL	1.0	63.0	UNCERTAIN CORRELATION
299.4	MODESTO		SHALE & CLAYSTONE	10.0	64.0	
289.4	MODESTO		SANDY SHALE	19.0	74.0	
270.4	MODESTO		SANDSTONE/SHALE	91.0	93.0	
179.4	MODESTO		BLACK SHALE	6.0	184.0	
173.4	MODESTO		LIMESTONE	1.0	190.0	
172.4	MODESTO		GRAY SHALE	3.0	191.0	
169.4	MODESTO		CALCAREOUS SHALE	3.0	194.0	SOFT
166.4	MODESTO		GRAY SHALE	11.0	197.0	
155.4	MODESTO	WOMAC	COAL	1.3	208.0	
154.1	MODESTO		SHALE	20.7	209.3	
133.4	MODESTO		LIMESTONE	0.7	230.0	
132.7	MODESTO		SANDY SHALE	59.3	230.7	W/SS SEAMS
73.4	MODESTO		SHALE	19.0	290.0	W/SIDERITE BANDS
54.4	MODESTO	CHAPEL	COAL	0.7	309.0	
53.7	MODESTO		GRAY SHALE	4.3	309.7	
49.4	MODESTO		SANDY SHALE	9.0	314.0	W/SS SEAMS
40.4	MODESTO		SANDSTONE	14.0	323.0	
26.4	MODESTO		SANDY SHALE	22.0	337.0	
4.4	MODESTO		LIMESTONE	5.0	359.0	
-0.6	MODESTO		SHALE	18.0	364.0	
-18.6	MODESTO		SANDSTONE	8.0	382.0	
-26.6	MODESTO		SANDY SHALE	19.0	390.0	
-45.6	MODESTO		CALCAREOUS SHALE	6.0	409.0	
-51.6	MODESTO		SANDSTONE	40.0	415.0	
-91.6	MODESTO		BLACK SHALE	21.0	455.0	
-112.6	MODESTO		SANDY SHALE	23.0	476.0	
-135.6	CARBONDALE	DANVILLE	COAL	1.5	499.0	
-137.1	CARBONDALE		GRAY SHALE	2.5	500.5	
-139.6	CARBONDALE	ANVIL ROCK	SANDSTONE	56.4	503.0	
-196.0	CARBONDALE		DARK SHALE	5.9	559.4	
-201.9	CARBONDALE		FOSSILIFEROUS SHALE	0.8	565.3	
-202.7	CARBONDALE	BRERETON	LIMESTONE	0.8	566.1	
-203.5	CARBONDALE	ANNA	BLACK SHALE	4.3	566.9	
-207.8	CARBONDALE	HERRIN	COAL	1.4	571.2	
-209.2	CARBONDALE	HERRIN	SHALE	0.2	572.6	
-209.4	CARBONDALE	HERRIN	COAL	0.8	572.8	
-210.2	CARBONDALE		SHALE & CLAYSTONE	3.4	573.6	

-213.6	CARBONDALE		SANDSTONE	8.0	577.0	
-221.6	CARBONDALE		SANDY SHALE	17.0	585.0	
-238.6	CARBONDALE		SHALE	14.0	602.0	W/SIDERITE BANDS
-252.6	CARBONDALE	BRIAR HILL	COAL	2.0	616.0	
-254.6	CARBONDALE		SHALE	2.0	618.0	
-256.6	CARBONDALE		SANDSTONE	49.0	620.0	
-305.6	CARBONDALE		SHALE	4.9	669.0	
-310.5	CARBONDALE		BLACK SHALE	1.4	673.9	
-312.0	CARBONDALE	ST. DAVID	LIMESTONE	0.7	675.4	NUM SID BANDS & NODS; SPARINGLY FOSS.
-312.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	676.1	
-315.6	CARBONDALE	SPRINGFIELD	COAL	1.8	679.0	
-317.4	CARBONDALE	SPRINGFIELD	FUSAIN	0.0	680.8	
-317.4	CARBONDALE	SPRINGFIELD	COAL	2.6	680.8	
-320.0	CARBONDALE		CLAYSTONE	3.4	683.4	
-323.4	CARBONDALE		LIMESTONE	1.2	686.8	

MAPID: 05902021000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 609' S line, 1350' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.203259 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.645326 **DATE COLLECTED:** 9 / 14 / 1956

SURFACE ELEVATION (FT.): 377.2 **LOGGED (FT.):** 386.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 2H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
377.2	PLEISTOCENE		CLAY	3.0	0.0	
374.2	MODESTO		SOFT SHALE	27.0	3.0	
347.2	MODESTO		SHALE	24.0	30.0	
323.2	MODESTO		LIMESTONE	4.5	54.0	
318.7	MODESTO		DARK SHALE	43.5	58.5	
275.2	MODESTO		GRAY SHALE	10.0	102.0	
265.2	MODESTO		SANDSTONE	8.0	112.0	
257.2	MODESTO		SANDY SHALE	9.8	120.0	
247.4	MODESTO		SHALE	47.3	129.8	
200.2	MODESTO		BLACK SHALE	2.0	177.0	
198.2	MODESTO		SHALE	15.8	179.0	
182.4	CARBONDALE	DANVILLE	COAL	1.3	194.8	
181.2	CARBONDALE		UNDERCLAY	5.3	196.0	
175.9	CARBONDALE		SANDSTONE	4.8	201.3	
171.2	CARBONDALE	ALLENBY	COAL	0.2	206.0	
171.0	CARBONDALE		UNDERCLAY	0.8	206.2	
170.2	CARBONDALE		SANDSTONE	7.0	207.0	
163.2	CARBONDALE		SHALE	1.5	214.0	
161.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	215.5	
159.2	CARBONDALE	ANVIL ROCK	SHALE	4.0	218.0	
155.2	CARBONDALE	ANVIL ROCK	SANDSTONE	37.7	222.0	
117.5	CARBONDALE		SHALE	5.0	259.7	
112.5	CARBONDALE	BRERETON	LIMESTONE	0.6	264.7	
111.9	CARBONDALE	ANNA	BLACK SHALE	1.6	265.3	
110.4	CARBONDALE	HERRIN	COAL	3.8	266.8	
106.6	CARBONDALE		UNDERCLAY	4.3	270.6	
102.4	CARBONDALE		LIMESTONE	2.2	274.8	
100.2	CARBONDALE		GRAY SHALE	19.0	277.0	
81.2	CARBONDALE		SANDY DARK SHALE	15.7	296.0	
65.5	CARBONDALE	BRIAR HILL	COAL	1.6	311.7	
63.9	CARBONDALE		UNDERCLAY	1.8	313.3	
62.2	CARBONDALE		SHALY SANDSTONE	16.3	315.0	
45.9	CARBONDALE		SANDSTONE	5.3	331.3	
40.7	CARBONDALE		SILTY SHALE	39.0	336.5	
1.7	CARBONDALE	TURNER MINE	BLACK SHALE	5.1	375.5	
-3.4	CARBONDALE	SPRINGFIELD	COAL	4.4	380.6	
-7.8	CARBONDALE		UNDERCLAY	1.5	385.0	

MAPID: 05902021000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 609' S line, 1350' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.203259 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.645326 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 377.0 **LOGGED (FT.):** 270.7 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 2-H **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
182.1	CARBONDALE	DANVILLE	COAL	1.5	194.9	
180.6	CARBONDALE		SHALE & SILTSTONE	9.8	196.4	
170.8	CARBONDALE	ALLENBY	COAL	0.1	206.2	
170.7	CARBONDALE		SHALE & SANDSTONE	9.5	206.3	
161.2	CARBONDALE	BANKSTON FORK	NODULAR LIMESTONE	2.3	215.8	
158.9	CARBONDALE	LAWSON	GRAY SHALE	2.4	218.1	
156.5	CARBONDALE	LAWSON	SILTSTONE	2.7	220.5	
153.8	CARBONDALE	LAWSON	SANDSTONE	33.4	223.2	
120.4	CARBONDALE	JAMESTOWN	BONE COAL	1.0	256.6	
119.4	CARBONDALE		GRAY SHALE	5.8	257.6	
113.7	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	2.2	263.3	
111.5	CARBONDALE	ANNA	BLACK SHALE	1.5	265.5	
110.0	CARBONDALE	HERRIN	COAL	3.7	267.0	

MAPID: 05902031000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 197' N line, 280' W line of NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.206995 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650564 **DATE COLLECTED:** 10 / 2 / 1956

SURFACE ELEVATION (FT.): 405.8 **LOGGED (FT.):** 331.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 4H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
405.8	PLEISTOCENE		CLAY	35.0	0.0	
370.8	MODESTO		SHALE	7.0	35.0	
363.8	MODESTO		GRAY SHALE & SANDSTONE	18.0	42.0	
345.8	MODESTO		SANDSTONE	8.0	60.0	
337.8	MODESTO		GRAY SHALE	24.0	68.0	
313.8	MODESTO		DARK SHALE	23.0	92.0	
290.8	MODESTO		GRAY SHALE	16.4	115.0	
274.4	CARBONDALE	DANVILLE	COAL	1.2	131.4	
273.2	CARBONDALE		UNDERCLAY	0.6	132.6	
272.6	CARBONDALE	ANVIL ROCK	SANDSTONE	57.8	133.2	
214.9	CARBONDALE		DARK SHALE	5.1	190.9	
209.8	CARBONDALE	BRERETON	LIMESTONE	1.5	196.0	
208.3	CARBONDALE	ANNA	BLACK SHALE	2.0	197.5	
206.3	CARBONDALE	HERRIN	COAL	4.3	199.5	
202.0	CARBONDALE		UNDERCLAY	3.0	203.8	
199.0	CARBONDALE		LIMESTONE	3.3	206.8	
195.8	CARBONDALE		SHALY SANDSTONE	9.0	210.0	
186.8	CARBONDALE		SANDSTONE	15.0	219.0	
171.8	CARBONDALE		GRAY SHALE	12.8	234.0	
159.0	CARBONDALE		DARK SHALE	2.2	246.8	
156.8	CARBONDALE	BRIAR HILL	COAL	3.3	249.0	
153.5	CARBONDALE		SHALY SANDSTONE	52.3	252.3	
101.3	CARBONDALE		SHALE	11.0	304.5	
90.3	CARBONDALE	ST. DAVID	LIMESTONE	1.5	315.5	
88.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	317.0	
86.0	CARBONDALE	SPRINGFIELD	COAL	4.8	319.8	
81.2	CARBONDALE		UNDERCLAY	6.4	324.6	

MAPID: 05902056000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 30' N line, 85' W line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.2077 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.658515 **DATE COLLECTED:** 10 / 24 / 1956

SURFACE ELEVATION (FT.): 392.6 **LOGGED (FT.):** 247.1 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 8H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
392.6	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0	
366.6	MODESTO		SANDSTONE	7.0	26.0	
359.6	MODESTO		SOFT SHALE	6.0	33.0	
353.6	MODESTO		DARK SHALE	3.2	39.0	
350.4	CARBONDALE	DANVILLE	COAL	1.8	42.2	
348.6	CARBONDALE		UNDERCLAY	1.0	44.0	
347.6	CARBONDALE		SANDSTONE	15.1	45.0	
332.5	CARBONDALE	ALLENBY	COAL	0.8	60.1	
331.7	CARBONDALE		UNDERCLAY	1.1	60.9	
330.6	CARBONDALE		SANDSTONE	6.0	62.0	
324.6	CARBONDALE	BANKSTON FORK	LIMESTONE	4.0	68.0	
320.6	CARBONDALE		SHALE	1.3	72.0	
319.3	CARBONDALE		SILTY SHALE	1.0	73.3	
318.3	CARBONDALE	ANVIL ROCK	SANDSTONE	34.7	74.3	
283.7	CARBONDALE		SANDSTONE/COAL	0.4	108.9	
283.3	CARBONDALE		GRAY SHALE	2.8	109.3	
280.5	CARBONDALE	BRERETON	LIMESTONE	0.3	112.1	
280.2	CARBONDALE	BRERETON	DARK SHALE	0.6	112.4	
279.6	CARBONDALE	BRERETON	LIMESTONE	0.3	113.0	
279.3	CARBONDALE	ANNA	BLACK SHALE	3.1	113.3	
276.2	CARBONDALE	HERRIN	COAL	3.1	116.4	
273.1	CARBONDALE	HERRIN	BLUE BAND	0.2	119.5	
272.9	CARBONDALE	HERRIN	COAL	0.8	119.7	
272.2	CARBONDALE		UNDERCLAY	3.6	120.4	
268.6	CARBONDALE		GRAY SHALE	4.8	124.0	
263.8	CARBONDALE		SANDSTONE	5.1	128.8	
258.7	CARBONDALE		SANDY SHALE	17.1	133.9	
241.6	CARBONDALE		DARK SHALE	18.6	151.0	SOME BLACK SHALE
223.0	CARBONDALE	BRIAR HILL	COAL	1.8	169.6	
221.2	CARBONDALE		SHALY SANDSTONE	4.3	171.4	
216.8	CARBONDALE		COAL	0.1	175.8	
216.8	CARBONDALE		SANDY SHALE	60.4	175.8	
156.3	CARBONDALE	ST. DAVID	SHALE W/ LIME NODULES	0.8	236.3	
155.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	237.1	
153.5	CARBONDALE	SPRINGFIELD	COAL	4.2	239.1	
149.3	CARBONDALE		UNDERCLAY	3.8	243.3	

MAPID: 05903256000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.205645 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.656711 **DATE COLLECTED:** 5 / 5 / 1967

SURFACE ELEVATION (FT.): 391.7 **LOGGED (FT.):** 241.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1694 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
391.7	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
371.7	MODESTO		SHALE	20.5	20.0	
351.2	CARBONDALE	DANVILLE	COAL	1.3	40.5	
349.9	CARBONDALE		UNDERCLAY	1.2	41.8	
348.7	CARBONDALE		SANDSTONE	21.0	43.0	
327.7	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	64.0	
325.7	CARBONDALE	ANVIL ROCK	SANDSTONE	39.0	66.0	
286.7	CARBONDALE		SHALE	1.8	105.0	
284.9	CARBONDALE	BRERETON	LIMESTONE	0.7	106.8	
284.2	CARBONDALE	ANNA	SHALE	3.7	107.5	DARK
280.5	CARBONDALE	HERRIN	COAL	3.9	111.2	
276.6	CARBONDALE		UNDERCLAY	4.4	115.1	
272.2	CARBONDALE		SANDSTONE	25.5	119.5	
246.7	CARBONDALE		SHALE	19.5	145.0	
227.2	CARBONDALE	BRIAR HILL	COAL	2.2	164.5	
225.0	CARBONDALE		SANDSTONE	38.5	166.7	
186.5	CARBONDALE		SANDY SHALE	27.7	205.2	
158.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	232.9	
156.5	CARBONDALE	SPRINGFIELD	COAL	4.8	235.2	
151.7	CARBONDALE		UNDERCLAY	1.0	240.0	

MAPID: 05923837000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 15 **QUARTERS/FOOTAGES:** 1' S line, 660' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.191664 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.643711 **DATE COLLECTED:** 1 / 5 / 1971

SURFACE ELEVATION (FT.): 367.0 **LOGGED (FT.):** 467.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4332-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
367.0	PLEISTOCENE		UNCONSOLIDATED	61.5	0.0	
305.5	MODESTO		SHALE	31.5	61.5	
274.0	MODESTO	CHAPEL	COAL	0.8	93.0	
273.2	MODESTO		UNDERCLAY	1.4	93.8	
271.8	MODESTO		SHALE	7.3	95.2	
264.5	MODESTO		SANDSTONE	37.0	102.5	
227.5	MODESTO		SANDY SHALE	7.5	139.5	
220.0	MODESTO		SANDSTONE	2.0	147.0	
218.0	MODESTO		SHALE	1.4	149.0	
216.6	MODESTO		LIMESTONE	3.0	150.4	
213.6	MODESTO		SHALE	1.6	153.4	
212.0	MODESTO		SANDSTONE	14.0	155.0	
198.0	MODESTO		SHALE	24.5	169.0	
173.5	MODESTO		SANDSTONE/SHALE	74.0	193.5	
99.5	MODESTO		SHALE	3.0	267.5	
96.5	MODESTO		UNDERCLAY	3.0	270.5	
93.5	MODESTO		SANDY SHALE	12.0	273.5	
81.5	CARBONDALE	DANVILLE	COAL	2.5	285.5	
79.0	CARBONDALE		SHALY SANDSTONE	9.0	288.0	
70.0	CARBONDALE	ALLENBY	COAL	1.0	297.0	
69.0	CARBONDALE		SANDY SHALE	2.5	298.0	
66.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.6	300.5	
63.9	CARBONDALE		SHALE	1.9	303.1	
62.0	CARBONDALE	ANVIL ROCK	SANDSTONE	38.0	305.0	
24.0	CARBONDALE		SHALE	4.7	343.0	
19.3	CARBONDALE	BRERETON	LIMESTONE	1.0	347.7	
18.3	CARBONDALE	ANNA	BLACK SHALE	2.5	348.7	
15.8	CARBONDALE	HERRIN	COAL	3.1	351.2	
12.7	CARBONDALE		UNDERCLAY	2.7	354.3	
10.0	CARBONDALE		SANDSTONE	20.5	357.0	
-10.5	CARBONDALE		SANDY SHALE	7.0	377.5	
-17.5	CARBONDALE		SHALE	12.5	384.5	
-30.0	CARBONDALE	BRIAR HILL	COAL	2.5	397.0	
-32.5	CARBONDALE		SANDSTONE/SHALE	45.5	399.5	
-78.0	CARBONDALE		SHALE	11.5	445.0	
-89.5	CARBONDALE	ST. DAVID	LIMESTONE	0.6	456.5	
-90.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	457.1	
-92.9	CARBONDALE	TURNER MINE	SHALE	0.9	459.9	
-93.8	CARBONDALE	SPRINGFIELD	COAL	4.7	460.8	

-98.5	CARBONDALE	SHALE	1.8	465.5

MAPID: 05902055000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2610' N line, 2445' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216454 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.651278 **DATE COLLECTED:** 10 / 20 / 1956

SURFACE ELEVATION (FT.): 393.3 **LOGGED (FT.):** 222.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 7H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
393.3	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
379.3	MODESTO		SOFT SHALE	7.0	14.0	
372.3	MODESTO		GRAY SHALE	7.6	21.0	
364.7	CARBONDALE	DANVILLE	COAL	2.5	28.6	
362.2	CARBONDALE		UNDERCLAY	3.5	31.1	
358.7	CARBONDALE		SANDSTONE	6.4	34.6	
352.3	CARBONDALE		SANDY SHALE	5.1	41.0	
347.2	CARBONDALE	ALLENBY	COAL	0.7	46.1	
346.5	CARBONDALE		UNDERCLAY	0.3	46.8	
346.3	CARBONDALE	ANVIL ROCK	SANDSTONE	36.5	47.0	
309.8	CARBONDALE		BLACK SHALE	6.5	83.5	
303.3	CARBONDALE	BRERETON	LIMESTONE	6.1	90.0	
297.3	CARBONDALE	ANNA	BLACK SHALE	0.4	96.0	
296.8	CARBONDALE	HERRIN	COAL	3.2	96.5	
293.7	CARBONDALE	HERRIN	BLUE BAND	0.2	99.6	
293.5	CARBONDALE	HERRIN	COAL	0.7	99.8	
292.8	CARBONDALE		UNDERCLAY	5.3	100.5	
287.5	CARBONDALE		SHALY SANDSTONE	16.7	105.8	
270.8	CARBONDALE		SANDY SHALE	19.3	122.5	
251.5	CARBONDALE		BLACK SHALE	3.3	141.8	
248.2	CARBONDALE	BRIAR HILL	COAL	2.0	145.1	
246.2	CARBONDALE		SILTY SHALE	1.5	147.1	
244.7	CARBONDALE		SANDSTONE	7.2	148.6	
237.5	CARBONDALE		SANDY DARK SHALE	5.0	155.8	
232.5	CARBONDALE		SANDSTONE	24.3	160.8	
208.3	CARBONDALE		SANDY SHALE	24.8	185.0	
183.5	CARBONDALE		BLACK SHALE	0.3	209.8	
183.2	CARBONDALE	ST. DAVID	LIMESTONE	0.7	210.1	
182.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.8	210.8	
178.7	CARBONDALE	SPRINGFIELD	COAL	4.7	214.6	
174.0	CARBONDALE		UNDERCLAY	3.3	219.3	

MAPID: 05902055000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2610' N line, 2445' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216454 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.651278 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 393.0 **LOGGED (FT.):** 108.1 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 7-H **WELL TYPE:** Coal Test

COMMENT: FAIR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
358.8	CARBONDALE	DANVILLE	COAL	2.5	34.2	
356.3	CARBONDALE		SHALE & SANDSTONE	15.0	36.7	
341.3	CARBONDALE	ALLENBY	COAL	0.7	51.7	
340.6	CARBONDALE	LAWSON	CLAYSTONE	0.3	52.4	
340.3	CARBONDALE	LAWSON	SANDSTONE	16.0	52.7	
324.3	CARBONDALE	LAWSON	ARGILLACEOUS SANDSTONE	22.8	68.7	
301.6	CARBONDALE	LAWSON	GRAY SHALE	6.0	91.4	
295.6	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	6.2	97.4	
289.4	CARBONDALE	ANNA	BLACK SHALE	0.4	103.6	
289.0	CARBONDALE	HERRIN	COAL	4.1	104.0	

MAPID: 05902057000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 30' S line, 385' W line of SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.225159 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.64377 **DATE COLLECTED:** 10 / 26 / 1956

SURFACE ELEVATION (FT.): 368.2 **LOGGED (FT.):** 121.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 9H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
368.2	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0	
328.2	CARBONDALE		SOFT SHALE	12.0	40.0	
316.2	CARBONDALE		SANDSTONE	1.0	52.0	
315.2	CARBONDALE		SANDSTONE	7.0	53.0	START CORE
308.2	CARBONDALE		SANDY SHALE	3.1	60.0	
305.1	CARBONDALE		NO RECORD	9.5	63.1	CORE MISSING
295.5	CARBONDALE		SANDY SHALE	14.0	72.7	
281.5	CARBONDALE		GRAY SHALE & SANDSTONE	19.8	86.7	
261.7	CARBONDALE		BLACK SHALE	1.2	106.5	
260.5	CARBONDALE	ST. DAVID	LIMESTONE	1.3	107.7	
259.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	109.0	
256.4	CARBONDALE	SPRINGFIELD	COAL	4.9	111.8	
251.5	CARBONDALE		UNDERCLAY	4.3	116.7	

MAPID: 05902209000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 450' S line, 0' W line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.21721 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.644899 **DATE COLLECTED:** 11 / 5 / 1957

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 205.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 46 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0	PLEISTOCENE		CLAY	5.0	0.0	
383.0	PLEISTOCENE		SAND	40.2	5.0	
342.8	CARBONDALE	ANVIL ROCK	SANDSTONE	11.3	45.2	
331.5	CARBONDALE	ANVIL ROCK	SANDSTONE	7.0	56.5	
324.5	CARBONDALE		SHALE	7.5	63.5	
317.0	CARBONDALE		SHALE	2.0	71.0	
315.0	CARBONDALE	BRERETON	GRAY LIMESTONE	4.3	73.0	
310.7	CARBONDALE	ANNA	SHALE	0.6	77.3	
310.2	CARBONDALE	HERRIN	COAL	3.8	77.8	
306.3	CARBONDALE		UNDERCLAY	2.3	81.7	
304.0	CARBONDALE		SANDSTONE	30.0	84.0	
274.0	CARBONDALE		SHALE	9.3	114.0	
264.7	CARBONDALE		SHALE	3.9	123.3	
260.7	CARBONDALE	BRIAR HILL	COAL	2.7	127.3	
258.1	CARBONDALE		GRAY SANDSTONE	12.1	129.9	
246.0	CARBONDALE		SHALE	53.5	142.0	
192.5	CARBONDALE	TURNER MINE	SHALE	3.2	195.5	
189.3	CARBONDALE	SPRINGFIELD	COAL	5.0	198.7	
184.3	CARBONDALE		UNDERCLAY	1.3	203.7	

MAPID: 05902209000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 450' S line, 0' W line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.21721 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.644899 **DATE COLLECTED:** 11 / 5 / 1957

SURFACE ELEVATION (FT.): 388.0 **LOGGED (FT.):** 205.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
388.0			UNCONSOLIDATED	45.2	0.0	
342.8			ROCK	32.7	45.2	
310.2	CARBONDALE	HERRIN	COAL	3.8	77.8	
306.3	CARBONDALE		ROCK	45.6	81.7	
260.7	CARBONDALE	BRIAR HILL	COAL	2.7	127.3	
258.1	CARBONDALE		ROCK	68.8	129.9	
189.3	CARBONDALE	SPRINGFIELD	COAL	5.0	198.7	
184.3	CARBONDALE		ROCK	1.3	203.7	

MAPID: 05903238000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' N line, 1320' W line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.221797 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.65112 **DATE COLLECTED:** 3 / 20 / 1967

SURFACE ELEVATION (FT.): 396.9 **LOGGED (FT.):** 209.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1680-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
396.9	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	
338.9	CARBONDALE	ANVIL ROCK	SHALE	17.0	58.0	
321.9	CARBONDALE	ANVIL ROCK	SANDSTONE	6.0	75.0	
315.9	CARBONDALE	ANNA	BLACK SHALE	0.5	81.0	SOFT
315.4	CARBONDALE	HERRIN	COAL	2.8	81.5	
312.6	CARBONDALE		UNDERCLAY	5.7	84.3	
306.9	CARBONDALE		SANDSTONE	20.0	90.0	
286.9	CARBONDALE		SANDY SHALE	13.5	110.0	
273.4	CARBONDALE		SHALE	7.0	123.5	
266.4	CARBONDALE	BRIAR HILL	COAL	2.5	130.5	
263.9	CARBONDALE		SANDSTONE	27.0	133.0	
236.9	CARBONDALE		SANDY SHALE	33.6	160.0	
203.3	CARBONDALE		SHALE	5.0	193.6	
198.3	CARBONDALE	ST. DAVID	LIMESTONE	1.1	198.6	
197.2	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	199.7	
194.4	CARBONDALE	SPRINGFIELD	COAL	5.0	202.5	
189.4	CARBONDALE		UNDERCLAY	2.0	207.5	

MAPID: 05903239000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' S line, 1' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.207971 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.650907 **DATE COLLECTED:** 3 / 23 / 1967

SURFACE ELEVATION (FT.): 394.2 **LOGGED (FT.):** 304.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1681-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
394.2	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0	
373.2	MODESTO		SANDSTONE	12.0	21.0	
361.2	MODESTO		SANDY SHALE	37.0	33.0	
324.2	MODESTO		SHALE	18.0	70.0	
306.2	MODESTO		SHALE	5.0	88.0	
301.2	MODESTO		SHALE	12.5	93.0	
288.7	CARBONDALE	DANVILLE	COAL	1.5	105.5	
287.2	CARBONDALE	ANVIL ROCK	SANDSTONE	60.0	107.0	
227.2	CARBONDALE		SHALE	5.0	167.0	
222.2	CARBONDALE	BRERETON	LIMESTONE	2.0	172.0	
220.2	CARBONDALE	ANNA	BLACK SHALE	0.9	174.0	
219.3	CARBONDALE	ANNA	SHALE	0.7	174.9	
218.6	CARBONDALE	ANNA	BLACK SHALE	0.4	175.6	
218.2	CARBONDALE	HERRIN	COAL	3.9	176.0	
214.3	CARBONDALE		UNDERCLAY	1.7	179.9	
212.7	CARBONDALE		SANDSTONE	24.5	181.5	
188.2	CARBONDALE		SANDY SHALE	11.0	206.0	
177.2	CARBONDALE		SHALE	11.0	217.0	
166.2	CARBONDALE	BRIAR HILL	COAL	2.5	228.0	
163.7	CARBONDALE		SANDSTONE	15.5	230.5	
148.2	CARBONDALE		SANDY SHALE	49.6	246.0	
98.6	CARBONDALE	ST. DAVID	LIMESTONE	1.3	295.6	
97.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	296.9	
94.7	CARBONDALE	SPRINGFIELD	COAL	4.7	299.5	

MAPID: 05903244000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217133 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.651187 **DATE COLLECTED:** 3 / 28 / 1967

SURFACE ELEVATION (FT.): 391.0 **LOGGED (FT.):** 225.5 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1682-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
391.0	PLEISTOCENE		UNCONSOLIDATED	27.5	0.0	
363.5	MODESTO		SHALE	6.0	27.5	
357.5	MODESTO		SANDSTONE	7.5	33.5	
350.0	MODESTO		SHALE	0.5	41.0	
349.5	MODESTO		SANDSTONE	5.0	41.5	
344.5			SHALE	3.5	46.5	
341.0	CARBONDALE	ANVIL ROCK	SANDSTONE	35.0	50.0	WHITE
306.0	CARBONDALE		SHALE	5.5	85.0	
300.5	CARBONDALE	BRERETON	LIMESTONE	6.5	90.5	
294.0	CARBONDALE	ANNA	BLACK SHALE	0.5	97.0	
293.5	CARBONDALE	HERRIN	COAL	3.8	97.5	
289.7	CARBONDALE		UNDERCLAY	4.2	101.3	
285.5	CARBONDALE		SANDSTONE	24.5	105.5	WHITE
261.0	CARBONDALE		SANDY SHALE	8.0	130.0	
253.0	CARBONDALE		SHALE	4.0	138.0	
249.0	CARBONDALE		SHALE	1.5	142.0	
247.5	CARBONDALE		SHALE	3.0	143.5	DARK
244.5	CARBONDALE	BRIAR HILL	COAL	2.5	146.5	
242.0	CARBONDALE		SANDSTONE	21.0	149.0	
221.0	CARBONDALE		SANDY SHALE	45.4	170.0	
175.6	CARBONDALE	ST. DAVID	LIMESTONE	0.6	215.4	
175.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	216.0	
172.4	CARBONDALE	SPRINGFIELD	COAL	4.9	218.6	
167.5	CARBONDALE		UNDERCLAY	2.0	223.5	

MAPID: 059275B0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22294 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.650114 **DATE COLLECTED:** 0 / 0 / 1915

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 90.0 **LOG TYPE:** Drillers Log

SOURCE: FLD NOTES-WALLCE LEE **WELL TYPE:** Engineering Test Holes

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.0			ROCK	90.0	0.0	
310.0			COAL	-	90.0	

MAPID: 05932450000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 2640' S line, 1320' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212551 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.650925 **DATE COLLECTED:** 3 / 31 / 1967

SURFACE ELEVATION (FT.): 382.3 **LOGGED (FT.):** 249.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1683-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
382.3	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
354.3	MODESTO		SHALE	11.0	28.0	
343.3	MODESTO		SHALE	1.0	39.0	
342.3	MODESTO		SHALE	23.0	40.0	
319.3	CARBONDALE	DANVILLE	COAL	1.0	63.0	
318.3	CARBONDALE		SHALE	0.5	64.0	
317.8	CARBONDALE	ANVIL ROCK	SANDSTONE	44.5	64.5	
273.3	CARBONDALE		SHALE	7.0	109.0	
266.3	CARBONDALE	BRERETON	LIMESTONE	3.9	116.0	
262.4	CARBONDALE	ANNA	BLACK SHALE	1.1	119.9	
261.3	CARBONDALE	HERRIN	COAL	3.7	121.0	
257.6	CARBONDALE		UNDERCLAY	3.8	124.7	
253.8	CARBONDALE		SANDSTONE	23.5	128.5	
230.3	CARBONDALE		SANDY SHALE	13.0	152.0	
217.3	CARBONDALE		SHALE	4.0	165.0	
213.3	CARBONDALE	BRIAR HILL	COAL	2.6	169.0	
210.7	CARBONDALE		SHALE	1.9	171.6	
208.8	CARBONDALE		SANDSTONE	28.5	173.5	
180.3	CARBONDALE		SANDY SHALE	34.8	202.0	
145.5	CARBONDALE		SHALE	0.5	236.8	
145.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	237.3	
144.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.2	237.8	
140.3	CARBONDALE	SPRINGFIELD	COAL	5.0	242.0	
135.3	CARBONDALE		UNDERCLAY	2.0	247.0	

MAPID: 05990292000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 16 **QUARTERS/FOOTAGES:** 50' N line, 900' W line of NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.22326 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650894 **DATE COLLECTED:** 0 / 0 / 1957

SURFACE ELEVATION (FT.): 394.9 **LOGGED (FT.):** 202.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 12K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
394.9	PLEISTOCENE		CLAY	16.0	0.0	
378.9	PLEISTOCENE		SAND	47.0	16.0	
331.9	PLEISTOCENE		SANDY CLAY	22.0	63.0	
309.9	PLEISTOCENE		CLAY	11.0	85.0	GREEN
298.9	PLEISTOCENE		CLAY	9.0	96.0	GRAY
289.9	CARBONDALE		GRAY SHALE	20.3	105.0	
269.6	CARBONDALE	BRIAR HILL	COAL	2.5	125.3	
267.1	CARBONDALE		SANDSTONE	42.3	127.8	
224.9	CARBONDALE		SANDY SHALE	14.7	170.0	
210.2	CARBONDALE		DARK SHALE	4.2	184.7	
206.1	CARBONDALE	ST. DAVID	LIMESTONE	0.9	188.8	
205.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	189.8	
203.1	CARBONDALE	SPRINGFIELD	COAL	4.8	191.8	
198.2	CARBONDALE		SHALE W/ LIME NODULES	5.3	196.7	

MAPID: 05902105000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 660' S line, 1' E line of SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.240478 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.652879 **DATE COLLECTED:** 5 / 0 / 1957

SURFACE ELEVATION (FT.): 402.3 **LOGGED (FT.):** 203.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 16K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
402.3	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0	
371.3	MODESTO		BLACK SHALE	0.3	31.0	
371.0	CARBONDALE	DANVILLE	COAL	0.5	31.3	
370.5	CARBONDALE		GRAY SHALE	6.2	31.8	
364.3	CARBONDALE	ANVIL ROCK	SANDSTONE	15.0	38.0	
349.3	CARBONDALE	ANVIL ROCK	SANDY SHALE	12.0	53.0	
337.3	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	8.0	65.0	
329.3	CARBONDALE		DARK SHALE	5.0	73.0	
324.3	CARBONDALE	BRERETON	LIMESTONE	3.7	78.0	
320.6	CARBONDALE	HERRIN	COAL	3.0	81.7	
317.6	CARBONDALE		GRAY SHALE	5.3	84.7	
312.3	CARBONDALE		SANDSTONE	5.0	90.0	
307.3	CARBONDALE		SANDY SHALE	35.6	95.0	
271.7	CARBONDALE		DARK SHALE	0.5	130.6	
271.2	CARBONDALE		BLACK SHALE	4.4	131.1	
266.8	CARBONDALE	BRIAR HILL	COAL	3.0	135.5	
263.8	CARBONDALE		SANDSTONE	3.0	138.5	
260.8	CARBONDALE		SANDY SHALE	45.3	141.5	
215.5	CARBONDALE		DARK SHALE	1.3	186.8	
214.3	CARBONDALE		BLACK SHALE	1.0	188.0	
213.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	189.0	
212.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	189.8	
209.0	CARBONDALE	SPRINGFIELD	COAL	5.0	193.3	
204.0	CARBONDALE		UNDERCLAY	4.8	198.3	

MAPID: 05902167000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241631 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.657469 **DATE COLLECTED:** 10 / 11 / 1957

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 427.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	51.0	0.0	
359.0			ROCK	17.3	51.0	
341.7	CARBONDALE	HERRIN	COAL	3.9	68.3	
337.9	CARBONDALE		ROCK	55.2	72.1	
282.7	CARBONDALE	BRIAR HILL	COAL	2.3	127.3	
280.4	CARBONDALE		ROCK	56.6	129.6	
223.8	CARBONDALE	SPRINGFIELD	COAL	4.3	186.2	
219.5	CARBONDALE		ROCK	62.3	190.5	
157.2			COAL	1.3	252.8	
155.8			ROCK	34.8	254.2	
121.0			COAL	1.5	289.0	
119.5			ROCK	52.6	290.5	
66.9			COAL	0.2	343.1	
66.8			ROCK	57.8	343.2	
8.9	SPOON	DEKOVEN	COAL	2.2	401.1	SOME CORE MISSING
6.8	SPOON		ROCK	17.4	403.2	
-10.6	SPOON	DAVIS	COAL	3.6	420.6	
-14.2	SPOON		ROCK	3.5	424.2	

MAPID: 05902167000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241631 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.657469 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 75.9 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.3	CARBONDALE	LAWSON	CALCAREOUS SANDSTONE	1.5	54.7	
353.8	CARBONDALE	LAWSON	SANDSTONE	9.1	56.2	
344.7	CARBONDALE	LAWSON	GRAY SHALE	4.8	65.3	
340.0	CARBONDALE	BRERETON	LIMESTONE & SHALE	2.0	70.0	
338.0	CARBONDALE	HERRIN	COAL	3.9	72.0	

MAPID: 05902167000C **VERSION:** 3 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241631 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.657469 **DATE COLLECTED:** 10 / 0 / 1957

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 431.0 **LOG TYPE:** Multiple log types

SOURCE: **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
154.0	CARBONDALE	HOUCHIN CREEK	COAL	1.3	256.0	
118.0	CARBONDALE	SURVANT	COAL	1.5	292.0	
64.0	CARBONDALE	COLCHESTER	COAL	0.2	346.0	
6.0	CARBONDALE	DEKOVEN	COAL	2.2	404.0	
6.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	404.0	
-14.0	CARBONDALE	DAVIS	COAL	3.6	424.0	

MAPID: 05902167000C **VERSION:** 4 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241631 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.657469 **DATE COLLECTED:** 10 / 7 / 1957

SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 431.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 42 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
410.0	PLEISTOCENE		CLAY & GRAVEL	51.0	0.0	
359.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	1.4	51.0	
357.6	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	0.7	52.4	
356.9	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	8.4	53.1	
348.5	CARBONDALE		SHALE	4.8	61.5	
343.7	CARBONDALE	BRERETON	GRAY LIMESTONE	0.3	66.3	
343.5	CARBONDALE	BRERETON	GRAY LIMESTONE	1.8	66.5	
341.7	CARBONDALE		NO RECORD	3.3	68.3	ADJUSTED FOR MARKER
338.5	CARBONDALE	HERRIN	COAL	3.9	71.5	
334.6	CARBONDALE		UNDERCLAY	2.5	75.4	
332.2	CARBONDALE		GRAY LIMESTONE	0.3	77.8	
331.9	CARBONDALE		SHALE	1.2	78.1	
330.7	CARBONDALE		SILTSTONE	2.2	79.3	LIMESTONE NOTED
328.6	CARBONDALE		SHALE	3.0	81.4	
325.6	CARBONDALE		SILTSTONE	1.5	84.4	
324.1	CARBONDALE		GRAY SANDSTONE	7.3	85.9	
316.8	CARBONDALE		GRAY LIMESTONE	0.2	93.2	
316.7	CARBONDALE		NO RECORD	3.7	93.3	ADJUSTED FOR MARKER
313.0	CARBONDALE		SHALE	7.5	97.0	
305.5	CARBONDALE		SHALE	11.3	104.5	
294.2	CARBONDALE		SHALE	13.9	115.8	
280.2	CARBONDALE		NO RECORD	0.8	129.8	ADJUSTED FOR MARKER
279.5	CARBONDALE	BRIAR HILL	COAL	2.3	130.5	
277.2	CARBONDALE		GRAY SILTSTONE	0.1	132.8	
277.1	CARBONDALE		GRAY SANDSTONE	2.6	132.9	
274.5	CARBONDALE		SANDSTONE	0.9	135.5	
273.6	CARBONDALE		GRAY SILTSTONE	1.7	136.4	
271.9	CARBONDALE		SILTSTONE	1.3	138.1	
270.6	CARBONDALE		SHALE	12.1	139.4	
258.5	CARBONDALE		SHALE	18.2	151.5	
240.3	CARBONDALE		SHALE	14.8	169.7	
225.5	CARBONDALE	ST. DAVID	LIMESTONE	0.5	184.5	
225.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	185.0	DARK
224.0	CARBONDALE	ST. DAVID	SHALE	0.2	186.0	
223.8	CARBONDALE	ST. DAVID	LIMESTONE	0.3	186.2	
223.6	CARBONDALE	TURNER MINE	SHALE	2.9	186.4	
220.7	CARBONDALE	SPRINGFIELD	COAL	4.3	189.3	
216.3	CARBONDALE		UNDERCLAY	1.0	193.7	
215.3	CARBONDALE		GRAY LIMESTONE	0.6	194.7	

214.7	CARBONDALE		SHALE	6.8	195.3	
207.9	CARBONDALE		SHALE	2.9	202.1	
205.0	CARBONDALE		SHALE	13.5	205.0	
191.5	CARBONDALE		SHALE	21.5	218.5	
170.0	CARBONDALE		SHALE	10.0	240.0	
160.0	CARBONDALE	EXCELLO	SHALE	2.5	250.0	
157.5	CARBONDALE	EXCELLO	SHALE	3.5	252.5	
154.0	CARBONDALE	HOUCHIN CREEK	COAL	1.3	256.0	
152.7	CARBONDALE		SILTSTONE	1.2	257.3	
151.5	CARBONDALE		SILTSTONE	2.0	258.5	
149.5	CARBONDALE		SHALE	4.1	260.5	
145.4	CARBONDALE		SHALE	3.6	264.6	
141.8	CARBONDALE		SHALE	6.0	268.2	
135.8	CARBONDALE		GRAY SILTSTONE	2.3	274.2	
133.5	CARBONDALE		SHALE	9.0	276.5	
124.5	CARBONDALE		SHALE	6.4	285.5	
118.1	CARBONDALE		SHALE	0.3	291.9	
117.8	CARBONDALE	SURVANT	COAL	1.5	292.2	
116.3	CARBONDALE		NO RECORD	1.8	293.7	ADJUSTED FOR MARKER
114.5	CARBONDALE		SHALE	1.8	295.5	
112.7	CARBONDALE		SHALE	6.2	297.3	
106.5	CARBONDALE		SHALE	0.5	303.5	
106.0	CARBONDALE		SHALE	2.8	304.0	
103.2	CARBONDALE		SHALE	3.6	306.8	
99.6	CARBONDALE		LIMESTONE	0.2	310.4	
99.4	CARBONDALE		SHALE	0.2	310.6	
99.2	CARBONDALE		SANDSTONE	2.8	310.8	
96.5	CARBONDALE		SHALE	6.6	313.5	
89.9	CARBONDALE		SHALE & SANDSTONE	0.4	320.1	
89.5	CARBONDALE		SANDSTONE	0.9	320.5	
88.6	CARBONDALE		SHALE & SANDSTONE	3.3	321.4	
85.2	CARBONDALE		SHALE	4.3	324.8	
80.9	CARBONDALE		SILTSTONE	2.3	329.1	
78.6	CARBONDALE		SHALE	4.0	331.4	
74.5	CARBONDALE		SHALE	10.6	335.5	
63.9	CARBONDALE	MECCA QUARRY	SHALE	0.2	346.1	
63.7	CARBONDALE	COLCHESTER	COAL	0.2	346.3	
63.6	CARBONDALE		ROCK	1.0	346.4	ARGILLACEOUS
62.6	CARBONDALE		ROCK	1.4	347.4	ARGILLACEOUS
61.2	CARBONDALE		SILTSTONE	2.7	348.8	
58.5	CARBONDALE		SILTSTONE	12.0	351.5	
46.5	CARBONDALE		SANDSTONE	3.5	363.5	
43.0	CARBONDALE		SANDSTONE	7.7	367.0	
35.3	CARBONDALE		SHALE	3.0	374.7	
32.3	CARBONDALE		SANDSTONE	5.3	377.7	
27.0	CARBONDALE		SANDSTONE	12.0	383.0	
15.0	CARBONDALE		SHALE	4.0	395.0	
11.0	CARBONDALE		SANDSTONE	5.3	399.0	

5.7	CARBONDALE	DEKOVEN	COAL	2.2	404.3	
3.6	CARBONDALE		NO RECORD	10.1	406.4	ADJUSTED FOR MARKER
-6.5	CARBONDALE		SHALE	7.3	416.5	
-13.8	CARBONDALE	DAVIS	COAL	3.6	423.8	
-17.4	TRADEWATER		SHALE	3.1	427.4	
-20.5	TRADEWATER		UNCLASSIFIED	0.5	430.5	

MAPID: 05903006000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244016 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.648322 **DATE COLLECTED:** 9 / 3 / 1964

SURFACE ELEVATION (FT.): 342.3 **LOGGED (FT.):** 96.9 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1119 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.3	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
332.3	PLEISTOCENE		CLAY	30.0	10.0	
302.3	PLEISTOCENE		GRAVEL	41.0	40.0	
261.3	CARBONDALE		GRAY SHALE	5.0	81.0	
256.3	CARBONDALE		SANDSTONE	1.0	86.0	
255.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.5	87.0	
251.8	CARBONDALE	SPRINGFIELD	COAL	4.4	90.5	
247.4	CARBONDALE		UNDERCLAY	2.0	94.9	

MAPID: 05903240000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 1640' N line, 1' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.226344 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.653816 **DATE COLLECTED:** 3 / 15 / 1967

SURFACE ELEVATION (FT.): 401.5 **LOGGED (FT.):** 189.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1679-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
401.5	PLEISTOCENE		UNCONSOLIDATED	91.0	0.0	
310.5	CARBONDALE		SHALE	22.5	91.0	
288.0	CARBONDALE	BRIAR HILL	COAL	2.5	113.5	
285.5	CARBONDALE		SANDSTONE	39.0	116.0	
246.5	CARBONDALE		SANDY SHALE	22.8	155.0	
223.7	CARBONDALE		SHALE	1.0	177.8	
222.7	CARBONDALE	ST. DAVID	LIMESTONE	1.0	178.8	
221.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	179.8	
218.5	CARBONDALE	SPRINGFIELD	COAL	4.7	183.0	
213.8	CARBONDALE		UNDERCLAY	2.0	187.7	

MAPID: 05903241000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2640' N line, 1320' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.230965 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.651068 **DATE COLLECTED:** 3 / 13 / 1967

SURFACE ELEVATION (FT.): 396.6 **LOGGED (FT.):** 184.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1678-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
396.6	PLEISTOCENE		UNCONSOLIDATED	95.5	0.0	
301.1	CARBONDALE		SHALE	15.5	95.5	
285.6	CARBONDALE	BRIAR HILL	COAL	2.5	111.0	
283.1	CARBONDALE		SANDSTONE	24.5	113.5	
258.6	CARBONDALE		SANDY SHALE	34.6	138.0	
224.0	CARBONDALE		SHALE	1.7	172.6	
222.3	CARBONDALE	ST. DAVID	LIMESTONE	0.8	174.3	
221.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	175.1	
218.6	CARBONDALE	SPRINGFIELD	COAL	4.6	178.0	
214.0	CARBONDALE		UNDERCLAY	1.6	182.6	

MAPID: 05903321000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2590' N line, 1370' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.231136 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.651205 **DATE COLLECTED:** 7 / 22 / 1967

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO **WELL TYPE:** Coal Test

COMMENT: NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0	
-			LIMESTONE	7.0	87.0	
-			SANDSTONE	10.0	94.0	

MAPID: 05903435000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 45' S line, 10' W line of SW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.24043 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.654844 **DATE COLLECTED:** 9 / 19 / 1966

SURFACE ELEVATION (FT.): 398.5 **LOGGED (FT.):** 198.3 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 1395 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
398.5	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0	
359.5	CARBONDALE	ANVIL ROCK	SANDY SHALE	37.0	39.0	
322.5	CARBONDALE	BRERETON	LIMESTONE	3.6	76.0	
318.9	CARBONDALE	ANNA	LIMESTONE & SHALE	0.4	79.6	"LIME SLATE"
318.5	CARBONDALE	HERRIN	COAL	3.2	80.0	
315.3	CARBONDALE		UNDERCLAY	3.8	83.2	
311.5	CARBONDALE		SANDSTONE	33.0	87.0	
278.5	CARBONDALE		SHALE	10.0	120.0	
268.5	CARBONDALE		BLACK SHALE	3.0	130.0	
265.5	CARBONDALE	BRIAR HILL	COAL	2.8	133.0	
262.7	CARBONDALE		SANDSTONE	14.0	135.8	
248.7	CARBONDALE		SANDSTONE/SHALE	35.8	149.8	
212.9	CARBONDALE		SHALE	2.0	185.6	
210.9	CARBONDALE	ST. DAVID	LIMESTONE	1.1	187.6	
209.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	188.7	
207.0	CARBONDALE	SPRINGFIELD	COAL	4.8	191.5	
202.2	CARBONDALE		UNDERCLAY	2.0	196.3	

MAPID: 05923838000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' N line, 1650' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239455 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.652004 **DATE COLLECTED:** 11 / 7 / 1972

SURFACE ELEVATION (FT.): 375.0 **LOGGED (FT.):** 163.7 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4351-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	PLEISTOCENE		UNCONSOLIDATED	83.0	0.0	
292.0	CARBONDALE		SHALE	11.5	83.0	
280.5	CARBONDALE		SHALE	3.0	94.5	DARK
277.5	CARBONDALE	BRIAR HILL	COAL	2.9	97.5	
274.6	CARBONDALE		SANDY SHALE	53.0	100.4	
221.6	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.7	153.4	
220.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.9	154.1	
218.0	CARBONDALE	SPRINGFIELD	COAL	5.2	157.0	
212.8	CARBONDALE		UNDERCLAY	1.5	162.2	

MAPID: 05923839000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 2310' N line, 660' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.242889 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.652014 **DATE COLLECTED:** 11 / 22 / 1972

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 147.2 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4353-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
338.0	CARBONDALE	ANVIL ROCK	SANDSTONE	4.0	12.0	
334.0	CARBONDALE	ANVIL ROCK	SHALE	5.0	16.0	
329.0	CARBONDALE	ANVIL ROCK	SANDSTONE	3.0	21.0	
326.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.7	24.0	
321.3	CARBONDALE	BRERETON	LIMESTONE	0.8	28.7	
320.5	CARBONDALE	ANNA	BLACK SHALE	0.9	29.5	
319.6	CARBONDALE	HERRIN	COAL	3.4	30.4	
316.2	CARBONDALE		UNDERCLAY	2.0	33.8	
314.2	CARBONDALE		SHALE	4.2	35.8	
310.0	CARBONDALE		SANDSTONE	8.0	40.0	
302.0	CARBONDALE		SANDY SHALE	24.0	48.0	
278.0	CARBONDALE		SHALE	10.3	72.0	DARK
267.7	CARBONDALE	BRIAR HILL	COAL	2.9	82.3	
264.8	CARBONDALE		SANDSTONE	10.0	85.2	
254.8	CARBONDALE		SHALE	40.1	95.2	
214.7	CARBONDALE		CALCAREOUS SHALE	0.4	135.3	
214.3	CARBONDALE	ST. DAVID	LIMESTONE	1.0	135.7	
213.3	CARBONDALE	TURNER MINE	SANDSTONE/LIMESTONE	0.4	136.7	BLACK
213.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	137.0	
210.3	CARBONDALE	SPRINGFIELD	COAL	3.0	139.7	
207.3	CARBONDALE	SPRINGFIELD	LIMESTONE	0.8	142.7	
206.5	CARBONDALE	SPRINGFIELD	COAL	1.0	143.5	
205.5	CARBONDALE		UNDERCLAY	2.7	144.5	

MAPID: 05990291000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 17 **QUARTERS/FOOTAGES:** 50' S line, 660' W line of SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.233491 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.651176 **DATE COLLECTED:** 4 / 0 / 1957

SURFACE ELEVATION (FT.): 376.4 **LOGGED (FT.):** 391.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 11K **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
376.4	PLEISTOCENE		UNCONSOLIDATED	73.0	0.0	
303.4	CARBONDALE		GRAY SHALE & LIMESTONE	11.0	73.0	
292.4	CARBONDALE		SANDY SHALE	6.8	84.0	
285.6	CARBONDALE		DARK SHALE	0.3	90.8	
285.4	CARBONDALE		BLACK SHALE	3.5	91.0	
281.9	CARBONDALE	BRIAR HILL	COAL	0.7	94.5	
281.2	CARBONDALE	BRIAR HILL	SANDSTONE	0.5	95.2	
280.7	CARBONDALE	BRIAR HILL	COAL	1.8	95.7	
278.9	CARBONDALE		UNDERCLAY	1.9	97.5	
277.0	CARBONDALE		SANDY SHALE	53.9	99.4	
223.1	CARBONDALE		SHALE W/ LIME NODULES	2.8	153.3	
220.2	CARBONDALE	ST. DAVID	LIMESTONE	0.7	156.2	
219.6	CARBONDALE	TURNER MINE	BLACK SHALE	3.3	156.8	
216.2	CARBONDALE	SPRINGFIELD	COAL	4.5	160.2	
211.7	CARBONDALE		SHALE W/ LIME NODULES	6.2	164.7	
205.6	CARBONDALE		SHALE W/ LIME NODULES	48.5	170.8	
157.1	CARBONDALE		FOSSILIFEROUS SHALE	0.8	219.3	
156.2	CARBONDALE		BLACK SHALE	0.7	220.2	
155.6	CARBONDALE	HANOVER	LIMESTONE	1.4	220.8	
154.1	CARBONDALE	EXCELLO	BLACK SHALE	2.6	222.3	
151.6	CARBONDALE	HOUCHIN CREEK	COAL	1.8	224.8	
149.8	CARBONDALE		SANDSTONE	28.3	226.6	
121.6	CARBONDALE		SANDY SHALE	10.1	254.8	
111.5	CARBONDALE	SURVANT	COAL	2.8	264.9	
108.6	CARBONDALE		SANDY SHALE	15.3	267.8	
93.3	CARBONDALE		SANDSTONE	16.8	283.1	
76.6	CARBONDALE		SANDY DARK SHALE	18.3	299.8	
58.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.2	318.2	
56.1	CARBONDALE	COLCHESTER	COAL	0.3	320.3	
55.7	CARBONDALE	PALZO	SANDSTONE	25.2	320.7	
30.6	CARBONDALE	PALZO	SANDY SHALE	11.8	345.8	
18.8	CARBONDALE		COAL	0.1	357.6	
18.7	CARBONDALE		SANDY SHALE	1.2	357.7	
17.6	CARBONDALE	DEKOVEN	COAL	3.5	358.8	
14.1	CARBONDALE		GRAY SHALE	0.8	362.3	
13.2	CARBONDALE		SANDSTONE	13.0	363.2	
0.2	CARBONDALE		DARK SHALE	5.5	376.2	
-5.3	CARBONDALE		BLACK SHALE	2.2	381.7	

-7.4	CARBONDALE	DAVIS	COAL	3.6	383.8
-11.0	CARBONDALE		SANDSTONE	4.3	387.4

MAPID: 05902211000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.258877 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.654745 **DATE COLLECTED:** 11 / 22 / 1957

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 284.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 48 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
362.0	PLEISTOCENE		CLAY	7.0	0.0	BROWN
355.0	PLEISTOCENE		SAND	43.0	7.0	
312.0	PLEISTOCENE		SAND	42.5	50.0	
269.5	CARBONDALE		GRAY SANDSTONE	6.5	92.5	
263.0	CARBONDALE		SHALE	10.5	99.0	
252.5	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	53.5	109.5	
199.0	CARBONDALE		SHALE	2.8	163.0	
196.2	CARBONDALE	HERRIN	COAL	3.3	165.8	
192.8	CARBONDALE		UNDERCLAY	0.8	169.2	
192.0	CARBONDALE		SHALE	7.5	170.0	
184.5	CARBONDALE		GRAY SANDSTONE	5.5	177.5	
179.0	CARBONDALE		SHALE	3.5	183.0	
175.5	CARBONDALE		GRAY SANDSTONE	17.5	186.5	
158.0	CARBONDALE		SHALE	19.2	204.0	
138.8	CARBONDALE		SHALE	5.6	223.2	
133.2	CARBONDALE	BRIAR HILL	COAL	3.0	228.8	
130.2	CARBONDALE		SHALY SANDSTONE	6.3	231.8	GRAY
124.0	CARBONDALE		SHALE	36.8	238.0	
87.2	CARBONDALE	TURNER MINE	SHALE	3.5	274.8	
83.7	CARBONDALE	SPRINGFIELD	COAL	4.7	278.3	
79.1	CARBONDALE		UNDERCLAY	1.1	282.9	

MAPID: 05902211000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.258877 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.654745 **DATE COLLECTED:** 11 / 22 / 1957

SURFACE ELEVATION (FT.): 362.0 **LOGGED (FT.):** 284.0 **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
362.0			UNCONSOLIDATED	7.0	0.0	
355.0			ROCK	158.8	7.0	
196.2	CARBONDALE	HERRIN	COAL	3.3	165.8	
192.8	CARBONDALE		ROCK	59.6	169.2	
133.2	CARBONDALE	BRIAR HILL	COAL	3.0	228.8	
130.2	CARBONDALE		ROCK	46.5	231.8	
83.7	CARBONDALE	SPRINGFIELD	COAL	4.7	278.3	
79.1	CARBONDALE		ROCK	1.1	282.9	

MAPID: 05902274000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** 900' N line, 100' E line of NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245523 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.655914 **DATE COLLECTED:** 7 / 22 / 1958

SURFACE ELEVATION (FT.): 347.4 **LOGGED (FT.):** 181.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 518 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
347.4	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
334.4	MODESTO		SANDSTONE	14.0	13.0	
320.4	CARBONDALE	DANVILLE	COAL	0.5	27.0	
319.9	CARBONDALE	ANVIL ROCK	SANDSTONE	29.0	27.5	
290.9	CARBONDALE		GRAY SHALE	6.5	56.5	
284.4	CARBONDALE	HERRIN	COAL	3.8	63.0	
280.6	CARBONDALE		UNDERCLAY	3.0	66.8	
277.6	CARBONDALE		SANDY SHALE	48.0	69.8	
229.6	CARBONDALE		BLACK SHALE	4.0	117.8	
225.6	CARBONDALE	BRIAR HILL	COAL	3.0	121.8	
222.6	CARBONDALE		SANDY SHALE	47.0	124.8	
175.6	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	171.8	
171.6	CARBONDALE		GRAY SHALE	0.5	175.8	
171.1	CARBONDALE	SPRINGFIELD	COAL	4.4	176.3	
166.7	CARBONDALE		UNDERCLAY	0.5	180.7	

MAPID: 05902313000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** 410' N line, 289' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246177 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.657271 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 351.9 **LOGGED (FT.):** 85.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 524 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
351.9	PLEISTOCENE		UNCONSOLIDATED	48.0	0.0	
303.9	CARBONDALE	ANVIL ROCK	SANDSTONE	28.7	48.0	
275.2	CARBONDALE	BRERETON	LIMESTONE	4.5	76.7	
270.7	CARBONDALE	HERRIN	COAL	4.0	81.2	

MAPID: 05902313000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** 410' N line, 289' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246177 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.657271 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CORP 524 **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
124.2	CARBONDALE	LAWSON	SANDSTONE	28.7	227.8	
95.5	CARBONDALE	BRERETON	LIMESTONE	4.5	256.5	
91.0	CARBONDALE	HERRIN	COAL	4.0	261.0	

MAPID: 05902988000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248614 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.64462 **DATE COLLECTED:** 9 / 8 / 1964

SURFACE ELEVATION (FT.): 435.2 **LOGGED (FT.):** 117.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1091 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
435.2	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
416.2	CARBONDALE		SANDSTONE	30.0	19.0	
386.2	CARBONDALE		GRAY SHALE	8.5	49.0	
377.7	CARBONDALE		BLACK SHALE	4.0	57.5	
373.7	CARBONDALE	BRIAR HILL	COAL	3.2	61.5	
370.5	CARBONDALE		UNDERCLAY	2.0	64.7	
368.5	CARBONDALE		SANDY SHALE	15.0	66.7	
353.5	CARBONDALE		GRAY SHALE	25.7	81.7	
327.9	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	107.3	
323.9	CARBONDALE	SPRINGFIELD	COAL	5.1	111.3	
318.8	CARBONDALE		UNDERCLAY	1.1	116.4	

MAPID: 05902989000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.24861 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646459 **DATE COLLECTED:** 9 / 9 / 1964

SURFACE ELEVATION (FT.): 377.9 **LOGGED (FT.):** 108.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO.]1093 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
377.9	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
373.9	CARBONDALE		SANDSTONE	39.0	4.0	
334.9	CARBONDALE		GRAY SHALE	8.0	43.0	
326.9	CARBONDALE		BLACK SHALE	3.0	51.0	
323.9	CARBONDALE	BRIAR HILL	COAL	2.9	54.0	
321.0	CARBONDALE		UNDERCLAY	2.0	56.9	
319.0	CARBONDALE		SANDY SHALE	11.0	58.9	
308.0	CARBONDALE		GRAY SHALE	29.1	69.9	
278.9	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	99.0	
274.9	CARBONDALE	SPRINGFIELD	COAL	4.8	103.0	
270.1	CARBONDALE		UNDERCLAY	1.0	107.8	

MAPID: 05902991000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246332 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.646484 **DATE COLLECTED:** 9 / 5 / 1964
SURFACE ELEVATION (FT.): 352.1 **LOGGED (FT.):** 79.3 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 1101 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
352.1	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
342.1	PLEISTOCENE		CLAY	53.0	10.0	
289.1	CARBONDALE		GRAY SHALE	5.0	63.0	
284.1	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	68.0	
279.6	CARBONDALE	SPRINGFIELD	COAL	4.8	72.5	
274.8	CARBONDALE		UNDERCLAY	2.0	77.3	

MAPID: 05903005000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.255456 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.644535 **DATE COLLECTED:** 10 / 2 / 1964
SURFACE ELEVATION (FT.): 509.5 **LOGGED (FT.):** 171.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 1118 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
509.5	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
498.5	CARBONDALE		SANDSTONE	4.0	11.0	
494.5	CARBONDALE		GRAY SHALE	23.5	15.0	
471.0	CARBONDALE	ANNA	DARK SHALE	4.0	38.5	
467.0	CARBONDALE	HERRIN	COAL	3.0	42.5	
464.0	CARBONDALE		UNDERCLAY	4.5	45.5	
459.5	CARBONDALE		SANDSTONE	47.0	50.0	
412.5	CARBONDALE		SANDY SHALE	10.0	97.0	
402.5	CARBONDALE		GRAY SHALE	11.5	107.0	
391.0	CARBONDALE	BRIAR HILL	COAL	3.0	118.5	
388.0	CARBONDALE		UNDERCLAY	3.5	121.5	
384.5	CARBONDALE		SANDY SHALE	9.0	125.0	
375.5	CARBONDALE		GRAY SHALE & SANDSTONE	18.0	134.0	
357.5	CARBONDALE		GRAY SHALE	7.5	152.0	
350.0	CARBONDALE		SANDSTONE	0.5	159.5	
349.5	CARBONDALE	TURNER MINE	BLACK SHALE	6.5	160.0	
343.0	CARBONDALE	SPRINGFIELD	COAL	4.5	166.5	
338.5	CARBONDALE		UNDERCLAY	0.5	171.0	

MAPID: 05903008000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.253173 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646415 **DATE COLLECTED:** 10 / 7 / 1964

SURFACE ELEVATION (FT.): 462.5 **LOGGED (FT.):** 80.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1125 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
462.5	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
445.5	CARBONDALE	ANVIL ROCK	SANDSTONE	18.5	17.0	
427.0	CARBONDALE	ANVIL ROCK	SHALE	11.5	35.5	
415.5	CARBONDALE	ANVIL ROCK	SANDSTONE	18.0	47.0	
397.5	CARBONDALE		GRAY SHALE	6.0	65.0	
391.5	CARBONDALE	BRERETON	LIMESTONE	4.5	71.0	
387.0	CARBONDALE		GRAY SHALE	0.5	75.5	
386.5	CARBONDALE	HERRIN	COAL	2.8	76.0	
383.7	CARBONDALE	HERRIN	SHALE	0.1	78.8	
383.6	CARBONDALE	HERRIN	COAL	0.6	78.9	
383.0	CARBONDALE		UNDERCLAY	1.0	79.5	

MAPID: 05903009000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW SE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.257736 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646368 **DATE COLLECTED:** 10 / 14 / 1964

SURFACE ELEVATION (FT.): 461.0 **LOGGED (FT.):** 237.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1127 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
461.0	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
444.0	CARBONDALE	ANVIL ROCK	SANDSTONE	89.0	17.0	
355.0	CARBONDALE		GRAY SHALE	6.0	106.0	
349.0	CARBONDALE	HERRIN	COAL	3.0	112.0	
346.0	CARBONDALE		UNDERCLAY	3.0	115.0	
343.0	CARBONDALE		SANDSTONE	52.0	118.0	
291.0	CARBONDALE		GRAY SHALE	10.0	170.0	
281.0	CARBONDALE	BRIAR HILL	COAL	0.7	180.0	
280.3	CARBONDALE	BRIAR HILL	GRAY SHALE	1.7	180.7	
278.7	CARBONDALE	BRIAR HILL	COAL	3.0	182.3	
275.7	CARBONDALE		SHALE	10.0	185.3	
265.7	CARBONDALE		SANDY SHALE	31.7	195.3	
234.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	227.0	
230.0	CARBONDALE	SPRINGFIELD	COAL	5.2	231.0	
224.8	CARBONDALE		UNDERCLAY	1.0	236.2	

MAPID: 05903010000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SW SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.260019 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.644477 **DATE COLLECTED:** 10 / 14 / 1964

SURFACE ELEVATION (FT.): 442.2 **LOGGED (FT.):** 174.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1129 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
442.2	PLEISTOCENE		UNCONSOLIDATED	10.5	0.0	
431.7	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	10.5	
401.7	CARBONDALE		GRAY SHALE	3.0	40.5	
398.7	CARBONDALE	BRERETON	LIMESTONE	2.0	43.5	
396.7	CARBONDALE	ANNA	BLACK SHALE	1.0	45.5	
395.7	CARBONDALE	HERRIN	COAL	3.3	46.5	
392.4	CARBONDALE	HERRIN	BLUE BAND	0.3	49.8	
392.2	CARBONDALE	HERRIN	COAL	0.5	50.0	
391.7	CARBONDALE		UNDERCLAY	4.0	50.5	
387.7	CARBONDALE		SANDSTONE	46.5	54.5	
341.2	CARBONDALE		GRAY SHALE	21.0	101.0	
320.2	CARBONDALE	BRIAR HILL	COAL	3.0	122.0	
317.2	CARBONDALE		UNDERCLAY	1.0	125.0	
316.2	CARBONDALE		GRAY SHALE	38.0	126.0	
278.2	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	164.0	
273.7	CARBONDALE	SPRINGFIELD	COAL	5.2	168.5	
268.5	CARBONDALE		UNDERCLAY	1.0	173.7	

MAPID: 05903014000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.257736 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.648229 **DATE COLLECTED:** 10 / 22 / 1964

SURFACE ELEVATION (FT.): 395.2 **LOGGED (FT.):** 140.1 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1133 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.2	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
390.2	CARBONDALE	ANVIL ROCK	SANDSTONE	25.0	5.0	
365.2	CARBONDALE	ANVIL ROCK	SANDSTONE	30.0	30.0	
335.2	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	6.0	60.0	
329.2	CARBONDALE	BRERETON	LIMESTONE	1.0	66.0	
328.2	CARBONDALE	ANNA	BLACK SHALE	1.0	67.0	
327.2	CARBONDALE	HERRIN	COAL	4.0	68.0	
323.2	CARBONDALE		UNDERCLAY	2.0	72.0	
321.2	CARBONDALE		SHALE	3.0	74.0	
318.2	CARBONDALE		SANDSTONE	50.0	77.0	
268.2	CARBONDALE		GRAY SHALE	10.0	127.0	
258.2	CARBONDALE	BRIAR HILL	COAL	3.1	137.0	

MAPID: 05903015000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.255454 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650103 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 370.7 **LOGGED (FT.):** 446.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1134 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.7	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
365.7	MODESTO		SANDSTONE	7.0	5.0	
358.7	MODESTO		SANDSTONE	30.5	12.0	
328.2	CARBONDALE	DANVILLE	COAL	1.5	42.5	
326.7	CARBONDALE		UNDERCLAY	2.5	44.0	
324.2	CARBONDALE		SHALE	19.5	46.5	
304.7	CARBONDALE	ANVIL ROCK	SANDSTONE	24.5	66.0	
280.2	CARBONDALE		GRAY SHALE	4.0	90.5	
276.2	CARBONDALE	BRERETON	LIMESTONE	4.5	94.5	
271.7	CARBONDALE	ANNA	BLACK SHALE	1.0	99.0	
270.7	CARBONDALE	HERRIN	COAL	3.5	100.0	
267.2	CARBONDALE		UNDERCLAY	1.5	103.5	
265.7	CARBONDALE		SHALE	4.0	105.0	
261.7	CARBONDALE		SANDSTONE	47.5	109.0	
214.2	CARBONDALE		GRAY SHALE	5.5	156.5	
208.7	CARBONDALE	BRIAR HILL	COAL	3.0	162.0	
205.7	CARBONDALE		UNDERCLAY	1.0	165.0	
204.7	CARBONDALE		SANDY SHALE	30.0	166.0	
174.7	CARBONDALE		GRAY SHALE	13.5	196.0	
161.2	CARBONDALE	ST. DAVID	LIMESTONE	1.0	209.5	
160.2	CARBONDALE	TURNER MINE	BLACK SHALE	5.0	210.5	
155.2	CARBONDALE	SPRINGFIELD	COAL	5.0	215.5	
150.2	CARBONDALE		UNDERCLAY	4.0	220.5	
146.2	CARBONDALE		GRAY SHALE	18.5	224.5	
127.7	CARBONDALE		GRAY SHALE	26.0	243.0	
101.7	CARBONDALE		GRAY SHALE & SANDSTONE	6.5	269.0	
95.2	CARBONDALE		BLACK SHALE	2.0	275.5	
93.2	CARBONDALE	HANOVER	LIMESTONE	1.5	277.5	
91.7	CARBONDALE	EXCELLO	BLACK SHALE	2.5	279.0	
89.2	CARBONDALE	HOUCHIN CREEK	COAL	1.5	281.5	
87.7	CARBONDALE		SANDY SHALE	22.0	283.0	
65.7	CARBONDALE		GRAY SHALE	12.5	305.0	
53.2	CARBONDALE	SURVANT	COAL	2.5	317.5	
50.7	CARBONDALE		GRAY SHALE	10.0	320.0	
40.7	CARBONDALE		GRAY SHALE & SANDSTONE	9.0	330.0	
31.7	CARBONDALE		SANDSTONE	16.5	339.0	
15.2	CARBONDALE		GRAY SHALE	14.5	355.5	
0.7	CARBONDALE	MECCA QUARRY	DARK SHALE	5.0	370.0	

-4.3	CARBONDALE	COLCHESTER	COAL	0.5	375.0
-4.8	CARBONDALE	PALZO	SHALY SANDSTONE	12.5	375.5
-17.3	CARBONDALE	PALZO	SANDSTONE	17.0	388.0
-34.3	CARBONDALE		SANDY SHALE	18.3	405.0
-52.6	CARBONDALE	DEKOVEN	COAL	3.3	423.3
-55.8	CARBONDALE		GRAY SHALE	2.0	426.5
-57.8	CARBONDALE		SANDSTONE	1.5	428.5
-59.3	CARBONDALE		SANDY SHALE	4.5	430.0
-63.8	CARBONDALE		GRAY SHALE	5.5	434.5
-69.3	CARBONDALE		BLACK SHALE	2.0	440.0
-71.3	CARBONDALE	DAVIS	COAL	3.7	442.0
-75.0	CARBONDALE		UNDERCLAY	0.5	445.7

MAPID: 05903016000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.257735 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.650089 **DATE COLLECTED:** 11 / 11 / 1964

SURFACE ELEVATION (FT.): 364.0 **LOGGED (FT.):** 108.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1135 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
364.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
360.0	PLEISTOCENE		SAND	6.0	4.0	
354.0	MODESTO		SANDSTONE	7.0	10.0	
347.0	MODESTO		GRAY SHALE	2.0	17.0	
345.0	MODESTO		SANDSTONE	5.0	19.0	
340.0	MODESTO		GRAY SHALE	1.0	24.0	
339.0			SANDSTONE	41.5	25.0	
297.5	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	66.5	
296.5	CARBONDALE	ANVIL ROCK	SHALY SANDSTONE	7.5	67.5	
289.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.0	75.0	
269.0	CARBONDALE		GRAY SHALE	5.5	95.0	
263.5	CARBONDALE	BRERETON	LIMESTONE	2.5	100.5	
261.0	CARBONDALE	ANNA	BLACK SHALE	1.0	103.0	
260.0	CARBONDALE	HERRIN	COAL	3.5	104.0	
256.5	CARBONDALE		UNDERCLAY	0.5	107.5	

MAPID: 05903018000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** NE SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250892 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.646437 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 385.6 **LOGGED (FT.):** 93.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1137 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
385.6	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
382.6	CARBONDALE		SANDSTONE	19.0	3.0	
363.6	CARBONDALE		SANDY SHALE	5.0	22.0	
358.6	CARBONDALE		GRAY SHALE	13.0	27.0	
345.6	CARBONDALE	BRIAR HILL	COAL	3.0	40.0	
342.6	CARBONDALE		UNDERCLAY	1.5	43.0	
341.1	CARBONDALE		SHALE	3.0	44.5	
338.1	CARBONDALE		SANDY SHALE	38.0	47.5	
300.1	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	85.5	
297.1	CARBONDALE	SPRINGFIELD	COAL	4.8	88.5	
292.3	CARBONDALE		UNDERCLAY	0.5	93.3	

MAPID: 05903020000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SE SW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250896 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.644593 **DATE COLLECTED:** 12 / 1 / 1964

SURFACE ELEVATION (FT.): 435.8 **LOGGED (FT.):** 69.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1139 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
435.8	PLEISTOCENE		UNCONSOLIDATED	16.5	0.0	
419.3	PLEISTOCENE		SANDSTONE	12.5	16.5	
406.8	PLEISTOCENE		SANDSTONE	14.0	29.0	
392.8	PLEISTOCENE		GRAY SHALE	12.0	43.0	
380.8	CARBONDALE	BRIAR HILL	COAL	2.8	55.0	
378.0	CARBONDALE		UNDERCLAY	1.7	57.8	
376.3	CARBONDALE		SANDY SHALE	10.0	59.5	

MAPID: 05903416000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 18 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.262871 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.643972 **DATE COLLECTED:** 11 / 24 / 1969
SURFACE ELEVATION (FT.): 451.0 **LOGGED (FT.):** 120.0 **LOG TYPE:** Drillers Log
SOURCE: Q RICHEY, DRILLER **WELL TYPE:** Water Well
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
451.0			UNCONSOLIDATED	11.0	0.0	
440.0			ROCK	37.0	11.0	
403.0			COAL	3.0	48.0	
400.0			ROCK	69.0	51.0	

MAPID: 05900025300M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE NE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.245766 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.643278 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES- PETER HINE MINE **WELL TYPE:** Underground mine
COMMENT: # 5 MINE ABD '21

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			COAL	-		"PROBABLY #5"

MAPID: 05900064002M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.25605 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.641289 **DATE COLLECTED:** 7 / 22 / 1938
SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 4.3 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-MCABE, CEDAR HILL C C **WELL TYPE:** Underground mine
COMMENT: SAMPLE B.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			ROCK	-		
-			COAL	4.3		

MAPID: 05900064001M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.257192 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.641274 **DATE COLLECTED:** 7 / 22 / 1938
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 5.2 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-MCABE,BOLEY-CEDAR HILL C C **WELL TYPE:** Underground mine
COMMENT: SAMPLE #1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	0.3		
-			COAL	4.9		

MAPID: 05900064000M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.255485 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.640836 **DATE COLLECTED:** 0 / 0 / 1942
SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-CEDAR HILL C C **WELL TYPE:** Underground mine
COMMENT: BECAME PART OF PEABODY EAGLE STRIP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.0			UNKNOWN	0.0	0.0	

MAPID: 05900229500M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.257791 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.638956 **DATE COLLECTED:** 0 / 0 / 1934
SURFACE ELEVATION (FT.): 380.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-FINNIE C C **WELL TYPE:** Underground mine
COMMENT:

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

MAPID: 05902212000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.253254 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.633471 **DATE COLLECTED:** 11 / 29 / 1957

SURFACE ELEVATION (FT.): 422.0 **LOGGED (FT.):** 127.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 49 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
422.0	PLEISTOCENE		CLAY	9.3	0.0	BROWN
412.7			SANDSTONE	8.7	9.3	PROBABLY BELOW DAVIS COAL -CGT
404.0			GRAY SANDSTONE	31.2	18.0	
372.8			SHALE	3.3	49.2	
369.5			GRAY SANDSTONE	42.0	52.5	
327.5			SHALE	5.5	94.5	
322.0			SHALE	4.3	100.0	
317.7			SHALE	0.3	104.3	
317.4			SHALE	3.4	104.6	
314.0			GRAY SANDSTONE	19.0	108.0	

MAPID: 05902607000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246351 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.635402 **DATE COLLECTED:** 11 / 27 / 1961

SURFACE ELEVATION (FT.): 355.1 **LOGGED (FT.):** 96.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. **WELL TYPE:** Coal Test

COMMENT: NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.1	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
349.1	PLEISTOCENE		CLAY	60.0	6.0	
289.1	PLEISTOCENE		SAND	7.0	66.0	
282.1	TRADEWATER		SANDSTONE	9.0	73.0	
273.1	TRADEWATER		SANDY SHALE	14.0	82.0	

MAPID: 05902937000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** 40' N line, 1050' E line of NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.2534 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.643524 **DATE COLLECTED:** 4 / 2 / 1964

SURFACE ELEVATION (FT.): 488.1 **LOGGED (FT.):** 117.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 981 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
488.1	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
471.1	CARBONDALE		SANDSTONE	33.0	17.0	
438.1	CARBONDALE		GRAY SHALE	14.5	50.0	
423.6	CARBONDALE	BRIAR HILL	COAL	3.0	64.5	
420.6	CARBONDALE		UNDERCLAY	0.5	67.5	
420.1	CARBONDALE		SHALY SANDSTONE	3.0	68.0	
417.1	CARBONDALE		GRAY SHALE	37.0	71.0	
380.1	CARBONDALE		FOSSILIFEROUS SHALE	0.5	108.0	
379.6	CARBONDALE	ST. DAVID	LIMESTONE	1.0	108.5	
378.6	CARBONDALE	TURNER MINE	FOSSILIFEROUS BLACK SHALE	0.3	109.5	
378.3	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	109.8	
375.1	CARBONDALE	SPRINGFIELD	MINE OPENING	4.3	113.0	OPENING

MAPID: 05902938000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.2509 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642746 **DATE COLLECTED:** 4 / 14 / 1964

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 336.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 982 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
354.0	CARBONDALE		SANDSTONE	26.0	11.0	
328.0	CARBONDALE		GRAY SHALE	11.5	37.0	
316.5	CARBONDALE	BRIAR HILL	COAL	3.0	48.5	
313.5	CARBONDALE		SHALY SANDSTONE	3.0	51.5	
310.5	CARBONDALE		GRAY SHALE	38.0	54.5	
272.5	CARBONDALE	ST. DAVID	LIMESTONE	1.2	92.5	
271.3	CARBONDALE	TURNER MINE	FOSSILIFEROUS BLACK SHALE	0.3	93.7	
271.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	94.0	
268.0	CARBONDALE	SPRINGFIELD	COAL	4.5	97.0	
263.5	CARBONDALE		SHALE	13.0	101.5	
250.5	CARBONDALE		GRAY SHALE	39.0	114.5	
211.5	CARBONDALE		BLACK SHALE	0.8	153.5	
210.7	CARBONDALE	HANOVER	LIMESTONE	2.5	154.3	
208.2	CARBONDALE	EXCELLO	BLACK SHALE	2.3	156.8	
206.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	159.0	
204.5	CARBONDALE		SHALE	0.5	160.5	
204.0	CARBONDALE		SANDY SHALE	4.0	161.0	FOSSILIFEROUS
200.0	CARBONDALE		SANDY SHALE	7.5	165.0	
192.5	CARBONDALE		SHALE	21.5	172.5	
171.0	CARBONDALE	SURVANT	COAL	2.0	194.0	
169.0	CARBONDALE		GRAY SHALE	15.0	196.0	
154.0	CARBONDALE		SANDSTONE/LIMESTONE	17.0	211.0	
137.0	CARBONDALE		SANDSTONE	9.0	228.0	
128.0	CARBONDALE		GRAY SHALE	7.5	237.0	
120.5	CARBONDALE	MECCA QUARRY	DARK SHALE	4.0	244.5	
116.5	CARBONDALE	COLCHESTER	COAL	0.3	248.5	
116.2	CARBONDALE	PALZO	SANDSTONE	54.3	248.8	
62.0	CARBONDALE		SHALE	10.5	303.0	
51.5	CARBONDALE	DEKOVEN	COAL	2.8	313.5	
48.7	CARBONDALE		SHALE	0.5	316.3	
48.2	CARBONDALE		SANDSTONE	7.0	316.8	
41.2	CARBONDALE		GRAY SHALE	6.3	323.8	
35.0	CARBONDALE		BLACK SHALE	2.0	330.0	
33.0	CARBONDALE	DAVIS	COAL	3.6	332.0	
29.4	CARBONDALE		UNDERCLAY	1.0	335.6	

MAPID: 05902938000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.2509 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.642746 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 462.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: STONEFORT COAL CORP 982 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
303.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	159.0	
268.0	CARBONDALE	SURVANT	COAL	2.0	194.0	
213.5	CARBONDALE	COLCHESTER	COAL	0.2	248.5	
148.5	CARBONDALE	DEKOVEN	COAL	2.6	313.5	
148.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	313.5	
130.0	CARBONDALE	DAVIS	COAL	3.5	332.0	31% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05903021000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250945 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.635348 **DATE COLLECTED:** 2 / 23 / 1962

SURFACE ELEVATION (FT.): 430.6 **LOGGED (FT.):** 73.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 947 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
430.6	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
425.6	CARBONDALE	PALZO	SANDSTONE	10.0	5.0	BROWN
415.6	CARBONDALE		SANDSTONE	30.0	15.0	GRAY
385.6	CARBONDALE		GRAY SHALE	2.5	45.0	
383.1	CARBONDALE	DEKOVEN	COAL	3.5	47.5	
379.6	CARBONDALE		UNDERCLAY	1.0	51.0	
378.6	CARBONDALE		SANDY SHALE	5.0	52.0	
373.6	CARBONDALE		GRAY SHALE	9.0	57.0	
364.6	CARBONDALE		BLACK SHALE	2.5	66.0	
362.1	CARBONDALE	DAVIS	COAL	3.5	68.5	
358.6	CARBONDALE		UNDERCLAY	1.0	72.0	

MAPID: 05903022000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.253225 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637167 **DATE COLLECTED:** 2 / 26 / 1962

SURFACE ELEVATION (FT.): 428.5 **LOGGED (FT.):** 82.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 948 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
428.5	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
420.5	CARBONDALE	PALZO	SANDSTONE	15.0	8.0	BROWN
405.5	CARBONDALE	PALZO	SANDSTONE	30.5	23.0	
375.0	CARBONDALE		GRAY SHALE	1.5	53.5	
373.5	CARBONDALE	DEKOVEN	COAL	3.8	55.0	
369.7	CARBONDALE		UNDERCLAY	2.0	58.8	
367.7	CARBONDALE		SANDY SHALE	6.2	60.8	
361.5	CARBONDALE		GRAY SHALE	9.0	67.0	
352.5	CARBONDALE		BLACK SHALE	1.5	76.0	
351.0	CARBONDALE	DAVIS	COAL	3.5	77.5	
347.5	CARBONDALE		UNDERCLAY	1.0	81.0	

MAPID: 05903024000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.253214 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639017 **DATE COLLECTED:** 3 / 1 / 1962

SURFACE ELEVATION (FT.): 381.5 **LOGGED (FT.):** 99.4 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 950 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
381.5	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
363.5	CARBONDALE		SANDSTONE	3.0	18.0	
360.5	CARBONDALE		GRAY SHALE	15.0	21.0	
345.5	CARBONDALE		SANDY SHALE	10.0	36.0	
335.5	CARBONDALE		GRAY SHALE	10.0	46.0	
325.5	CARBONDALE		SANDY SHALE	19.0	56.0	
306.5	CARBONDALE	DEKOVEN	COAL	3.7	75.0	
302.8	CARBONDALE		UNDERCLAY	1.3	78.7	
301.5	CARBONDALE		SANDY SHALE	5.0	80.0	
296.5	CARBONDALE		GRAY SHALE	9.0	85.0	
287.5	CARBONDALE		BLACK SHALE	2.0	94.0	
285.5	CARBONDALE	DAVIS	COAL	3.4	96.0	

MAPID: 05903025000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250922 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639047 **DATE COLLECTED:** 3 / 5 / 1962

SURFACE ELEVATION (FT.): 383.4 **LOGGED (FT.):** 122.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 951 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
383.4	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
369.4	CARBONDALE		SANDSTONE	16.0	14.0	
353.4	CARBONDALE		GRAY SHALE	7.0	30.0	
346.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	37.0	
343.9	CARBONDALE	COLCHESTER	COAL	0.6	39.5	
343.4	CARBONDALE		UNDERCLAY	2.0	40.0	
341.4	CARBONDALE		SANDY SHALE	18.0	42.0	
323.4	CARBONDALE	PALZO	SHALY SANDSTONE	28.0	60.0	
295.4	CARBONDALE		SANDY SHALE	6.0	88.0	
289.4	CARBONDALE		GRAY SHALE	2.0	94.0	
287.4	CARBONDALE	DEKOVEN	COAL	3.7	96.0	
283.7	CARBONDALE		UNDERCLAY	1.0	99.7	
282.7	CARBONDALE		SANDY SHALE	5.0	100.7	
277.7	CARBONDALE		SANDSTONE	5.0	105.7	
272.7	CARBONDALE		SANDY SHALE	6.0	110.7	
266.7	CARBONDALE		BLACK SHALE	1.3	116.7	
265.4	CARBONDALE	DAVIS	COAL	3.8	118.0	
261.6	CARBONDALE		UNDERCLAY	1.0	121.8	

MAPID: 05903026000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.250933 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637197 **DATE COLLECTED:** 3 / 6 / 1962

SURFACE ELEVATION (FT.): 407.0 **LOGGED (FT.):** 111.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 952 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
407.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
397.0	CARBONDALE		SANDSTONE	8.0	10.0	
389.0	CARBONDALE		SHALE	9.5	18.0	
379.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	27.5	
378.5	CARBONDALE	COLCHESTER	COAL	0.5	28.5	
378.0	CARBONDALE		UNDERCLAY	1.0	29.0	
377.0	CARBONDALE		SHALE	11.0	30.0	
366.0	CARBONDALE	PALZO	SHALY SANDSTONE	20.0	41.0	
346.0	CARBONDALE		SANDY SHALE	18.5	61.0	
327.5	CARBONDALE		GRAY SHALE	6.0	79.5	
321.5	CARBONDALE	DEKOVEN	COAL	3.7	85.5	
317.8	CARBONDALE		UNDERCLAY	1.0	89.2	
316.8	CARBONDALE		SANDY SHALE	4.0	90.2	
312.8	CARBONDALE		SANDSTONE	4.5	94.2	
308.3	CARBONDALE		GRAY SHALE	6.3	98.7	
302.0	CARBONDALE		BLACK SHALE	2.5	105.0	
299.5	CARBONDALE	DAVIS	COAL	3.7	107.5	

MAPID: 05903035000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.25324 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.635318 **DATE COLLECTED:** 4 / 17 / 1964

SURFACE ELEVATION (FT.): 419.4 **LOGGED (FT.):** 56.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 986 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
419.4	PLEISTOCENE		UNCONSOLIDATED	7.5	0.0	
411.9	CARBONDALE	PALZO	SANDSTONE	16.0	7.5	
395.9	CARBONDALE	PALZO	SHALY SANDSTONE	6.0	23.5	
389.9	CARBONDALE	DEKOVEN	COAL	3.3	29.5	
386.6	CARBONDALE		UNDERCLAY	5.3	32.8	
381.4	CARBONDALE		SANDSTONE	5.0	38.0	
376.4	CARBONDALE		GRAY SHALE	9.5	43.0	
366.9	CARBONDALE	DAVIS	COAL	3.2	52.5	
363.7	CARBONDALE		UNDERCLAY	1.0	55.7	

MAPID: 05903040000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248642 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.637225 **DATE COLLECTED:** 6 / 9 / 1964
SURFACE ELEVATION (FT.): 374.7 **LOGGED (FT.):** 69.3 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 991 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
374.7	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	
349.7	CARBONDALE	PALZO	SANDSTONE	10.0	25.0	
339.7	CARBONDALE		GRAY SHALE	10.0	35.0	
329.7	CARBONDALE	DEKOVEN	COAL	2.8	45.0	
326.9	CARBONDALE		UNDERCLAY	1.0	47.8	
325.9	CARBONDALE		GRAY SHALE	13.8	48.8	
312.2	CARBONDALE		BLACK SHALE	2.5	62.5	
309.7	CARBONDALE	DAVIS	COAL	3.3	65.0	
306.4	CARBONDALE		UNDERCLAY	1.0	68.3	

MAPID: 05903046000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE SE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246347 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.637255 **DATE COLLECTED:** 6 / 10 / 1964
SURFACE ELEVATION (FT.): 364.5 **LOGGED (FT.):** 64.9 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 997 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
364.5	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
349.5	PLEISTOCENE		CLAY	25.0	15.0	
324.5	CARBONDALE		GRAY SHALE	17.0	40.0	
307.5	CARBONDALE		BLACK SHALE	2.5	57.0	
305.0	CARBONDALE	DAVIS	COAL	3.4	59.5	
301.6	CARBONDALE		UNDERCLAY	2.0	62.9	

MAPID: 05903060000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246341 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.640957 **DATE COLLECTED:** 6 / 16 / 1964

SURFACE ELEVATION (FT.): 356.1 **LOGGED (FT.):** 147.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1011 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.1	PLEISTOCENE		UNCONSOLIDATED	61.0	0.0	
295.1	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	2.0	61.0	COLCHESTER COAL AT BASE
293.1	CARBONDALE		UNDERCLAY	5.0	63.0	
288.1	CARBONDALE		GRAY SHALE & SANDSTONE	13.0	68.0	
275.1	CARBONDALE	PALZO	SANDSTONE	41.0	81.0	
234.1	CARBONDALE	DEKOVEN	COAL	3.5	122.0	
230.6	CARBONDALE		UNDERCLAY	3.5	125.5	
227.1	CARBONDALE		SANDSTONE	6.0	129.0	
221.1	CARBONDALE		GRAY SHALE	6.6	135.0	
214.6	CARBONDALE		BLACK SHALE	2.0	141.5	
212.6	CARBONDALE	DAVIS	COAL	3.6	143.5	
209.0	CARBONDALE		UNDERCLAY	0.5	147.1	

MAPID: 05903064000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246346 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639104 **DATE COLLECTED:** 6 / 18 / 1964

SURFACE ELEVATION (FT.): 360.4 **LOGGED (FT.):** 108.9 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1015 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.4	PLEISTOCENE		UNCONSOLIDATED	46.5	0.0	
313.9	CARBONDALE	PALZO	SANDSTONE	28.5	46.5	
285.4	CARBONDALE	DEKOVEN	COAL	3.5	75.0	
281.9	CARBONDALE		UNDERCLAY	3.5	78.5	
278.4	CARBONDALE		SANDSTONE	11.0	82.0	
267.4	CARBONDALE		GRAY SHALE	9.5	93.0	
257.9	CARBONDALE		BLACK SHALE	2.0	102.5	
255.9	CARBONDALE	DAVIS	COAL	3.4	104.5	
252.5	CARBONDALE		UNDERCLAY	1.0	107.9	

MAPID: 05903073000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW SE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248634 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639074 **DATE COLLECTED:** 7 / 22 / 1964

SURFACE ELEVATION (FT.): 374.3 **LOGGED (FT.):** 134.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1069 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
374.3	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
359.3	CARBONDALE		SANDSTONE	10.0	15.0	
349.3	CARBONDALE		GRAY SHALE	20.5	25.0	
328.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	45.5	
326.8	CARBONDALE	COLCHESTER	COAL	0.5	47.5	
326.3	CARBONDALE		GRAY SHALE	6.0	48.0	
320.3	CARBONDALE	PALZO	SANDSTONE	51.5	54.0	
268.8	CARBONDALE		GRAY SHALE	2.5	105.5	
266.3	CARBONDALE	DEKOVEN	COAL	3.5	108.0	
262.8	CARBONDALE		UNDERCLAY	1.0	111.5	
261.8	CARBONDALE		SANDSTONE	10.0	112.5	
251.8	CARBONDALE		GRAY SHALE	5.5	122.5	
246.3	CARBONDALE		BLACK SHALE	2.0	128.0	
244.3	CARBONDALE	DAVIS	COAL	3.3	130.0	
241.0	CARBONDALE		UNDERCLAY	1.0	133.3	

MAPID: 05903074000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246337 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642806 **DATE COLLECTED:** 7 / 27 / 1964

SURFACE ELEVATION (FT.): 352.0 **LOGGED (FT.):** 234.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1073 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
352.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
337.0	PLEISTOCENE		CLAY	40.5	15.0	
296.5	PLEISTOCENE		SAND	10.0	55.5	
286.5	CARBONDALE		SANDSTONE	20.0	65.5	
266.5	CARBONDALE		SANDY SHALE	9.0	85.5	
257.5	CARBONDALE	SURVANT	COAL	2.0	94.5	
255.5	CARBONDALE		UNDERCLAY	2.0	96.5	
253.5	CARBONDALE		SANDSTONE	22.0	98.5	
231.5	CARBONDALE		SANDY SHALE	26.0	120.5	
205.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	146.5	
202.5	CARBONDALE	COLCHESTER	COAL	0.5	149.5	
202.0	CARBONDALE		GRAY SHALE	6.0	150.0	
196.0	CARBONDALE	PALZO	SANDSTONE	50.0	156.0	
146.0	CARBONDALE		SANDY SHALE	3.0	206.0	
143.0	CARBONDALE	DEKOVEN	COAL	3.5	209.0	
139.5	CARBONDALE		UNDERCLAY	1.0	212.5	
138.5	CARBONDALE		SANDSTONE	10.0	213.5	
128.5	CARBONDALE		GRAY SHALE	4.5	223.5	
124.0	CARBONDALE		BLACK SHALE	1.5	228.0	
122.5	CARBONDALE	DAVIS	COAL	3.5	229.5	
119.0	CARBONDALE		UNDERCLAY	1.0	233.0	

MAPID: 05903075000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.248619 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642776 **DATE COLLECTED:** 9 / 3 / 1964

SURFACE ELEVATION (FT.): 379.0 **LOGGED (FT.):** 120.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1089 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
379.0	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0	
342.0	CARBONDALE		GRAY SHALE	37.0	37.0	
305.0	CARBONDALE	EXCELLO	BLACK SHALE	2.0	74.0	
303.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	76.0	
302.5	CARBONDALE		UNDERCLAY	2.0	76.5	
300.5	CARBONDALE		SANDY SHALE	10.0	78.5	
290.5	CARBONDALE		GRAY SHALE	25.5	88.5	
265.0	CARBONDALE	SURVANT	COAL	2.0	114.0	
263.0	CARBONDALE		UNDERCLAY	1.0	116.0	
262.0	CARBONDALE		SHALE	3.0	117.0	

MAPID: 05903076000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.2509 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642746 **DATE COLLECTED:** 9 / 9 / 1964

SURFACE ELEVATION (FT.): 420.6 **LOGGED (FT.):** 47.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1092 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
420.6	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
408.6	CARBONDALE		BROWN SHALE	15.5	12.0	
393.1	CARBONDALE		GRAY SHALE	9.0	27.5	
384.1	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	36.5	
380.1	CARBONDALE	SPRINGFIELD	COAL	4.5	40.5	
375.6	CARBONDALE		UNDERCLAY	2.0	45.0	

MAPID: 05903077000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.2532 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.640866 **DATE COLLECTED:** 9 / 8 / 1964

SURFACE ELEVATION (FT.): 411.7 **LOGGED (FT.):** 63.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1094 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
411.7	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
383.7	CARBONDALE		GRAY SHALE	12.0	28.0	
371.7	CARBONDALE		GRAY SHALE	16.5	40.0	
355.2	CARBONDALE	EXCELLO	BLACK SHALE	4.5	56.5	
350.7	CARBONDALE	HOUCHIN CREEK	COAL	1.7	61.0	
349.0	CARBONDALE		UNDERCLAY	0.5	62.7	

MAPID: 05903080000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW NE

QUADRANGLE: EQUALITY **LONGITUDE:** -88.253185 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642713 **DATE COLLECTED:** 9 / 9 / 1964

SURFACE ELEVATION (FT.): 440.6 **LOGGED (FT.):** 92.9 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1098 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
440.6	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
426.6	CARBONDALE		GRAY SHALE	18.0	14.0	
408.6	CARBONDALE		BLACK SHALE	5.0	32.0	
403.6	CARBONDALE	BRIAR HILL	COAL	3.0	37.0	
400.6	CARBONDALE		GRAY SHALE	42.5	40.0	
358.1	CARBONDALE		SANDSTONE	2.0	82.5	
356.1	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	84.5	
353.6	CARBONDALE	SPRINGFIELD	COAL	4.9	87.0	
348.7	CARBONDALE		UNDERCLAY	1.0	91.9	

MAPID: 05903086000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.255467 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642683 **DATE COLLECTED:** 10 / 8 / 1964

SURFACE ELEVATION (FT.): 514.2 **LOGGED (FT.):** 66.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1120 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
514.2	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
497.2	CARBONDALE		SHALY SANDSTONE	24.0	17.0	
473.2	CARBONDALE		SANDSTONE	8.0	41.0	
465.2	CARBONDALE		SANDY SHALE	6.0	49.0	
459.2	CARBONDALE		GRAY SHALE	8.0	55.0	
451.2	CARBONDALE	BRIAR HILL	COAL	3.0	63.0	
448.2	CARBONDALE		UNDERCLAY	0.5	66.0	

MAPID: 05903398000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE NE SW

QUADRANGLE: EQUALITY **LONGITUDE:** -88.254961 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.635759 **DATE COLLECTED:** 5 / 26 / 1969

SURFACE ELEVATION (FT.): 436.3 **LOGGED (FT.):** 70.0 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY DD-2 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
436.3	PLEISTOCENE		UNCLASSIFIED	10.0	0.0	
426.3	CARBONDALE		SANDSTONE	0.3	10.0	
426.0	CARBONDALE		CLAYSTONE & SILTSTONE	0.5	10.3	
425.5	CARBONDALE		SANDSTONE/SILTSTONE	15.5	10.8	SOME CARB FRAGMENTS
410.0	CARBONDALE		SHALE	0.3	26.3	
409.7	CARBONDALE		SANDSTONE	13.1	26.6	WITH COAL STRINGERS
396.6	CARBONDALE		SHALE	5.6	39.7	DARK
391.0	CARBONDALE	DEKOVEN	COAL	3.3	45.3	
387.8	CARBONDALE		UNDERCLAY	1.6	48.5	
386.2	CARBONDALE		SHALE	0.8	50.1	
385.4	CARBONDALE		SANDSTONE	2.3	50.9	
383.0	CARBONDALE		SILTSTONE	1.2	53.3	
381.9	CARBONDALE		SHALE	3.3	54.4	
378.5	CARBONDALE		SHALE	5.3	57.8	
373.3	CARBONDALE		SHALE	3.0	63.0	
370.3	CARBONDALE	DAVIS	COAL	3.5	66.0	
366.8	CARBONDALE		UNDERCLAY	0.5	69.5	

MAPID: 05903398000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NE NE NE SW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.254961 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.635759 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 436.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**
SOURCE: PEABODY COAL CO. DD-2 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.7	CARBONDALE	DEKOVEN	COAL	3.2	45.3	
390.7	CARBONDALE	LOWER DEKOVEN	COAL	0.0	45.3	
370.0	CARBONDALE	DAVIS	COAL	3.5	66.0	11% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 059274A0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** NW NW SE
QUADRANGLE: EQUALITY **LONGITUDE:** -88.25324 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.635318 **DATE COLLECTED:** 0 / 0 / 1933
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 10.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, ROAD CUT SO. GIBSONIA **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	2.0		
-	SPOON	DEKOVEN	COAL	2.5		W=5(BLOSSOM)
-			ROCK	6.0		

MAPID: 059275B0004F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 19 **QUARTERS/FOOTAGES:** SW SE SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.246941 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.62938 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 0.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WALLACE LEE **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			COAL	0.3	0.0	IN BED OF CREEK

MAPID: 05900047000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232423 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.635445 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 768.0 **LOG TYPE:** Drillers Log

SOURCE: BYRD & SON 15 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		SOIL	20.0	0.0	
-	CARBONDALE		BLUE SHALE	6.0	20.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	26.0	
-	CARBONDALE		SANDSTONE	36.5	26.5	BROKEN WITH UNDERCLAY NOTED
-	CARBONDALE		SANDSTONE	16.0	63.0	
-	CARBONDALE	DEKOVEN	COAL	2.6	79.0	BROKEN WITH SHALE
-	CARBONDALE		UNDERCLAY	1.4	81.6	
-	CARBONDALE		SHALY SANDSTONE	9.0	83.0	
-	CARBONDALE		BLUE SHALE	1.0	92.0	
-	CARBONDALE		SHALY SANDSTONE	2.0	93.0	
-	CARBONDALE		BLUE SHALE	12.0	95.0	
-	CARBONDALE		SHALE	3.0	107.0	
-	CARBONDALE	DAVIS	COAL	0.1	110.0	BONEY
-	CARBONDALE	DAVIS	COAL	3.3	110.1	
-	TRADEWATER		LIMESTONE	11.7	113.3	
-	TRADEWATER		BLUE SHALE	13.0	125.0	
-	TRADEWATER		SHALE	15.0	138.0	HARD BANDS
-	TRADEWATER		SHALE	6.3	153.0	YELLOW BANDS; BLACK
-	TRADEWATER		COAL	0.5	159.3	
-	TRADEWATER		SANDSTONE	10.2	159.8	
-	TRADEWATER		SHALE	6.0	170.0	
-	TRADEWATER		BLUE SHALE	9.0	176.0	
-	TRADEWATER		BLUE LIMESTONE	2.0	185.0	
-	TRADEWATER		SHALE	1.3	187.0	
-	TRADEWATER		COAL	0.9	188.3	
-	TRADEWATER		SHALE	11.8	189.3	
-	TRADEWATER		LIMESTONE	6.0	201.0	
-	TRADEWATER		BLUE SHALE	6.0	207.0	
-	TRADEWATER		LIMESTONE	18.0	213.0	
-	TRADEWATER		BLUE SHALE	3.0	231.0	
-	TRADEWATER		LIMESTONE	10.0	234.0	
-	TRADEWATER		SANDSTONE	6.0	244.0	
-	TRADEWATER		SHALE	13.3	250.0	HARD BANDS
-	TRADEWATER		COAL	0.7	263.3	SHALE NOTED
-	TRADEWATER		SHALE	6.0	264.0	
-	TRADEWATER		SANDSTONE	4.0	270.0	
-	TRADEWATER		CALCAREOUS SHALE	17.0	274.0	
-	TRADEWATER		SANDSTONE	64.7	291.0	
-	TRADEWATER		COAL	1.7	355.7	SHALE NOTED

-	TRADEWATER	SHALE	12.7	357.3	
-	TRADEWATER	DARK SHALE	24.0	370.0	
-	TRADEWATER	BLUE SHALE	13.0	394.0	
-	TRADEWATER	SHALE & SANDSTONE	14.0	407.0	
-	TRADEWATER	SHALY SANDSTONE	5.0	421.0	
-	TRADEWATER	SANDSTONE	9.0	426.0	
-	TRADEWATER	SHALE	7.3	435.0	YELLOW BANDS; BLACK
-	TRADEWATER	COAL	0.2	442.3	
-	TRADEWATER	SHALE	10.5	442.5	
-	TRADEWATER	SANDSTONE	7.0	453.0	
-	TRADEWATER	COAL	1.0	460.0	SHALE NOTED
-	TRADEWATER	BLUE SHALE	9.0	461.0	
-	TRADEWATER	SANDSTONE	64.0	470.0	
-	TRADEWATER	SHALY SANDSTONE	15.0	534.0	
-	TRADEWATER	SHALY SANDSTONE	9.0	549.0	
-	TRADEWATER	SANDSTONE	20.0	558.0	SHALE STREAKS
-	TRADEWATER	GRAY SANDSTONE	19.0	578.0	
-	TRADEWATER	SANDSTONE	46.0	597.0	
-	TRADEWATER	SHALE	17.0	643.0	
-	TRADEWATER	SANDSTONE	4.0	660.0	
-	TRADEWATER	BLUE SHALE	2.0	664.0	
-	TRADEWATER	COAL	0.3	666.0	
-	TRADEWATER	SANDSTONE	2.8	666.3	
-	TRADEWATER	SHALE	6.0	669.0	
-	TRADEWATER	SANDSTONE	20.0	675.0	
-	TRADEWATER	SHALE	34.0	695.0	
-	TRADEWATER	SHALE	9.9	729.0	
-	TRADEWATER	COAL	1.1	738.9	BELL?
-	TRADEWATER	COAL	0.5	740.0	SHALE NOTED
-	TRADEWATER	BLUE SHALE	9.5	740.5	
-	TRADEWATER	SHALE	8.3	750.0	
-	TRADEWATER	COAL	0.7	758.3	
-	TRADEWATER	BLUE SHALE	3.1	758.9	
-	TRADEWATER	SANDSTONE	6.0	762.0	

MAPID: 05900047000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232423 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 37.635445 **DATE COLLECTED:** 0 / 0 / 1912
SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Other Core Study
SOURCE: TAYLOR & BYRD, 15 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
324.0	CARBONDALE	COLCHESTER	COAL	0.5	26.0	
271.0	CARBONDALE	DEKOVEN	COAL	2.6	79.0	
271.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	79.0	
240.0	CARBONDALE	DAVIS	COAL	3.3	110.0	
190.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.5	160.0	10% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
165.0	TRADEWATER	STONEFORT	LIMESTONE	2.0	185.0	

MAPID: 05902213000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 700' E line of SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229094 **GEOLOGIST:** C.KOROSE
CONFIDENTIAL: N **LATITUDE:** 37.632075 **DATE COLLECTED:** 12 / 3 / 1957
SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 128.5 **LOG TYPE:** Drillers Log
SOURCE: BRANSFORD MINING CO. 50 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
490.0	PLEISTOCENE		CLAY	18.0	0.0	BROWN
472.0	CARBONDALE		SHALE	7.0	18.0	
465.0	CARBONDALE		SHALE	10.5	25.0	
454.5	CARBONDALE		SHALE	2.2	35.5	
452.3	CARBONDALE	MECCA QUARRY	SHALE	0.9	37.7	
451.4	CARBONDALE	COLCHESTER	COAL	0.4	38.6	
451.0	CARBONDALE		SHALE	9.0	39.0	
442.0	CARBONDALE		BROWN SANDSTONE	1.2	48.0	
440.8	CARBONDALE		SANDSTONE	24.8	49.2	
416.0	CARBONDALE		SHALE	6.3	74.0	
409.7	CARBONDALE		GRAY SANDSTONE	2.8	80.3	
407.0	CARBONDALE		SHALE	11.5	83.0	
395.5	CARBONDALE		SHALE	0.7	94.5	
394.8	CARBONDALE	DEKOVEN	COAL	1.8	95.2	
393.0	CARBONDALE		SHALE	2.5	97.0	
390.5	CARBONDALE		GRAY SANDSTONE	15.5	99.5	
375.0	CARBONDALE		SHALE	6.7	115.0	
368.3	CARBONDALE		SHALE	2.3	121.7	
366.1	CARBONDALE	DAVIS	COAL	3.6	123.9	
362.5	TRADEWATER		UNDERCLAY	1.0	127.5	

MAPID: 05902213000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 1100' S line, 700' E line of SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.229094 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.632075 **DATE COLLECTED:** 12 / 3 / 1957

SURFACE ELEVATION (FT.): 490.0 **LOGGED (FT.):** 128.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
490.0			UNCONSOLIDATED	18.0	0.0	
472.0			ROCK	20.6	18.0	
451.4			COAL	0.4	38.6	
451.0			ROCK	56.2	39.0	
394.8	SPOON	DEKOVEN	COAL	1.8	95.2	
393.0	SPOON		ROCK	26.9	97.0	
366.1	SPOON	DAVIS	COAL	3.6	123.9	
362.5	SPOON		ROCK	1.0	127.5	

MAPID: 05902586000C **VERSION:** 1 **PROJECT:** CUSMAP

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 990' E line of NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23008 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.633635 **DATE COLLECTED:** 9 / 0 / 1961

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 1110.0 **LOG TYPE:** Electric Log

SOURCE: MAYFIELD JACK H **WELL TYPE:** Producer-Oil and Gas

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
252.0	SPOON	DAVIS	UNCLASSIFIED	-	132.0	
-726.0	BASE OF PENN.		UNCLASSIFIED	-	1110.0	

MAPID: 05902586000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** 990' N line, 990' E line of NE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23008 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.633635 **DATE COLLECTED:** 9 / 0 / 1961

SURFACE ELEVATION (FT.): 384.0 **LOGGED (FT.):** 403.0 **LOG TYPE:** Electric Log

SOURCE: JACK MAYFIELD E LOG TOPS BY W.H.SMITH **WELL TYPE:** Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
384.0			ROCK	132.0	0.0	
252.0	SPOON	DAVIS	COAL	-	132.0	L-TOP OF E LOG AT 132'
-			ROCK	78.0		
-	SPOON	WISE RIDGE	COAL	-		L-TOP OF E LOG AT 210'
-			ROCK	193.0		
-			COAL	-		L-TOP OF E LOG AT 403'

MAPID: 05902629000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239405 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.633587 **DATE COLLECTED:** 7 / 25 / 1961

SURFACE ELEVATION (FT.): 380.5 **LOGGED (FT.):** 43.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 683 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
380.5	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
365.5	CARBONDALE		SANDSTONE	10.0	15.0	
355.5	CARBONDALE		SANDY SHALE	8.0	25.0	
347.5	CARBONDALE		GRAY SHALE	4.5	33.0	
343.0	CARBONDALE		BLACK SHALE	2.0	37.5	
341.0	CARBONDALE	DAVIS	COAL	3.5	39.5	

MAPID: 05902638000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234778 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.631763 **DATE COLLECTED:** 8 / 15 / 1961

SURFACE ELEVATION (FT.): 432.5 **LOGGED (FT.):** 75.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 709 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
432.5	PLEISTOCENE		UNCONSOLIDATED	11.5	0.0	
421.0	CARBONDALE	PALZO	SANDSTONE	13.5	11.5	
407.5	CARBONDALE	PALZO	SHALE	20.5	25.0	
387.0	CARBONDALE	DEKOVEN	COAL	3.6	45.5	
383.4	CARBONDALE		UNDERCLAY	2.0	49.1	
381.4	CARBONDALE		SANDSTONE	7.0	51.1	
374.4	CARBONDALE		SHALE	11.4	58.1	
363.0	CARBONDALE		BLACK SHALE	2.0	69.5	
361.0	CARBONDALE	DAVIS	COAL	3.6	71.5	
357.4	CARBONDALE		UNDERCLAY	0.5	75.1	

MAPID: 05902641000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241724 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.633576 **DATE COLLECTED:** 8 / 18 / 1961

SURFACE ELEVATION (FT.): 395.5 **LOGGED (FT.):** 45.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 712 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.5	PLEISTOCENE		SOIL	7.0	0.0	
388.5	CARBONDALE		SANDSTONE	8.5	7.0	
380.0	CARBONDALE	DEKOVEN	COAL	1.0	15.5	
379.0	CARBONDALE	DEKOVEN	COAL	1.7	16.5	
377.3	CARBONDALE		UNDERCLAY	2.0	18.2	
375.3	CARBONDALE		SANDY SHALE	5.3	20.2	
370.0	CARBONDALE		SANDSTONE	4.0	25.5	
366.0	CARBONDALE		SANDY SHALE	8.5	29.5	
357.5	CARBONDALE		GRAY SHALE	3.0	38.0	
354.5	CARBONDALE		BLACK SHALE	1.5	41.0	
353.0	CARBONDALE	DAVIS	COAL	3.2	42.5	

MAPID: 05902663000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239394 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.635431 **DATE COLLECTED:** 11 / 21 / 1961

SURFACE ELEVATION (FT.): 344.5 **LOGGED (FT.):** 62.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 878 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.5	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
338.5	CARBONDALE	PALZO	SANDSTONE	14.0	6.0	
324.5	CARBONDALE	PALZO	SHALY SANDSTONE	5.0	20.0	
319.5	CARBONDALE		SHALE	5.0	25.0	
314.5	CARBONDALE	DEKOVEN	COAL	3.0	30.0	
311.5	CARBONDALE		UNDERCLAY	2.0	33.0	
309.5	CARBONDALE		SHALE	15.0	35.0	
294.5	CARBONDALE		GRAY SHALE	5.5	50.0	
289.0	CARBONDALE		BLACK SHALE	2.0	55.5	
287.0	CARBONDALE	DAVIS	COAL	3.5	57.5	
283.5	TRADEWATER		UNDERCLAY	1.0	61.0	

MAPID: 05902849000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234797 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.629922 **DATE COLLECTED:** 6 / 16 / 1961

SURFACE ELEVATION (FT.): 448.7 **LOGGED (FT.):** 40.1 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 666 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
448.7	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
439.7	CARBONDALE	PALZO	SANDSTONE	25.0	9.0	
414.7	CARBONDALE		GRAY SHALE	2.0	34.0	
412.7	CARBONDALE	DEKOVEN	COAL	3.1	36.0	
409.6	CARBONDALE		UNDERCLAY	1.0	39.1	

MAPID: 05902865000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.237086 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.633594 **DATE COLLECTED:** 8 / 8 / 1961
SURFACE ELEVATION (FT.): 399.6 **LOGGED (FT.):** 28.0 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 702 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.6	PLEISTOCENE		UNCONSOLIDATED	8.5	0.0	
391.1	CARBONDALE	PALZO	SANDSTONE	4.0	8.5	
387.1	CARBONDALE		SANDY SHALE	12.0	12.5	
375.1	CARBONDALE	DEKOVEN	COAL	3.5	24.5	

MAPID: 05902868000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.237097 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.631753 **DATE COLLECTED:** 8 / 10 / 1961
SURFACE ELEVATION (FT.): 429.4 **LOGGED (FT.):** 30.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 706 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
429.4	PLEISTOCENE		UNCONSOLIDATED	8.5	0.0	
420.9	CARBONDALE	PALZO	SANDSTONE	11.5	8.5	
409.4	CARBONDALE		SANDY SHALE	7.5	20.0	
401.9	CARBONDALE	DEKOVEN	COAL	3.0	27.5	

MAPID: 05903092000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232463 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.631773 **DATE COLLECTED:** 3 / 27 / 1962

SURFACE ELEVATION (FT.): 446.6 **LOGGED (FT.):** 133.2 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 957 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
446.6	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
432.6	CARBONDALE		SANDSTONE	10.0	14.0	
422.6	CARBONDALE		SHALE	22.0	24.0	
400.6	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.0	46.0	COLCHESTER COAL AT BASE
399.6	CARBONDALE		UNDERCLAY	4.0	47.0	
395.6	CARBONDALE	PALZO	SANDSTONE	44.0	51.0	
351.6	CARBONDALE		GRAY SHALE	2.0	95.0	
349.6	CARBONDALE	DEKOVEN	COAL	3.0	97.0	
346.6	CARBONDALE		UNDERCLAY	1.0	100.0	
345.6	CARBONDALE		SHALY SANDSTONE	16.0	101.0	
329.6	CARBONDALE		GRAY SHALE	11.0	117.0	
318.6	CARBONDALE		BLACK SHALE	1.0	128.0	
317.6	CARBONDALE	DAVIS	COAL	3.2	129.0	
314.4	TRADEWATER		UNDERCLAY	1.0	132.2	

MAPID: 05903093000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.2301 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.635452 **DATE COLLECTED:** 3 / 29 / 1962
SURFACE ELEVATION (FT.): 366.3 **LOGGED (FT.):** 109.3 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 958 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
366.3	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
356.3	PLEISTOCENE		CLAY	17.0	10.0	
339.3	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.0	27.0	COLCHESTER COAL AT BOTTOM
338.3	CARBONDALE		UNDERCLAY	4.0	28.0	
334.3	CARBONDALE	PALZO	SANDSTONE	40.0	32.0	
294.3	CARBONDALE		GRAY SHALE	3.0	72.0	
291.3	CARBONDALE	DEKOVEN	COAL	3.2	75.0	
288.1	CARBONDALE		UNDERCLAY	1.0	78.2	
287.1	CARBONDALE		SANDSTONE	15.8	79.2	
271.3	CARBONDALE		GRAY SHALE	8.0	95.0	
263.3	CARBONDALE		BLACK SHALE	2.0	103.0	
261.3	CARBONDALE	DAVIS	COAL	3.3	105.0	
258.0	TRADEWATER		UNDERCLAY	1.0	108.3	

MAPID: 05903094000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227803 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.633626 **DATE COLLECTED:** 4 / 12 / 1962
SURFACE ELEVATION (FT.): 360.2 **LOGGED (FT.):** 115.0 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 962 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
360.2	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
350.2	CARBONDALE		SANDY SHALE	10.0	10.0	
340.2	CARBONDALE		GRAY SHALE	11.0	20.0	
329.2	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.5	31.0	COLCHESTER AT BASE
327.7	CARBONDALE		UNDERCLAY	4.0	32.5	
323.7	CARBONDALE	PALZO	SANDSTONE	44.5	36.5	
279.2	CARBONDALE		GRAY SHALE	13.0	81.0	
266.2	CARBONDALE	DEKOVEN	COAL	3.5	94.0	
262.7	CARBONDALE		UNDERCLAY	1.0	97.5	
261.7	CARBONDALE		SANDY SHALE	11.5	98.5	
250.2	CARBONDALE		BLACK SHALE	0.5	110.0	
249.7	CARBONDALE	DAVIS	COAL	3.5	110.5	
246.2	TRADEWATER		UNDERCLAY	1.0	114.0	

MAPID: 05903095000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234749 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.63544 **DATE COLLECTED:** 4 / 16 / 1962

SURFACE ELEVATION (FT.): 366.1 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 963 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
366.1	PLEISTOCENE		UNCONSOLIDATED	2.0	0.0	
364.1	CARBONDALE		SANDSTONE	8.0	2.0	
356.1	CARBONDALE		GRAY SHALE	18.5	10.0	
337.6	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.5	28.5	COLCHESTER AT BASE
336.1	CARBONDALE		UNDERCLAY	5.0	30.0	
331.1	CARBONDALE	PALZO	SANDSTONE	44.5	35.0	
286.6	CARBONDALE		GRAY SHALE	2.0	79.5	
284.6	CARBONDALE	DEKOVEN	COAL	3.1	81.5	
281.5	CARBONDALE		UNDERCLAY	1.4	84.6	
280.1	CARBONDALE		SANDY SHALE	19.5	86.0	
260.6	CARBONDALE		BLACK SHALE	2.0	105.5	
258.6	CARBONDALE	DAVIS	COAL	3.5	107.5	
255.1	TRADEWATER		UNDERCLAY	1.0	111.0	

MAPID: 05903096000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234763 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.633602 **DATE COLLECTED:** 4 / 17 / 1962

SURFACE ELEVATION (FT.): 445.7 **LOGGED (FT.):** 130.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 964 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
445.7	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
427.7	CARBONDALE		SANDSTONE	10.0	18.0	
417.7	CARBONDALE		SHALE	22.0	28.0	
395.7	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.5	50.0	COLCHESTER AT BASE
394.2	CARBONDALE		UNDERCLAY	4.0	51.5	
390.2	CARBONDALE	PALZO	SANDSTONE	15.5	55.5	
374.7	CARBONDALE	PALZO	SANDSTONE	25.5	71.0	
349.2	CARBONDALE		GRAY SHALE	5.0	96.5	
344.2	CARBONDALE	DEKOVEN	COAL	4.0	101.5	
340.2	CARBONDALE		UNDERCLAY	1.5	105.5	
338.7	CARBONDALE		SANDY SHALE	17.0	107.0	
321.7	CARBONDALE		BLACK SHALE	2.0	124.0	
319.7	CARBONDALE	DAVIS	COAL	3.5	126.0	
316.2	TRADEWATER		UNDERCLAY	1.0	129.5	

MAPID: 05903097000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227828 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.631794 **DATE COLLECTED:** 4 / 30 / 1962

SURFACE ELEVATION (FT.): 409.7 **LOGGED (FT.):** 138.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 965 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
409.7	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0	
393.7	PLEISTOCENE		CLAY	12.0	16.0	
381.7	PLEISTOCENE		CLAY	24.0	28.0	
357.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.3	52.0	
356.4	CARBONDALE	COLCHESTER	COAL	0.3	53.3	
356.2	CARBONDALE		UNDERCLAY	4.0	53.5	
352.2	CARBONDALE	PALZO	SANDSTONE	33.5	57.5	
318.7	CARBONDALE		SANDY SHALE	9.5	91.0	
309.2	CARBONDALE		SHALE	4.0	100.5	
305.2	CARBONDALE	DEKOVEN	COAL	0.2	104.5	
305.0	CARBONDALE	DEKOVEN	SHALE	0.3	104.7	
304.7	CARBONDALE	DEKOVEN	COAL	2.5	105.0	
302.2	CARBONDALE		UNDERCLAY	1.0	107.5	
301.2	CARBONDALE		SANDY SHALE	24.5	108.5	
276.7	CARBONDALE		BLACK SHALE	2.0	133.0	
274.7	CARBONDALE	DAVIS	COAL	3.8	135.0	

MAPID: 05903098000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227853 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.629964 **DATE COLLECTED:** 4 / 24 / 1962
SURFACE ELEVATION (FT.): 437.2 **LOGGED (FT.):** 139.7 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 966 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
437.2	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
419.2	CARBONDALE		SANDSTONE	10.0	18.0	
409.2	CARBONDALE		SANDY SHALE	20.0	28.0	
389.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.2	48.0	
387.0	CARBONDALE	COLCHESTER	COAL	0.3	50.2	
386.7	CARBONDALE		UNDERCLAY	7.0	50.5	
379.7	CARBONDALE	PALZO	SANDSTONE	38.5	57.5	
341.2	CARBONDALE		GRAY SHALE	10.5	96.0	
330.7	CARBONDALE	DEKOVEN	COAL	3.3	106.5	
327.4	CARBONDALE		UNDERCLAY	1.3	109.8	
326.2	CARBONDALE		SANDY SHALE	21.0	111.0	
305.2	CARBONDALE		BLACK SHALE	2.5	132.0	
302.7	CARBONDALE	DAVIS	COAL	4.2	134.5	
298.5	TRADEWATER		UNDERCLAY	1.0	138.7	

MAPID: 05903099000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.24172 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.635426 **DATE COLLECTED:** 6 / 22 / 1964
SURFACE ELEVATION (FT.): 350.5 **LOGGED (FT.):** 57.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 1024 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.5	PLEISTOCENE		UNCONSOLIDATED	13.5	0.0	
337.0	CARBONDALE		GRAY SHALE	15.5	13.5	
321.5	CARBONDALE	DEKOVEN	COAL	3.5	29.0	
318.0	CARBONDALE		UNDERCLAY	3.5	32.5	
314.5	CARBONDALE		SANDSTONE	7.0	36.0	
307.5	CARBONDALE		SANDY SHALE	8.5	43.0	
299.0	CARBONDALE		BLACK SHALE	1.5	51.5	
297.5	CARBONDALE	DAVIS	COAL	3.5	53.0	
294.0	CARBONDALE		UNDERCLAY	1.0	56.5	

MAPID: 05903128000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW NW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244042 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.635418 **DATE COLLECTED:** 7 / 10 / 1964
SURFACE ELEVATION (FT.): 350.5 **LOGGED (FT.):** 62.9 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 1053 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.5	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0	
316.5	CARBONDALE	DEKOVEN	COAL	3.5	34.0	
313.0	CARBONDALE		UNDERCLAY	4.0	37.5	
309.0	CARBONDALE		GRAY SHALE	2.5	41.5	
306.5	CARBONDALE		SANDSTONE	3.0	44.0	
303.5	CARBONDALE		GRAY SHALE	10.0	47.0	
293.5	CARBONDALE		BLACK SHALE	1.5	57.0	
292.0	CARBONDALE	DAVIS	COAL	3.4	58.5	
288.6	TRADEWATER		UNDERCLAY	1.0	61.9	

MAPID: 05903132000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244038 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.637268 **DATE COLLECTED:** 7 / 13 / 1964
SURFACE ELEVATION (FT.): 361.1 **LOGGED (FT.):** 106.6 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 1057 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.1	PLEISTOCENE		UNCONSOLIDATED	70.0	0.0	
291.1	CARBONDALE		GRAY SHALE	9.0	70.0	
282.1	CARBONDALE	DEKOVEN	COAL	3.3	79.0	
278.8	CARBONDALE		UNDERCLAY	6.2	82.3	
272.6	CARBONDALE		SANDSTONE	5.0	88.5	
267.6	CARBONDALE		GRAY SHALE	7.0	93.5	
260.6	CARBONDALE		BLACK SHALE	1.5	100.5	
259.1	CARBONDALE	DAVIS	COAL	3.6	102.0	
255.5	TRADEWATER		UNDERCLAY	1.0	105.6	

MAPID: 05903142000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244032 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.64097 **DATE COLLECTED:** 7 / 22 / 1964

SURFACE ELEVATION (FT.): 354.5 **LOGGED (FT.):** 161.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1067 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.5	PLEISTOCENE		UNCONSOLIDATED	73.0	0.0	
281.5	PLEISTOCENE		SAND	5.0	73.0	
276.5	CARBONDALE		UNDERCLAY	3.5	78.0	MISSING COLCHESTER ERODED
273.0	CARBONDALE		SANDY SHALE	5.5	81.5	
267.5	CARBONDALE	PALZO	SANDSTONE	6.5	87.0	
261.0	CARBONDALE	PALZO	SANDSTONE	39.5	93.5	
221.5	CARBONDALE		SHALE	1.0	133.0	
220.5	CARBONDALE	DEKOVEN	COAL	3.5	134.0	
217.0	CARBONDALE		UNDERCLAY	1.5	137.5	
215.5	CARBONDALE		SANDY SHALE	8.0	139.0	
207.5	CARBONDALE		GRAY SHALE	8.0	147.0	
199.5	CARBONDALE		BLACK SHALE	1.5	155.0	
198.0	CARBONDALE	DAVIS	COAL	3.5	156.5	
194.5	TRADEWATER		UNDERCLAY	1.0	160.0	

MAPID: 05903147000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.244033 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.63912 **DATE COLLECTED:** 7 / 27 / 1964

SURFACE ELEVATION (FT.): 356.6 **LOGGED (FT.):** 130.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1074 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
356.6	PLEISTOCENE		UNCONSOLIDATED	69.0	0.0	
287.6	CARBONDALE		SOFT SHALE	8.0	69.0	
279.6	CARBONDALE	PALZO	SANDSTONE	23.5	77.0	
256.1	CARBONDALE		SHALE	1.0	100.5	
255.1	CARBONDALE	DEKOVEN	COAL	3.5	101.5	
251.6	CARBONDALE		UNDERCLAY	2.0	105.0	
249.6	CARBONDALE		SANDSTONE	13.5	107.0	
236.1	CARBONDALE		GRAY SHALE	4.0	120.5	
232.1	CARBONDALE		BLACK SHALE	1.5	124.5	
230.6	CARBONDALE	DAVIS	COAL	3.5	126.0	
227.1	TRADEWATER		UNDERCLAY	1.0	129.5	

MAPID: 05903150000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232386 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639119 **DATE COLLECTED:** 8 / 18 / 1964

SURFACE ELEVATION (FT.): 342.2 **LOGGED (FT.):** 219.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1077 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
342.2	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
332.2	PLEISTOCENE		CLAY	34.0	10.0	
298.2	PLEISTOCENE		SAND	10.0	44.0	
288.2	CARBONDALE		SANDSTONE	10.0	54.0	
278.2	CARBONDALE		SANDY SHALE	13.0	64.0	
265.2	CARBONDALE		GRAY SHALE	10.0	77.0	
255.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	87.0	
252.7	CARBONDALE	COLCHESTER	COAL	0.5	89.5	
252.2	CARBONDALE		UNDERCLAY	4.0	90.0	
248.2	CARBONDALE	PALZO	SANDSTONE	56.0	94.0	
192.2	CARBONDALE	DEKOVEN	COAL	0.3	150.0	
191.9	CARBONDALE		SANDSTONE	22.7	150.3	
169.2	CARBONDALE		SANDY SHALE	5.0	173.0	
164.2	CARBONDALE		BLACK SHALE	2.0	178.0	
162.2	CARBONDALE	DAVIS	COAL	2.9	180.0	
159.3	TRADEWATER		UNDERCLAY	1.1	182.9	
158.2	TRADEWATER		SANDSTONE	20.0	184.0	
138.2	TRADEWATER		SANDY SHALE	15.5	204.0	

MAPID: 05903151000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241692 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.642813 **DATE COLLECTED:** 7 / 29 / 1964

SURFACE ELEVATION (FT.): 346.5 **LOGGED (FT.):** 216.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1078 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
346.5	PLEISTOCENE		UNCONSOLIDATED	79.5	0.0	
267.0	CARBONDALE		GRAY SHALE	15.5	79.5	
251.5	CARBONDALE		SANDSTONE	12.0	95.0	
239.5	CARBONDALE		SANDSTONE	20.5	107.0	
219.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	127.5	
216.0	CARBONDALE	COLCHESTER	COAL	0.5	130.5	
215.5	CARBONDALE		UNDERCLAY	5.0	131.0	
210.5	CARBONDALE	PALZO	SANDSTONE	54.5	136.0	
156.0	CARBONDALE	DEKOVEN	COAL	3.5	190.5	
152.5	CARBONDALE		UNDERCLAY	3.5	194.0	
149.0	CARBONDALE		SANDY SHALE	12.5	197.5	
136.5	CARBONDALE		BLACK SHALE	1.5	210.0	
135.0	CARBONDALE	DAVIS	COAL	3.5	211.5	
131.5	TRADEWATER		UNDERCLAY	1.0	215.0	

MAPID: 05903152000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.23473 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637281 **DATE COLLECTED:** 8 / 25 / 1964

SURFACE ELEVATION (FT.): 348.8 **LOGGED (FT.):** 152.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1079 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
348.8	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
333.8	PLEISTOCENE		CLAY	40.0	15.0	
293.8	PLEISTOCENE		SAND	6.0	55.0	
287.8	CARBONDALE		GRAY SHALE	5.0	61.0	
282.8	CARBONDALE	PALZO	SANDSTONE	49.0	66.0	
233.8	CARBONDALE		GRAY SHALE	4.0	115.0	
229.8	CARBONDALE		BLACK SHALE	0.3	119.0	
229.5	CARBONDALE	DEKOVEN	COAL	3.3	119.3	
226.2	CARBONDALE		UNDERCLAY	1.0	122.6	
225.2	CARBONDALE		SANDSTONE	10.0	123.6	
215.2	CARBONDALE		GRAY SHALE	11.4	133.6	
203.8	CARBONDALE		BLACK SHALE	2.0	145.0	
201.8	CARBONDALE	DAVIS	COAL	3.5	147.0	
198.3	CARBONDALE		UNDERCLAY	2.0	150.5	

MAPID: 05903153000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE NW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232423 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.635445 **DATE COLLECTED:** 8 / 18 / 1964

SURFACE ELEVATION (FT.): 337.1 **LOGGED (FT.):** 117.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1080 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
337.1	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
326.1	CARBONDALE		SANDY SHALE	24.0	11.0	
302.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	35.0	
299.6	CARBONDALE	COLCHESTER	COAL	0.5	37.5	
299.1	CARBONDALE		UNDERCLAY	4.0	38.0	
295.1	CARBONDALE	PALZO	SANDSTONE	23.0	42.0	
272.1	CARBONDALE		SANDY SHALE	19.0	65.0	
253.1	CARBONDALE	DEKOVEN	COAL	3.5	84.0	
249.6	CARBONDALE		UNDERCLAY	0.5	87.5	
249.1	CARBONDALE		SHALY SANDSTONE	18.0	88.0	
231.1	CARBONDALE		GRAY SHALE	5.5	106.0	
225.6	CARBONDALE		BLACK SHALE	1.5	111.5	
224.1	CARBONDALE	DAVIS	COAL	3.5	113.0	
220.6	CARBONDALE		UNDERCLAY	1.0	116.5	

MAPID: 05903154000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.2417 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.640967 **DATE COLLECTED:** 8 / 25 / 1964

SURFACE ELEVATION (FT.): 344.9 **LOGGED (FT.):** 196.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1081 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.9	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	
286.9	CARBONDALE		GRAY SHALE	10.0	58.0	
276.9	CARBONDALE		SANDY SHALE	22.0	68.0	
254.9	CARBONDALE		GRAY SHALE	11.0	90.0	
243.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	101.0	
241.9	CARBONDALE	COLCHESTER	COAL	0.5	103.0	
241.4	CARBONDALE		UNDERCLAY	4.0	103.5	
237.4	CARBONDALE	PALZO	SANDSTONE	60.5	107.5	
176.9	CARBONDALE	DEKOVEN	COAL	3.3	168.0	
173.6	CARBONDALE		UNDERCLAY	1.7	171.3	
171.9	CARBONDALE		SANDSTONE	16.0	173.0	
155.9	CARBONDALE		BLACK SHALE	2.0	189.0	
153.9	CARBONDALE	DAVIS	COAL	3.5	191.0	
150.4	CARBONDALE		UNDERCLAY	1.5	194.5	

MAPID: 05903155000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234715 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.63912 **DATE COLLECTED:** 8 / 20 / 1964

SURFACE ELEVATION (FT.): 347.6 **LOGGED (FT.):** 157.1 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1082 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
347.6	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	
289.6	CARBONDALE		GRAY SHALE	10.0	58.0	
279.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	68.0	
276.1	CARBONDALE	COLCHESTER	COAL	0.5	71.5	
275.6	CARBONDALE		UNDERCLAY	6.0	72.0	
269.6	CARBONDALE	PALZO	SANDSTONE	38.0	78.0	
231.6	CARBONDALE		GRAY SHALE	10.5	116.0	
221.1	CARBONDALE	DEKOVEN	COAL	3.5	126.5	
217.6	CARBONDALE		UNDERCLAY	1.0	130.0	
216.6	CARBONDALE		SHALY SANDSTONE	20.0	131.0	
196.6	CARBONDALE		BLACK SHALE	1.5	151.0	
195.1	CARBONDALE	DAVIS	COAL	3.6	152.5	
191.5	CARBONDALE		UNDERCLAY	1.0	156.1	

MAPID: 05903156000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232404 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637283 **DATE COLLECTED:** 8 / 26 / 1964

SURFACE ELEVATION (FT.): 344.9 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1083 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
329.9	PLEISTOCENE		CLAY	37.0	15.0	
292.9	CARBONDALE		GRAY SHALE	19.5	52.0	
273.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	71.5	
271.4	CARBONDALE	COLCHESTER	COAL	0.5	73.5	
270.9	CARBONDALE		UNDERCLAY	5.0	74.0	
265.9	CARBONDALE	PALZO	SANDSTONE	41.0	79.0	
224.9	CARBONDALE		SANDY SHALE	7.0	120.0	
217.9	CARBONDALE		BLACK SHALE	0.3	127.0	
217.6	CARBONDALE	DEKOVEN	COAL	3.5	127.3	
214.1	CARBONDALE		UNDERCLAY	1.0	130.8	
213.1	CARBONDALE		SANDSTONE	10.2	131.8	
202.9	CARBONDALE		SANDY SHALE	6.0	142.0	
196.9	CARBONDALE		GRAY SHALE	6.0	148.0	
190.9	CARBONDALE		BLACK SHALE	1.5	154.0	
189.4	CARBONDALE	DAVIS	COAL	3.5	155.5	
185.9	CARBONDALE		UNDERCLAY	1.0	159.0	

MAPID: 05903157000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SE SW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.241712 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637273 **DATE COLLECTED:** 8 / 24 / 1964

SURFACE ELEVATION (FT.): 335.8 **LOGGED (FT.):** 123.1 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1084 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
335.8	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0	
271.8	CARBONDALE	PALZO	SANDSTONE	27.0	64.0	
244.8	CARBONDALE	DEKOVEN	COAL	3.4	91.0	
241.4	CARBONDALE		UNDERCLAY	1.6	94.4	
239.8	CARBONDALE		SHALY SANDSTONE	21.0	96.0	
218.8	CARBONDALE		BLACK SHALE	1.5	117.0	
217.3	CARBONDALE	DAVIS	COAL	3.6	118.5	
213.7	CARBONDALE		UNDERCLAY	1.0	122.1	

MAPID: 05903158000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NW NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.234701 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.640958 **DATE COLLECTED:** 8 / 28 / 1964

SURFACE ELEVATION (FT.): 344.3 **LOGGED (FT.):** 228.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1085 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.3	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
329.3	PLEISTOCENE		CLAY	44.0	15.0	
285.3	PLEISTOCENE		SAND	6.0	59.0	
279.3	CARBONDALE		SANDY SHALE	12.0	65.0	
267.3	CARBONDALE	SURVANT	COAL	3.0	77.0	
264.3	CARBONDALE		UNDERCLAY	2.0	80.0	
262.3	CARBONDALE		SANDY SHALE	28.5	82.0	
233.8	CARBONDALE		GRAY SHALE	20.0	110.5	
213.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	130.5	
211.8	CARBONDALE	COLCHESTER	COAL	0.5	132.5	
211.3	CARBONDALE		UNDERCLAY	3.0	133.0	
208.3	CARBONDALE	PALZO	SANDY SHALE	52.0	136.0	
156.3	CARBONDALE	PALZO	SANDSTONE	2.0	188.0	
154.3	CARBONDALE	DEKOVEN	COAL	2.9	190.0	
151.4	CARBONDALE		UNDERCLAY	0.6	192.9	
150.8	CARBONDALE		SHALE	18.5	193.5	
132.3	CARBONDALE		GRAY SHALE	10.0	212.0	
122.3	CARBONDALE		BLACK SHALE	2.0	222.0	
120.3	CARBONDALE	DAVIS	COAL	3.5	224.0	
116.8	CARBONDALE		UNDERCLAY	1.0	227.5	

MAPID: 05903159000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.237045 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639118 **DATE COLLECTED:** 8 / 28 / 1964

SURFACE ELEVATION (FT.): 345.3 **LOGGED (FT.):** 153.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1086 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.3	PLEISTOCENE		UNCONSOLIDATED	58.5	0.0	
286.8	CARBONDALE		GRAY SHALE	7.0	58.5	
279.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	65.5	
277.8	CARBONDALE	COLCHESTER	COAL	0.5	67.5	
277.3	CARBONDALE		UNDERCLAY	2.0	68.0	
275.3	CARBONDALE		SANDY SHALE	8.5	70.0	
266.8	CARBONDALE	PALZO	SANDSTONE	40.0	78.5	
226.8	CARBONDALE		GRAY SHALE	4.5	118.5	
222.3	CARBONDALE	DEKOVEN	COAL	3.3	123.0	
219.0	CARBONDALE		UNDERCLAY	1.7	126.3	
217.3	CARBONDALE		SHALY SANDSTONE	4.0	128.0	
213.3	CARBONDALE		SANDSTONE	10.5	132.0	
202.8	CARBONDALE		GRAY SHALE	5.0	142.5	
197.8	CARBONDALE		BLACK SHALE	2.0	147.5	
195.8	CARBONDALE	DAVIS	COAL	3.5	149.5	
192.3	CARBONDALE		UNDERCLAY	0.5	153.0	

MAPID: 05903160000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239367 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.640963 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 343.9 **LOGGED (FT.):** 178.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1087 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
343.9	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
333.9	PLEISTOCENE		CLAY	47.0	10.0	
286.9	CARBONDALE		SANDY SHALE	10.0	57.0	
276.9	CARBONDALE		GRAY SHALE	20.0	67.0	
256.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	87.0	
254.9	CARBONDALE	COLCHESTER	COAL	0.5	89.0	
254.4	CARBONDALE		UNDERCLAY	3.5	89.5	
250.9	CARBONDALE	PALZO	SANDSTONE	57.0	93.0	
193.9	CARBONDALE	DEKOVEN	COAL	3.3	150.0	
190.6	CARBONDALE		UNDERCLAY	1.0	153.3	
189.6	CARBONDALE		SHALY SANDSTONE	10.0	154.3	
179.6	CARBONDALE		GRAY SHALE	7.0	164.3	
172.6	CARBONDALE		BLACK SHALE	2.0	171.3	
170.6	CARBONDALE	DAVIS	COAL	3.5	173.3	
167.1	CARBONDALE		UNDERCLAY	2.0	176.8	

MAPID: 05903161000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** SW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239386 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.637275 **DATE COLLECTED:** 9 / 1 / 1964

SURFACE ELEVATION (FT.): 347.7 **LOGGED (FT.):** 100.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1088 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
347.7	PLEISTOCENE		UNCONSOLIDATED	52.0	0.0	
295.7	CARBONDALE	PALZO	SANDSTONE	4.0	52.0	
291.7	CARBONDALE	PALZO	GRAY SHALE	5.0	56.0	
286.7	CARBONDALE	PALZO	SANDSTONE	5.5	61.0	
281.2	CARBONDALE		GRAY SHALE	1.0	66.5	
280.2	CARBONDALE	DEKOVEN	COAL	3.2	67.5	
277.0	CARBONDALE		UNDERCLAY	1.8	70.7	
275.2	CARBONDALE		SHALY SANDSTONE	5.5	72.5	
269.7	CARBONDALE		SANDSTONE	8.5	78.0	
261.2	CARBONDALE		GRAY SHALE	8.0	86.5	
253.2	CARBONDALE		BLACK SHALE	2.0	94.5	
251.2	CARBONDALE	DAVIS	COAL	3.6	96.5	
247.6	CARBONDALE		UNDERCLAY	0.5	100.1	

MAPID: 05903162000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NW SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.239374 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.639119 **DATE COLLECTED:** 9 / 2 / 1964

SURFACE ELEVATION (FT.): 354.2 **LOGGED (FT.):** 146.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1090 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.2	PLEISTOCENE		UNCONSOLIDATED	68.0	0.0	
286.2	CARBONDALE		SANDY SHALE	6.0	68.0	
280.2	CARBONDALE		GRAY SHALE	3.0	74.0	
277.2	CARBONDALE		UNDERCLAY	3.0	77.0	COLCHESTER MISSING
274.2	CARBONDALE		GRAY SHALE	5.5	80.0	
268.7	CARBONDALE	PALZO	SANDSTONE	28.5	85.5	
240.2	CARBONDALE	DEKOVEN	COAL	3.3	114.0	
236.9	CARBONDALE		UNDERCLAY	2.8	117.3	
234.2	CARBONDALE		SHALY SANDSTONE	5.0	120.0	
229.2	CARBONDALE		SANDSTONE	6.0	125.0	
223.2	CARBONDALE		GRAY SHALE	8.0	131.0	
215.2	CARBONDALE		BLACK SHALE	2.0	139.0	
213.2	CARBONDALE	DAVIS	COAL	3.5	141.0	
209.7	CARBONDALE		UNDERCLAY	1.5	144.5	

MAPID: 05903397000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.231897 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.630398 **DATE COLLECTED:** 5 / 29 / 1969

SURFACE ELEVATION (FT.): 420.8 **LOGGED (FT.):** 100.6 **LOG TYPE:** Survey Core Study

SOURCE: PEABODY C-1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
420.8	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
401.8	CARBONDALE		SANDSTONE	4.6	19.0	
397.2	CARBONDALE		SHALE	0.6	23.6	
396.6	CARBONDALE		SANDSTONE	6.7	24.2	
390.0	CARBONDALE		SANDSTONE/SILTSTONE	3.2	30.8	
386.8	CARBONDALE		SANDSTONE/SHALE	8.0	34.0	
378.8	CARBONDALE		SANDSTONE/SILTSTONE	8.0	42.0	
370.8	CARBONDALE		SANDSTONE	4.3	50.0	
366.5	CARBONDALE		SANDSTONE/SHALE	0.8	54.3	BLACK
365.8	CARBONDALE		SANDSTONE/SILTSTONE	3.3	55.0	
362.5	CARBONDALE		SHALE	2.8	58.3	
359.7	CARBONDALE		SILTSTONE	2.9	61.1	
356.8	CARBONDALE		SHALE	4.5	64.0	DARK
352.3	CARBONDALE	DEKOVEN	COAL	3.7	68.5	
348.6	CARBONDALE		UNDERCLAY	0.6	72.2	
348.0	CARBONDALE		SILTSTONE	1.0	72.8	
347.0	CARBONDALE		SHALE	3.7	73.8	
343.4	CARBONDALE		SHALE	1.5	77.4	CARBONACEOUS; DARK
341.9	CARBONDALE		SILTSTONE	1.8	78.9	
340.0	CARBONDALE		SANDSTONE	14.3	80.8	CARBONACEOUS STREAKS
325.7	CARBONDALE	DAVIS	COAL	4.4	95.1	
321.3	CARBONDALE		SHALE	0.2	99.5	
321.1	CARBONDALE		CLAYSTONE & SILTSTONE	0.9	99.7	

MAPID: 05903397000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 20 **QUARTERS/FOOTAGES:** NE SE SW SE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.231897 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.630398 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 0.0 **LOG TYPE:**

SOURCE: PEABODY COAL CO. C-1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
351.5	CARBONDALE	DEKOVEN	COAL	3.7	68.5	
351.5	CARBONDALE	LOWER DEKOVEN	COAL	0.0	68.5	
325.0	CARBONDALE	DAVIS	COAL	4.4	95.0	65% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05902058000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217103 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.643655 **DATE COLLECTED:** 10 / 30 / 1956

SURFACE ELEVATION (FT.): 400.7 **LOGGED (FT.):** 213.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 10H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
400.7	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0	
361.7	CARBONDALE		GRAY SHALE	4.0	39.0	
357.7	CARBONDALE	ANVIL ROCK	SANDSTONE	25.8	43.0	
331.9	CARBONDALE		GRAY SHALE	8.3	68.8	
323.5	CARBONDALE	BRERETON	LIMESTONE	3.5	77.2	
320.0	CARBONDALE	ANNA	BLACK SHALE	0.4	80.7	
319.6	CARBONDALE	HERRIN	COAL	2.8	81.1	
316.8	CARBONDALE	HERRIN	BLUE BAND	0.3	83.9	
316.5	CARBONDALE	HERRIN	COAL	0.8	84.2	
315.8	CARBONDALE		UNDERCLAY	6.4	84.9	
309.4	CARBONDALE		SANDY SHALE	1.2	91.3	
308.2	CARBONDALE		SANDSTONE	13.3	92.5	
294.9	CARBONDALE		SANDY SHALE	27.6	105.8	
267.3	CARBONDALE	BRIAR HILL	COAL	2.5	133.4	
264.8	CARBONDALE		SILTY SHALE	3.7	135.9	
261.1	CARBONDALE		SANDSTONE	6.8	139.6	
254.3	CARBONDALE		SANDY SHALE	51.9	146.4	
202.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	198.3	
199.2	CARBONDALE	TURNER MINE	LIMESTONE AND BLACK SHALE	1.5	201.5	
197.7	CARBONDALE	TURNER MINE	BLACK SHALE	2.7	203.0	
195.0	CARBONDALE	SPRINGFIELD	COAL	4.9	205.7	
190.1	CARBONDALE		UNDERCLAY	2.4	210.6	

MAPID: 05902058000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** 0' N line, 2640' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.217103 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.643655 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 401.0 **LOGGED (FT.):** 84.8 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 10-H **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.0	CARBONDALE	LAWSON	GRAY SHALE	4.0	39.0	
358.0	CARBONDALE	LAWSON	SANDSTONE	9.2	43.0	
348.8	CARBONDALE	LAWSON	SHALE & SANDSTONE	16.7	52.2	
332.2	CARBONDALE	LAWSON	GRAY SHALE	8.3	68.8	
323.8	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.5	77.2	
320.3	CARBONDALE	ANNA	BLACK SHALE	0.3	80.7	
320.0	CARBONDALE	HERRIN	COAL	3.8	81.0	

MAPID: 05903163000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.225509 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.631795 **DATE COLLECTED:** 4 / 2 / 1962

SURFACE ELEVATION (FT.): 392.7 **LOGGED (FT.):** 148.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 959 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
392.7	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
372.7	CARBONDALE		SANDSTONE	15.0	20.0	
357.7	CARBONDALE		SOFT SHALE	22.5	35.0	
335.2	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	2.0	57.5	COLCHESTER COAL AT BASE
333.2	CARBONDALE		UNDERCLAY	5.0	59.5	
328.2	CARBONDALE	PALZO	SANDSTONE	32.0	64.5	
296.2	CARBONDALE		GRAY SHALE	10.5	96.5	
285.7	CARBONDALE		SHALE	7.5	107.0	
278.2	CARBONDALE	DEKOVEN	COAL	3.0	114.5	
275.2	CARBONDALE		UNDERCLAY	1.0	117.5	
274.2	CARBONDALE		SHALE	22.0	118.5	
252.2	CARBONDALE		BLACK SHALE	2.5	140.5	
249.7	CARBONDALE		LIMESTONE	0.5	143.0	
249.2	CARBONDALE	DAVIS	COAL	4.0	143.5	
245.2	TRADEWATER		UNDERCLAY	1.0	147.5	

MAPID: 05903164000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223194 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.631783 **DATE COLLECTED:** 4 / 5 / 1962

SURFACE ELEVATION (FT.): 346.9 **LOGGED (FT.):** 156.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 960 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
346.9	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	
324.9	CARBONDALE		SOFT SHALE	10.0	22.0	
314.9	CARBONDALE		SANDSTONE	33.0	32.0	
281.9	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.5	65.0	COLCHESTER COAL AT BASE
280.4	CARBONDALE		UNDERCLAY	3.0	66.5	
277.4	CARBONDALE	PALZO	SHALY SANDSTONE	49.5	69.5	
227.9	CARBONDALE		GRAY SHALE	4.0	119.0	
223.9	CARBONDALE	DEKOVEN	COAL	3.4	123.0	
220.5	CARBONDALE		UNDERCLAY	1.0	126.4	
219.5	CARBONDALE		SANDY SHALE	19.1	127.4	
200.4	CARBONDALE		BLACK SHALE	5.0	146.5	
195.4	CARBONDALE	DAVIS	COAL	4.3	151.5	
191.1	TRADEWATER		UNDERCLAY	1.0	155.8	

MAPID: 05903165000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW SW SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.216281 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.62992 **DATE COLLECTED:** 4 / 9 / 1962
SURFACE ELEVATION (FT.): 353.1 **LOGGED (FT.):** 113.5 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. 961 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
353.1	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
343.1	CARBONDALE		SHALE	18.0	10.0	
325.1	CARBONDALE	MECCA QUARRY	BLACK SHALE & COAL	1.5	28.0	COLCHESTER COAL AT BASE
323.6	CARBONDALE		UNDERCLAY	4.5	29.5	
319.1	CARBONDALE	PALZO	SANDSTONE	4.0	34.0	
315.1	CARBONDALE	PALZO	GRAY SHALE	5.0	38.0	
310.1	CARBONDALE	PALZO	SANDSTONE	22.0	43.0	
288.1	CARBONDALE		SANDY SHALE	20.5	65.0	
267.6	CARBONDALE		GRAY SHALE	1.0	85.5	
266.6	CARBONDALE	DEKOVEN	COAL	3.3	86.5	
263.3	CARBONDALE		UNDERCLAY	1.0	89.8	
262.3	CARBONDALE		SHALE	16.3	90.8	
246.1	CARBONDALE		BLACK SHALE	2.0	107.0	
244.1	CARBONDALE	DAVIS	COAL	3.5	109.0	
240.6	TRADEWATER		UNDERCLAY	1.0	112.5	

MAPID: 05903167000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** SE SW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223223 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.629953 **DATE COLLECTED:** 4 / 26 / 1962
SURFACE ELEVATION (FT.): 360.7 **LOGGED (FT.):** 98.6 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL MINING CO. **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.7	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0	SOME SOFT GYSH INCLUDED
331.7	CARBONDALE	PALZO	SANDSTONE	26.0	29.0	
305.7	CARBONDALE		SANDY SHALE	13.0	55.0	
292.7	CARBONDALE		SHALE	2.0	68.0	
290.7	CARBONDALE	DEKOVEN	COAL	3.5	70.0	
287.2	CARBONDALE		UNDERCLAY	1.5	73.5	
285.7	CARBONDALE		SANDY SHALE	19.0	75.0	
266.7	CARBONDALE	DAVIS	COAL	3.6	94.0	
263.1	TRADEWATER		UNDERCLAY	1.0	97.6	

MAPID: 059275B0005F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 21 **QUARTERS/FOOTAGES:** SW NW NE SE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.212144 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.634936 **DATE COLLECTED:** 0 / 0 / 1926
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-J.M.WELLER,& GEOL OF ILL.VOL6 **WELL TYPE:** Underground mine
COMMENT: WORTHEN"#7 AND #5 MINED AT TOLBERTS MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		NO INFORMATION ABD MINE SITE

MAPID: 05900229600M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** SW SW SW SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.207605 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.629419 **DATE COLLECTED:** 11 / 21 / 1915
SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 5.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-M & L C C (BOUTWELL MINE **WELL TYPE:** Underground mine
COMMENT: SAMPLED BY WALLACE LEE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	0.1		
-	CARBONDALE	SPRINGFIELD	COAL	4.9		

MAPID: 05901354000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE SE SW
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200022 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.631679 **DATE COLLECTED:** 4 / 0 / 1954
SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Survey Core Study
SOURCE: EAGLE VALLEY C C, ISGS CORE STUDY **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	25.0	0.0	
365.0			ROCK	35.0	25.0	L-CORE BEGINS
330.0	CARBONDALE	HERRIN	COAL	3.3	60.0	BLUE SHALE PARTING, .10'
326.7	CARBONDALE		ROCK	39.1	63.3	
287.6	CARBONDALE	BRIAR HILL	COAL	3.0	102.4	
284.7	CARBONDALE		ROCK	60.1	105.3	
224.6	CARBONDALE	SPRINGFIELD	COAL	4.7	165.4	
219.9	CARBONDALE		ROCK	1.3	170.1	

MAPID: 05901354000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200022 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.631679 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 65.3 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
423.6	CARBONDALE	LAWSON	SANDSTONE	8.9	26.4	
414.7	CARBONDALE	LAWSON	CARBONACEOUS SANDSTONE	16.9	35.3	
397.8	CARBONDALE	LAWSON	GRAY SHALE	2.0	52.2	
395.8	CARBONDALE	LAWSON	CLAYSTONE	0.2	54.2	
395.6	CARBONDALE	BRERETON	LIMESTONE & SHALE	5.7	54.4	
389.9	CARBONDALE	ANNA	BLACK SHALE	1.9	60.1	
388.0	CARBONDALE	HERRIN	COAL	3.3	62.0	

MAPID: 05901354000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.200022 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.631679 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 173.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE VALLEY COAL 2 **WELL TYPE:** Coal Test

COMMENT: NOTE ON LOG: NO SUCH ELEV. IN NESESW

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
450.0			UNCLASSIFIED	25.0	0.0	
425.0	CARBONDALE	ANVIL ROCK	GRAY SANDSTONE	27.0	25.0	
398.0	CARBONDALE		SHALE	2.0	52.0	
396.0	CARBONDALE	BRERETON	LIMESTONE	6.0	54.0	
390.0	CARBONDALE		SHALE	1.9	60.0	
388.1	CARBONDALE	HERRIN	COAL	3.2	61.9	
384.9	CARBONDALE		UNDERCLAY	4.9	65.1	
380.0	CARBONDALE		SANDSTONE	14.0	70.0	
366.0	CARBONDALE		SHALE	16.0	84.0	
350.0	CARBONDALE		SHALE	4.2	100.0	
345.8	CARBONDALE	BRIAR HILL	COAL	3.0	104.2	
342.8	CARBONDALE		UNDERCLAY	3.1	107.2	
339.7	CARBONDALE		SHALE	54.1	110.3	
285.6	CARBONDALE		SHALE	2.0	164.4	
283.6	CARBONDALE	ST. DAVID	LIMESTONE	0.8	166.4	
282.8	CARBONDALE	SPRINGFIELD	COAL	4.7	167.2	
278.1	CARBONDALE		UNDERCLAY	1.1	171.9	

MAPID: 05901356000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.206985 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.631706 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE VALLEY COAL 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCLASSIFIED	28.0	0.0	
422.0	CARBONDALE		SHALE	28.0	28.0	
394.0	CARBONDALE		SANDSTONE	5.0	56.0	
389.0	CARBONDALE		SHALE	12.0	61.0	
377.0	CARBONDALE		LIMESTONE	1.0	73.0	
376.0	CARBONDALE		SHALE	2.3	74.0	
373.7	CARBONDALE	SPRINGFIELD	COAL	4.7	76.3	
369.0	CARBONDALE		UNDERCLAY	1.0	81.0	

MAPID: 05901356000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.206985 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.631706 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
450.0			UNCONSOLIDATED	28.0	0.0	
422.0			ROCK	48.4	28.0	L-LOG BEGINS
373.6	CARBONDALE	SPRINGFIELD	COAL	4.8	76.4	
368.8	CARBONDALE		ROCK	0.8	81.2	

MAPID: 05901356000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** NW SW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.206985 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.631706 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 450.0 **LOGGED (FT.):** 82.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY COAL CO 3 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
450.0	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
422.0	CARBONDALE		SANDSTONE	7.1	28.0	
414.9	CARBONDALE		SILTSTONE	11.5	35.1	
403.4	CARBONDALE		SHALE	7.6	46.6	
395.8	CARBONDALE		SILTSTONE	4.8	54.2	
391.0	CARBONDALE		SHALE	0.8	59.0	THICKNESS AS PER LOG
390.2	CARBONDALE		SILTSTONE	2.7	59.8	
387.6	CARBONDALE		SHALE	9.8	62.4	
377.7	CARBONDALE	ST. DAVID	LIMESTONE	-	72.3	THICKNESS NOT RECORDED
377.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.2	72.3	
376.6	CARBONDALE	TURNER MINE	LIMESTONE	1.3	73.4	
375.2	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	74.8	
375.0	CARBONDALE	TURNER MINE	SHALE	1.4	75.0	
373.6	CARBONDALE	TURNER MINE	BLACK SHALE	0.1	76.4	INTERLAMINATED COAL
373.6	CARBONDALE	SPRINGFIELD	COAL	4.8	76.4	
368.7	CARBONDALE		UNDERCLAY	0.8	81.3	

MAPID: 05901357000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.204633 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.633534 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 157.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE VALLEY COAL 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCLASSIFIED	22.0	0.0	
398.0	CARBONDALE	ANVIL ROCK	SANDSTONE	10.0	22.0	
388.0	CARBONDALE	BRERETON	LIMESTONE	5.0	32.0	
383.0	CARBONDALE	ANNA	SHALE	1.0	37.0	
382.0	CARBONDALE	HERRIN	COAL	3.7	38.0	
378.3	CARBONDALE		UNDERCLAY	2.3	41.7	
376.0	CARBONDALE		SHALE	37.0	44.0	
339.0	CARBONDALE		SHALE	2.5	81.0	
336.5	CARBONDALE	BRIAR HILL	COAL	3.1	83.5	
333.4	CARBONDALE		SHALE	59.4	86.6	
274.0	CARBONDALE		LIMESTONE	1.0	146.0	
273.0	CARBONDALE		SHALE	2.8	147.0	
270.2	CARBONDALE	SPRINGFIELD	COAL	5.0	149.8	
265.2	CARBONDALE		SHALE	2.2	154.8	

MAPID: 05901357000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.204633 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.633534 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 157.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
420.0			UNCONSOLIDATED	22.0	0.0	
398.0			ROCK	16.2	22.0	L-CORE BEGINS
381.8	CARBONDALE	HERRIN	COAL	3.6	38.2	BLUE SHALE PARTING, .16'
378.3	CARBONDALE		ROCK	41.8	41.7	
336.5	CARBONDALE	BRIAR HILL	COAL	3.1	83.5	
333.4	CARBONDALE		ROCK	64.6	86.6	
268.8	CARBONDALE	SPRINGFIELD	COAL	5.1	151.2	
263.7	CARBONDALE		ROCK	1.2	156.3	

MAPID: 05901357000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.204633 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.633534 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 420.0 **LOGGED (FT.):** 157.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY COAL CO 5 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
420.0	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	
398.0	CARBONDALE	ANVIL ROCK	SANDSTONE	7.5	22.0	
390.5	CARBONDALE		SHALE	2.1	29.5	
388.4	CARBONDALE	BRERETON	LIMESTONE	5.2	31.6	
383.2	CARBONDALE	ANNA	BLACK SHALE	1.4	36.8	
381.8	CARBONDALE	HERRIN	COAL	3.6	38.2	
378.2	CARBONDALE		UNDERCLAY	3.8	41.8	
374.4	CARBONDALE		SILTSTONE	7.1	45.6	
367.3	CARBONDALE		SHALE	30.8	52.7	
336.5	CARBONDALE	BRIAR HILL	COAL	3.1	83.5	
333.4	CARBONDALE		SILTSTONE	3.5	86.6	
329.9	CARBONDALE		SHALE	0.9	90.1	THICKNESS AS PER LOG
329.0	CARBONDALE		SANDSTONE	0.5	91.0	
328.5	CARBONDALE		SHALE	1.5	91.5	
327.0	CARBONDALE		SILTSTONE	18.0	93.0	
309.0	CARBONDALE		SHALE	20.0	111.0	
289.0	CARBONDALE		SILTSTONE	3.6	131.0	
285.4	CARBONDALE		SHALE	12.7	134.6	
272.7	CARBONDALE	TURNER MINE	BLACK SHALE	3.9	147.3	THICKNESS AS PER LOG
268.8	CARBONDALE	SPRINGFIELD	COAL	5.1	151.2	
263.7	CARBONDALE		UNDERCLAY	0.8	156.3	

MAPID: 05902016000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 86' S line, 243' E line of SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.199622 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.636525 **DATE COLLECTED:** 9 / 12 / 1956

SURFACE ELEVATION (FT.): 395.1 **LOGGED (FT.):** 266.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 1H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
395.1	PLEISTOCENE		UNCONSOLIDATED	22.5	0.0	
372.6	PLEISTOCENE		RED SHALE	0.3	22.5	
372.3	MODESTO		GRAY SHALE	72.2	22.8	
300.1	CARBONDALE	DANVILLE	COAL	1.2	95.0	
298.9	CARBONDALE		UNDERCLAY	1.8	96.2	
297.1	CARBONDALE		SANDSTONE	1.7	98.0	
295.4	CARBONDALE		SHALE W/ LIME NODULES	7.3	99.7	
288.1	CARBONDALE	ANVIL ROCK	SANDSTONE	35.3	107.0	
252.8	CARBONDALE		DARK SHALE	3.9	142.3	
248.9	CARBONDALE	BRERETON	LIMESTONE	4.0	146.2	
244.9	CARBONDALE	ANNA	BLACK SHALE	2.1	150.2	
242.8	CARBONDALE	HERRIN	COAL	3.6	152.3	
239.3	CARBONDALE		UNDERCLAY	2.8	155.8	
236.5	CARBONDALE		LIMESTONE	0.8	158.6	
235.8	CARBONDALE		SANDY SHALE	15.7	159.3	
220.1	CARBONDALE		DARK SHALE	19.5	175.0	
200.6	CARBONDALE	BRIAR HILL	COAL	3.0	194.5	
197.6	CARBONDALE		SANDSTONE	32.5	197.5	
165.1	CARBONDALE		SILTY SHALE	27.8	230.0	
137.3	CARBONDALE	TURNER MINE	BLACK SHALE	0.7	257.8	
136.7	CARBONDALE	SPRINGFIELD	COAL	4.8	258.4	
131.9	CARBONDALE		UNDERCLAY	2.8	263.2	

MAPID: 05902030000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 782' N line, 1756' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.195505 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.64153 **DATE COLLECTED:** 9 / 21 / 1956

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 378.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 3H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0	
330.0	MODESTO		BLUE SHALE	16.2	30.0	
313.8	MODESTO		LIMESTONE	3.5	46.2	
310.3	MODESTO		SANDY SHALE	6.3	49.7	
304.0	MODESTO		GRAY SHALE	6.0	56.0	
298.0	MODESTO		SANDY SHALE	4.7	62.0	
293.3	MODESTO		SANDSTONE	10.0	66.7	
283.3	MODESTO		GRAY SHALE	21.9	76.7	
261.4	MODESTO		BLACK SHALE	4.4	98.6	
257.0	MODESTO		GRAY SHALE	13.0	103.0	
244.0	MODESTO		SANDY SHALE	52.0	116.0	
192.0	MODESTO		GRAY SHALE	2.0	168.0	
190.0	MODESTO		DARK SHALE	7.0	170.0	
183.0	MODESTO		GRAY SHALE	17.1	177.0	
165.9	CARBONDALE	DANVILLE	COAL	1.5	194.1	
164.4	CARBONDALE		UNDERCLAY	0.4	195.6	
164.0	CARBONDALE	ANVIL ROCK	SANDSTONE	50.1	196.0	
113.9	CARBONDALE		SHALE	5.8	246.1	
108.1	CARBONDALE	BRERETON	LIMESTONE	2.6	251.9	
105.5	CARBONDALE	ANNA	BLACK SHALE	2.6	254.5	
102.9	CARBONDALE	HERRIN	COAL	3.4	257.1	
99.5	CARBONDALE		UNDERCLAY	1.0	260.5	
98.5	CARBONDALE		SILTY SHALE	3.5	261.5	
95.0	CARBONDALE		GRAY SHALE	9.5	265.0	
85.5	CARBONDALE		SHALE	8.5	274.5	
77.0	CARBONDALE		SHALE	7.0	283.0	
70.0	CARBONDALE		BLACK SHALE	11.1	290.0	
58.9	CARBONDALE	BRIAR HILL	COAL	2.6	301.1	
56.3	CARBONDALE		UNDERCLAY	7.3	303.7	
49.0	CARBONDALE		SANDSTONE	29.0	311.0	
20.0	CARBONDALE		SILTY SHALE	20.0	340.0	
0.0	CARBONDALE	ST. DAVID	LIMESTONE	5.0	360.0	
-5.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.1	365.0	
-6.1	CARBONDALE	SPRINGFIELD	COAL	4.5	366.1	
-10.6	CARBONDALE		UNDERCLAY	7.4	370.6	

MAPID: 05902030000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 22 **QUARTERS/FOOTAGES:** 782' N line, 1756' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.195505 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.64153 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 260.3 **LOG TYPE:** Survey Core Study

SOURCE: STONEFORT COAL CORP 3-H **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
165.1	CARBONDALE	DANVILLE	COAL	1.5	194.9	
163.6	CARBONDALE	LAWSON	CLAYSTONE	0.4	196.4	
163.2	CARBONDALE	LAWSON	SANDSTONE	50.1	196.8	
113.1	CARBONDALE	LAWSON	BLACK SHALE	4.1	246.9	
109.0	CARBONDALE	BRERETON	LIMESTONE/UNDERCLAY	3.4	251.0	
105.6	CARBONDALE	ANNA	BLACK SHALE	2.6	254.4	
103.0	CARBONDALE	HERRIN	COAL	3.3	257.0	

MAPID: 05902161000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 250' S line, 30' E line of SE SE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.162617 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.636269 **DATE COLLECTED:** 9 / 0 / 1957

SURFACE ELEVATION (FT.): 344.5 **LOGGED (FT.):** 946.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
344.5	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
326.5	PLEISTOCENE		SAND	44.0	18.0	
282.5	PLEISTOCENE		GRAVEL	6.0	62.0	
276.5			GRAY SHALE	7.0	68.0	
269.5			SANDY SHALE	45.0	75.0	
224.5			DARK SHALE	55.0	120.0	
169.5			COAL	1.0	175.0	
168.5			CALCAREOUS SANDSTONE	3.0	176.0	
165.5			LIMESTONE	7.0	179.0	
158.5			SHALY SANDSTONE	19.0	186.0	
139.5			SANDY SHALE	17.0	205.0	
122.5			SANDSTONE	4.0	222.0	
118.5			SANDY SHALE	21.0	226.0	
97.5			DARK SHALE	3.0	247.0	
94.5			SOFT SHALE	3.0	250.0	
91.5			LIMESTONE	2.0	253.0	
89.5			GRAY SHALE	30.0	255.0	
59.5			SANDSTONE	43.0	285.0	
16.5			LIMESTONE	2.0	328.0	
14.5			SHALE	13.0	330.0	
1.5			DARK SHALE	1.0	343.0	
0.5			GRAY SHALE	6.0	344.0	
-5.5			SANDY SHALE	50.0	350.0	
-55.5			SHALY SANDSTONE	50.0	400.0	
-105.5			DARK SHALE	15.0	450.0	
-120.5			GREEN SHALE	18.0	465.0	
-138.5	MODESTO		SANDY SHALE	13.0	483.0	
-151.5	MODESTO		SANDSTONE	26.0	496.0	
-177.5	MODESTO		SANDY SHALE	46.0	522.0	
-223.5	MODESTO		SANDSTONE	74.0	568.0	
-297.5	MODESTO		LIMESTONE	2.0	642.0	
-299.5	MODESTO		SHALE	3.0	644.0	
-302.5	MODESTO		SANDY SHALE	10.0	647.0	
-312.5	MODESTO		SHALE/COAL	7.0	657.0	
-319.5	MODESTO		GRAY SHALE	11.0	664.0	
-330.5	MODESTO		SANDY SHALE	10.0	675.0	
-340.5	MODESTO		VARRIGATED SHALE	14.0	685.0	
-354.5	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	699.0	

-356.0	MODESTO		SANDSTONE/LIMESTONE	18.5	700.5
-374.5	MODESTO		SANDSTONE	13.0	719.0
-387.5	MODESTO		SANDY SHALE	33.0	732.0
-420.5	MODESTO		DARK SHALE	7.0	765.0
-427.5	MODESTO		GRAY SHALE	3.0	772.0
-430.5	MODESTO		SANDY SHALE	2.0	775.0
-432.5	MODESTO		SHALY SANDSTONE	3.0	777.0
-435.5	MODESTO		DARK SHALE	7.0	780.0
-442.5	CARBONDALE	DANVILLE	COAL	1.5	787.0
-444.0	CARBONDALE		SANDY SHALE	7.5	788.5
-451.5	CARBONDALE	ALLENBY	COAL	0.3	796.0
-451.8	CARBONDALE		SHALE WITH LIMESTONE	5.7	796.3
-457.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	802.0
-460.0	CARBONDALE	ANVIL ROCK	SANDSTONE	20.5	804.5
-480.5	CARBONDALE		DARK SHALE	5.0	825.0
-485.5	CARBONDALE		BLACK SHALE	3.0	830.0
-488.5	CARBONDALE	HERRIN	COAL	0.8	833.0
-489.3	CARBONDALE		SOFT SHALE	7.3	833.8
-496.5	CARBONDALE		SANDY DARK SHALE	29.0	841.0
-525.5	CARBONDALE		DARK SHALE	3.0	870.0
-528.5	CARBONDALE	BRIAR HILL	COAL	1.8	873.0
-530.3	CARBONDALE		SANDY SHALE	34.2	874.8
-564.5	CARBONDALE		SANDY SHALE	22.0	909.0
-586.5	CARBONDALE		DARK SHALE	4.0	931.0
-590.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	935.0
-591.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.6	936.0
-594.1	CARBONDALE	SPRINGFIELD	COAL	5.4	938.6
-599.5	CARBONDALE		DARK SHALE	2.0	944.0

MAPID: 05903536000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.166485 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.642084 **DATE COLLECTED:** 7 / 1 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 1033.0 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4337-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
340.0	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
280.0	BOND		SHALE	10.0	60.0	
270.0	BOND		LIMESTONE	1.0	70.0	
269.0	BOND		SHALE	7.0	71.0	
262.0	BOND		SANDSTONE	3.5	78.0	
258.5	BOND		SANDY SHALE	138.5	81.5	
120.0	BOND		SHALE	2.5	220.0	
117.5	BOND		COAL	0.5	222.5	
117.0	BOND		UNDERCLAY	3.0	223.0	
114.0	BOND		SANDSTONE	40.0	226.0	
74.0	BOND		SANDY SHALE	34.0	266.0	
40.0	BOND		LIMESTONE	4.0	300.0	
36.0	BOND		SANDY SHALE	17.5	304.0	
18.5	BOND		COAL	1.5	321.5	
17.0	BOND		SANDY SHALE	27.0	323.0	
-10.0	BOND		SHALE	17.0	350.0	
-27.0	BOND		SANDSTONE	17.5	367.0	
-44.5	BOND	CARTHAGE	LIMESTONE	7.8	384.5	
-52.3	MODESTO		SHALE	20.0	392.3	
-72.3	MODESTO		SANDY SHALE	70.2	412.3	
-142.5	MODESTO		LIMESTONE	1.0	482.5	
-143.5	MODESTO		SANDSTONE	6.0	483.5	
-149.5	MODESTO		SANDY SHALE	45.0	489.5	
-194.5	MODESTO		SHALE	3.0	534.5	
-197.5	MODESTO		LIMESTONE	0.5	537.5	
-198.0	MODESTO		SANDY SHALE	22.0	538.0	
-220.0	MODESTO		SANDSTONE	18.0	560.0	
-238.0	MODESTO		SANDY SHALE	52.0	578.0	
-290.0	MODESTO		SHALE	18.0	630.0	
-308.0	MODESTO	CHAPEL	COAL	1.0	648.0	
-309.0	MODESTO		SHALE	3.0	649.0	
-312.0	MODESTO		LIMESTONE	1.0	652.0	
-313.0	MODESTO		GRAY SHALE & SANDSTONE	46.0	653.0	
-359.0	MODESTO		LIMESTONE	4.0	699.0	
-363.0	MODESTO		SANDSTONE	9.0	703.0	
-372.0	MODESTO		SHALE	12.0	712.0	
-384.0	MODESTO		SANDY SHALE	70.0	724.0	
-454.0	MODESTO		SHALE	14.0	794.0	

-468.0	MODESTO		SHALE	3.0	808.0
-471.0	MODESTO		SANDY SHALE	4.0	811.0
-475.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	815.0
-478.0	MODESTO		SANDSTONE	10.0	818.0
-488.0	MODESTO		SHALE	12.0	828.0
-500.0	CARBONDALE	DANVILLE	COAL	1.1	840.0
-501.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	5.0	841.0
-506.1	CARBONDALE	ANVIL ROCK	SANDSTONE	56.0	846.1
-562.1	CARBONDALE	BRERETON	LIMESTONE	0.5	902.1
-562.6	CARBONDALE	ANNA	BLACK SHALE	3.0	902.6
-565.6	CARBONDALE	HERRIN	COAL	2.6	905.6
-568.2	CARBONDALE		UNDERCLAY	1.8	908.2
-570.0	CARBONDALE		LIMESTONE	3.0	910.0
-573.0	CARBONDALE		SANDSTONE	30.5	913.0
-603.5	CARBONDALE		SANDY SHALE	10.0	943.5
-613.5	CARBONDALE	BRIAR HILL	COAL	2.6	953.5
-616.1	CARBONDALE		SANDY SHALE	66.9	956.1
-683.0	CARBONDALE	ST. DAVID	LIMESTONE	0.4	1023.0
-683.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.6	1023.4
-687.0	CARBONDALE	SPRINGFIELD	COAL	4.6	1027.0
-691.6	CARBONDALE		UNDERCLAY	1.4	1031.6

MAPID: 05903536000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 330' N line, 2310' E line

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.166485 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.642084 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 908.6 **LOG TYPE:** Drillers Log

SOURCE: PEABODY COAL CO. 4337C **WELL TYPE:** Coal Test

COMMENT: POOR DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-475.4	MODESTO	PIASA	LIMESTONE	3.0	815.4	
-478.4	MODESTO		SHALE & SANDSTONE	22.0	818.4	
-500.4	CARBONDALE	DANVILLE	COAL	1.1	840.4	
-501.5	CARBONDALE	LAWSON	SILTY SHALE	5.0	841.5	
-506.5	CARBONDALE	LAWSON	SANDSTONE	56.0	846.5	
-562.5	CARBONDALE	BRERETON	LIMESTONE	0.5	902.5	
-563.0	CARBONDALE	ANNA	BLACK SHALE	3.0	903.0	
-566.0	CARBONDALE	HERRIN	COAL	2.6	906.0	

MAPID: 05923840000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 24 **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line of SW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.167222 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.631853 **DATE COLLECTED:** 1 / 18 / 1971

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 715.8 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4338-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
340.0	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
280.0	BOND		SHALE	20.0	60.0	
260.0	BOND	CARTHAGE	LIMESTONE	10.0	80.0	
250.0	MODESTO		SHALE	29.0	90.0	
221.0	MODESTO	NEW HAVEN	COAL	1.3	119.0	
219.7	MODESTO		UNDERCLAY	2.7	120.3	
217.0	MODESTO		SHALE	37.0	123.0	
180.0	MODESTO		SANDSTONE	13.0	160.0	
167.0	MODESTO		SHALE	90.0	173.0	
77.0	MODESTO		SANDSTONE	25.0	263.0	
52.0	MODESTO		SANDY SHALE	61.0	288.0	
-9.0	MODESTO	CHAPEL	COAL	1.0	349.0	
-10.0	MODESTO		UNDERCLAY	0.9	350.0	
-10.9	MODESTO		SHALE	5.1	350.9	
-16.0	MODESTO		SANDSTONE	21.0	356.0	
-37.0	MODESTO		SANDY SHALE	31.0	377.0	
-68.0	MODESTO		LIMESTONE	3.4	408.0	
-71.4	MODESTO		SANDY SHALE	48.6	411.4	
-120.0	MODESTO		SANDSTONE	20.0	460.0	
-140.0	MODESTO		SANDY SHALE	34.5	480.0	
-174.5	MODESTO		SHALE	4.0	514.5	
-178.5	MODESTO		SHALE	10.5	518.5	
-189.0	MODESTO		LIMESTONE	3.0	529.0	
-192.0	MODESTO		SHALE	2.0	532.0	
-194.0	CARBONDALE	DANVILLE	COAL	1.3	534.0	
-195.3	CARBONDALE	ANVIL ROCK	SANDSTONE	57.0	535.3	
-252.3	CARBONDALE	ANNA	BLACK SHALE	3.0	592.3	
-255.3	CARBONDALE	ANNA	LIMESTONE	0.7	595.3	
-256.0	CARBONDALE	HERRIN	COAL	3.1	596.0	
-259.1	CARBONDALE		UNDERCLAY	1.0	599.1	
-260.1	CARBONDALE		LIMESTONE	2.7	600.1	
-262.8	CARBONDALE		SANDSTONE	20.0	602.8	
-282.8	CARBONDALE		SANDY SHALE	17.2	622.8	
-300.0	CARBONDALE	BRIAR HILL	COAL	2.4	640.0	
-302.4	CARBONDALE		SANDY SHALE	7.6	642.4	
-310.0	CARBONDALE		SANDSTONE	20.0	650.0	
-330.0	CARBONDALE		SANDY SHALE	35.9	670.0	
-365.9	CARBONDALE	ST. DAVID	LIMESTONE & SHALE	0.9	705.9	
-366.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.4	706.8	

-369.2	CARBONDALE	SPRINGFIELD	COAL	4.6	709.2
-373.8	CARBONDALE		UNDERCLAY	2.0	713.8

MAPID: 05902054000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 27' S line, 50' W line of SW SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.162257 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.621169 **DATE COLLECTED:** 10 / 16 / 1956

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 422.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL MINING CO. 6H **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
330.0	MODESTO		SAND	55.0	20.0	
275.0	MODESTO		GRAVEL	11.0	75.0	
264.0	MODESTO		GRAY SHALE	52.0	86.0	
212.0	MODESTO		DARK SHALE	4.0	138.0	
208.0	MODESTO		GRAY SHALE	10.0	142.0	
198.0	MODESTO		LIMESTONE	1.0	152.0	
197.0	MODESTO		GRAY SHALE	12.0	153.0	
185.0	MODESTO		SANDSTONE	74.0	165.0	
111.0	MODESTO		GRAY SHALE	16.7	239.0	
94.3	MODESTO		COAL	1.0	255.7	
93.3	MODESTO		UNDERCLAY	1.3	256.7	
92.0	MODESTO		SHALY SANDSTONE	35.0	258.0	
57.0	MODESTO		SHALE	18.3	293.0	
38.7	MODESTO	WEST FRANKLIN	LIMESTONE	2.8	311.3	
35.8	MODESTO		DARK SHALE	0.8	314.2	
35.0	MODESTO		SHALE	14.5	315.0	
20.5	MODESTO		BLACK SHALE & COAL	0.5	329.5	
20.0	MODESTO		SANDSTONE	0.3	330.0	
19.7	MODESTO		UNDERCLAY	2.5	330.3	
17.2	MODESTO		SANDSTONE	31.3	332.8	
-14.0	MODESTO		GRAY SHALE	6.0	364.0	
-20.0	MODESTO		BLACK SHALE	8.7	370.0	
-28.7	MODESTO		GRAY SHALE	3.0	378.7	
-31.7	CARBONDALE	DANVILLE	COAL	0.8	381.7	
-32.5	CARBONDALE		SANDY SHALE	2.3	382.5	
-34.8	CARBONDALE		SANDSTONE	37.3	384.8	

MAPID: 05923841000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 25 **QUARTERS/FOOTAGES:** 2640' N line, 2640' E line

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.163067 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.620941 **DATE COLLECTED:** 12 / 27 / 1970

SURFACE ELEVATION (FT.): 346.0 **LOGGED (FT.):** 606.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4331 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
346.0	PLEISTOCENE		UNCONSOLIDATED	84.5	0.0	
261.5	MODESTO		SHALE	43.0	84.5	
218.5	MODESTO		SHALE	3.2	127.5	
215.3	MODESTO		LIMESTONE	0.6	130.7	
214.7	MODESTO		SHALE	16.2	131.3	
198.5	MODESTO		SANDSTONE	28.5	147.5	
170.0	MODESTO		SANDY SHALE	70.0	176.0	
100.0	MODESTO		SHALE	1.0	246.0	
99.0	MODESTO		COAL	0.5	247.0	
98.5	MODESTO		UNDERCLAY	2.0	247.5	
96.5	MODESTO		SANDY SHALE	5.5	249.5	
91.0	MODESTO		SANDSTONE	10.0	255.0	
81.0	MODESTO		SHALE & SANDSTONE	36.0	265.0	
45.0	MODESTO		SHALE	2.0	301.0	
43.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	303.0	
40.5	MODESTO		SANDSTONE	5.5	305.5	
35.0	MODESTO		SANDY SHALE	11.0	311.0	
24.0	MODESTO		SANDSTONE	41.5	322.0	
-17.5	MODESTO		SANDY SHALE	7.0	363.5	
-24.5	MODESTO		SHALE	3.0	370.5	
-27.5	MODESTO		SHALE	3.5	373.5	
-31.0	CARBONDALE	DANVILLE	COAL	1.0	377.0	
-32.0	CARBONDALE		SANDSTONE/SHALE	32.0	378.0	
-64.0	CARBONDALE		SHALE	7.5	410.0	
-71.5	CARBONDALE		SANDY SHALE	5.5	417.5	
-77.0	CARBONDALE		SHALE	3.0	423.0	
-80.0	CARBONDALE		SANDY SHALE	22.0	426.0	
-102.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.5	448.0	
-104.5	CARBONDALE	ANVIL ROCK	SANDSTONE/SHALE	37.0	450.5	
-141.5	CARBONDALE	BRERETON	LIMESTONE	2.0	487.5	
-143.5	CARBONDALE	ANNA	BLACK SHALE	5.4	489.5	
-148.9	CARBONDALE	ANNA	LIMESTONE	2.0	494.9	
-150.9	CARBONDALE	HERRIN	COAL	1.5	496.9	
-152.4	CARBONDALE		UNDERCLAY	2.6	498.4	
-155.0	CARBONDALE		LIMESTONE	2.0	501.0	
-157.0	CARBONDALE		SANDSTONE	17.0	503.0	LOG NOTES LIMEY
-174.0	CARBONDALE		SANDY SHALE	19.5	520.0	
-193.5	CARBONDALE	BRIAR HILL	COAL	2.0	539.5	
-195.5	CARBONDALE		SANDSTONE/SHALE	16.5	541.5	

-212.0	CARBONDALE		SANDY SHALE	20.0	558.0
-232.0	CARBONDALE		SHALE	18.5	578.0
-250.5	CARBONDALE	ST. DAVID	LIMESTONE	0.5	596.5
-251.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	597.0
-254.0	CARBONDALE	SPRINGFIELD	COAL	4.7	600.0
-258.7	CARBONDALE		SHALE	1.7	604.7

MAPID: 05900229700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.177173 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.618436 **DATE COLLECTED:** 0 / 0 / 1865

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES- BOSWELL MINE **WELL TYPE:** Underground mine

COMMENT:

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

MAPID: 05900229701M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NW SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.177173 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.618436 **DATE COLLECTED:** 0 / 0 / 1865

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 27.2 **LOG TYPE:** Measured section

SOURCE: GEOLOGY OF ILL VOL 6,BOSWELL MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0			UNCONSOLIDATED	-	0.0	
-			ROCK	24.0		
-			COAL	3.2		

MAPID: 05901317000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SE NW SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.186226 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.618543 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 27.2 **LOG TYPE:** Drillers Log

SOURCE: BOSWELLS MINE **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE		SANDSTONE	9.0	0.0	
-	CARBONDALE		ROCK	6.0	9.0	FLAGSTONE NOTED
-	CARBONDALE		SHALE	4.0	15.0	
-	CARBONDALE	BRERETON	GRAY LIMESTONE	3.0	19.0	
-	CARBONDALE	ANNA	SHALE	2.0	22.0	
-	CARBONDALE	HERRIN	COAL	3.2	24.0	

MAPID: 05901355000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 45' N line, 20' E line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.185263 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.628562 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
360.0			UNCONSOLIDATED	0.6	0.0	
359.4			ROCK	81.9	0.6	L-CORE BEGINS
277.5	CARBONDALE	DANVILLE	COAL	2.2	82.5	
275.4	CARBONDALE		ROCK	63.9	84.6	
211.4	CARBONDALE	HERRIN	COAL	3.0	148.6	BLUE SHALE PARTING, .08'
208.5	CARBONDALE		ROCK	38.7	151.5	
169.8	CARBONDALE	BRIAR HILL	COAL	3.5	190.2	PYRITE, .08'
-	CARBONDALE		ROCK	65.8		
-	CARBONDALE	SPRINGFIELD	COAL	4.8		PYRITE, .10'
-	CARBONDALE		ROCK	1.9		

MAPID: 05901355000C **VERSION:** 2 **PROJECT:** ROOF STUDY

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 45' N line, 20' E line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.185263 **GEOLOGIST:**

CONFIDENTIAL: N **LATITUDE:** 37.628562 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 356.0 **LOGGED (FT.):** 207.0 **LOG TYPE:** Survey Core Study

SOURCE: **WELL TYPE:** Coal Test

COMMENT: GOOD DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
218.8	CARBONDALE	DANVILLE	COAL	2.2	137.2	
216.7	CARBONDALE	ALLENBY	SILTY SHALE	8.9	139.3	
207.8	CARBONDALE		CARBONACEOUS SHALE	1.0	148.2	
206.8	CARBONDALE	LAWSON	CLAYSTONE	0.6	149.2	
206.2	CARBONDALE	LAWSON	GRAY SHALE	7.9	149.8	
198.3	CARBONDALE	LAWSON	SANDSTONE	35.2	157.7	
163.2	CARBONDALE	LAWSON	GRAY SHALE	2.3	192.8	
160.8	CARBONDALE	BRERETON	LIMESTONE & SHALE	5.0	195.2	
155.8	CARBONDALE	ANNA	BLACK SHALE	3.8	200.2	
152.0	CARBONDALE	HERRIN	COAL	3.0	204.0	

MAPID: 05901355000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 45' N line, 20' E line of NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.185263 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.628562 **DATE COLLECTED:** 4 / 0 / 1954

SURFACE ELEVATION (FT.): 355.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE VALLEY COAL 4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
355.0			UNCLASSIFIED	56.0	0.0	
299.0	MODESTO		SHALE	82.0	56.0	
217.0	CARBONDALE	DANVILLE	COAL	2.6	138.0	
214.4	CARBONDALE		UNDERCLAY	2.4	140.6	
212.0	CARBONDALE	ANVIL ROCK	SANDSTONE	50.0	143.0	
162.0	CARBONDALE		SHALE	2.0	193.0	
160.0	CARBONDALE	BRERETON	LIMESTONE	6.0	195.0	
154.0	CARBONDALE		SHALE	3.1	201.0	
150.9	CARBONDALE	HERRIN	COAL	3.0	204.1	
147.9	CARBONDALE		UNDERCLAY	2.9	207.1	
145.0	CARBONDALE		SANDSTONE	22.0	210.0	
123.0	CARBONDALE		SHALE	13.8	232.0	
109.2	CARBONDALE	BRIAR HILL	COAL	3.1	245.8	
106.1	CARBONDALE		UNDERCLAY	3.1	248.9	
103.0	CARBONDALE		SANDSTONE	60.0	252.0	
43.0	CARBONDALE		SHALE	2.9	312.0	
40.1	CARBONDALE	SPRINGFIELD	COAL	4.7	314.9	
35.4	CARBONDALE		UNDERCLAY	1.4	319.6	

MAPID: 05902164000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.178415 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.622989 **DATE COLLECTED:** 9 / 17 / 1957

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 323.5 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. 44 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
370.0	PLEISTOCENE		CLAY	80.0	0.0	
290.0	MODESTO		LIMESTONE	0.1	80.0	
289.9	MODESTO		SILTSTONE	1.9	80.1	
288.0	MODESTO		SANDSTONE	1.2	82.0	
286.8	MODESTO		LIMESTONE	0.8	83.2	
286.0	MODESTO		LIMESTONE	0.9	84.0	
285.1	MODESTO		SILTSTONE	2.4	84.9	
282.7	MODESTO		SHALE	0.8	87.3	
281.8	MODESTO		SILTSTONE	0.3	88.2	
281.5	MODESTO		SILTSTONE	2.7	88.5	
278.8	MODESTO		SHALE	2.8	91.2	
276.0	MODESTO		SHALE	2.1	94.0	
273.9	MODESTO		SANDSTONE	0.2	96.1	
273.7	MODESTO		SHALE	6.8	96.3	
267.0	MODESTO		SHALE	8.5	103.0	
258.5	MODESTO		LIMESTONE	1.5	111.5	
257.0	MODESTO		SHALE	17.1	113.0	
239.9	MODESTO		SHALE	5.1	130.1	
234.8	MODESTO		SHALE	2.3	135.2	
232.6	MODESTO		SHALE	4.3	137.4	
228.2	MODESTO		SHALE	11.3	141.8	
217.0	MODESTO		DARK SHALE	4.3	153.0	
212.7	MODESTO		LIMESTONE	0.2	157.3	GRAY TO BLACK
212.5	CARBONDALE	DANVILLE	COAL	2.3	157.5	
210.2	CARBONDALE		UNDERCLAY	0.2	159.8	
210.0	CARBONDALE		SHALE	2.3	160.0	
207.7	CARBONDALE		LIMESTONE	0.3	162.3	
207.4	CARBONDALE		COAL	0.3	162.6	
207.2	CARBONDALE		UNDERCLAY	1.2	162.8	
206.0	CARBONDALE		SANDSTONE	1.9	164.0	
204.1	CARBONDALE		SHALE	1.3	165.9	
202.7	CARBONDALE	ALLENBY	COAL	0.2	167.3	
202.6	CARBONDALE		UNDERCLAY	3.0	167.4	
199.6	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	170.4	
198.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	171.5	
194.0	CARBONDALE		SHALE	0.5	176.0	
193.5	CARBONDALE		SHALE	2.2	176.5	
191.3	CARBONDALE		SHALE	1.7	178.7	
189.7	CARBONDALE	ANVIL ROCK	SILTSTONE	0.8	180.3	

188.8	CARBONDALE	ANVIL ROCK	SANDSTONE	8.8	181.2	
180.0	CARBONDALE		SHALE	4.0	190.0	
176.0	CARBONDALE		SHALE	2.5	194.0	
173.5	CARBONDALE	BRERETON	LIMESTONE	4.4	196.5	
169.1	CARBONDALE	ANNA	SHALE	4.2	200.9	
164.9	CARBONDALE	HERRIN	COAL	2.6	205.1	
162.3	CARBONDALE		UNDERCLAY	3.7	207.7	
158.7	CARBONDALE		SHALE	3.6	211.3	
155.1	CARBONDALE		SHALE	1.3	214.9	
153.8	CARBONDALE		LIMESTONE	2.2	216.2	
151.7	CARBONDALE		SHALE	6.7	218.3	
145.0	CARBONDALE		SHALE	8.0	225.0	
137.0	CARBONDALE		SHALE	7.8	233.0	
129.2	CARBONDALE		SHALE	8.8	240.8	COAL SEAM; DARK
120.3	CARBONDALE	BRIAR HILL	COAL	2.7	249.7	
117.7	CARBONDALE		SANDSTONE	2.3	252.3	
115.3	CARBONDALE		SILTSTONE	2.3	254.7	
113.0	CARBONDALE		SILTSTONE	3.8	257.0	
109.2	CARBONDALE		SHALE	4.8	260.8	
104.4	CARBONDALE		SHALE	10.9	265.6	
93.5	CARBONDALE		SHALE	17.5	276.5	
76.0	CARBONDALE		SHALE	12.8	294.0	
63.2	CARBONDALE		SHALE	1.6	306.8	
61.6	CARBONDALE		LIMESTONE	1.0	308.4	
60.6	CARBONDALE		SHALE	1.5	309.4	
59.1	CARBONDALE		LIMESTONE	0.8	310.9	
58.3	CARBONDALE		SHALE	0.8	311.7	
57.6	CARBONDALE	SPRINGFIELD	COAL	4.3	312.4	
53.3	CARBONDALE		UNDERCLAY	6.8	316.7	

MAPID: 05902164000C **VERSION:** 2 **PROJECT:** NCRDS87

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.178415 **GEOLOGIST:** WEIBEL

CONFIDENTIAL: N **LATITUDE:** 37.622989 **DATE COLLECTED:** 9 / 18 / 1957

SURFACE ELEVATION (FT.): 370.0 **LOGGED (FT.):** 323.5 **LOG TYPE:** Other Core Study

SOURCE: BRANSFORD MINING CO. 44 **WELL TYPE:** Diamond Drill

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
370.0			UNCONSOLIDATED	80.0	0.0	
290.0	MODESTO		LIMESTONE	0.1	80.0	
289.9	MODESTO		SILTSTONE	1.9	80.1	
288.0	MODESTO		SANDSTONE	1.2	82.0	
286.8	MODESTO		LIMESTONE	1.8	83.2	
285.1	MODESTO		SILTSTONE	2.4	84.9	
282.7	MODESTO		SHALE	0.8	87.3	
281.8	MODESTO		SILTSTONE	5.8	88.2	
276.0	MODESTO		SHALE	0.0	94.0	
276.0	MODESTO		BLACK SHALE	2.1	94.0	
273.9	MODESTO		SANDSTONE	0.2	96.1	
273.7	MODESTO		SHALE	15.3	96.3	
258.5	MODESTO		LIMESTONE	1.5	111.5	
257.0	MODESTO		SHALE	24.4	113.0	
232.6	MODESTO		BLACK SHALE	4.3	137.4	
228.2	MODESTO		SHALE	15.6	141.8	
212.7	MODESTO		LIMESTONE	0.2	157.3	
212.5	MODESTO		COAL	2.3	157.5	
210.2	MODESTO		UNDERCLAY	0.2	159.8	
210.0	MODESTO		GRAY SHALE	2.3	160.0	
207.7	MODESTO	PIASA	LIMESTONE	0.3	162.3	UNCERTAIN CORRELATION
207.4	CARBONDALE	DANVILLE	COAL	0.3	162.6	UNCERTAIN CORRELATION
207.2	CARBONDALE		UNDERCLAY	1.2	162.8	
206.0	CARBONDALE		SANDSTONE	1.9	164.0	
204.1	CARBONDALE		GRAY SHALE	1.3	165.9	
202.7	CARBONDALE		COAL	0.2	167.3	
202.6	CARBONDALE		UNDERCLAY	3.0	167.4	
199.6	CARBONDALE		LIMESTONE	5.6	170.4	
194.0	CARBONDALE		GRAY SHALE	4.3	176.0	
189.7	CARBONDALE		SILTSTONE	0.8	180.3	
188.8	CARBONDALE		SANDSTONE	8.8	181.2	
180.0			SHALE	4.0	190.0	
176.0	CARBONDALE		BLACK SHALE	2.5	194.0	
173.5	CARBONDALE	BRERETON	LIMESTONE	4.4	196.5	
169.1	CARBONDALE	ANNA	BLACK SHALE	4.2	200.9	
164.9	CARBONDALE	HERRIN	COAL	2.6	205.1	
162.3	CARBONDALE		UNDERCLAY	3.7	207.7	
158.7	CARBONDALE		GRAY SHALE	3.6	211.3	
155.1	CARBONDALE		LIMESTONE	1.3	214.9	

153.8	CARBONDALE		SHALE	24.7	216.2
129.2	CARBONDALE		DARK SHALE	8.8	240.8
120.3	CARBONDALE	BRIAR HILL	COAL	2.7	249.7
117.7	CARBONDALE		SANDSTONE	2.3	252.3
115.3	CARBONDALE		SILTSTONE	6.2	254.7
109.2	CARBONDALE		SHALE	46.0	260.8
63.2	CARBONDALE		BLACK SHALE	1.6	306.8
61.6	CARBONDALE		LIMESTONE	1.0	308.4
60.6	CARBONDALE		BLACK SHALE	1.5	309.4
59.1	CARBONDALE	ST. DAVID	LIMESTONE	0.8	310.9
58.3	CARBONDALE	TURNER MINE	BLACK SHALE	0.1	311.7
58.2	CARBONDALE		UNKNOWN	0.7	311.8
57.6	CARBONDALE	SPRINGFIELD	COAL	4.3	312.4
53.3	CARBONDALE		UNDERCLAY	6.8	316.7

MAPID: 05902205000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** SW NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18738 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.623197 **DATE COLLECTED:** 10 / 25 / 1957

SURFACE ELEVATION (FT.): 365.0 **LOGGED (FT.):** 121.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 45 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
365.0	PLEISTOCENE		CLAY	14.0	0.0	BROWN
351.0	PLEISTOCENE		CLAY	13.5	14.0	BROWN
337.5	CARBONDALE		SHALE	18.0	27.5	
319.5	CARBONDALE		SHALE	1.6	45.5	
317.9	CARBONDALE	BRIAR HILL	COAL	3.3	47.1	
314.7	CARBONDALE		SANDSTONE	31.2	50.3	
283.5	CARBONDALE		SHALE	32.5	81.5	
251.0	CARBONDALE		SHALE	1.8	114.0	
249.2	CARBONDALE	SPRINGFIELD	COAL	4.2	115.8	
245.0	CARBONDALE		UNDERCLAY	1.0	120.0	GRAY

MAPID: 05923842000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 26 **QUARTERS/FOOTAGES:** 1640' N line, 1320' E line

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.176311 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.623826 **DATE COLLECTED:** 1 / 4 / 1971

SURFACE ELEVATION (FT.): 350.0 **LOGGED (FT.):** 384.1 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4329-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
350.0	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
285.0	MODESTO		SHALE	4.0	65.0	
281.0	MODESTO		LIMESTONE	3.0	69.0	
278.0	MODESTO		SANDSTONE	4.0	72.0	
274.0	MODESTO		SANDY SHALE	9.0	76.0	
265.0	MODESTO		LIMESTONE	3.6	85.0	
261.4	MODESTO		SANDY SHALE	14.0	88.6	
247.4	MODESTO		SANDSTONE	16.0	102.6	
231.4	MODESTO		SHALE	5.0	118.6	
226.4	MODESTO		SANDY SHALE	18.4	123.6	
208.0	MODESTO		SHALE	1.5	142.0	
206.5	MODESTO		COAL	0.5	143.5	
206.0	MODESTO		SANDY SHALE	4.0	144.0	
202.0	MODESTO		SANDSTONE	3.5	148.0	
198.5	MODESTO		SANDY SHALE	30.5	151.5	
168.0	MODESTO		SHALE	21.0	182.0	
147.0	MODESTO		SHALE	5.3	203.0	
141.7	MODESTO		SHALE	11.0	208.3	
130.7	MODESTO		SANDY SHALE	6.1	219.3	
124.6	CARBONDALE	DANVILLE	COAL	1.9	225.4	
122.7	CARBONDALE		SHALE	3.7	227.3	
119.0	CARBONDALE		SANDSTONE	3.5	231.0	
115.5	CARBONDALE		SHALE	5.0	234.5	
110.5	CARBONDALE	BANKSTON FORK	LIMESTONE	2.8	239.5	
107.7	CARBONDALE		SHALE	2.7	242.3	
105.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	7.0	245.0	
98.0	CARBONDALE	ANVIL ROCK	SANDSTONE	5.0	252.0	
93.0	CARBONDALE	ANVIL ROCK	SANDY SHALE	4.0	257.0	
89.0	CARBONDALE		SHALE	2.9	261.0	
86.1	CARBONDALE	BRERETON	LIMESTONE	4.5	263.9	
81.6	CARBONDALE	ANNA	BLACK SHALE	3.6	268.4	
78.0	CARBONDALE	HERRIN	COAL	2.6	272.0	
75.4	CARBONDALE		UNDERCLAY	2.4	274.6	
73.0	CARBONDALE		SANDY SHALE	31.0	277.0	
42.0	CARBONDALE		SHALE	6.1	308.0	
35.9	CARBONDALE	BRIAR HILL	COAL	2.7	314.1	
33.2	CARBONDALE		SANDSTONE	4.2	316.8	
29.0	CARBONDALE		SANDY SHALE	6.0	321.0	
23.0	CARBONDALE		SANDSTONE	8.0	327.0	

15.0	CARBONDALE		SANDY SHALE	15.0	335.0	
0.0	CARBONDALE		SHALE	25.8	350.0	
-25.8	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	1.1	375.8	
-26.9	CARBONDALE	ST. DAVID	LIMESTONE	0.5	376.9	
-27.4	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	377.4	
-29.6	CARBONDALE	SPRINGFIELD	COAL	4.3	379.6	
-33.9	CARBONDALE		UNDERCLAY	0.3	383.9	THICKNESS CHANGED

MAPID: 05900043100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** NW SE SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.193086 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.616714 **DATE COLLECTED:** 0 / 0 / 1918

SURFACE ELEVATION (FT.): 390.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-STRONG & LOWERY C C **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
390.0			UNKNOWN	0.0	0.0	

MAPID: 05901324000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 85' N line, 233' E line of SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.195065 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.624903 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 399.7 **LOGGED (FT.):** 132.0 **LOG TYPE:** Drillers Log

SOURCE: EAGLE VALLEY COAL 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.7			UNCLASSIFIED	32.0	0.0	
367.7	CARBONDALE		GRAY SANDSTONE	17.0	32.0	
350.7	CARBONDALE		SHALE	6.0	49.0	
344.7	CARBONDALE		SHALE	3.1	55.0	
341.6	CARBONDALE	BRIAR HILL	COAL	3.4	58.1	
338.2	CARBONDALE		UNDERCLAY	0.8	61.5	
337.4	CARBONDALE		SHALE & SANDSTONE	24.7	62.3	
312.7	CARBONDALE		SHALE	33.0	87.0	
279.7	CARBONDALE		SHALE	4.0	120.0	
275.7	CARBONDALE		SHALE	1.8	124.0	
273.9	CARBONDALE	SPRINGFIELD	COAL	5.1	125.8	
268.8	CARBONDALE		UNDERCLAY	1.1	130.9	

MAPID: 05901324000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 85' N line, 233' E line of SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.195065 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.624903 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 400.0 **LOGGED (FT.):** 132.0 **LOG TYPE:** Survey Core Study

SOURCE: EAGLE VALLEY C C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
400.0			UNCONSOLIDATED	32.0	0.0	
368.0			ROCK	26.1	32.0	L-CORE BEGINS
341.9	CARBONDALE	BRIAR HILL	COAL	3.3	58.1	
338.6			ROCK	70.9	61.4	
267.7	CARBONDALE	SPRINGFIELD	COAL	5.1	132.3	PYRITE BAND .08'
262.6			ROCK	1.3	137.4	

MAPID: 05901324000C **VERSION:** 3 **PROJECT:** ISGS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** 85' N line, 233' E line of SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.195065 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.624903 **DATE COLLECTED:** 3 / 0 / 1954

SURFACE ELEVATION (FT.): 399.7 **LOGGED (FT.):** 131.5 **LOG TYPE:** Multiple log types

SOURCE: EAGLE VALLEY COAL CO 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
399.7	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0	
367.7	CARBONDALE		SHALE	0.6	32.0	WEATHERED
367.1	CARBONDALE		SHALE	5.3	32.6	
361.8	CARBONDALE		SILTSTONE	11.3	37.9	WITH SHALE
350.4	CARBONDALE		SHALE	8.9	49.3	
341.5	CARBONDALE	BRIAR HILL	COAL	3.3	58.2	
338.2	CARBONDALE		UNDERCLAY	1.3	61.5	
336.9	CARBONDALE		SILTSTONE	1.3	62.8	
335.6	CARBONDALE		SHALE	2.9	64.1	
332.7	CARBONDALE		SANDSTONE	1.9	67.0	
330.8	CARBONDALE		SILTSTONE	9.4	68.9	SHALE LAMINAE
321.4	CARBONDALE		SANDSTONE	1.8	78.3	
319.5	CARBONDALE		SHALE	0.1	80.2	
319.4	CARBONDALE		SANDSTONE	3.6	80.3	
315.8	CARBONDALE		SHALE	0.5	83.9	WITH SOME COAL ZONES
315.3	CARBONDALE		SILTSTONE	24.8	84.4	
290.5	CARBONDALE		SHALE	11.4	109.2	THICKNESS AS PER LOG
279.1	CARBONDALE		BLACK SHALE	2.5	120.6	
276.6	CARBONDALE		LIMESTONE	0.8	123.1	
275.8	CARBONDALE		BLACK SHALE	2.6	123.9	
273.2	CARBONDALE	SPRINGFIELD	COAL	5.0	126.5	
268.2	CARBONDALE		UNDERCLAY	0.0	131.5	

MAPID: 05903168000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** SW NW SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.206955 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.618581 **DATE COLLECTED:** 5 / 21 / 1962

SURFACE ELEVATION (FT.): 397.3 **LOGGED (FT.):** 139.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 976 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
397.3	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
379.3	CARBONDALE		SANDY SHALE	35.0	18.0	
344.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	53.0	
343.3	CARBONDALE	COLCHESTER	COAL	0.3	54.0	
343.0	CARBONDALE		UNDERCLAY	3.7	54.3	
339.3	CARBONDALE	PALZO	SANDSTONE	43.0	58.0	
296.3	CARBONDALE		SANDY SHALE	8.0	101.0	
288.3	CARBONDALE	DEKOVEN	COAL	3.3	109.0	
285.0	CARBONDALE		UNDERCLAY	1.7	112.3	
283.3	CARBONDALE		SANDSTONE	19.0	114.0	
264.3	CARBONDALE		BLACK SHALE	2.0	133.0	
262.3	CARBONDALE	DAVIS	COAL	3.5	135.0	
258.8	TRADEWATER		UNDERCLAY	1.0	138.5	

MAPID: 05903169000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SE SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.200013 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.616705 **DATE COLLECTED:** 5 / 24 / 1962

SURFACE ELEVATION (FT.): 345.8 **LOGGED (FT.):** 125.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 978 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.8	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
330.8	PLEISTOCENE		CLAY	35.0	15.0	
295.8	CARBONDALE	PALZO	SANDSTONE	20.0	50.0	
275.8	CARBONDALE		SANDY SHALE	25.0	70.0	
250.8	CARBONDALE	DEKOVEN	COAL	3.2	95.0	
247.6	CARBONDALE		UNDERCLAY	1.8	98.2	
245.8	CARBONDALE		SANDSTONE	10.0	100.0	
235.8	CARBONDALE		SANDY SHALE	9.0	110.0	
226.8	CARBONDALE		BLACK SHALE	2.0	119.0	
224.8	CARBONDALE	DAVIS	COAL	3.8	121.0	
221.0	TRADEWATER		UNDERCLAY	1.0	124.8	

MAPID: 05903170000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE SW SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.204632 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.6167 **DATE COLLECTED:** 5 / 25 / 1962

SURFACE ELEVATION (FT.): 354.8 **LOGGED (FT.):** 98.3 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 979 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
354.8	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0	
332.8	CARBONDALE	PALZO	SANDSTONE	35.0	22.0	
297.8	CARBONDALE		SANDY SHALE	10.5	57.0	
287.3	CARBONDALE	DEKOVEN	COAL	3.2	67.5	
284.1	CARBONDALE		UNDERCLAY	1.3	70.7	
282.8	CARBONDALE		SANDSTONE	10.0	72.0	
272.8	CARBONDALE		SANDY SHALE	9.5	82.0	
263.3	CARBONDALE		BLACK SHALE	2.0	91.5	
261.3	CARBONDALE	DAVIS	COAL	3.8	93.5	
257.5	TRADEWATER		UNDERCLAY	1.0	97.3	

MAPID: 05903171000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.204659 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.620465 **DATE COLLECTED:** 5 / 29 / 1962

SURFACE ELEVATION (FT.): 355.1 **LOGGED (FT.):** 140.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 980 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
355.1	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0	
323.1	CARBONDALE		SANDY SHALE	46.0	32.0	
277.1	CARBONDALE	PALZO	SANDSTONE	10.0	78.0	
267.1	CARBONDALE		SANDY SHALE	21.5	88.0	
245.6	CARBONDALE	DEKOVEN	COAL	2.9	109.5	
242.7	CARBONDALE		UNDERCLAY	1.6	112.4	
241.1	CARBONDALE		SANDSTONE	10.0	114.0	
231.1	CARBONDALE		SANDY SHALE	10.0	124.0	
221.1	CARBONDALE		BLACK SHALE	2.0	134.0	
219.1	CARBONDALE	DAVIS	COAL	3.8	136.0	
215.3	TRADEWATER		UNDERCLAY	1.0	139.8	

MAPID: 05923854000C **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 27 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.204708 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.628 **DATE COLLECTED:** 7 / 14 / 1975

SURFACE ELEVATION (FT.): 440.0 **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	THICKNESS (FT.) OVERBURDEN	COMMENT
440.0			UNCONSOLIDATED	21.0	0.0	
419.0			ROCK	31.0	21.0	
388.0			COAL	3.0	52.0	
385.0			ROCK	55.0	55.0	

MAPID: 05901881000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW SE SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.22075 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.614946 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 415.0 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 28A6 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
415.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
400.0	TRADEWATER		SANDSTONE	5.5	15.0	
394.5	TRADEWATER		COAL	0.5	20.5	
394.0	TRADEWATER		SANDSTONE	19.0	21.0	
375.0	TRADEWATER		GRAY SHALE	5.0	40.0	
370.0	TRADEWATER		COAL	0.5	45.0	
369.5	TRADEWATER		UNDERCLAY	4.5	45.5	
365.0	TRADEWATER		SANDY SHALE	25.0	50.0	
340.0	TRADEWATER		GRAY SHALE	25.0	75.0	

MAPID: 05901883000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW SW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.223124 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.620599 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 324.2 **LOGGED (FT.):** 79.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 28D7 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
324.2	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
319.2	TRADEWATER		SANDSTONE	21.0	5.0	
298.2	TRADEWATER		SANDSTONE	1.0	26.0	
297.2	TRADEWATER		BLACK SHALE	2.5	27.0	
294.7	TRADEWATER		COAL	0.5	29.5	
294.2	TRADEWATER		UNDERCLAY	5.0	30.0	
289.2	TRADEWATER		SANDY SHALE	35.0	35.0	
254.2	TRADEWATER		SANDSTONE	9.0	70.0	

MAPID: 05902875000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NE SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.211571 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.618614 **DATE COLLECTED:** 10 / 3 / 1961

SURFACE ELEVATION (FT.): 409.7 **LOGGED (FT.):** 78.7 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 787 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
409.7	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
400.7	CARBONDALE		SHALE & CLAYSTONE	14.0	9.0	
386.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	23.0	
385.2	CARBONDALE	COLCHESTER	COAL	0.3	24.5	
384.9	CARBONDALE		UNDERCLAY	2.2	24.8	
382.7	CARBONDALE	PALZO	SANDSTONE	7.0	27.0	
375.7	CARBONDALE		SHALE	22.0	34.0	
353.7	CARBONDALE		SANDY SHALE	19.5	56.0	
334.2	CARBONDALE	DEKOVEN	COAL	2.7	75.5	
331.5	CARBONDALE		UNDERCLAY	0.5	78.2	

MAPID: 05902880000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.209252 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.616708 **DATE COLLECTED:** 10 / 12 / 1961

SURFACE ELEVATION (FT.): 403.4 **LOGGED (FT.):** 83.6 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 799 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
403.4	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
395.4	PLEISTOCENE		CLAY	6.0	8.0	
389.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	14.0	
388.4	CARBONDALE	COLCHESTER	COAL	0.3	15.0	
388.1	CARBONDALE		SANDY SHALE	9.2	15.3	
378.9	CARBONDALE		SHALY SANDSTONE	15.0	24.5	
363.9	CARBONDALE	PALZO	SANDSTONE	25.5	39.5	
338.4	CARBONDALE		SANDY SHALE	15.5	65.0	
322.9	CARBONDALE	DEKOVEN	COAL	2.8	80.5	
320.1	CARBONDALE		UNDERCLAY	0.5	83.3	

MAPID: 05902886000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW NW SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.216205 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.620538 **DATE COLLECTED:** 11 / 6 / 1961

SURFACE ELEVATION (FT.): 436.9 **LOGGED (FT.):** 22.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 855 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
436.9	PLEISTOCENE		SOIL	9.0	0.0	
427.9	CARBONDALE	PALZO	SANDSTONE	9.0	9.0	
418.9	CARBONDALE	DEKOVEN	UNDERCLAY	3.0	18.0	
415.9	CARBONDALE			1.0	21.0	

MAPID: 05903172000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.225513 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.626238 **DATE COLLECTED:** 12 / 8 / 1961

SURFACE ELEVATION (FT.): 366.4 **LOGGED (FT.):** 30.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 889 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
366.4	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
348.4	CARBONDALE		GRAY SHALE	2.0	18.0	
346.4	CARBONDALE		BLACK SHALE	2.3	20.0	
344.1	CARBONDALE	DAVIS	COAL	3.7	22.3	
340.4	TRADEWATER		UNDERCLAY	4.0	26.0	

MAPID: 05903174000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223224 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.628101 **DATE COLLECTED:** 12 / 11 / 1961

SURFACE ELEVATION (FT.): 350.5 **LOGGED (FT.):** 52.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
350.5	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
340.5	CARBONDALE		SANDSTONE	3.0	10.0	
337.5	CARBONDALE		SANDY SHALE	11.5	13.0	
326.0	CARBONDALE	DEKOVEN	COAL	3.3	24.5	
322.7	CARBONDALE		UNDERCLAY & SANDSTONE	1.0	27.8	
321.7	CARBONDALE		SANDSTONE	12.3	28.8	
309.5	CARBONDALE		GRAY SHALE	5.0	41.0	
304.5	CARBONDALE		BLACK SHALE	2.3	46.0	
302.2	CARBONDALE	DAVIS	COAL	3.5	48.3	
298.7	TRADEWATER		UNDERCLAY	1.0	51.8	

MAPID: 05903176000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NW NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.223199 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.626223 **DATE COLLECTED:** 12 / 12 / 1961

SURFACE ELEVATION (FT.): 359.7 **LOGGED (FT.):** 25.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 893 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
359.7	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0	
343.7	CARBONDALE		GRAY SHALE	4.0	16.0	
339.7	CARBONDALE		BLACK SHALE	2.0	20.0	
337.7	CARBONDALE	DAVIS	COAL	3.3	22.0	
334.4	TRADEWATER		UNDERCLAY	0.5	25.3	

MAPID: 05903178000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SW NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.216246 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.624301 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): 437.2 **LOGGED (FT.):** 0.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 969 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
437.2	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
427.2	PLEISTOCENE		CLAY	17.0	10.0	
410.2	CARBONDALE	COLCHESTER	COAL	0.5	27.0	
409.7	CARBONDALE		CLAYSTONE	9.5	27.5	
400.2	CARBONDALE	PALZO	SHALY SANDSTONE	6.5	37.0	
393.7	CARBONDALE	PALZO	SANDSTONE	18.5	43.5	
375.2	CARBONDALE	PALZO	SHALE	15.0	62.0	
360.2	CARBONDALE		GRAY SHALE	4.0	77.0	
356.2	CARBONDALE	DEKOVEN	COAL	3.1	81.0	
353.1	CARBONDALE		UNDERCLAY	1.9	84.1	
351.2	CARBONDALE		SANDSTONE	18.0	86.0	
333.2	CARBONDALE		BLACK SHALE	2.0	104.0	
331.2	CARBONDALE	DAVIS	COAL	3.5	106.0	
327.7	TRADEWATER		UNDERCLAY	-	109.5	

MAPID: 05903179000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SE NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.218576 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.626196 **DATE COLLECTED:** 5 / 4 / 1962

SURFACE ELEVATION (FT.): 412.6 **LOGGED (FT.):** 129.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 970 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
412.6	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0	
392.6	CARBONDALE		GRAY SHALE	28.0	20.0	
364.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	48.0	
363.1	CARBONDALE	COLCHESTER	COAL	0.3	49.5	
362.8	CARBONDALE		CLAYSTONE	7.3	49.8	
355.6	CARBONDALE	PALZO	SHALY SANDSTONE	18.0	57.0	
337.6	CARBONDALE		SHALE	26.5	75.0	
311.1	CARBONDALE	DEKOVEN	COAL	3.1	101.5	
308.0	CARBONDALE		UNDERCLAY	1.4	104.6	
306.6	CARBONDALE		SHALY SANDSTONE	16.5	106.0	
290.1	CARBONDALE		BLACK SHALE	2.0	122.5	
288.1	CARBONDALE	DAVIS	COAL	3.5	124.5	
284.6	TRADEWATER		UNDERCLAY	1.0	128.0	

MAPID: 05903180000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE NE NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.218598 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.628077 **DATE COLLECTED:** 5 / 7 / 1962

SURFACE ELEVATION (FT.): 361.9 **LOGGED (FT.):** 125.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 971 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
361.9	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
351.9	CARBONDALE		SHALE	30.0	10.0	
321.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	40.0	
320.4	CARBONDALE	COLCHESTER	COAL	0.5	41.5	
319.9	CARBONDALE		UNDERCLAY	5.0	42.0	
314.9	CARBONDALE	PALZO	SANDSTONE	15.0	47.0	
299.9	CARBONDALE	PALZO	SHALE	19.0	62.0	
280.9	CARBONDALE		GRAY SHALE	16.0	81.0	
264.9	CARBONDALE	DEKOVEN	COAL	3.3	97.0	
261.6	CARBONDALE		UNDERCLAY	1.7	100.3	
259.9	CARBONDALE		SHALE	17.0	102.0	
242.9	CARBONDALE		BLACK SHALE	2.0	119.0	
240.9	CARBONDALE	DAVIS	COAL	3.5	121.0	
237.4	TRADEWATER		UNDERCLAY	1.0	124.5	

MAPID: 05903181000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NW SW NE
QUADRANGLE: SALINE MINES **LONGITUDE:** -88.216246 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.624301 **DATE COLLECTED:** 5 / 8 / 1962
SURFACE ELEVATION (FT.): 419.0 **LOGGED (FT.):** 131.9 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CO. 972 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
419.0	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0	
403.0	CARBONDALE		SANDY SHALE	31.0	16.0	
372.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.8	47.0	
370.2	CARBONDALE	COLCHESTER	COAL	0.3	48.8	
370.0	CARBONDALE		UNDERCLAY	6.5	49.0	
363.5	CARBONDALE	PALZO	SANDSTONE	5.5	55.5	
358.0	CARBONDALE	PALZO	SHALE	20.0	61.0	
338.0	CARBONDALE		GRAY SHALE	20.0	81.0	
318.0	CARBONDALE	DEKOVEN	COAL	3.3	101.0	
314.7	CARBONDALE		UNDERCLAY	1.8	104.3	
313.0	CARBONDALE		SANDSTONE	19.0	106.0	
294.0	CARBONDALE		BLACK SHALE	2.0	125.0	
292.0	CARBONDALE	DAVIS	COAL	3.9	127.0	
288.1	TRADEWATER		UNDERCLAY	1.0	130.9	

MAPID: 05903183000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** SW NE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.211641 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.626154 **DATE COLLECTED:** 5 / 15 / 1962
SURFACE ELEVATION (FT.): 349.8 **LOGGED (FT.):** 121.6 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CO. 974 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
349.8	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
332.8	CARBONDALE		SANDY SHALE	20.5	17.0	
312.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	37.5	
311.3	CARBONDALE	COLCHESTER	COAL	0.5	38.5	
310.8	CARBONDALE		UNDERCLAY	6.0	39.0	
304.8	CARBONDALE	PALZO	SANDSTONE	20.0	45.0	
284.8	CARBONDALE		SANDY SHALE	23.5	65.0	
261.3	CARBONDALE	DEKOVEN	COAL	3.4	88.5	
257.9	CARBONDALE		UNDERCLAY	1.6	91.9	
256.3	CARBONDALE		SANDSTONE	23.5	93.5	
232.8	CARBONDALE	DAVIS	COAL	3.6	117.0	
229.2	TRADEWATER		UNDERCLAY	1.0	120.6	

MAPID: 05903185000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 28 **QUARTERS/FOOTAGES:** NE SE NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.209311 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.624253 **DATE COLLECTED:** 5 / 23 / 1962

SURFACE ELEVATION (FT.): 362.7 **LOGGED (FT.):** 114.8 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 977 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
362.7	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
354.7	CARBONDALE		SANDY SHALE	23.0	8.0	
331.7	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	31.0	
329.7	CARBONDALE	COLCHESTER	COAL	0.5	33.0	
329.2	CARBONDALE		UNDERCLAY	4.0	33.5	
325.2	CARBONDALE	PALZO	SANDSTONE	22.5	37.5	
302.7	CARBONDALE		SANDY SHALE	21.5	60.0	
281.2	CARBONDALE	DEKOVEN	COAL	2.8	81.5	
278.4	CARBONDALE		UNDERCLAY	1.7	84.3	
276.7	CARBONDALE		SANDSTONE	9.0	86.0	
267.7	CARBONDALE		SANDY SHALE	12.5	95.0	
255.2	CARBONDALE		BLACK SHALE	2.0	107.5	
253.2	CARBONDALE	DAVIS	COAL	3.8	109.5	
249.4	TRADEWATER		UNDERCLAY	1.5	113.3	

MAPID: 05901893000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW SW SE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.234577 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.616859 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 104.0 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 29B4 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
-	TRADEWATER		SANDSTONE	33.0	12.0	
-	TRADEWATER		GRAY SHALE	7.5	45.0	
-	TRADEWATER		COAL	0.5	52.5	
-	TRADEWATER		UNDERCLAY	2.0	53.0	
-	TRADEWATER		SANDY SHALE	28.0	55.0	
-	TRADEWATER		GRAY SHALE	21.0	83.0	

MAPID: 05902558000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NW NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.232475 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.628082 **DATE COLLECTED:** 5 / 29 / 1961
SURFACE ELEVATION (FT.): 433.5 **LOGGED (FT.):** 51.0 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CO. 638 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
433.5	PLEISTOCENE		UNCONSOLIDATED	1.0	0.0	
432.5	CARBONDALE		SANDSTONE	17.0	1.0	
415.5	CARBONDALE		SANDSTONE/COAL	0.3	18.0	
415.2	CARBONDALE		SANDSTONE	0.3	18.3	
414.9	CARBONDALE		SANDSTONE/COAL	0.2	18.6	
414.7	CARBONDALE		SANDSTONE	0.1	18.8	
414.7	CARBONDALE	DEKOVEN	COAL	0.7	18.8	
414.0	CARBONDALE		UNDERCLAY	1.5	19.5	
412.5	CARBONDALE		SANDSTONE/SHALE	11.0	21.0	
401.5	CARBONDALE		SANDSTONE	8.0	32.0	
393.5	CARBONDALE		GRAY SHALE	4.5	40.0	
389.0	CARBONDALE		BLACK SHALE	2.0	44.5	
387.0	CARBONDALE	DAVIS	COAL	4.0	46.5	
383.0	TRADEWATER		UNDERCLAY	0.5	50.5	

MAPID: 05903186000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NW NE NE
QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.230163 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.628098 **DATE COLLECTED:** 12 / 5 / 1961
SURFACE ELEVATION (FT.): 417.7 **LOGGED (FT.):** 55.6 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CO. 885 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
417.7	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
407.7	CARBONDALE		SANDSTONE	5.0	10.0	
402.7	CARBONDALE		SANDY SHALE	7.5	15.0	
395.2	CARBONDALE	DEKOVEN	COAL	3.0	22.5	
392.2	CARBONDALE		UNDERCLAY	2.0	25.5	
390.2	CARBONDALE		SANDY SHALE	8.5	27.5	
381.7	CARBONDALE		SANDSTONE	6.5	36.0	
375.2	CARBONDALE		GRAY SHALE	7.0	42.5	
368.2	CARBONDALE		BLACK SHALE	1.5	49.5	
366.7	CARBONDALE	DAVIS	COAL	3.6	51.0	
363.1	TRADEWATER		UNDERCLAY	1.0	54.6	

MAPID: 05903188000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 29 **QUARTERS/FOOTAGES:** NE NE NE

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.227851 **GEOLOGIST:** D NORTH

CONFIDENTIAL: N **LATITUDE:** 37.628111 **DATE COLLECTED:** 12 / 7 / 1961

SURFACE ELEVATION (FT.): 398.2 **LOGGED (FT.):** 60.5 **LOG TYPE:** Drillers Log

SOURCE: STONEFORT COAL CO. 887 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
398.2	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
388.2	CARBONDALE		SANDSTONE	12.0	10.0	
376.2	CARBONDALE		SANDY SHALE	10.0	22.0	
366.2	CARBONDALE	DEKOVEN	COAL	3.3	32.0	
362.9	CARBONDALE		UNDERCLAY	1.0	35.3	
361.9	CARBONDALE		SANDY SHALE	6.2	36.3	
355.7	CARBONDALE		SANDSTONE	2.0	42.5	
353.7	CARBONDALE		SANDY SHALE	4.5	44.5	
349.2	CARBONDALE		GRAY SHALE	5.5	49.0	
343.7	CARBONDALE		BLACK SHALE	1.5	54.5	
342.2	CARBONDALE	DAVIS	COAL	3.5	56.0	
338.7	TRADEWATER		UNDERCLAY	1.0	59.5	

MAPID: 05900063103M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 200' S line, 105' W line of SE

QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.253792 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.61455 **DATE COLLECTED:** 10 / 22 / 1935

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 40.2 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-E.V.SCHNEIDER, SCHNEIDER CC **WELL TYPE:** Underground mine

COMMENT: SAMPLE #2. SAME AS BLU BLAZ BLOC MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-			ROCK	30.0		
-	ABBOTT	WILLIS	COAL	3.2		
-			ROCK	7.0		

MAPID: 05900063102M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** 200' S line, 75' W line of SE

QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.253896 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.614551 **DATE COLLECTED:** 10 / 22 / 1935

SURFACE ELEVATION (FT.): 460.0 **LOGGED (FT.):** 40.1 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-E.V.SCHNEIDER, SCHNEIDER MN **WELL TYPE:** Underground mine

COMMENT: SAMPLE # 1

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
460.0			ROCK	30.0	0.0	
-	ABBOTT	WILLIS	COAL	3.1		
-			ROCK	7.0		

MAPID: 05900063101M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SW SW SE

QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.253575 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.614464 **DATE COLLECTED:** 8 / 11 / 1933

SURFACE ELEVATION (FT.): 480.0 **LOGGED (FT.):** 9.2 **LOG TYPE:** Measured section

SOURCE: FLD NOTES-WANLESS, SCHNEIDER BROS MINE **WELL TYPE:** Underground mine

COMMENT: SAME AS BLUE BLAZ BLOC MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	6.0		
-	ABBOTT	WILLIS	COAL	3.2		
-			ROCK	-		

MAPID: 05900074700M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** SW SE SE SW

QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.255897 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.614454 **DATE COLLECTED:** 0 / 0 / 1912

SURFACE ELEVATION (FT.): 520.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section

SOURCE: MINE NOTES-CRAIG MINE **WELL TYPE:** Underground mine

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
520.0			UNKNOWN	0.0	0.0	

MAPID: 05900229900M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE SE NE SW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.254828 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.619094 **DATE COLLECTED:** 8 / 11 / 1933
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 13.5 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, E. SCOTT MINE **WELL TYPE:** Underground mine
COMMENT: MINE ENTRY, E. SCOTT MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	8.0		
-	ABBOTT	WILLIS	COAL	-		THICKENS WEST TO 4'
-			ROCK	5.5		

MAPID: 059274A0027F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** NW SE NW NW
QUADRANGLE: EQUALITY **LONGITUDE:** -88.260755 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.626452 **DATE COLLECTED:** 8 / 11 / 1933
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-M. FULLER, ABD MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
500.0			UNKNOWN	0.0	0.0	

MAPID: 059274D0002F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE NE SE SW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.254775 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.616313 **DATE COLLECTED:** 8 / 11 / 1933
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 36.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS, ABD MINE **WELL TYPE:** Underground mine
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			ROCK	4.0		
-	ABBOTT	WILLIS	COAL	2.3		THICKNESS AVERAGED
-			ROCK	31.5		

MAPID: 059274D0003F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** NE NW SE SW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.257112 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.617228 **DATE COLLECTED:** 8 / 11 / 1933
SURFACE ELEVATION (FT.): 540.0 **LOGGED (FT.):** 12.3 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-WANLESS **WELL TYPE:** Roadcut
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
540.0			ROCK	6.0	0.0	
534.0	ABBOTT	WILLIS	COAL	0.5	6.0	BLOSSOM
533.5			ROCK	5.5	6.5	
528.0	ABBOTT	WILLIS	COAL	0.3	12.0	BLOSSOM

MAPID: 059274D0001F **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 30 **QUARTERS/FOOTAGES:** SE NE SW
QUADRANGLE: KARBERS RIDGE **LONGITUDE:** -88.255398 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.618628 **DATE COLLECTED:** 8 / 11 / 1933
SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 20.8 **LOG TYPE:** Measured section
SOURCE: FLD NOTES-FULLER **WELL TYPE:** Outcrop
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
560.0			ROCK	18.5	0.0	
-			ROCK	0.7		
-			ROCK	1.7		

MAPID: 05902789000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 34 **QUARTERS/FOOTAGES:** 125' N line, 600' W line of NE NW
QUADRANGLE: SALINE MINES **LONGITUDE:** -88.201382 **GEOLOGIST:** D NORTH
CONFIDENTIAL: N **LATITUDE:** 37.613537 **DATE COLLECTED:** 9 / 26 / 1961
SURFACE ELEVATION (FT.): 339.0 **LOGGED (FT.):** 71.0 **LOG TYPE:** Drillers Log
SOURCE: STONEFORT COAL CO. 792 **WELL TYPE:** Coal Test
COMMENT: NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
339.0	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
279.0			SANDSTONE	11.0	60.0	

MAPID: 05900050000C **VERSION:** 1 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18851 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.609315 **DATE COLLECTED:**

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 121.3 **LOG TYPE:** Drillers Log

SOURCE: INDEPENDENT COAL **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
-	PLEISTOCENE		CLAY	10.0	0.0	
-	CARBONDALE		SANDSTONE	6.0	10.0	
-	CARBONDALE		BLUE SHALE	8.0	16.0	
-	CARBONDALE		SHALE	18.0	24.0	
-	CARBONDALE	COLCHESTER	COAL	0.3	42.0	
-	CARBONDALE		UNDERCLAY	5.0	42.3	
-	CARBONDALE		SHALE	40.0	47.4	
-	CARBONDALE		GRAY SANDSTONE	3.0	87.3	
-	CARBONDALE	DEKOVEN	COAL	3.0	90.3	
-	CARBONDALE		UNDERCLAY	0.5	93.3	
-	CARBONDALE		SANDSTONE	8.0	93.8	
-	CARBONDALE		SHALE	10.5	101.8	
-	CARBONDALE		SHALE	5.0	112.3	
-	CARBONDALE	DAVIS	COAL	4.0	117.3	

MAPID: 05900050000C **VERSION:** 2 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18851 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.609315 **DATE COLLECTED:** 0 / 0 / 1900

SURFACE ELEVATION (FT.): 360.0 **LOGGED (FT.):** 121.0 **LOG TYPE:** Other Core Study

SOURCE: INDEPENDENT COAL, **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
318.0	CARBONDALE	COLCHESTER	COAL	0.3	42.0	
270.0	CARBONDALE	DEKOVEN	COAL	3.0	90.0	
270.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	90.0	
241.0	CARBONDALE	DAVIS	COAL	4.0	119.0	35% SANDSTONE IN DAVIS-DEKOVEN INTERVAL

MAPID: 05900230100M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 2350' N line, 550' W line of NW
QUADRANGLE: SALINE MINES **LONGITUDE:** -88.187767 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.60743 **DATE COLLECTED:** 11 / 12 / 1981
SURFACE ELEVATION (FT.): 385.0 **LOGGED (FT.):** 0.0 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-DANNER,INDEPENDENT C C **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: 05900230101M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** NW SW NW
QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18851 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.609315 **DATE COLLECTED:** 0 / 0 / 1875
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 121.4 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-WORTHEN,INDEPENDENT C C MINE **WELL TYPE:** Underground mine
COMMENT: FROM GEOLOGY OF ILL. VOL 6

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
410.0			UNCONSOLIDATED	10.0	0.0	
400.0			ROCK	32.0	10.0	
368.0			COAL	0.3	42.0	
367.7			ROCK	48.0	42.3	
319.7	SPOON	DEKOVEN	COAL	3.0	90.3	
316.7	SPOON		ROCK	24.0	93.3	
292.7	SPOON	DAVIS	COAL	4.0	117.3	

MAPID: 05900230102M **VERSION:** 1 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** NE SW SW NW
QUADRANGLE: SALINE MINES **LONGITUDE:** -88.187945 **GEOLOGIST:** BARGH,M
CONFIDENTIAL: N **LATITUDE:** 37.607934 **DATE COLLECTED:** 0 / 0 / 1915
SURFACE ELEVATION (FT.): 410.0 **LOGGED (FT.):** 3.9 **LOG TYPE:** Measured section
SOURCE: MINE NOTES-W. LEE, INDEPENDENT C C MINE **WELL TYPE:** Underground mine
COMMENT: LOCATION OF SAMPLE:200'N MOUTH OF SLOPE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	SPOON		ROCK	-		
-	SPOON	DAVIS	COAL	3.9		

MAPID: 05902181000C **VERSION:** 1 **PROJECT:** RJJ-DAVIS

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1100' S line, 100' W line of NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18931 **GEOLOGIST:** JACOBSON

CONFIDENTIAL: N **LATITUDE:** 37.60959 **DATE COLLECTED:** 12 / 0 / 1957

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Other Core Study

SOURCE: BRANSFORD MINING 1 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
375.0	CARBONDALE	COLCHESTER	COAL	0.1	65.0	
320.0	CARBONDALE	DEKOVEN	COAL	0.3	120.0	
320.0	CARBONDALE	LOWER DEKOVEN	COAL	0.0	120.0	
298.0	CARBONDALE	DAVIS	COAL	4.0	142.0	
260.0	TRADEWATER	SEAHORNE LS	LIMESTONE	0.3	180.0	45% SANDSTONE IN DAVIS-DEKOVEN INTERVAL
225.0	TRADEWATER	STONEFORT	LIMESTONE	0.5	215.0	
190.0	TRADEWATER	MT. RORAH	COAL	0.3	250.0	

MAPID: 05902181000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1100' S line, 100' W line of NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18931 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.60959 **DATE COLLECTED:** 12 / 20 / 1957

SURFACE ELEVATION (FT.): 412.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING CO. **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
412.0			UNCONSOLIDATED	38.5	0.0	
373.5			ROCK	26.7	38.5	
346.8			COAL	0.1	65.2	
346.8			ROCK	55.1	65.2	
291.7			COAL	0.3	120.3	
291.3			ROCK	20.8	120.7	
270.5	SPOON	DAVIS	COAL	4.0	141.5	
266.5			ROCK	39.3	145.5	
227.3			COAL	0.3	184.7	
226.9			ROCK	32.5	185.1	
194.4			COAL	0.4	217.6	
194.0			ROCK	32.3	218.0	
161.7			COAL	0.3	250.3	
161.3			ROCK	14.3	250.7	

MAPID: 05902181000C **VERSION:** 3 **PROJECT:** NCRDS97

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 35 **QUARTERS/FOOTAGES:** 1100' S line, 100' W line of NW

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.18931 **GEOLOGIST:** C.KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.60959 **DATE COLLECTED:** 12 / 20 / 1957

SURFACE ELEVATION (FT.): 440.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Drillers Log

SOURCE: BRANSFORD MINING CO. 102 **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
440.0	PLEISTOCENE		SAND/CLAY	38.5	0.0	
401.5	CARBONDALE		BROWN SANDSTONE	2.0	38.5	
399.5	CARBONDALE		BLUE SHALE	20.2	40.5	
379.3	CARBONDALE		SHALE	4.5	60.7	
374.8	CARBONDALE	HERRIN	COAL	0.1	65.2	
374.7	CARBONDALE		SHALE	17.3	65.3	
357.5	CARBONDALE		LIGHT SHALE	16.8	82.5	
340.7	CARBONDALE		SANDSTONE	8.9	99.3	GRAYISH BROWN
331.8	CARBONDALE	BRIAR HILL	BLUE SHALE	12.2	108.2	
319.7	CARBONDALE		COAL	0.3	120.3	
319.3	CARBONDALE		BLUE SHALE	2.5	120.7	
316.8	CARBONDALE		SHALE & SANDSTONE	14.3	123.2	
302.5	CARBONDALE		BLUE SHALE	4.0	137.5	
298.5	CARBONDALE	SPRINGFIELD	COAL	4.0	141.5	
294.5	CARBONDALE		UNDERCLAY	2.3	145.5	
292.2	CARBONDALE		BLUE SHALE	10.8	147.8	
281.4	CARBONDALE		SHALE	6.0	158.6	
275.4	CARBONDALE		SHALE	15.8	164.6	
259.7	CARBONDALE	EXCELLO	SHALE	4.4	180.3	
255.2	CARBONDALE	HOUCHIN CREEK	COAL	0.3	184.8	
254.9	CARBONDALE		SHALE	28.3	185.1	
226.7	CARBONDALE		SHALE	1.6	213.3	
225.1	CARBONDALE		LIMESTONE	0.5	214.9	
224.6	CARBONDALE		SHALE	2.2	215.4	
222.4	CARBONDALE	SURVANT	COAL	0.4	217.6	
222.0	CARBONDALE		SHALE	30.6	218.0	
191.4	CARBONDALE		BLUE SHALE	1.8	248.6	
189.7	CARBONDALE	COLCHESTER	COAL	0.3	250.3	
189.3	CARBONDALE		BLUE SHALE	5.3	250.7	
184.0	CARBONDALE		GREEN SHALE	9.0	256.0	

MAPID: 05902151000C **VERSION:** 1 **PROJECT:** NCRDS99

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 635' N line, 150' E line of NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.153378 **GEOLOGIST:** MCCRACKEN

CONFIDENTIAL: N **LATITUDE:** 37.612255 **DATE COLLECTED:** 9 / 9 / 1957

SURFACE ELEVATION (FT.): 345.0 **LOGGED (FT.):** 663.8 **LOG TYPE:** Survey Core Study

SOURCE: BRANSFORD MINING 41 **WELL TYPE:** Coal Test

COMMENT: LOCATION FROM STRIP LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	THICKNESS (FT.) OVERBURDEN	COMMENT
345.0			NO RECORD	125.0	0.0	
220.0			SHALE	18.0	125.0	
202.0			LIMESTONE	2.0	143.0	
200.0			CLAYSTONE & SHALE	2.0	145.0	
198.0			LIMESTONE	5.5	147.0	
192.5			SANDSTONE	15.0	152.5	
177.5			SILTSTONE	3.8	167.5	
173.7			SHALE	6.8	171.3	
167.0			BLACK SHALE	3.7	178.0	
163.3			CLAYSTONE & SHALE	0.5	181.7	MAY NOT BE PART OF CORE
162.8			DOLOMITE	0.3	182.2	MAY NOT BE PART OF CORE
162.5			BLACK SHALE	0.6	182.5	
162.0			COAL	2.6	183.0	
159.3			UNDERCLAY	0.1	185.7	
159.3			UNDERCLAY	1.0	185.7	MAY NOT BE PART OF CORE
158.3			LIMESTONE	0.5	186.7	DEPTH AS PER LOG
157.8			CLAYSTONE & SHALE	3.3	187.2	
154.5			SILTSTONE	5.0	190.5	THICKNESS AS PER LOG
149.5			LIMESTONE	0.3	195.5	
149.2			BLACK SHALE	0.2	195.8	
149.1			CLAYSTONE & SHALE	0.5	195.9	
148.6			LIMESTONE	3.8	196.4	THICKNESS AS PER LOG;CORESPIN
144.8			CLAYSTONE & SHALE	5.4	200.2	THICKNESS AS PER LOG
139.4			SILTSTONE	12.3	205.6	
127.2			SHALE	2.8	217.8	
124.3			BLACK SHALE	8.4	220.7	THICKNESS AS PER LOG
115.8			COAL	0.1	229.2	
115.7			BLACK SHALE	0.3	229.3	
115.4			SILTSTONE	0.5	229.6	
114.9			BLACK LIMESTONE	0.5	230.1	
114.4			BLACK SHALE	0.3	230.6	
114.1			BLACK LIMESTONE	0.3	230.9	
113.7			CLAYSTONE & SILTSTONE	14.8	231.3	THICKNESS AS PER LOG
99.0			SILTSTONE	7.5	246.0	
91.5			SANDSTONE	4.3	253.5	
87.2			SILTSTONE	1.8	257.8	
85.5			SHALE	2.5	259.5	
83.0			COAL	1.4	262.0	THICKNESS AS PER LOG

81.6	UNDERCLAY	1.6	263.4	
80.0	CLAYSTONE & SILTSTONE	2.3	265.0	
77.7	CLAYSTONE & SHALE	1.0	267.3	
76.7	SILTSTONE	11.7	268.3	THICKNESS AS PER LOG
65.0	SHALE	12.5	280.0	
52.5	BLACK SHALE	0.5	292.5	
52.0	SHALE	3.0	293.0	THICKNESS AS PER LOG
49.0	COAL	1.1	296.0	
47.9	UNDERCLAY	1.5	297.1	
46.4	LIMESTONE	3.3	298.6	
43.1	CLAYSTONE & SILTSTONE	2.0	301.9	
41.1	SILTSTONE	4.3	303.9	
36.8	SANDSTONE	2.8	308.2	
34.0	SHALE	25.2	311.0	
8.8	CLAYSTONE & SILTSTONE	0.8	336.2	
8.0	SILTSTONE	0.7	337.0	
7.3	CLAYSTONE & SILTSTONE	10.8	337.7	THICKNESS AS PER LOG
-3.5	SILTSTONE	4.5	348.5	
-8.0	SANDSTONE	62.0	353.0	
-70.0	BLACK SHALE	0.5	415.0	WITH COAL
-70.5	LIMESTONE	1.0	415.5	
-71.5	SHALE	0.5	416.5	
-72.0	LIMESTONE	0.7	417.0	
-72.7	CLAYSTONE & SILTSTONE	0.2	417.7	
-72.8	BLACK SHALE	0.1	417.8	WITH COAL
-73.0	CLAYSTONE & SILTSTONE	21.0	418.0	
-94.0	SHALE	14.5	439.0	
-108.5	SANDSTONE	2.3	453.5	
-110.8	SHALE	2.2	455.8	
-112.9	SANDSTONE	91.9	457.9	
-204.8	SHALE	2.7	549.8	
-207.5	LIMESTONE	1.3	552.5	
-208.8	CLAYSTONE & SILTSTONE	1.8	553.8	
-210.6	SILTSTONE	4.0	555.6	
-214.6	CLAYSTONE & SILTSTONE	13.3	559.6	
-227.9	SHALE	0.3	572.9	
-228.2	COAL	0.1	573.2	
-228.3	CLAYSTONE	0.3	573.3	BLACK
-228.5	UNDERCLAY	1.5	573.5	THICKNESS AS PER LOG
-230.0	CLAYSTONE & SILTSTONE	2.5	575.0	
-232.5	SHALE	2.3	577.5	
-234.8	LIMESTONE	11.2	579.8	THICKNESS AS PER LOG
-246.0	SILTSTONE	1.3	591.0	
-247.3	SANDSTONE	1.3	592.3	
-248.6	SILTSTONE	26.4	593.6	THICKNESS AS PER LOG
-275.0	SHALE	30.0	620.0	THICKNESS AS PER LOG
-305.0	CLAYSTONE & SILTSTONE	4.0	650.0	

-309.0	SHALE	6.0	654.0
-315.0	LIMESTONE	0.5	660.0
-315.5	SHALE	0.8	660.5
-316.3	BLACK SHALE	0.9	661.3
-317.2	LIMESTONE	0.5	662.2
-317.7	SHALE	1.2	662.7

MAPID: 05902151000C **VERSION:** 2 **PROJECT:** BLM

COUNTY: GALLATIN **TWP/RNG:** 10S 9E **SECTION:** 36 **QUARTERS/FOOTAGES:** 635' N line, 150' E line of NE

QUADRANGLE: SALINE MINES **LONGITUDE:** -88.153378 **GEOLOGIST:** BARGH,M

CONFIDENTIAL: N **LATITUDE:** 37.612255 **DATE COLLECTED:** 9 / 9 / 1959

SURFACE ELEVATION (FT.): 340.0 **LOGGED (FT.):** 665.0 **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
340.0			UNKNOWN	125.0	0.0	
215.0			ROCK	58.0	125.0	E-TP=125' L=CORE BEGNS
157.0			COAL	2.6	183.0	
154.4			ROCK	43.5	185.6	
111.0			COAL	0.1	229.0	
110.9			ROCK	32.8	229.1	
78.1			COAL	1.4	261.9	
76.7			ROCK	32.6	263.3	
44.1			COAL	1.1	295.9	
43.0			ROCK	276.0	297.0	
-233.0			COAL	0.1	573.0	
-233.2			ROCK	91.7	573.2	

MAPID: 05903631000C **VERSION:** 1 **PROJECT:** AVAIL

COUNTY: GALLATIN **TWP/RNG:** 10S 10E **SECTION:** 6 **QUARTERS/FOOTAGES:** 1980' N line, 1320' W line of NW

QUADRANGLE: SHAWNEETOWN **LONGITUDE:** -88.148073 **GEOLOGIST:** C KOROSE

CONFIDENTIAL: N **LATITUDE:** 37.683734 **DATE COLLECTED:** 11 / 2 / 1970

SURFACE ELEVATION (FT.): **LOGGED (FT.):** 146.4 **LOG TYPE:** Drillers Log

SOURCE: PEABODY 4314-C **WELL TYPE:** Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	132.5	0.0	
-	CARBONDALE		SHALE	5.2	132.5	
-	CARBONDALE	ST. DAVID	CALCAREOUS SHALE	0.9	137.7	
-	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	138.6	
-	CARBONDALE	SPRINGFIELD	COAL	4.2	140.1	
-	CARBONDALE		UNDERCLAY	2.1	144.3	