

# Status Report

**Total Records: 318**

Top 3 County Records		Top 3 Log Type Records		Top 3 Coal Records		Top 3 Member Records	
Edgar	318	Drillers Log	132	HERRIN	262	HERRIN COAL	262
		Electric Log	83	DANVILLE	211	DANVILLE COAL	211
		Survey Core Study	32	SPRINGFIELD	195	SPRINGFIELD COAL	195

## Data Summary

Cross-tabulation of all selected logs, individual logs will vary.

Tabulation of logged intervals only, individual logs will vary.

*Depth and Thickness measurements in feet*

Member	Lithology	Avg. Depth	Min. Depth	Max. Depth	Avg. Thk	Min. Thk	Max. Thk
<b>SURVANT - UPPER</b>		<b>437.9</b>	322.1	548.4	<b>1.0</b>	0.4	1.6
<b>SURVANT - LOWER</b>		<b>458.3</b>	332.2	559.2	<b>1.5</b>	0.3	6.8
<b>MILLERSVILLE</b>	LIMESTONE	<b>141.8</b>	84.5	199.0	<b>36.8</b>	32.5	41.0
<b>CARTHAGE</b>	LIMESTONE	<b>183.0</b>	114.1	256.0	<b>3.0</b>	1.3	5.0
<b>WOMAC</b>	COAL	<b>104.2</b>	88.0	120.3	<b>1.0</b>	1.0	1.0
<b>CHAPEL</b>	COAL	<b>159.5</b>	79.0	368.5	<b>1.2</b>	0.3	2.5
<b>WEST FRANKLIN</b>	LIMESTONE	<b>232.2</b>	38.0	465.0	<b>4.3</b>	1.0	16.0
<b>PIRTLE (IN)</b>	COAL	<b>194.6</b>	186.0	203.2	<b>1.2</b>	0.4	2.0
<b>DANVILLE</b>	COAL	<b>245.5</b>	24.8	528.0	<b>3.8</b>	0.5	7.0
<b>BANKSTON FORK</b>	LIMESTONE	<b>219.0</b>	115.0	442.5	<b>3.4</b>	0.5	23.3
<b>ENERGY</b>	SHALE	<b>190.3</b>	30.0	594.0	<b>87.2</b>	3.5	118.8
<b>HERRIN</b>	COAL	<b>317.2</b>	85.0	632.0	<b>2.9</b>	0.5	10.0
<b>BRIAR HILL</b>	COAL	<b>326.1</b>	310.7	355.6	<b>0.8</b>	0.1	1.4
<b>ST. DAVID</b>	LIMESTONE	<b>369.2</b>	332.0	392.0	<b>1.1</b>	0.5	2.0
<b>TURNER MINE</b>	SHALE	<b>299.0</b>	99.0	565.0	<b>2.5</b>	0.6	6.0
<b>SPRINGFIELD</b>	COAL	<b>343.4</b>	126.0	639.0	<b>3.2</b>	0.1	7.3
<b>EXCELLO</b>	SHALE	<b>340.1</b>	182.8	610.0	<b>4.7</b>	1.0	13.0
<b>HOUCHIN CREEK</b>	COAL	<b>399.7</b>	115.0	694.0	<b>2.0</b>	-0.4	6.0
<b>SURVANT</b>	COAL	<b>423.9</b>	243.4	676.7	<b>1.8</b>	0.0	6.0
<b>MECCA QUARRY</b>	SHALE	<b>433.2</b>	197.4	702.0	<b>7.9</b>	1.2	41.0
<b>COLCHESTER</b>	COAL	<b>491.2</b>	200.9	779.0	<b>1.5</b>	0.3	5.0
<b>PALZO</b>	SANDSTONE	<b>501.3</b>	462.0	555.0	<b>17.7</b>	2.0	27.0
<b>SEELYVILLE</b>	COAL	<b>553.7</b>	324.0	810.0	<b>5.3</b>	0.1	10.0
<b>ROCK ISLAND</b>	COAL	<b>680.4</b>	680.4	680.4	<b>0.6</b>	0.6	0.6
<b>POPE CREEK</b>	COAL	<b>702.0</b>	702.0	702.0	<b>2.3</b>	2.3	2.3
					<b>Net Coal</b>	<b>27.6</b>	

## 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: 04500908000C    VERSION: 1    PROJECT: CONF

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 5    QUARTERS/FOOTAGES: NE NW SE

QUADRANGLE: SANDFORD    LONGITUDE: -87.542033    GEOLOGIST: LOG BOOK

CONFIDENTIAL: N    LATITUDE: 39.512249    DATE COLLECTED: 11 / 0 / 1962

SURFACE ELEVATION (FT.): 619.2    LOGGED (FT.): 584.3    LOG TYPE: Drillers Log

SOURCE: SNOW HILL COAL CORP.    342    WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
370.0	SHELBURN	DANVILLE	COAL	4.4	249.2	
250.3	CARBONDALE	HERRIN	COAL	1.5	368.9	
229.1	CARBONDALE	SPRINGFIELD	COAL	4.2	390.1	
176.2	CARBONDALE	HOUCHIN CREEK	COAL	3.6	443.0	NAME SAYS 4A
118.2	CARBONDALE	SURVANT - UPPER	COAL	1.0	501.0	
104.2	CARBONDALE	SURVANT - LOWER	COAL	1.0	515.0	
43.5	CARBONDALE	SEELYVILLE	COAL	6.9	575.7	

MAPID: 04500908000C VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 5 QUARTERS/FOOTAGES: NE NW SE

QUADRANGLE: SANDFORD LONGITUDE: -87.542033

GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.512249

DATE COLLECTED: 11 / 0 / 1962

SURFACE ELEVATION (FT.): 619.2

LOGGED (FT.): 584.3

LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.

WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE #4453

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
619.2			UNCONSOLIDATED	172.6	0.0	
446.6	MODESTO		CLAYSTONE & SILTSTONE	10.4	172.6	FIRE CLAY
436.2	MODESTO		LIMESTONE	0.6	183.0	
435.6	MODESTO		SHALE	10.6	183.6	
425.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.7	194.2	
423.3	MODESTO		SHALE	2.0	195.9	
421.3	MODESTO		LIMESTONE	0.3	197.9	
421.0	MODESTO		SHALE	11.8	198.2	
409.2	MODESTO		SHALE	15.0	210.0	WITH LS BANDS
394.2	MODESTO		SHALE	24.2	225.0	
370.0	CARBONDALE	DANVILLE	COAL	4.4	249.2	
365.6	CARBONDALE		UNDERCLAY	8.4	253.6	FIRE CLAY
357.2	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	262.0	
356.1	CARBONDALE	ENERGY	SANDSTONE/SHALE	86.9	263.1	SANDY SHALE
269.2	CARBONDALE	ENERGY	SHALE	18.9	350.0	WITH SIDERITE BANDS
250.3	CARBONDALE	HERRIN	SHALE/COAL	1.5	368.9	BLACK SHALE AND COAL
248.8	CARBONDALE		UNDERCLAY	4.8	370.4	WITH LS BANDS AND NODULES; FIRE CLAY
244.0	CARBONDALE		LIMESTONE	0.6	375.2	
243.4	CARBONDALE		SANDSTONE	4.9	375.8	
238.5	CARBONDALE		SHALE	0.8	380.7	
237.7	CARBONDALE		BLACK SHALE	1.0	381.5	
236.7	CARBONDALE		LIMESTONE	0.2	382.5	
236.5	CARBONDALE		BLACK SHALE	0.7	382.7	
235.8	CARBONDALE		BLACK SHALE	3.0	383.4	
232.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.7	386.4	
229.1	CARBONDALE	SPRINGFIELD	COAL	4.2	390.1	
224.9	CARBONDALE		UNDERCLAY	2.0	394.3	FIRE CLAY
222.9	CARBONDALE		SANDSTONE/SHALE	23.7	396.3	SANDY SH
199.2	CARBONDALE		SHALE	23.0	420.0	
176.2	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	3.7	443.0	BLACK SHALE
172.5	CARBONDALE		UNDERCLAY	3.3	446.7	
169.2	CARBONDALE		SANDY SHALE	19.0	450.0	
150.2	CARBONDALE		SANDSTONE	26.0	469.0	
124.2	CARBONDALE		SANDY SHALE	6.0	495.0	
118.2	CARBONDALE	SURVANT	COAL	1.0	501.0	
117.2	CARBONDALE		SANDY SHALE	13.0	502.0	
104.2	CARBONDALE	SURVANT	COAL	1.0	515.0	
103.2	CARBONDALE		SANDSTONE	4.0	516.0	
99.2	CARBONDALE		SANDY SHALE	10.0	520.0	

89.2	CARBONDALE		BLACK SHALE	12.0	530.0	
77.2	CARBONDALE	COLCHESTER	SHALE/COAL	3.5	542.0	BLACK SHALE AND COAL
73.7	SPOON		UNDERCLAY	3.9	545.5	
69.8	SPOON		SHALY SILTSTONE	2.8	549.4	CORED TO T.D.
67.0	SPOON		SILTY SHALE	3.5	552.2	WITH LS MASSES
63.5	SPOON		SANDSTONE/SHALE	5.2	555.7	GRAY TO WHITE
58.4	SPOON		SHALE	8.1	560.8	DARK GRAY TO BLACK
50.3	SPOON		COAL	0.7	568.9	
49.6	SPOON		SILTSTONE	2.9	569.6	
46.7	SPOON		CARBONACEOUS SHALE	2.9	572.5	
43.8	SPOON		BLACK SHALE	0.2	575.4	
43.6	SPOON	SEELYVILLE	COAL	6.8	575.6	
36.9	SPOON		UNDERCLAY	1.2	582.3	STIGMARIAN; SLICKENSIDES
35.7	SPOON		SILTY SHALE	0.8	583.5	

**MAPID:** 04500909000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 12N 10W    **SECTION:** 5    **QUARTERS/FOOTAGES:** SW SW SE  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.544384    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.506813    **DATE COLLECTED:** 10 / 0 / 1962  
**SURFACE ELEVATION (FT.):** 609.9    **LOGGED (FT.):** 586.3    **LOG TYPE:** Drillers Log  
**SOURCE:** SNOW HILL COAL CORP. 341    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
424.9			COAL	2.0	185.0	
363.0	SHELBURN	DANVILLE	COAL	5.2	246.9	
241.9	CARBONDALE	HERRIN	COAL	1.2	368.0	
219.9	CARBONDALE	SPRINGFIELD	COAL	4.1	390.0	
163.8	CARBONDALE	HOUCHIN CREEK	COAL	1.0	446.1	
102.1	CARBONDALE	SURVANT - UPPER	COAL	1.0	507.8	
86.7	CARBONDALE	SURVANT - LOWER	COAL	1.0	523.2	
63.4	CARBONDALE	COLCHESTER	COAL	0.9	546.5	
32.1	CARBONDALE	SEELYVILLE	COAL	6.3	577.8	

MAPID: 04500909000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 5    QUARTERS/FOOTAGES: SW SW SE

QUADRANGLE: SANDFORD    LONGITUDE: -87.544384

GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.506813

DATE COLLECTED: 10 / 0 / 1962

SURFACE ELEVATION (FT.): 609.9

LOGGED (FT.): 586.3

LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.

WELL TYPE: Coal Test

COMMENT: LOG & CORE; CORE #4452, 549-586'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
609.9			UNCONSOLIDATED	165.0	0.0	
444.9	MODESTO		SHALE	20.0	165.0	
424.9	MODESTO	CHAPEL	COAL	2.0	185.0	
422.9	MODESTO		UNDERCLAY	3.0	187.0	FIRECLAY
419.9	MODESTO		SHALE	3.5	190.0	
416.4	MODESTO		LIMESTONE	1.1	193.5	
415.3	MODESTO		SHALE	8.0	194.6	
407.3	MODESTO		SANDSTONE	3.2	202.6	
404.1	MODESTO		SHALE	2.0	205.8	
402.1	MODESTO		LIMESTONE	0.2	207.8	
401.9	MODESTO		SHALE	38.9	208.0	WITH LS NODULES 208-220
363.0	CARBONDALE	DANVILLE	COAL	5.2	246.9	
357.8	CARBONDALE		UNDERCLAY	6.4	252.1	FIRECLAY
351.4	CARBONDALE	BANKSTON FORK	LIMESTONE	1.2	258.5	
350.2	CARBONDALE	ENERGY	SANDSTONE	30.3	259.7	
319.9	CARBONDALE	ENERGY	SANDY SHALE	30.0	290.0	
289.9	CARBONDALE	ENERGY	SANDSTONE	20.0	320.0	
269.9	CARBONDALE	ENERGY	SHALE	27.0	340.0	WITH SIDERITE BANDS
242.9	CARBONDALE	ENERGY	BLACK SHALE	1.0	367.0	
241.9	CARBONDALE	HERRIN	COAL	1.2	368.0	
240.7	CARBONDALE		UNDERCLAY	5.3	369.2	WITH LS NODULES; FIRECLAY
235.4	CARBONDALE		SHALE	11.5	374.5	WITH SIDERITE BANDS
223.9	CARBONDALE		BLACK SHALE	1.8	386.0	
222.1	CARBONDALE	ST. DAVID	LIMESTONE	0.9	387.8	
221.2	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	388.7	
219.9	CARBONDALE	SPRINGFIELD	COAL	4.1	390.0	
215.8	CARBONDALE		SANDSTONE/SHALE	35.9	394.1	SANDY SHALE
179.9	CARBONDALE		SHALE	12.0	430.0	
167.9	CARBONDALE	EXCELLO	BLACK SHALE	4.1	442.0	
163.8	CARBONDALE	HOUCHIN CREEK	COAL	1.0	446.1	
162.8	CARBONDALE		UNDERCLAY	2.9	447.1	FIRECLAY
159.9	CARBONDALE		SANDY SHALE	7.0	450.0	
152.9	CARBONDALE		SANDSTONE	50.8	457.0	
102.1	CARBONDALE	SURVANT	COAL	1.0	507.8	
101.1	CARBONDALE		UNDERCLAY	4.0	508.8	FIRECLAY
97.1	CARBONDALE		SANDSTONE	10.4	512.8	
86.7	CARBONDALE	SURVANT	COAL	1.0	523.2	
85.7	CARBONDALE		SANDSTONE	2.8	524.2	
82.9	CARBONDALE		SHALE	14.7	527.0	WITH SIDERITE BANDS

68.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.8	541.7	
63.4	CARBONDALE	COLCHESTER	COAL	0.9	546.5	
62.5	SPOON		UNDERCLAY	2.5	547.4	FIRECLAY
60.0	SPOON		SILTSTONE	1.0	549.9	CORED TO T.D.
59.0	SPOON		SILTSTONE & SHALE	2.2	550.9	
56.8	SPOON		CARBONACEOUS SILTSTONE	0.6	553.1	CALCAREOUS
56.2	SPOON		CARBONACEOUS SHALE	0.3	553.7	SILTY
56.0	SPOON		SILTSTONE	0.3	553.9	BROWN
55.6	SPOON		SHALE	2.7	554.3	
53.0	SPOON		SANDSTONE	0.6	556.9	GRAY TO WHITE
52.4	SPOON		SHALE	3.2	557.5	DRK.GRAY TO BLACK; SID. LENSE
49.2	SPOON		SANDSTONE/SHALE	10.5	560.7	GRAY TO WHITE
38.7	SPOON		SHALE	4.0	571.2	
34.7	SPOON		BLACK SHALE	0.3	575.2	
34.4	SPOON		CORE LOSS	2.2	575.5	
32.2	SPOON	SEELYVILLE	COAL	6.3	577.7	
26.0	SPOON		UNDERCLAY	2.0	583.9	STIGMARIA FOSSILS
24.0	SPOON		COAL	0.4	585.9	

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MAPID: 04500948000C    VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 5    QUARTERS/FOOTAGES: 400' S line, 50' W line of SE

QUADRANGLE: SANDFORD    LONGITUDE: -87.54538    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.507004    DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 611.9    LOGGED (FT.): 596.0    LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.    WELL TYPE: Structure Test

COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
611.9			UNCONSOLIDATED	164.0	0.0	
447.9	MODESTO		SHALE	22.0	164.0	
425.9	MODESTO	CHAPEL	COAL	2.0	186.0	
423.9	MODESTO		SHALE	12.0	188.0	WITH SS LENSE
411.9	MODESTO		SHALE	20.0	200.0	
391.9	MODESTO		SHALE	30.0	220.0	
361.9	CARBONDALE	DANVILLE	COAL	4.0	250.0	
357.9	CARBONDALE		SHALE	19.0	254.0	
338.9	CARBONDALE	BANKSTON FORK	SANDY LIMESTONE	2.0	273.0	
336.9	CARBONDALE	ENERGY	SANDSTONE	25.0	275.0	GRAY
311.9	CARBONDALE	ENERGY	SHALE	20.0	300.0	
291.9	CARBONDALE	ENERGY	SANDSTONE	51.0	320.0	
240.9	CARBONDALE	HERRIN	COAL	1.0	371.0	
239.9	CARBONDALE		SHALE	17.0	372.0	
222.9	CARBONDALE		BLACK SHALE	2.0	389.0	
220.9	CARBONDALE	SPRINGFIELD	COAL	4.0	391.0	
216.9	CARBONDALE		UNDERCLAY	7.0	395.0	
209.9	CARBONDALE		SHALY SANDSTONE	28.0	402.0	
181.9	CARBONDALE	EXCELLO	BLACK SHALE	13.0	430.0	
168.9	CARBONDALE	HOUCHIN CREEK	COAL	3.0	443.0	
165.9	CARBONDALE		SANDSTONE	45.0	446.0	
120.9	CARBONDALE	SURVANT	COAL	1.0	491.0	
119.9	CARBONDALE		SANDSTONE	61.0	492.0	
58.9	CARBONDALE	COLCHESTER	COAL	2.0	553.0	
56.9	SPOON		SANDSTONE	27.0	555.0	WITH THIN DRK. GRAY CARBONACEOUS LAMINAE
29.9	SPOON		SHALE	5.0	582.0	
24.9	SPOON	SEELYVILLE	COAL	6.0	587.0	
18.9	SPOON		UNDERCLAY	3.0	593.0	

MAPID: 04500948000C VERSION: 2

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 5 QUARTERS/FOOTAGES: 400' S line, 50' W line of SE

QUADRANGLE: SANDFORD LONGITUDE: -87.54538 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.507004 DATE COLLECTED: 12 / 22 / 1953

SURFACE ELEVATION (FT.): 612.0 LOGGED (FT.): 596.0 LOG TYPE: Drillers Log

SOURCE: SUN OIL CO. WELL TYPE: Structure Test

COMMENT: ACCURACY OF COAL THICKNESS WITHIN 1 FT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
612.0			UNCONSOLIDATED	164.0	0.0
448.0	MODESTO		GRAY SHALE	22.0	164.0
426.0	MODESTO	PIRTLE (IN)	COAL	2.0	186.0
424.0	MODESTO		SHALE	62.0	188.0
362.0	CARBONDALE	DANVILLE	COAL	4.0	250.0
358.0	CARBONDALE		GRAY SHALE	19.0	254.0
339.0	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	273.0
337.0	CARBONDALE	ENERGY	SANDSTONE	25.0	275.0
312.0	CARBONDALE	ENERGY	GRAY SHALE	20.0	300.0
292.0	CARBONDALE	ENERGY	SANDSTONE	51.0	320.0
241.0	CARBONDALE	HERRIN	COAL	1.0	371.0
240.0	CARBONDALE		GRAY SHALE	17.0	372.0
223.0	CARBONDALE		BLACK SHALE	2.0	389.0
221.0	CARBONDALE	SPRINGFIELD	COAL	4.0	391.0
217.0	CARBONDALE		UNDERCLAY	7.0	395.0
210.0	CARBONDALE		SANDSTONE	28.0	402.0
182.0	CARBONDALE	EXCELLO	BLACK SHALE	13.0	430.0
169.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	443.0
166.0	CARBONDALE		SANDSTONE	45.0	446.0
121.0	CARBONDALE	SURVANT	COAL	1.0	491.0
120.0	CARBONDALE		SANDSTONE	61.0	492.0
59.0	CARBONDALE	COLCHESTER	COAL	2.0	553.0
57.0	SPOON	PALZO	SANDSTONE	27.0	555.0
30.0	SPOON		GRAY SHALE	5.0	582.0
25.0	SPOON	SEELYVILLE	COAL	6.0	587.0
19.0	SPOON		UNDERCLAY	3.0	593.0



MAPID: 04500948000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 5 QUARTERS/FOOTAGES: 400' S line, 50' W line of SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.54538 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.507004 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 611.9 LOGGED (FT.): 595.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. E-4-53 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
425.9			COAL	2.0	186.0	
361.9	SHELBURN	DANVILLE	COAL	4.0	250.0	
240.9	CARBONDALE	HERRIN	COAL	1.0	371.0	
220.9	CARBONDALE	SPRINGFIELD	COAL	4.0	391.0	
168.9	CARBONDALE	HOUCHIN CREEK	COAL	3.0	443.0	
120.9	CARBONDALE	SURVANT	COAL	1.0	491.0	
58.9	CARBONDALE	COLCHESTER	COAL	2.0	553.0	
24.9	CARBONDALE	SEELYVILLE	COAL	6.0	587.0	

MAPID: 04500218000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 280' S line, 1060' W line of NW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.569831 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.514008 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 559.0 LOGGED (FT.): 520.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
422.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	137.0	
369.0	CARBONDALE	DANVILLE	COAL	4.5	190.0	
249.0	CARBONDALE	HERRIN	COAL	-	310.0	
227.0	CARBONDALE	SPRINGFIELD	COAL	5.0	332.0	
173.0	CARBONDALE	HOUCHIN CREEK	COAL	-	386.0	
69.0	CARBONDALE	COLCHESTER	COAL	-	490.0	
44.0	SPOON	SEELYVILLE	COAL	5.0	515.0	

MAPID: 04500914000C    VERSION: 1

PROJECT: CONF

COUNTY: EDGAR                    TWP/RNG: 12N 10W    SECTION: 6    QUARTERS/FOOTAGES: 4' N line, 31' E line  
QUADRANGLE: SANDFORD                    LONGITUDE: -87.555013                    GEOLOGIST: LOG BOOK  
CONFIDENTIAL: N                            LATITUDE: 39.520464                    DATE COLLECTED: 12 / 0 / 1962  
SURFACE ELEVATION (FT.): 628.0                    LOGGED (FT.): 556.1                    LOG TYPE: Drillers Log  
SOURCE: SNOW HILL COAL CORP.    344                    WELL TYPE: Coal Test  
COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
462.3			COAL	1.3	165.7
395.0	SHELBURN	DANVILLE	COAL	4.3	233.0
281.0	CARBONDALE	HERRIN	COAL	1.5	347.0
261.0	CARBONDALE	SPRINGFIELD	COAL	4.3	367.0
210.8	CARBONDALE	HOUCHIN CREEK	COAL	4.2	417.2
145.3	CARBONDALE	SURVANT - UPPER	COAL	1.0	482.7
105.8	CARBONDALE	SURVANT - LOWER	COAL	6.8	522.2
80.8	CARBONDALE	SEELYVILLE	COAL	6.8	547.2
72.0			COAL	0.1	556.0

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MAPID: 04500914000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR                      TWP/RNG: 12N 10W    SECTION: 6    QUARTERS/FOOTAGES: 4' N line, 31' E line

QUADRANGLE: SANDFORD                      LONGITUDE: -87.555013                      GEOLOGIST: SROKA

CONFIDENTIAL: N                      LATITUDE: 39.520464                      DATE COLLECTED: 10 / 0 / 1962

SURFACE ELEVATION (FT.): 628.0                      LOGGED (FT.): 555.8                      LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.                      WELL TYPE: Coal Test

COMMENT: DRILLERS LOG AND CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
628.0			UNCONSOLIDATED	117.0	0.0	
511.0	MODESTO		SANDY SHALE	48.7	117.0	
462.3	MODESTO	CHAPEL	COAL	1.3	165.7	
461.0	MODESTO		UNDERCLAY	3.0	167.0	FIRE CLAY
458.0	MODESTO		CALCAREOUS SHALE	4.0	170.0	
454.0	MODESTO		SHALE	5.5	174.0	WITH LS NODULES AND BANDS
448.5	MODESTO	WEST FRANKLIN	LIMESTONE	2.3	179.5	
446.2	MODESTO		SHALE	13.2	181.8	WITH LS BANDS
433.0	MODESTO		SHALE	38.0	195.0	WITH SIDERITE BANDS
395.0	CARBONDALE	DANVILLE	COAL	4.3	233.0	
390.7	CARBONDALE		UNDERCLAY	6.2	237.3	FIRE CLAY
384.5	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	243.5	
384.0	CARBONDALE		SHALE	6.0	244.0	
378.0	CARBONDALE	ENERGY	SANDSTONE/SHALE	25.0	250.0	SANDY SHALE
353.0	CARBONDALE	ENERGY	SHALE	72.0	275.0	
281.0	CARBONDALE	HERRIN	SHALE/COAL	1.5	347.0	BLACK SHALE AND COAL
279.5	CARBONDALE		UNDERCLAY	3.5	348.5	FIRE CLAY
276.0	CARBONDALE		SHALE	1.7	352.0	
274.3	CARBONDALE		LIMESTONE	2.0	353.7	
272.3	CARBONDALE		SANDSTONE	5.3	355.7	
267.0	CARBONDALE		SHALE	3.7	361.0	
263.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	364.7	
261.0	CARBONDALE	SPRINGFIELD	COAL	4.3	367.0	
256.7	CARBONDALE		UNDERCLAY	2.7	371.3	FIRE CLAY
254.0	CARBONDALE		SANDY SHALE	7.0	374.0	
247.0	CARBONDALE		LIMESTONE	0.5	381.0	
246.5	CARBONDALE		SHALE	33.2	381.5	
213.3	CARBONDALE		CALCAREOUS SANDSTONE	2.5	414.7	
210.8	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	4.2	417.2	BLACK SHALE AND COAL
206.6	CARBONDALE		SANDSTONE	61.3	421.4	
145.3	CARBONDALE	SURVANT	COAL	1.0	482.7	
144.3	CARBONDALE		UNDERCLAY	2.3	483.7	FIRE CLAY
142.0	CARBONDALE		SHALE & SANDSTONE	36.0	486.0	SANDY SHALE
106.0	CARBONDALE	COLCHESTER	COAL	1.7	522.0	
104.3	SPOON		UNDERCLAY	3.7	523.7	FIRE CLAY; CORED TO T.D.
100.6	SPOON		SILTSTONE	7.1	527.4	FEW SIDERITE NODULES IN LOWER PART
93.5	SPOON		SHALE	11.3	534.5	DRK. GRAY TO BLACK; THIN SLTST/SS LENSES
82.2	SPOON		SHALE	1.3	545.8	PYRITIC; FOSSILIF LOWER PART

80.8	SPOON	SEELYVILLE	COAL	6.7	547.2	
74.2	SPOON		UNDERCLAY	0.3	553.8	STIGMARIAN, SLIP FRACTURES
73.8	SPOON		CARBONACEOUS SHALE	1.4	554.2	
72.4	SPOON		BLACK SHALE	0.2	555.6	
72.2	SPOON		COAL	0.1	555.8	

**MAPID:** 04500915000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 12N 10W    **SECTION:** 6    **QUARTERS/FOOTAGES:** 2060' S line, 2250' E line  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.562961    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.511559    **DATE COLLECTED:** 12 / 0 / 1962  
**SURFACE ELEVATION (FT.):** 562.5    **LOGGED (FT.):** 519.2    **LOG TYPE:** Drillers Log  
**SOURCE:** SNOW HILL COAL CORP.    343    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
373.3	SHELBURN	DANVILLE	COAL	5.5	189.2	
257.0	CARBONDALE	HERRIN	COAL	2.7	305.5	
233.8	CARBONDALE	SPRINGFIELD	COAL	3.0	328.7	
183.5	CARBONDALE	HOUCHIN CREEK	COAL	3.0	379.0	
117.1	CARBONDALE	SURVANT - UPPER	COAL	1.6	445.4	
77.7	CARBONDALE	SURVANT - LOWER	COAL	2.0	484.8	
50.6	CARBONDALE	SEELYVILLE	COAL	6.1	511.9	

MAPID: 04500915000C VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 2060' S line, 2250' E line

QUADRANGLE: SANDFORD LONGITUDE: -87.562961 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.511559 DATE COLLECTED: 10 / 0 / 1962

SURFACE ELEVATION (FT.): 562.5 LOGGED (FT.): 519.2 LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP. WELL TYPE: Coal Test

COMMENT: DRILLERS LOG AND CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
562.5			UNCONSOLIDATED	60.0	0.0	
502.5	MODESTO		SHALE	62.4	60.0	
440.1	MODESTO	CHAPEL	SHALE/COAL	2.0	122.4	BLACK SHALE
438.1	MODESTO		UNDERCLAY	1.6	124.4	FIRE CLAY
436.5	MODESTO		SHALE	10.5	126.0	WITH LS NODULES AND BANDS
426.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	136.5	
422.5	MODESTO		CALCAREOUS SHALE	2.7	140.0	
419.8	MODESTO		SHALE	10.0	142.7	WITH LS BANDS
409.8	MODESTO		CALCAREOUS SHALE	10.0	152.7	
399.8	MODESTO		SHALE	26.5	162.7	WITH SIDERITE BANDS
373.3	CARBONDALE	DANVILLE	COAL	5.5	189.2	
367.8	CARBONDALE		UNDERCLAY	11.0	194.7	FIRE CLAY
356.8	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	205.7	
356.3	CARBONDALE	ENERGY	SANDSTONE/SHALE	38.8	206.2	SANDY SHALE
317.5	CARBONDALE	ENERGY	SHALE	60.5	245.0	WITH SIDERITE BANDS
257.0	CARBONDALE	HERRIN	SHALE/COAL	2.7	305.5	BLACK SHALE AND COAL
254.3	CARBONDALE		UNDERCLAY	5.8	308.2	WITH LS BANDS; FIRE CLAY
248.5	CARBONDALE		SANDSTONE	8.0	314.0	
240.5	CARBONDALE		SHALE	3.5	322.0	
237.0	CARBONDALE	TURNER MINE	BLACK SHALE	3.2	325.5	
233.8	CARBONDALE	SPRINGFIELD	COAL	3.0	328.7	
230.8	CARBONDALE		UNDERCLAY	1.3	331.7	FIRE CLAY
229.5	CARBONDALE		SANDSTONE/SHALE	25.0	333.0	SANDY SHALE
204.5	CARBONDALE		SHALE	21.0	358.0	
183.5	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	3.0	379.0	BLACK SHALE AND COAL
180.5	CARBONDALE		SANDSTONE	63.4	382.0	
117.1	CARBONDALE	SURVANT	COAL	1.6	445.4	
115.5	CARBONDALE		SANDSTONE/SHALE	37.8	447.0	SANDY SHALE
77.7	CARBONDALE	COLCHESTER	SHALE/COAL	2.0	484.8	BLACK SHALE
75.7	SPOON		CLAYSTONE & SHALE	3.2	486.8	
72.5	SPOON		SANDSTONE	2.5	490.0	
70.0	SPOON		SANDSTONE	1.7	492.5	GRAY TO WHITE; CORED TO T.D.
68.3	SPOON		SHALE	1.8	494.2	PYRITE NODULES AND STRINGERS
66.5	SPOON		SHALE	5.0	496.0	SIDERITE LENSES; SS LENSES BOTTOM .5 FT
61.5	SPOON		SANDSTONE	1.2	501.0	BLACK CARBONACEOUS LENSES
60.3	SPOON		COAL	0.0	502.2	THREE LENSES SEPARATED BY SLTST LENSES
60.3	SPOON		SHALE	0.4	502.2	
59.9	SPOON		SANDSTONE	3.9	502.6	BLACK COALIFIED PLANT DEBRIS

56.0	SPOON		SILTSTONE	1.0	506.5	SHALEY, CARBONACEOUS
55.0	SPOON		SILTY SHALE	2.5	507.5	CARBONACEOUS; WITH FEW SLTST LENSES
52.5	SPOON		SILTY SHALE	1.9	510.0	CARBONACEOUS
50.6	SPOON	SEELYVILLE	COAL	5.9	511.9	
44.7	SPOON		UNDERCLAY	1.3	517.8	STIGMARIA, SLIP FRACTURES

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MAPID: 04500949000C VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 400' S line, 25' E line of NE NE

QUADRANGLE: SANDFORD LONGITUDE: -87.555004 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.517924 DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 635.8 LOGGED (FT.): 570.0 LOG TYPE: Drillers Log

SOURCE: SUN OIL CO. WELL TYPE: Structure Test

COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.8			UNCONSOLIDATED	100.0	0.0	
535.8	MODESTO		SHALE	15.0	100.0	
520.8	MODESTO		LIMESTONE	0.5	115.0	GRAY
520.3	MODESTO		SILTY SHALE	49.5	115.5	
470.8	MODESTO	CHAPEL	COAL	1.0	165.0	
469.8	MODESTO		UNDERCLAY/SHALE	7.0	166.0	
462.8	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	173.0	TAN/GRAY
454.8	MODESTO		SHALE	12.0	181.0	
442.8	MODESTO		SHALE	27.0	193.0	
415.8	MODESTO		SHALE	10.0	220.0	
405.8	CARBONDALE	DANVILLE	COAL	5.0	230.0	
400.8	CARBONDALE		UNDERCLAY	5.0	235.0	
395.8	CARBONDALE	BANKSTON FORK	FOSSILIFEROUS LIMESTONE	5.0	240.0	
390.8	CARBONDALE	ENERGY	SANDSTONE	75.0	245.0	
315.8	CARBONDALE	ENERGY	SHALE	22.0	320.0	
293.8	CARBONDALE	HERRIN	COAL	2.0	342.0	
291.8	CARBONDALE		UNDERCLAY & SANDSTONE	12.0	344.0	
279.8	CARBONDALE		SANDSTONE	6.0	356.0	GRAY
273.8	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	362.0	
270.8	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0	
266.8	CARBONDALE		UNDERCLAY	1.0	369.0	
265.8	CARBONDALE		SANDSTONE	15.0	370.0	GRAY
250.8	CARBONDALE		SHALE	29.0	385.0	
221.8	CARBONDALE	HOUCHIN CREEK	COAL	3.0	414.0	
218.8	CARBONDALE		UNDERCLAY	1.0	417.0	
217.8	CARBONDALE		SANDSTONE/SHALE	67.0	418.0	
150.8	CARBONDALE		SHALE	20.0	485.0	
130.8	CARBONDALE		SILTY SHALE	15.0	505.0	
115.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	10.0	520.0	WITH TRACE OF COAL
105.8	SPOON		UNDERCLAY	5.0	530.0	
100.8	SPOON		SHALE	19.0	535.0	
81.8	SPOON	SEELYVILLE	COAL	6.0	554.0	
75.8	SPOON		SHALE	10.0	560.0	

MAPID: 04500949000C    VERSION: 2

PROJECT: NCRDS88

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 6    QUARTERS/FOOTAGES: 400' S line, 25' E line of NE NE

QUADRANGLE: SANDFORD    LONGITUDE: -87.555004    GEOLOGIST: R. SMITH

CONFIDENTIAL: N    LATITUDE: 39.517924    DATE COLLECTED: 12 / 8 / 1953

SURFACE ELEVATION (FT.): 636.0    LOGGED (FT.): 570.0    LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.    WELL TYPE: Structure Test

COMMENT: ACCURACY OF COAL THICKNESS WITHIN 1 FT.

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
636.0			UNCONSOLIDATED	100.0	0.0	
536.0	MODESTO		SHALE	15.0	100.0	
521.0	MODESTO		LIMESTONE	0.5	115.0	
520.5	MODESTO		SHALE	49.5	115.5	
471.0	MODESTO	CHAPEL	COAL	1.0	165.0	UNCERTAIN CORRELATION
470.0	MODESTO		UNDERCLAY	7.0	166.0	
463.0	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	173.0	UNCERTAIN CORRELATION
455.0	MODESTO		SHALE	39.0	181.0	
416.0	MODESTO		GRAY & BLACK SHALE	10.0	220.0	
406.0	CARBONDALE	DANVILLE	COAL	5.0	230.0	
401.0	CARBONDALE		UNDERCLAY	5.0	235.0	
396.0	CARBONDALE	BANKSTON FORK	LIMESTONE	5.0	240.0	
391.0	CARBONDALE	ENERGY	SANDSTONE	75.0	245.0	
316.0	CARBONDALE	ENERGY	GRAY SHALE	22.0	320.0	
294.0	CARBONDALE	HERRIN	COAL	2.0	342.0	
292.0	CARBONDALE		UNDERCLAY	6.0	344.0	
286.0	CARBONDALE		UNKNOWN	6.0	350.0	
280.0	CARBONDALE		SANDSTONE	6.0	356.0	
274.0	CARBONDALE	TURNER MINE	SHALE	3.0	362.0	SLATE
271.0	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0	
267.0	CARBONDALE		UNDERCLAY	1.0	369.0	
266.0	CARBONDALE		SANDSTONE	15.0	370.0	
251.0	CARBONDALE		SHALE	29.0	385.0	
222.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	414.0	
219.0	CARBONDALE		UNDERCLAY	1.0	417.0	
218.0	CARBONDALE		SANDSTONE/SHALE	67.0	418.0	
151.0	CARBONDALE		GRAY SHALE	35.0	485.0	
116.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	10.0	520.0	TRACE OF COAL, COLCHESTER HORIZON
106.0	SPOON		UNDERCLAY	5.0	530.0	
101.0	SPOON		GRAY SHALE	19.0	535.0	
82.0	SPOON	SEELYVILLE	COAL	6.0	554.0	
76.0			SHALE	10.0	560.0	



MAPID: 04500949000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 400' S line, 25' E line of NE NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.555004 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.517924 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 635.8 LOGGED (FT.): 570.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. E-2-53 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
470.8			COAL	1.0	165.0
405.8	SHELBURN	DANVILLE	COAL	5.0	230.0
293.8	CARBONDALE	HERRIN	COAL	2.0	342.0
270.8	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0
221.8	CARBONDALE	HOUCHIN CREEK	COAL	3.0	414.0
81.8	CARBONDALE	SEELYVILLE	COAL	6.0	554.0

MAPID: 04500950000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 650' S line, 150' W line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.572962 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.507701 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 615.5 LOGGED (FT.): 563.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. E-4-54 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
452.5			COAL	2.0	163.0
383.5	SHELBURN	DANVILLE	COAL	3.0	232.0
270.5	CARBONDALE	HERRIN	COAL	2.0	345.0
250.5	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0
93.5	CARBONDALE	COLCHESTER	COAL	2.0	522.0
64.5	CARBONDALE	SEELYVILLE	COAL	6.0	551.0

MAPID: 04500950000C VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 650' S line, 150' W line

QUADRANGLE: SANDFORD LONGITUDE: -87.572962 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.507701 DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 615.5 LOGGED (FT.): 563.0 LOG TYPE: Drillers Log

SOURCE: SUN OIL CO. WELL TYPE: Structure Test

COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.5			UNCONSOLIDATED	125.0	0.0	
490.5	MODESTO		SHALE	38.0	125.0	
452.5	MODESTO	CHAPEL	COAL	2.0	163.0	
450.5	MODESTO		UNDERCLAY	4.0	165.0	
446.5	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	169.0	BUFF
442.5	MODESTO	WEST FRANKLIN	SHALE	7.0	173.0	
435.5	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	180.0	
430.5	MODESTO		SHALE	10.0	185.0	
420.5	MODESTO		SHALE	37.0	195.0	WITH SCATTERED LS FRAGS
383.5	CARBONDALE	DANVILLE	COAL	3.0	232.0	
380.5	CARBONDALE	ENERGY	SANDSTONE	85.0	235.0	GRAY
295.5	CARBONDALE	ENERGY	SANDSTONE/SHALE	25.0	320.0	
270.5	CARBONDALE	HERRIN	COAL	2.0	345.0	
268.5	CARBONDALE		SANDSTONE/SHALE	15.0	347.0	
253.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	362.0	
250.5	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0	
246.5	CARBONDALE		SHALE	6.0	369.0	
240.5	CARBONDALE		SANDSTONE	147.0	375.0	SHALEY BASE
93.5	CARBONDALE	COLCHESTER	COAL	2.0	522.0	
91.5	SPOON		SHALE	27.0	524.0	WITH SS LENSES 530-540
64.5	SPOON	SEELYVILLE	COAL	6.0	551.0	
58.5	SPOON		SHALE	6.0	557.0	

MAPID: 04500875000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: SW SW SE

QUADRANGLE: DENNISON LONGITUDE: -87.562994 GEOLOGIST: LOG BOOK

CONFIDENTIAL: N LATITUDE: 39.492257 DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 598.0 LOGGED (FT.): 541.5 LOG TYPE: Drillers Log

SOURCE: SNOW HILL COAL CORP. 203 WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
439.5			COAL	1.0	158.5
396.2			COAL	0.3	201.8
380.8	SHELburn	DANVILLE	COAL	4.0	217.2
263.3	CARBONDALE	HERRIN	COAL	1.7	334.7
243.0	CARBONDALE	SPRINGFIELD	COAL	4.7	355.0
126.3	CARBONDALE	SURVANT	COAL	0.3	471.7
63.6	CARBONDALE	SEELYVILLE	COAL	5.6	534.4

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MAPID: 04500875000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 7    QUARTERS/FOOTAGES: SW SW SE

QUADRANGLE: DENNISON    LONGITUDE: -87.562994    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.492257    DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 598.0    LOGGED (FT.): 541.5    LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.    WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE #4265

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
598.0			UNCONSOLIDATED	151.0	0.0	
447.0	MODESTO		SHALE	7.0	151.0	
440.0	MODESTO		BLACK SHALE	0.5	158.0	
439.5	MODESTO	CHAPEL	COAL	1.0	158.5	
438.5	MODESTO		UNDERCLAY	5.5	159.5	FIRE CLAY
433.0	MODESTO		SANDY SHALE	7.5	165.0	
425.5	MODESTO		SANDSTONE	2.5	172.5	
423.0	MODESTO		SHALE	5.5	175.0	
417.5	MODESTO		LIMESTONE	0.3	180.5	
417.2	MODESTO		SHALE	0.3	180.8	
417.0	MODESTO		LIMESTONE	0.1	181.0	
416.9	MODESTO		SHALE	1.1	181.1	
415.8	MODESTO		LIMESTONE	0.2	182.2	
415.7	MODESTO		SHALE	9.7	182.3	
406.0	MODESTO		SHALE	9.8	192.0	
396.2	MODESTO		COAL	0.3	201.8	
395.8	MODESTO		UNDERCLAY	1.8	202.2	FIRE CLAY
394.0	MODESTO		SHALE	13.2	204.0	
380.8	CARBONDALE	DANVILLE	COAL	4.0	217.2	
376.8	CARBONDALE		UNDERCLAY	2.0	221.2	FIRE CLAY
374.8	CARBONDALE		SHALE	6.3	223.2	
368.5	CARBONDALE	ENERGY	CALCAREOUS SANDSTONE	1.8	229.5	
366.7	CARBONDALE	ENERGY	SHALY SANDSTONE	1.0	231.3	
365.7	CARBONDALE	ENERGY	SHALE	4.3	232.3	
361.5	CARBONDALE	ENERGY	SANDSTONE	21.5	236.5	
340.0	CARBONDALE	ENERGY	SANDSTONE/SHALE	32.0	258.0	
308.0	CARBONDALE	ENERGY	SANDY SHALE	15.0	290.0	
293.0	CARBONDALE	ENERGY	SHALE	29.0	305.0	WITH SIDERITE BANDS
264.0	CARBONDALE	ENERGY	BLACK SHALE	0.3	334.0	
263.7	CARBONDALE	ENERGY	BLACK SHALE	0.3	334.3	
263.3	CARBONDALE	HERRIN	COAL	1.7	334.7	
261.7	CARBONDALE		UNDERCLAY	2.2	336.3	FIRE CLAY
259.5	CARBONDALE		CALCAREOUS SHALE	1.5	338.5	
258.0	CARBONDALE		LIMESTONE	0.5	340.0	
257.5	CARBONDALE		SHALE	5.5	340.5	WITH LS NODULES
252.0	CARBONDALE		SANDSTONE	6.0	346.0	
246.0	CARBONDALE		BLACK SHALE	1.3	352.0	
244.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.7	353.3	

243.0	CARBONDALE	SPRINGFIELD	COAL	4.7	355.0	
238.3	CARBONDALE		UNDERCLAY	2.3	359.7	FIRE CLAY
236.0	CARBONDALE		SHALE	42.0	362.0	WITH SIDERITE BANDS
194.0	CARBONDALE		LIMESTONE	1.5	404.0	
192.5	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	2.3	405.5	BLACK SHALE
190.2	CARBONDALE		UNDERCLAY	3.7	407.8	FIRE CLAY
186.5	CARBONDALE		SANDSTONE	59.0	411.5	SHALEY IN PARTS
127.5	CARBONDALE		CALCAREOUS SANDSTONE	1.2	470.5	
126.3	CARBONDALE	SURVANT	COAL	0.3	471.7	
126.0	CARBONDALE		UNDERCLAY	2.0	472.0	FIRE CLAY
124.0	CARBONDALE		SHALE	26.0	474.0	
98.0	CARBONDALE	COLCHESTER	SHALE/COAL	4.0	500.0	BLACK SHALE AND COAL
94.0	SPOON		UNDERCLAY	2.0	504.0	FIRE CLAY
92.0	SPOON		SANDSTONE	2.5	506.0	SCATTERED CARBONACEOUS MATERIAL
89.5	SPOON		SANDSTONE/SHALE	0.2	508.5	
89.2	SPOON		SILTY SHALE	4.3	508.8	SLTST AND SIDERITE LENSES
84.9	SPOON		SANDSTONE/SHALE	6.3	513.1	SILTY SHALE
78.7	SPOON		SANDSTONE	6.0	519.3	BLACK CARBONACEOUS MATERIAL
72.7	SPOON		SHALY SILTSTONE	0.7	525.3	CARBONACEOUS; WITH FEW SS LENSES
72.0	SPOON		SANDSTONE	1.6	526.0	DRILL NOTES UNITS 57/58 MAY BE INVERTED
70.4	SPOON		SILTSTONE	5.0	527.6	CARBONACEOUS
65.4	SPOON		BLACK SHALE	1.8	532.6	
63.7	SPOON	SEELYVILLE	COAL	5.7	534.3	
58.0	SPOON		UNDERCLAY	1.5	540.0	STIGMARIA, SLICKENSIDED

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MAPID: 04500951000C    VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR                      TWP/RNG: 12N 10W    SECTION: 7    QUARTERS/FOOTAGES: 50' S line, 100' E line  
 QUADRANGLE: DENNISON                      LONGITUDE: -87.555185                      GEOLOGIST: SROKA  
 CONFIDENTIAL: N                      LATITUDE: 39.491512                      DATE COLLECTED: 11 / 0 / 1959  
 SURFACE ELEVATION (FT.): 535.9                      LOGGED (FT.): 502.0                      LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO.                      WELL TYPE: Structure Test  
 COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
535.9			UNCONSOLIDATED	75.0	0.0	
460.9	MODESTO		SHALE	19.0	75.0	
441.9	MODESTO	CHAPEL	COAL	1.0	94.0	
440.9	MODESTO		SHALE	19.0	95.0	
421.9	MODESTO	WEST FRANKLIN	FOSSILIFEROUS LIMESTONE	3.0	114.0	
418.9	MODESTO		SHALE	18.0	117.0	
400.9	MODESTO		SHALE	28.0	135.0	
372.9	MODESTO		LIMESTONE	1.0	163.0	TAN
371.9	CARBONDALE	DANVILLE	COAL	5.0	164.0	
366.9	CARBONDALE	ENERGY	SANDSTONE/SHALE	110.0	169.0	
256.9	CARBONDALE	HERRIN	COAL	2.0	279.0	
254.9	CARBONDALE		SANDSTONE	14.0	281.0	GRAY
240.9	CARBONDALE		SHALE	4.0	295.0	
236.9	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	299.0	
234.9	CARBONDALE	SPRINGFIELD	COAL	4.0	301.0	
230.9	CARBONDALE		UNDERCLAY	3.0	305.0	
227.9	CARBONDALE		SHALE	42.0	308.0	INCLUDES DRK. GRAY SH
185.9	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	6.0	350.0	BLACK SHALE
179.9	CARBONDALE		UNDERCLAY/SHALE	4.0	356.0	
175.9	CARBONDALE		SANDSTONE	78.0	360.0	
97.9	CARBONDALE	SURVANT	COAL	1.0	438.0	
96.9	CARBONDALE		SHALE	21.0	439.0	
75.9	CARBONDALE	COLCHESTER	COAL	2.0	460.0	
73.9	SPOON	PALZO	SANDSTONE	25.0	462.0	
48.9	SPOON		BLACK SHALE	6.0	487.0	
42.9	SPOON	SEELYVILLE	COAL	6.0	493.0	
36.9	SPOON		SHALE	3.0	499.0	

MAPID: 04500951000C    VERSION: 2

PROJECT: NCRDS87

COUNTY: EDGAR                      TWP/RNG: 12N 10W    SECTION: 7    QUARTERS/FOOTAGES: 50' S line, 100' E line  
 QUADRANGLE: DENNISON                      LONGITUDE: -87.555185                      GEOLOGIST: C TREWORYG  
 CONFIDENTIAL: N                      LATITUDE: 39.491512                      DATE COLLECTED: 12 / 11 / 1953  
 SURFACE ELEVATION (FT.): 536.0                      LOGGED (FT.): 502.0                      LOG TYPE: Drillers Log  
 SOURCE: SUN OIL COMPANY                      WELL TYPE: Structure Test  
 COMMENT: THICKNESS REPORTED IN WHOLE FEET

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
536.0			UNCONSOLIDATED	75.0	0.0	
461.0			SHALE	19.0	75.0	
442.0			COAL	1.0	94.0	THICKNESS IMPRECISE
441.0			SHALE	19.0	95.0	
422.0			LIMESTONE	3.0	114.0	
419.0			SHALE	46.0	117.0	
373.0			LIMESTONE	1.0	163.0	
372.0	CARBONDALE	DANVILLE	COAL	5.0	164.0	THICKNESS IMPRECISE
367.0	CARBONDALE	ENERGY	SANDSTONE/SHALE	110.0	169.0	MOSTLY ENERGY SHALE MEMBER
257.0	CARBONDALE	HERRIN	COAL	2.0	279.0	THICKNESS IMPRECISE
255.0	CARBONDALE		SANDSTONE	14.0	281.0	
241.0	CARBONDALE		SHALE	4.0	295.0	
237.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	299.0	
235.0	CARBONDALE	SPRINGFIELD	COAL	4.0	301.0	THICKNESS IMPRECISE
231.0	CARBONDALE		UNDERCLAY	3.0	305.0	
228.0	CARBONDALE		SHALE	42.0	308.0	
186.0	CARBONDALE	EXCELLO	SHALE/COAL	6.0	350.0	SOME HOUCHIN CREEK COAL AT THIS HORIZON
180.0	CARBONDALE		UNDERCLAY/SHALE	4.0	356.0	
176.0	CARBONDALE		SANDSTONE	78.0	360.0	
98.0	CARBONDALE	SURVANT	COAL	1.0	438.0	THICKNESS IMPRECISE
97.0	CARBONDALE		DARK SHALE	21.0	439.0	
76.0	CARBONDALE	COLCHESTER	COAL	2.0	460.0	THICKNESS IMPRECISE
74.0	SPOON	PALZO	SANDSTONE	25.0	462.0	
49.0	SPOON		BLACK SHALE	6.0	487.0	
43.0	SPOON	SEELYVILLE	COAL	6.0	493.0	THICKNESS IMPRECISE
37.0	SPOON		GRAY SHALE	3.0	499.0	

MAPID: 04500951000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 50' S line, 100' E line  
 QUADRANGLE: DENNISON LONGITUDE: -87.555185 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.491512 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 535.9 LOGGED (FT.): 502.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. E-3-53 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
441.9			COAL	1.0	94.0	
371.9	SHELBURN	DANVILLE	COAL	5.0	164.0	
256.9	CARBONDALE	HERRIN	COAL	2.0	279.0	
234.9	CARBONDALE	SPRINGFIELD	COAL	4.0	301.0	
97.9	CARBONDALE	SURVANT	COAL	1.0	438.0	
75.9	CARBONDALE	COLCHESTER	COAL	2.0	460.0	
42.9	CARBONDALE	SEELYVILLE	COAL	6.0	493.0	

MAPID: 04500874000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 8 QUARTERS/FOOTAGES: 321' N line, 298' W line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.553898 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.504967 DATE COLLECTED: 0 / 0 / 1961  
 SURFACE ELEVATION (FT.): 537.8 LOGGED (FT.): 479.1 LOG TYPE: Drillers Log  
 SOURCE: SNOW HILL COAL CORP. 202 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
384.0	SHELBURN	DANVILLE	COAL	2.4	153.8	
272.3	CARBONDALE	HERRIN	COAL	2.4	265.5	
252.3	CARBONDALE	SPRINGFIELD	COAL	4.9	285.5	
202.2	CARBONDALE	HOUCHIN CREEK	COAL	2.0	335.6	
133.8	CARBONDALE	SURVANT	COAL	0.5	404.0	
65.8	CARBONDALE	SEELYVILLE	COAL	5.8	472.0	



MAPID: 04500874000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 8    QUARTERS/FOOTAGES: 321' N line, 298' W line

QUADRANGLE: SANDFORD    LONGITUDE: -87.553898    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.504967    DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 537.8    LOGGED (FT.): 479.1    LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.    WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE NOT AT ISGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
537.8			UNCONSOLIDATED	55.0	0.0	
482.8	MODESTO		SHALE	34.0	55.0	
448.8	MODESTO	CHAPEL	SHALE/COAL	2.5	89.0	BLACK SHALE
446.3	MODESTO		UNDERCLAY	2.5	91.5	FIRECLAY
443.8	MODESTO		SHALE	4.0	94.0	WITH SIDERITE BANDS
439.8	MODESTO		SHALE	6.4	98.0	
433.4	MODESTO		LIMESTONE	0.8	104.4	
432.6	MODESTO		CALCAREOUS SHALE	0.3	105.2	
432.3	MODESTO		LIMESTONE	0.4	105.5	
431.9	MODESTO		SHALE	2.1	105.9	
429.8	MODESTO		SHALE	6.0	108.0	
423.8	MODESTO		CALCAREOUS SHALE	0.8	114.0	
423.0	MODESTO		SHALE	1.8	114.8	
421.3	MODESTO		LIMESTONE	0.2	116.5	
421.1	MODESTO		SANDY SHALE	5.8	116.7	WITH SIDERITE BANDS
415.3	MODESTO		SHALE	9.5	122.5	
405.8	MODESTO		SHALE	15.5	132.0	WITH SIDERITE BANDS
390.3	MODESTO		SHALE	6.3	147.5	WITH SIDERITE BANDS
384.0	CARBONDALE	DANVILLE	COAL	6.3	153.8	
377.8	CARBONDALE		UNDERCLAY	3.5	160.0	FIRECLAY
374.3	CARBONDALE		SHALE	1.8	163.5	WITH LS NODULES AND BANDS
372.5	CARBONDALE	BANKSTON FORK	LIMESTONE	23.3	165.3	
349.3	CARBONDALE	ENERGY	SHALE & SANDSTONE	4.0	188.5	SANDY SHALE
345.3	CARBONDALE	ENERGY	CALCAREOUS SANDSTONE	22.5	192.5	
322.8	CARBONDALE	ENERGY	SANDSTONE	19.0	215.0	
303.8	CARBONDALE	ENERGY	SHALE	21.0	234.0	WITH SIDERITE BANDS
282.8	CARBONDALE	ENERGY	BLACK SHALE	0.4	255.0	
282.4	CARBONDALE	ENERGY	BLACK SHALE	10.1	255.4	
272.3	CARBONDALE	HERRIN	COAL	2.4	265.5	
269.9	CARBONDALE		UNDERCLAY	2.5	267.9	
267.4	CARBONDALE		BLACK SHALE	4.7	270.4	
262.7	CARBONDALE		LIMESTONE	0.5	275.1	
262.2	CARBONDALE		BLACK SHALE	0.7	275.6	WITH LS NODULES
261.5	CARBONDALE		BLACK SHALE	6.8	276.3	
254.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.1	283.0	
252.7	CARBONDALE		LIMESTONE	0.4	285.1	CONCRETION?
252.3	CARBONDALE	SPRINGFIELD	COAL	4.9	285.5	
247.4	CARBONDALE		UNDERCLAY	2.6	290.4	FIRECLAY

244.8	CARBONDALE		SHALE	7.0	293.0	WITH LS BANDS
237.8	CARBONDALE		SHALE	32.5	300.0	WITH SIDERITE BANDS
205.3	CARBONDALE		LIMESTONE	3.1	332.5	
202.2	CARBONDALE	HOUCHIN CREEK	COAL	2.0	335.6	
200.2	CARBONDALE		SANDSTONE	66.4	337.6	
133.8	CARBONDALE	SURVANT	COAL	0.5	404.0	
133.3	CARBONDALE		UNDERCLAY	1.5	404.5	FIRECLAY
131.8	CARBONDALE		SANDY SHALE	24.0	406.0	
107.8	CARBONDALE		SHALE	11.0	430.0	
96.8	CARBONDALE	COLCHESTER	SHALE/COAL	3.0	441.0	BLACK SHALE AND COAL
93.8	SPOON		UNDERCLAY	2.3	444.0	FIRECLAY
91.5	SPOON		SILTSTONE	5.4	446.3	SIDERITE; CORED TO T.D.
86.1	SPOON		CARBONACEOUS SHALE	3.0	451.7	WITH SIDERITE
83.1	SPOON		SILTY SHALE	4.3	454.7	LENSES AND LAMINAE OF SS
78.9	SPOON		SANDSTONE	5.2	458.9	WITH THIN BLACK CARBONACEOUS LAMS
73.7	SPOON		CARBONACEOUS SHALE	7.9	464.1	LENSES OF SS AND SLTST
65.8	SPOON	SEELYVILLE	COAL	6.0	472.0	
59.8	SPOON		UNDERCLAY	1.1	478.0	STIGMARIA, SLIP FRACT, SLICKENSIDED

MAPID: 04500957000C    VERSION: 1

PROJECT: CONF

COUNTY: EDGAR    TWP/RNG: 12N 10W    SECTION: 8    QUARTERS/FOOTAGES: 450' S line, 50' E line

QUADRANGLE: DENNISON    LONGITUDE: -87.536297    GEOLOGIST: LOG BOOK

CONFIDENTIAL: N    LATITUDE: 39.492749    DATE COLLECTED:

SURFACE ELEVATION (FT.): 523.2    LOGGED (FT.): 500.0    LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.    E-6-54    WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
368.2	SHELBURN	DANVILLE	COAL	3.0	155.0	
261.2	CARBONDALE	HERRIN	COAL	1.0	262.0	
228.2	CARBONDALE	SPRINGFIELD	COAL	4.0	295.0	
178.2	CARBONDALE	HOUCHIN CREEK	COAL WITH SHALE	5.0	345.0	W/BLK SHALE
96.2	CARBONDALE	COLCHESTER	COAL	2.0	427.0	
64.2	CARBONDALE	SEELYVILLE	COAL	1.0	459.0	
34.2			COAL	3.0	489.0	

MAPID: 04500957000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR                      TWP/RNG: 12N 10W    SECTION: 8    QUARTERS/FOOTAGES: 450' S line, 50' E line  
 QUADRANGLE: DENNISON                      LONGITUDE: -87.536297                      GEOLOGIST: SROKA  
 CONFIDENTIAL: N                      LATITUDE: 39.492749                      DATE COLLECTED: 11 / 0 / 1959  
 SURFACE ELEVATION (FT.): 523.2                      LOGGED (FT.): 500.0                      LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO.                      WELL TYPE: Structure Test  
 COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
523.2			UNCONSOLIDATED	90.0	0.0	
433.2	MODESTO		SHALE	15.0	90.0	
418.2	MODESTO		FOSSILIFEROUS LIMESTONE	1.0	105.0	
417.2	MODESTO		SHALE	23.0	106.0	
394.2	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	129.0	BROWN
393.2	MODESTO		SHALE	25.0	130.0	
368.2	CARBONDALE	DANVILLE	COAL	3.0	155.0	
365.2	CARBONDALE		UNDERCLAY	7.0	158.0	
358.2	CARBONDALE	ENERGY	SHALE	97.0	165.0	
261.2	CARBONDALE	HERRIN	COAL	1.0	262.0	
260.2	CARBONDALE		SHALE	10.0	263.0	
250.2	CARBONDALE		SANDSTONE	20.0	273.0	
230.2	CARBONDALE		BLACK SHALE	2.0	293.0	
228.2	CARBONDALE	SPRINGFIELD	COAL	4.0	295.0	
224.2	CARBONDALE		UNDERCLAY	6.0	299.0	
218.2	CARBONDALE		SHALY SANDSTONE	40.0	305.0	
178.2	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	5.0	345.0	BLACK SHALE
173.2	CARBONDALE		SANDSTONE	54.0	350.0	
119.2	CARBONDALE		LIMESTONE	1.0	404.0	GRAY/BRN
118.2	CARBONDALE		SANDSTONE/SHALE	22.0	405.0	
96.2	CARBONDALE	SURVANT	COAL	2.0	427.0	
94.2	CARBONDALE		SHALE	30.0	429.0	GRAY TO BLACK
64.2	CARBONDALE	COLCHESTER	COAL	1.0	459.0	
63.2	SPOON		SHALE	29.0	460.0	WITH SS LENSES
34.2	SPOON	SEELYVILLE	COAL	3.0	489.0	
31.2	SPOON		UNDERCLAY	8.0	492.0	

MAPID: 04500871000C    VERSION: 1

PROJECT: CONF

COUNTY: EDGAR                    TWP/RNG: 12N 10W    SECTION: 17    QUARTERS/FOOTAGES: NW NW NE

QUADRANGLE: DENNISON                    LONGITUDE: -87.544298                    GEOLOGIST: LOG BOOK

CONFIDENTIAL: N                    LATITUDE: 39.490544                    DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 517.8                    LOGGED (FT.): 485.2                    LOG TYPE: Drillers Log

SOURCE: SNOW HILL COAL CORP.    201                    WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
374.0	SHELburn	DANVILLE	COAL	5.8	143.8
253.3	CARBONDALE	HERRIN	COAL	2.5	264.5
231.8	CARBONDALE	SPRINGFIELD	COAL	4.6	286.0
122.8	CARBONDALE	SURVANT - UPPER	COAL	1.0	395.0
99.0	CARBONDALE	SURVANT - LOWER	COAL	0.5	418.8
69.0	CARBONDALE	COLCHESTER	COAL	0.5	448.8
37.0	CARBONDALE	SEELYVILLE	COAL	4.4	480.8

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MAPID: 04500871000C VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: NW NW NE

QUADRANGLE: DENNISON LONGITUDE: -87.544298 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.490544 DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 517.8 LOGGED (FT.): 484.2 LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP. WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE NOT AT ISGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
517.8			UNCONSOLIDATED	84.0	0.0	
433.8	MODESTO		SHALE	14.0	84.0	WITH LS BANDS AND NODULES
419.8	MODESTO		SHALE	12.0	98.0	
407.8	MODESTO		SANDY SHALE	24.0	110.0	
383.8	MODESTO		SHALE	9.8	134.0	
374.0	CARBONDALE	DANVILLE	COAL	5.8	143.8	
368.2	CARBONDALE		UNDERCLAY	4.3	149.6	FIRE CLAY
364.0	CARBONDALE	BANKSTON FORK	LIMESTONE	0.5	153.8	
363.5	CARBONDALE		SHALE	19.7	154.3	
343.8	CARBONDALE	ENERGY	SANDSTONE	18.0	174.0	
325.8	CARBONDALE	ENERGY	SHALE	3.0	192.0	
322.8	CARBONDALE	ENERGY	SANDY SHALE	20.0	195.0	
302.8	CARBONDALE	ENERGY	SHALE	49.5	215.0	WITH SIDERITE BANDS
253.3	CARBONDALE	HERRIN	SHALE/COAL	2.5	264.5	BLACK SHALE AND COAL
250.8	CARBONDALE		UNDERCLAY	1.0	267.0	FIRE CLAY
249.8	CARBONDALE		UNDERCLAY	2.5	268.0	CALCAREOUS
247.3	CARBONDALE		LIMESTONE	4.0	270.5	WITH SHALE BANDS
243.3	CARBONDALE		SHALE	4.7	274.5	
238.6	CARBONDALE		SANDSTONE	3.8	279.2	WITH SHALE BANDS
234.8	CARBONDALE		SHALE	1.5	283.0	
233.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	284.5	
231.8	CARBONDALE	SPRINGFIELD	COAL	4.6	286.0	
227.2	CARBONDALE		UNDERCLAY	2.0	290.6	
225.2	CARBONDALE		SHALE	44.8	292.6	WITH SIDERITE BANDS
180.5	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	3.0	337.3	BLACK SHALE AND COAL
177.5	CARBONDALE		UNDERCLAY	6.2	340.3	FIRE CLAY
171.3	CARBONDALE		SANDSTONE	4.7	346.5	
166.6	CARBONDALE		SHALE	5.3	351.2	
161.3	CARBONDALE		SHALE	19.5	356.5	WITH SS BANDS
141.8	CARBONDALE		SANDY SHALE	19.0	376.0	
122.8	CARBONDALE	SURVANT	COAL	1.0	395.0	
121.8	CARBONDALE		UNDERCLAY	2.0	396.0	FIRE CLAY
119.8	CARBONDALE		SHALE	20.8	398.0	SITLY, GRAY
99.0	CARBONDALE	SURVANT	COAL	0.5	418.8	
98.5	CARBONDALE		UNDERCLAY	1.7	419.3	FIRE CLAY
96.8	CARBONDALE		SANDSTONE	4.0	421.0	
92.8	CARBONDALE		SANDY SHALE	10.0	425.0	
82.8	CARBONDALE		SHALE	7.0	435.0	

75.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.8	442.0	
69.0	CARBONDALE	COLCHESTER	COAL	0.5	448.8	CORED 449.125-T.D.
68.6	SPOON		UNDERCLAY	1.0	449.2	STIGMARIA
67.5	SPOON		CLAYSTONE & SILTSTONE	2.1	450.3	CARBONIZED PLANT FRAGMENTS
65.5	SPOON		SILTSTONE	1.3	452.3	GRAY/GRN
64.2	SPOON		SHALE	4.1	453.6	
60.1	SPOON		SANDSTONE/SHALE	1.2	457.7	
59.0	SPOON		SHALE & SANDSTONE	0.8	458.8	
58.2	SPOON		SANDSTONE	0.9	459.6	WITH BLACK CARBONACEOUS
57.3	SPOON		SANDSTONE	0.4	460.5	WITH BLACK CARBONACEOUS
56.9	SPOON		SHALE & SILTSTONE	1.7	460.9	
55.2	SPOON		SANDSTONE	1.0	462.6	X BDD; WITH BLACK CARB. PARTINGS
54.2	SPOON		SHALE	4.7	463.6	WITH SLTST LAMINAE AND LENSES
49.5	SPOON		SILTSTONE & SHALE	0.5	468.3	
49.0	SPOON		SANDSTONE	2.8	468.8	N SS SLTST, GRAY
46.2	SPOON		SILTSTONE	2.0	471.6	DRK.GRAY
44.2	SPOON		SILTY SHALE	3.5	473.6	
40.7	SPOON		BLACK SHALE	0.8	477.1	
40.0	SPOON	SEELYVILLE	COAL	4.4	477.8	
35.6	SPOON		UNDERCLAY	2.0	482.2	STIGMARIA, PYRITE, CARBONACEOUS

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MAPID: 04500952000C VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 150' N line, 50' E line

QUADRANGLE: DENNISON LONGITUDE: -87.53629 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.491092 DATE COLLECTED: 0 / 0 / 1954

SURFACE ELEVATION (FT.): 518.0 LOGGED (FT.): 466.0 LOG TYPE: Drillers Log

SOURCE: SUN OIL CO. WELL TYPE: Structure Test

COMMENT: STRIPPED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
518.0			UNCLASSIFIED	79.0	0.0	
439.0	MODESTO	CHAPEL	COAL	1.0	79.0	
438.0			UNCLASSIFIED	65.0	80.0	
373.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	145.0	
372.0	CARBONDALE		UNCLASSIFIED	106.0	146.0	
266.0	CARBONDALE	HERRIN	COAL	2.0	252.0	
264.0	CARBONDALE		UNDERCLAY	5.0	254.0	
259.0	CARBONDALE		LIMESTONE	1.0	259.0	
258.0	CARBONDALE		UNCLASSIFIED	10.0	260.0	
248.0	CARBONDALE	SPRINGFIELD	COAL	5.0	270.0	
243.0	CARBONDALE		UNDERCLAY	5.0	275.0	
238.0	CARBONDALE		UNCLASSIFIED	40.0	280.0	
198.0	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	5.0	320.0	
193.0	CARBONDALE		UNDERCLAY	5.0	325.0	
188.0	CARBONDALE		UNCLASSIFIED	50.0	330.0	
138.0	CARBONDALE	SURVANT	COAL	2.0	380.0	
136.0	CARBONDALE		UNCLASSIFIED	44.0	382.0	
92.0	CARBONDALE	COLCHESTER	COAL	2.0	426.0	
90.0	SPOON		LIMESTONE	1.0	428.0	
89.0	SPOON		UNCLASSIFIED	29.0	429.0	
60.0	SPOON	SEELYVILLE	COAL	2.0	458.0	
58.0	SPOON		UNCLASSIFIED	6.0	460.0	

MAPID: 04500952000C    VERSION: 2

PROJECT: NCRDS87

COUNTY: EDGAR                      TWP/RNG: 12N 10W    SECTION: 17    QUARTERS/FOOTAGES: 150' N line, 50' E line  
 QUADRANGLE: DENNISON                      LONGITUDE: -87.53629                      GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N                      LATITUDE: 39.491092                      DATE COLLECTED: 2 / 25 / 1954  
 SURFACE ELEVATION (FT.): 518.0                      LOGGED (FT.): 460.0                      LOG TYPE: Drillers Log  
 SOURCE: SUN OIL COMPANY                      WELL TYPE: Structure Test  
 COMMENT: THICKNESS REPORTED IN WHOLE FEET

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
518.0			UNCONSOLIDATED	79.0	0.0	
439.0			COAL	1.0	79.0	
438.0			SHALE	65.0	80.0	
373.0			LIMESTONE	1.0	145.0	
372.0			SHALE	44.0	146.0	
328.0	CARBONDALE	ENERGY	SANDSTONE/SHALE	62.0	190.0	
266.0	CARBONDALE	HERRIN	COAL	2.0	252.0	
264.0	CARBONDALE		UNDERCLAY	5.0	254.0	
259.0	CARBONDALE		LIMESTONE	1.0	259.0	
258.0	CARBONDALE		GRAY SHALE	10.0	260.0	
248.0	CARBONDALE	SPRINGFIELD	COAL	5.0	270.0	THICKNESS IMPRECISE
243.0	CARBONDALE		UNDERCLAY	5.0	275.0	
238.0	CARBONDALE		SANDSTONE	30.0	280.0	
198.0	CARBONDALE	EXCELLO	SHALE/COAL	5.0	320.0	SOME COAL REPORTED IN THIS INTERVAL
193.0	CARBONDALE		UNDERCLAY	5.0	325.0	
188.0	CARBONDALE		SANDSTONE	50.0	330.0	
138.0	CARBONDALE	SURVANT	COAL	2.0	380.0	THICKNESS IMPRECISE
136.0	CARBONDALE		GRAY SHALE	23.0	382.0	
113.0	CARBONDALE		SANDSTONE	21.0	405.0	
92.0	CARBONDALE		COAL	2.0	426.0	THICKNESS IMPRECISE
90.0	CARBONDALE		LIMESTONE	1.0	428.0	
89.0	CARBONDALE		SANDSTONE	11.0	429.0	
78.0	CARBONDALE		SHALE & SANDSTONE	18.0	440.0	
60.0	CARBONDALE	COLCHESTER	COAL	2.0	458.0	THICKNESS IMPRECISE



MAPID: 04500952000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 150' N line, 50' E line  
QUADRANGLE: DENNISON LONGITUDE: -87.53629 GEOLOGIST: LOG BOOK  
CONFIDENTIAL: N LATITUDE: 39.491092 DATE COLLECTED: 0 / 0 / 1954  
SURFACE ELEVATION (FT.): 518.0 LOGGED (FT.): 466.0 LOG TYPE: Survey Core Study  
SOURCE: SUN OIL CO. E-5-54 WELL TYPE: Coal Test  
COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
439.0			COAL	1.0	79.0
266.0	CARBONDALE	HERRIN	COAL	2.0	252.0
248.0	CARBONDALE	SPRINGFIELD	COAL	5.0	270.0
198.0	CARBONDALE	HOUCHIN CREEK	COAL	5.0	320.0
138.0	CARBONDALE	SURVANT	COAL	2.0	380.0
92.0	CARBONDALE	COLCHESTER	COAL	2.0	426.0
60.0	CARBONDALE	SEELYVILLE	COAL	2.0	458.0

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MAPID: 04500953000C VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 375' N line, 75' E line  
 QUADRANGLE: DENNISON LONGITUDE: -87.536375 GEOLOGIST: SROKA  
 CONFIDENTIAL: N LATITUDE: 39.490473 DATE COLLECTED: 11 / 0 / 1959  
 SURFACE ELEVATION (FT.): 554.0 LOGGED (FT.): 520.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. WELL TYPE: Structure Test  
 COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
554.0			UNCONSOLIDATED	117.0	0.0	
437.0	MODESTO	CHAPEL	COAL	1.0	117.0	
436.0	MODESTO		UNDERCLAY	4.0	118.0	
432.0	MODESTO		SHALE	60.0	122.0	
372.0	CARBONDALE	DANVILLE	COAL	2.0	182.0	
370.0	CARBONDALE		SHALE	6.0	184.0	
364.0	CARBONDALE	ENERGY	SHALY SANDSTONE	55.0	190.0	
309.0	CARBONDALE	ENERGY	SHALE	45.0	245.0	
264.0	CARBONDALE	ENERGY	BLACK SHALE	7.0	290.0	INCLUDES SOME DRK. GRAY
257.0	CARBONDALE	HERRIN	COAL	2.0	297.0	
255.0	CARBONDALE		UNDERCLAY	1.0	299.0	
254.0	CARBONDALE		FOSSILIFEROUS LIMESTONE	2.0	300.0	
252.0	CARBONDALE		SHALY SANDSTONE	17.0	302.0	
235.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	319.0	
233.0	CARBONDALE	SPRINGFIELD	COAL	4.0	321.0	
229.0	CARBONDALE		SHALE	45.0	325.0	
184.0	CARBONDALE		SHALE	5.0	370.0	
179.0	CARBONDALE		SANDSTONE	85.0	375.0	
94.0	CARBONDALE		SHALE	25.0	460.0	WITH SS IN UPPER PART; COAL? IN LOWER
69.0	SPOON		SHALE	24.0	485.0	
45.0	SPOON	SEELYVILLE	COAL	6.0	509.0	
39.0	SPOON		UNDERCLAY	5.0	515.0	

MAPID: 04500232000C VERSION: 1

PROJECT: CONTROL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 1 QUARTERS/FOOTAGES: 330' S line, 330' W line of NW SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.590906 GEOLOGIST: HINES  
 CONFIDENTIAL: N LATITUDE: 39.510379 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 949.0 LOG TYPE: Survey Sample Study  
 SOURCE: NATIONAL ASSOCIATED PETROLEUM WELL TYPE: Oil and Gas Test  
 COMMENT: OILWELLS LOGGED BY COAL SECT-LOGS IN GRU

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

MAPID: 04500236000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 1 QUARTERS/FOOTAGES: 75' N line, 305' E line of SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.583924 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.512977 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 692.0 LOGGED (FT.): 620.5 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
449.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	243.0	
396.0	CARBONDALE	DANVILLE	COAL	3.5	296.0	
280.0	CARBONDALE	HERRIN	COAL	-	412.0	
260.0	CARBONDALE	SPRINGFIELD	COAL	3.0	432.0	
215.0	CARBONDALE	HOUCHIN CREEK	COAL	-	477.0	
100.0	CARBONDALE	COLCHESTER	COAL	-	592.0	
76.0	SPOON	SEELYVILLE	COAL	4.5	616.0	

MAPID: 04500879000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 1 QUARTERS/FOOTAGES: SW SW SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.581616 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.506777 DATE COLLECTED: 0 / 0 / 1961  
 SURFACE ELEVATION (FT.): 658.0 LOGGED (FT.): 578.9 LOG TYPE: Drillers Log  
 SOURCE: SNOW HILL COAL CORP. 204 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
397.0	SHELBURN	DANVILLE	COAL	5.0	261.0	
284.0	CARBONDALE	HERRIN	COAL	2.0	374.0	
264.2	CARBONDALE	SPRINGFIELD	COAL	4.3	393.8	
218.0	CARBONDALE	HOUCHIN CREEK	COAL WITH SHALE	3.3	440.0	W/BLK SLATE
154.7	CARBONDALE	SURVANT	COAL	1.5	503.3	
112.2	CARBONDALE	COLCHESTER	COAL	3.3	545.8	
85.0	CARBONDALE	SEELYVILLE	COAL	5.6	573.0	

MAPID: 04500879000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 12N 11W    SECTION: 1    QUARTERS/FOOTAGES: SW SW SE

QUADRANGLE: SANDFORD    LONGITUDE: -87.581616    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.506777    DATE COLLECTED: 11 / 0 / 1961

SURFACE ELEVATION (FT.): 660.0    LOGGED (FT.): 578.9    LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.    WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE #4293

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
660.0			UNCONSOLIDATED	110.0	0.0	
550.0	MODESTO		SHALE	8.0	110.0	
542.0	MODESTO		BLACK SHALE	2.3	118.0	
539.7	MODESTO	WOMAC	COAL	1.0	120.3	
538.7	MODESTO		UNDERCLAY	1.7	121.3	FIRE CLAY
537.0	MODESTO		SHALE	3.7	123.0	
533.3	MODESTO		SHALE & SANDSTONE	36.3	126.7	SANDY SHALE, BASE OF BOND FM?
497.0	MODESTO		SHALE	32.8	163.0	WITH SIDERITE BANDS
464.2	MODESTO	CHAPEL	SHALE/COAL	0.8	195.8	BLACK SHALE AND COAL
463.5	MODESTO		UNDERCLAY	2.0	196.5	FIRE CLAY
461.5	MODESTO		SHALE	11.0	198.5	WITH LS NODULES AND BANDS
450.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	209.5	
447.5	MODESTO	WEST FRANKLIN	SHALE	0.5	212.5	
447.0	MODESTO	WEST FRANKLIN	LIMESTONE	0.5	213.0	
446.5	MODESTO		SHALE	1.5	213.5	
445.0	MODESTO		SHALE	8.5	215.0	
436.5	MODESTO		SHALE	26.5	223.5	WITH SIDERITE BANDS
410.0	MODESTO		SHALE	2.0	250.0	
408.0	MODESTO		SHALE	9.0	252.0	
399.0	CARBONDALE	DANVILLE	COAL	5.0	261.0	
394.0	CARBONDALE		UNDERCLAY	5.0	266.0	FIRE CLAY
389.0	CARBONDALE		SHALE	9.0	271.0	WITH LS NODULES
380.0	CARBONDALE	ENERGY	SANDSTONE	1.0	280.0	
379.0	CARBONDALE	ENERGY	CALCAREOUS SANDSTONE	2.0	281.0	
377.0	CARBONDALE	ENERGY	SANDSTONE	18.0	283.0	
359.0	CARBONDALE	ENERGY	SANDSTONE/SHALE	55.0	301.0	SANDY SHALE
304.0	CARBONDALE	ENERGY	SHALE	18.0	356.0	WITH SIDERITE BANDS
286.0	CARBONDALE	HERRIN	COAL	2.0	374.0	
284.0	CARBONDALE		UNDERCLAY	4.0	376.0	
280.0	CARBONDALE		SHALE	12.0	380.0	WITH SIDERITE BANDS
268.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	392.0	
267.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.3	392.5	
266.2	CARBONDALE	SPRINGFIELD	COAL	4.3	393.8	
262.0	CARBONDALE		UNDERCLAY	2.0	398.0	FIRE CLAY
260.0	CARBONDALE		SHALE	40.0	400.0	WITH SIDERITE BANDS
220.0	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	3.3	440.0	BLACK SHALE AND COAL
216.7	CARBONDALE		UNDERCLAY	1.8	443.3	FIRE CLAY

215.0	CARBONDALE		SANDSTONE	58.3	445.0	
156.7	CARBONDALE	SURVANT	COAL	1.5	503.3	
155.2	CARBONDALE		SANDSTONE/SHALE	22.2	504.8	SANDY SHALE
133.0	CARBONDALE	SURVANT	SHALE/COAL	1.0	527.0	BLACK SHALE AND COAL
132.0	CARBONDALE		SHALE	9.8	528.0	FOSSILIF AND CALC LOWER PART
122.2	CARBONDALE		FOSSILIFEROUS LIMESTONE	0.3	537.8	
121.9	CARBONDALE		SHALE	1.9	538.1	PECOPTERIS, NEUROPTERIS, ETC.
120.0	CARBONDALE		SHALE	3.2	540.0	DRK. GRAY? WITH SIDERITE NODULES
116.8	CARBONDALE	COLCHESTER	BLACK SHALE	5.0	543.2	DRILL LOG NOTES COAL WITHIN THIS INTERVL
111.8	SPOON		SANDSTONE	9.7	548.2	GRAY TO WHITE; ZONES OF N SS SH
102.2	SPOON		CARBONACEOUS SHALE	4.3	557.8	SIDE BANDS
97.8	SPOON		SHALE & SILTSTONE	3.7	562.2	CARBONACEOUS
94.2	SPOON		CARBONACEOUS SILTSTONE	5.3	565.8	
88.8	SPOON		CARBONACEOUS SHALE	0.9	571.2	
87.9	SPOON	SEELYVILLE	COAL	0.9	572.1	
87.0	SPOON		UNDERCLAY	5.9	573.0	STIGMARIA FOSSILS

MAPID: 04500945000C    VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR    TWP/RNG: 12N 11W    SECTION: 1    QUARTERS/FOOTAGES: 1269' S line, 330' W line of SE NW

QUADRANGLE: SANDFORD    LONGITUDE: -87.586312    GEOLOGIST: C TREWORGY

CONFIDENTIAL: N    LATITUDE: 39.516669    DATE COLLECTED:

SURFACE ELEVATION (FT.): 638.0    LOGGED (FT.): 541.0    LOG TYPE: Nuclear Log

SOURCE:    WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN	COMMENT
468.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	170.0	
412.0	CARBONDALE	DANVILLE	COAL	4.5	226.0	
302.0	CARBONDALE	HERRIN	COAL	2.5	336.0	
282.0	CARBONDALE	SPRINGFIELD	COAL	3.0	356.0	
234.0	CARBONDALE	HOUCHIN CREEK	COAL	-	404.0	
135.0	CARBONDALE	COLCHESTER	COAL	-	503.0	
103.0	SPOON	SEELYVILLE	COAL	6.0	535.0	

MAPID: 04500259000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: 450' N line, 445' W line of NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.599753 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.519215 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 711.0 LOGGED (FT.): 640.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
445.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	266.0
390.0	CARBONDALE	DANVILLE	COAL	5.5	321.0
279.0	CARBONDALE	HERRIN	COAL	2.0	432.0
263.0	CARBONDALE	SPRINGFIELD	COAL	4.0	448.0
216.0	CARBONDALE	HOUCHIN CREEK	COAL	-	495.0
95.0	CARBONDALE	COLCHESTER	COAL	-	616.0
77.0	SPOON	SEELYVILLE	COAL	6.0	634.0

MAPID: 04500862000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: SW NE NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.595563 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.517703 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 717.0 LOGGED (FT.): 635.5 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
457.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	260.0
398.0	CARBONDALE	DANVILLE	COAL	5.0	319.0
291.0	CARBONDALE	HERRIN	COAL	3.0	426.0
273.0	CARBONDALE	SPRINGFIELD	COAL	3.0	444.0
225.0	CARBONDALE	HOUCHIN CREEK	COAL	-	492.0
108.0	CARBONDALE	COLCHESTER	COAL	-	609.0
88.0	SPOON	SEELYVILLE	COAL	6.5	629.0

MAPID: 04500943000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: 230' N line, 330' E line of NW SE SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.595561 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.508801 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 651.0 LOGGED (FT.): 574.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
455.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	196.0
398.0	CARBONDALE	DANVILLE	COAL	4.5	253.0
288.0	CARBONDALE	HERRIN	COAL	3.0	363.0
269.0	CARBONDALE	SPRINGFIELD	COAL	3.5	382.0
222.0	CARBONDALE	HOUCHIN CREEK	COAL	-	429.0
102.0	CARBONDALE	COLCHESTER	COAL	-	549.0
84.0	SPOON	SEELYVILLE	COAL	7.0	567.0

MAPID: 04500947000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: NW NE SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.604774 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.512139 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 613.0 LOGGED (FT.): 593.5 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
401.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	212.0
346.0	CARBONDALE	DANVILLE	COAL	5.0	267.0
229.0	CARBONDALE	HERRIN	COAL	2.0	384.0
211.0	CARBONDALE	SPRINGFIELD	COAL	3.5	402.0
161.0	CARBONDALE	HOUCHIN CREEK	COAL	-	452.0
41.0	CARBONDALE	COLCHESTER	COAL	-	572.0
26.0	SPOON	SEELYVILLE	COAL	6.5	587.0

MAPID: 04500260000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 4 QUARTERS/FOOTAGES: NW SW NW  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.646792 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.51574 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 607.0 LOGGED (FT.): 584.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
404.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	203.0
356.0	CARBONDALE	DANVILLE	COAL	3.0	251.0
244.0	CARBONDALE	HERRIN	COAL	2.5	363.0
226.0	CARBONDALE	SPRINGFIELD	COAL	2.0	381.0
172.0	CARBONDALE	HOUCHIN CREEK	COAL	-	435.0
66.0	CARBONDALE	COLCHESTER	COAL	-	541.0
29.0	SPOON	SEELYVILLE	COAL	6.0	578.0

MAPID: 04500835000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 4 QUARTERS/FOOTAGES: 660' N line, 330' E line of NW  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.639801 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.518459 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 660.0 LOGGED (FT.): 640.5 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
378.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	282.0
326.0	CARBONDALE	DANVILLE	COAL	2.0	334.0
227.0	CARBONDALE	HERRIN	COAL	2.5	433.0
208.0	CARBONDALE	SPRINGFIELD	COAL	2.5	452.0
155.0	CARBONDALE	HOUCHIN CREEK	COAL	-	505.0
56.0	CARBONDALE	COLCHESTER	COAL	-	604.0
25.0	SPOON	SEELYVILLE	COAL	5.5	635.0



MAPID: 04500812000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 5 QUARTERS/FOOTAGES: 425' N line, 395' W line of NE

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.655843 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.51911 DATE COLLECTED:

SURFACE ELEVATION (FT.): 637.0 LOGGED (FT.): 431.0 LOG TYPE: Nuclear Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
437.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	200.0	
380.0	CARBONDALE	DANVILLE	COAL	2.0	257.0	
272.0	CARBONDALE	HERRIN	COAL	-	365.0	
257.0	CARBONDALE	SPRINGFIELD	COAL	-	380.0	
206.0	CARBONDALE	HOUCHIN CREEK	COAL	-	431.0	

MAPID: 04500973000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 5 QUARTERS/FOOTAGES: SE SE NW

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.658435 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.51393 DATE COLLECTED:

SURFACE ELEVATION (FT.): 645.0 LOGGED (FT.): 609.0 LOG TYPE: Nuclear Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
421.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	224.0	
369.0	CARBONDALE	DANVILLE	COAL	4.0	276.0	
265.0	CARBONDALE	HERRIN	COAL	-	380.0	
243.0	CARBONDALE	SPRINGFIELD	COAL	2.5	402.0	
189.0	CARBONDALE	HOUCHIN CREEK	COAL	-	456.0	
77.0	CARBONDALE	COLCHESTER	COAL	-	568.0	
42.0	SPOON	SEELYVILLE	COAL	6.0	603.0	

MAPID: 04501016000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 5 QUARTERS/FOOTAGES: 105' S line, 330' E line of SW NE

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.653796 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.51331 DATE COLLECTED:

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 608.5 LOG TYPE: Nuclear Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
420.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	220.0
369.0	CARBONDALE	DANVILLE	COAL	5.0	271.0
237.0	CARBONDALE	SPRINGFIELD	COAL	-	403.0
185.0	CARBONDALE	HOUCHIN CREEK	COAL	-	455.0
78.0	CARBONDALE	COLCHESTER	COAL	-	562.0
37.0	SPOON	SEELYVILLE	COAL	5.5	603.0

MAPID: 04500270000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: NE NE NE

QUADRANGLE: SANDFORD LONGITUDE: -87.593222 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.504876 DATE COLLECTED:

SURFACE ELEVATION (FT.): 641.0 LOGGED (FT.): 577.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
445.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	196.0
393.0	CARBONDALE	DANVILLE	COAL	4.0	248.0
277.0	CARBONDALE	HERRIN	COAL	2.0	364.0
259.0	CARBONDALE	SPRINGFIELD	COAL	3.5	382.0
209.0	CARBONDALE	HOUCHIN CREEK	COAL	-	432.0
92.0	CARBONDALE	COLCHESTER	COAL	-	549.0
69.0	SPOON	SEELYVILLE	COAL	5.0	572.0

MAPID: 04500271000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: NW NE NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.595529 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.504853 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 647.0 LOGGED (FT.): 583.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
438.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	209.0
385.0	CARBONDALE	DANVILLE	COAL	3.5	262.0
272.0	CARBONDALE	HERRIN	COAL	1.5	375.0
253.0	CARBONDALE	SPRINGFIELD	COAL	3.5	394.0
205.0	CARBONDALE	HOUCHIN CREEK	COAL	-	442.0
97.0	CARBONDALE	COLCHESTER	COAL	-	550.0
69.0	SPOON	SEELYVILLE	COAL	5.0	578.0

MAPID: 04500274000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: NW NE SW  
 QUADRANGLE: DENNISON LONGITUDE: -87.586238 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.49763 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 618.0 LOGGED (FT.): 542.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
451.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	167.0
391.0	CARBONDALE	DANVILLE	COAL	2.0	227.0
276.0	CARBONDALE	HERRIN	COAL	1.5	342.0
259.0	CARBONDALE	SPRINGFIELD	COAL	1.5	359.0
212.0	CARBONDALE	HOUCHIN CREEK	COAL	-	406.0
108.0	CARBONDALE	COLCHESTER	COAL	-	510.0
81.0	SPOON	SEELYVILLE	COAL	5.0	537.0

MAPID: 04500278000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 12N 12W

SECTION: 1

QUARTERS/FOOTAGES: SW NE NE

QUADRANGLE: PARIS SOUTH

LONGITUDE: -87.685393

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.528171

DATE COLLECTED:

SURFACE ELEVATION (FT.): 665.0

LOGGED (FT.): 766.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
285.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	380.0
228.0	CARBONDALE	DANVILLE	COAL	3.0	437.0
106.0	CARBONDALE	HERRIN	COAL	-	559.0
95.0	CARBONDALE	SPRINGFIELD	COAL	3.0	570.0
37.0	CARBONDALE	HOUCHIN CREEK	COAL	-	628.0
-65.0	CARBONDALE	COLCHESTER	COAL	-	730.0
-96.0	SPOON	SEELYVILLE	COAL	5.0	761.0

MAPID: 04500001000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR    TWP/RNG: 12N 12W    SECTION: 2    QUARTERS/FOOTAGES: 4130' S line, 1880' E line

QUADRANGLE: PARIS SOUTH    LONGITUDE: -87.707796    GEOLOGIST: R. SMITH

CONFIDENTIAL: N    LATITUDE: 39.527312    DATE COLLECTED: 8 / 0 / 1924

SURFACE ELEVATION (FT.): 619.0    LOGGED (FT.): 742.0    LOG TYPE: Drillers Log

SOURCE: R.D. MCCORD    WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
619.0			UNCONSOLIDATED	80.0	0.0
539.0	MATTOON		GRAY SHALE	4.5	80.0
534.5	BOND	MILLERSVILLE	LIMESTONE	5.5	84.5
529.0	BOND	MILLERSVILLE	DARK SHALE	10.3	90.0
518.7	BOND	MILLERSVILLE	LIMESTONE	8.7	100.3
510.0	BOND	MILLERSVILLE	DARK SHALE	4.0	109.0
506.0	BOND	MILLERSVILLE	LIMESTONE	4.0	113.0
502.0	BOND		SHALE	14.8	117.0
487.2	BOND		COAL	0.2	131.8
487.0	BOND		DARK SHALE	4.0	132.0
483.0	BOND		SANDY SHALE	35.0	136.0
448.0	BOND		DARK SHALE	23.0	171.0
425.0	BOND		LIMESTONE	2.0	194.0
423.0	BOND		BLACK SHALE	2.0	196.0
421.0	BOND		SHALE/COAL	1.0	198.0
420.0	BOND		GRAY SHALE	10.0	199.0
410.0	BOND		DARK SHALE	14.7	209.0
395.3	BOND		COAL	1.3	223.7
394.0	BOND		DARK SHALE	6.5	225.0
387.5	BOND		COAL	0.5	231.5
387.0	BOND		SHALE	17.0	232.0
370.0	BOND	CARTHAGE	LIMESTONE	2.0	249.0
368.0	MODESTO		DARK SHALE	11.0	251.0
357.0	MODESTO		LIMESTONE	1.0	262.0
356.0	MODESTO		SHALE	21.0	263.0
335.0	MODESTO		LIMESTONE	2.0	284.0
333.0	MODESTO		BLACK SHALE	1.0	286.0
332.0	MODESTO		GREEN SHALE	1.5	287.0
330.5	MODESTO		GRAY SHALE	4.6	288.5
326.0	MODESTO		SANDSTONE	12.0	293.0
314.0	MODESTO		SHALE	62.0	305.0
252.0	MODESTO		LIMESTONE	1.5	367.0
250.5	MODESTO	CHAPEL	COAL	0.6	368.5
249.9	MODESTO		SHALE	7.9	369.1
242.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	377.0
239.0	MODESTO		SHALE	1.0	380.0
238.0	MODESTO		DARK SHALE	9.0	381.0
229.0	MODESTO		SHALE	9.0	390.0
220.0	MODESTO		DARK SHALE	9.0	399.0

211.0	MODESTO		GRAY SHALE	18.0	408.0	
193.0	MODESTO		DARK SHALE	5.7	426.0	
187.3	CARBONDALE	DANVILLE	COAL	0.9	431.7	
186.4	CARBONDALE	DANVILLE	UNDERCLAY	0.4	432.6	
186.0	CARBONDALE	DANVILLE	COAL	1.4	433.0	
184.6	CARBONDALE		GRAY SHALE	8.1	434.4	
176.5	CARBONDALE	BANKSTON FORK	LIMESTONE	4.5	442.5	FUSULINA
172.0	CARBONDALE	ENERGY	SHALE	39.0	447.0	
133.0	CARBONDALE	ENERGY	DARK SHALE	16.0	486.0	
117.0	CARBONDALE	ENERGY	SHALE	19.0	502.0	
98.0	CARBONDALE	ENERGY	DARK SHALE	27.0	521.0	
71.0	CARBONDALE	HERRIN	COAL	2.0	548.0	
69.0	CARBONDALE		GRAY SHALE	10.0	550.0	
59.0	CARBONDALE		DARK SHALE	3.0	560.0	
56.0	CARBONDALE		SANDY SHALE	2.0	563.0	
54.0	CARBONDALE	TURNER MINE	BLACK SHALE	0.6	565.0	
53.4	CARBONDALE	SPRINGFIELD	COAL	0.5	565.6	
52.9	CARBONDALE		DARK SHALE	3.9	566.1	
49.0	CARBONDALE		SANDSTONE	7.0	570.0	
42.0	CARBONDALE		DARK SHALE	33.0	577.0	
9.0	CARBONDALE	EXCELLO	BLACK SHALE	2.8	610.0	
6.2	CARBONDALE	HOUCHIN CREEK	COAL	1.2	612.8	
5.1	CARBONDALE		SHALE	28.1	613.9	
-23.0	CARBONDALE		DARK SHALE	6.0	642.0	
-29.0	CARBONDALE		SHALE	28.0	648.0	
-57.0	CARBONDALE		BLACK SHALE	0.7	676.0	
-57.7	CARBONDALE	SURVANT	COAL	0.4	676.7	
-58.1	CARBONDALE		SANDY SHALE	20.9	677.1	
-79.0	CARBONDALE		DARK SHALE	4.0	698.0	
-83.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.5	702.0	
-89.5	SPOON		SHALE	25.5	708.5	
-115.0	SPOON		DARK SHALE	1.7	734.0	
-116.7	SPOON	SEELYVILLE	COAL	5.0	735.7	
-121.7	SPOON		UNDERCLAY	1.3	740.7	

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MAPID: 04500001000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 12W SECTION: 2 QUARTERS/FOOTAGES: 4130' S line, 1880' E line  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.707796 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.527312 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 619.0 LOGGED (FT.): 741.0 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
242.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	377.0
186.0	CARBONDALE	DANVILLE	COAL	1.4	433.0
71.0	CARBONDALE	HERRIN	COAL	2.0	548.0
54.0	CARBONDALE	SPRINGFIELD	COAL	0.5	565.0
6.0	CARBONDALE	HOUCHIN CREEK	COAL	1.1	613.0
-90.0	CARBONDALE	COLCHESTER	COAL	-	709.0
-117.0	SPOON	SEELYVILLE	COAL	5.0	736.0

MAPID: 04500280000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 12W SECTION: 7 QUARTERS/FOOTAGES: SW SE SW  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.787473 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.501053 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 670.0 LOGGED (FT.): 434.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: NOT REACH #6, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
414.0	BOND	CARTHAGE	LIMESTONE	4.0	256.0
295.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	375.0
238.0	CARBONDALE	DANVILLE	COAL	2.0	432.0

MAPID: 04500169000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 13W SECTION: 3 QUARTERS/FOOTAGES: 487' N line, 343' W line of NW  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.84891 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.525816 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 777.0 LOGGED (FT.): 494.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
655.0	BOND	CARTHAGE	LIMESTONE	5.0	122.0
549.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	228.0
499.0	CARBONDALE	DANVILLE	COAL	-	278.0
392.0	CARBONDALE	HERRIN	COAL	4.0	385.0
381.0	CARBONDALE	SPRINGFIELD	COAL	4.0	396.0
331.0	CARBONDALE	HOUCHIN CREEK	COAL	-	446.0
283.0	CARBONDALE	COLCHESTER	COAL	-	494.0

MAPID: 04501226000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 13W SECTION: 6 QUARTERS/FOOTAGES: NW NW NW  
 QUADRANGLE: KANSAS LONGITUDE: -87.9042 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.524488 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 740.0 LOGGED (FT.): 406.5 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	213.0
466.0	CARBONDALE	DANVILLE	COAL	4.0	274.0
358.0	CARBONDALE	HERRIN	COAL	3.5	382.0
338.0	CARBONDALE	SPRINGFIELD	COAL	4.5	402.0



MAPID: 04500979000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 13W SECTION: 14 QUARTERS/FOOTAGES: 39' N line, 61' E line of SW

QUADRANGLE: CLARKSVILLE LONGITUDE: -87.820926 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.491742 DATE COLLECTED:

SURFACE ELEVATION (FT.): 690.0 LOGGED (FT.): 606.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
496.0	BOND	CARTHAGE	LIMESTONE	4.0	194.0
378.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	312.0
329.0	CARBONDALE	DANVILLE	COAL	2.0	361.0
194.0	CARBONDALE	HERRIN	COAL	2.0	496.0
179.0	CARBONDALE	SPRINGFIELD	COAL	3.0	511.0
128.0	CARBONDALE	HOUCHIN CREEK	COAL	-	562.0
84.0	CARBONDALE	COLCHESTER	COAL	-	606.0

MAPID: 04500685000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 12N 14W SECTION: 14 QUARTERS/FOOTAGES: NE SW SE

QUADRANGLE: WESTFIELD EAST LONGITUDE: -87.928688 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.484492 DATE COLLECTED:

SURFACE ELEVATION (FT.): 676.0 LOGGED (FT.): 405.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	152.0
479.0	CARBONDALE	DANVILLE	COAL	-	197.0
373.0	CARBONDALE	HERRIN	COAL	1.5	303.0
356.0	CARBONDALE	SPRINGFIELD	COAL	-	320.0
314.0	CARBONDALE	HOUCHIN CREEK	COAL	-	362.0
271.0	CARBONDALE	COLCHESTER	COAL	-	405.0

MAPID: 04500136000C VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 4 QUARTERS/FOOTAGES: 2000' S line, 73' W line

QUADRANGLE: SANDFORD LONGITUDE: -87.537307 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.598498 DATE COLLECTED: 2 / 11 / 1949

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 495.0 LOG TYPE: Other Core Study

SOURCE: UNIVERSAL COAL WASHING CO. WELL TYPE: Coal Test

COMMENT: CORE DESCRIPTION, ISGS #2539 (REDUCED)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
640.0			UNCLASSIFIED	83.2	0.0	
556.8	MODESTO		CARBONACEOUS SHALE	8.0	83.2	PLANT REMAINS UPPER 2 FT.
548.8	MODESTO		CLAYSTONE & SHALE	2.8	91.2	SLIP FRACTURED
546.0	MODESTO		SHALE	3.4	94.0	WITH SIDERITE NODULES
542.6	MODESTO	CHAPEL	COAL	0.3	97.4	
542.3	MODESTO		UNDERCLAY	6.4	97.7	STIGMARIAN, SLIP FRACTURED
535.9	MODESTO		CLAYSTONE & SHALE	13.5	104.1	WITH LS AND SIDERITE NODULES
522.4	MODESTO		FOSSILIFEROUS LIMESTONE	0.5	117.6	
521.9	MODESTO		CLAYSTONE & SHALE	8.9	118.1	MOTTLED PURPLE AND RED
513.0	MODESTO		CLAYSTONE & SILTY SHALE	1.4	127.0	
511.6	MODESTO		SHALE	18.9	128.4	WITH CALCAREOUS NODULES
492.7	MODESTO		SHALE	3.8	147.3	PECTINS, GASTROPODS
488.8	MODESTO		SILTY LIMESTONE	0.5	151.2	BRACHIOPODS PRESENT
488.3	MODESTO		SHALE	5.3	151.7	D SH LS
483.0	MODESTO		SHALE	9.1	157.0	D SH LS
473.9	MODESTO		SILTY LIMESTONE	0.5	166.1	FOSSILIFEROUS
473.4	MODESTO		SHALE	10.9	166.6	WITH CALCAREOUS NODULES
462.5	CARBONDALE	DANVILLE	COAL	5.8	177.5	
456.7	CARBONDALE		UNDERCLAY	2.1	183.3	STIGMARIAN
454.7	CARBONDALE		CLAYSTONE & SHALE	3.8	185.3	SMALL GASTR. & DERBIAS
450.8	CARBONDALE	BANKSTON FORK	SILTY LIMESTONE	1.8	189.2	BRACHS.
449.1	CARBONDALE		CLAYSTONE & SHALE	0.1	190.9	WITH LS NODULES
449.0	CARBONDALE	ENERGY	SHALY SANDSTONE	25.0	191.0	
424.0	CARBONDALE	ENERGY	SHALE	37.4	216.0	LAMINAE AND LENSES OF SS
386.6	CARBONDALE	ENERGY	SHALE & SILTSTONE	25.0	253.4	
361.6	CARBONDALE	ENERGY	SILTY SHALE	6.1	278.4	WITH SIDERITE CONCRETIONS
355.5	CARBONDALE	ENERGY	SHALE	7.5	284.5	WITH THIN LS LAMINAE AND BEDS
348.0	CARBONDALE	ENERGY	BLACK SHALE	1.2	292.0	FISH SCALES
346.8	CARBONDALE	HERRIN	COAL	1.8	293.2	
345.0	CARBONDALE		UNDERCLAY	1.0	295.0	STIGMARIAN
344.1	CARBONDALE		CLAYSTONE & SHALE	3.1	295.9	WITH LS AND SIDERITE NODULES
341.0	CARBONDALE		SHALE	11.1	299.0	
329.9	CARBONDALE		BLACK SHALE	0.6	310.1	
329.3	CARBONDALE	BRIAR HILL	BONE COAL	1.4	310.7	OR CARBONACEOUS SHALE
327.9	CARBONDALE		UNDERCLAY	0.1	312.1	STIGMARIAN
327.8	CARBONDALE		SANDSTONE	1.4	312.2	GRAY

326.4	CARBONDALE		SHALE	1.1	313.6	CARBONIZED PLANTS
325.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	314.7	
323.0	CARBONDALE	SPRINGFIELD	COAL	1.2	317.0	
321.8	CARBONDALE		UNDERCLAY	0.9	318.2	STIGMARIAN
320.9	CARBONDALE		CLAYSTONE & SHALE	1.0	319.1	LS AND SIDERITE NODULES
319.9	CARBONDALE		SILTY SHALE	0.3	320.1	
319.6	CARBONDALE		SILTSTONE & SHALE	1.8	320.4	
317.8	CARBONDALE		SHALE	3.0	322.2	WITH LS NODULES
314.8	CARBONDALE		SHALY SILTSTONE	7.1	325.2	
307.7	CARBONDALE		SILTY SHALE	15.8	332.3	PYRITIC WITH SIDERITE BANDS AND LENSES UNIFORM
292.0	CARBONDALE		SILTY SHALE	8.3	348.0	
283.7	CARBONDALE		SHALE	10.8	356.3	PYRITE AND SIDERITE BANDS; BLACK AT BASE
273.0	CARBONDALE		COAL	0.7	367.0	
272.3	CARBONDALE		UNDERCLAY	2.4	367.7	STIGMARIAN, SLICKENSIDED
269.9	CARBONDALE		CLAYSTONE & SHALE	2.9	370.1	
267.0	CARBONDALE		SHALY SILTSTONE	13.0	373.0	
254.0	CARBONDALE		SHALE	19.6	386.0	SIDERITIC
236.4	CARBONDALE		BLACK SHALE	2.5	403.6	FISH SCALES (LEOIA TRICARONOTA?)
234.9	CARBONDALE		CORE LOSS	1.9	405.1	
233.0	CARBONDALE		CLAYSTONE & SHALE	1.1	407.0	WITH 1/16 INCH COAL STREAK
231.9	CARBONDALE		UNDERCLAY	1.5	408.1	STIGMARIAN
230.4	CARBONDALE		SILTSTONE & SHALE	2.7	409.6	SIDERITE
227.7	CARBONDALE		SANDSTONE/SHALE	2.7	412.3	
225.1	CARBONDALE		SILTSTONE & SHALE	0.8	414.9	
224.3	CARBONDALE		SANDSTONE	1.3	415.7	CARBONIZED PLANT REMAINS
223.1	CARBONDALE		SHALE & SILTSTONE	1.1	416.9	
222.0	CARBONDALE		SHALE	6.1	418.0	PLANT DEBRIS
215.9	CARBONDALE		SHALE	4.9	424.1	CORDAITES IN UPPER .5 FT
211.0	CARBONDALE		BLACK SHALE	2.0	429.0	FISH SCALES
209.0	CARBONDALE		SILTSTONE & SHALE	3.4	431.0	
205.6	CARBONDALE		SILTY SHALE	6.7	434.4	PELECYPODS
198.9	CARBONDALE		BLACK SHALE	0.6	441.1	BN COAL CARB
198.3	CARBONDALE		SHALE	5.4	441.7	PYRITIC AND SIDERITIC
192.9	CARBONDALE		LIMESTONE	0.3	447.1	BRN/GRAY
192.7	CARBONDALE		SHALE	2.2	447.3	GRADES TO DARK GRAY
190.5	CARBONDALE		BLACK SHALE	5.7	449.5	CLAMS, LINGULA, ORBICULOIDEA
184.8	CARBONDALE	COLCHESTER	COAL	0.3	455.2	
184.5	SPOON		UNDERCLAY	1.0	455.5	STIGMARIA
183.5	SPOON		CLAYSTONE & SHALE	2.0	456.5	WITH LS AND SIDERITE NODULES
181.5	SPOON		SILTSTONE & SHALE	4.2	458.5	ABUNDANT SIDERITE NODULES
177.3	SPOON		SHALY SANDSTONE	6.8	462.7	CARBONACEOUS SPECKS
170.6	SPOON		SHALE	15.2	469.4	PLANT FRAGMENTS
155.4	SPOON		CORE LOSS	2.4	484.6	
153.0	SPOON		SHALE	0.6	487.0	CUT BY 75 JNT; ABUND COAL PTS BASAL 2"
152.4	SPOON	SEELYVILLE	BONE COAL	3.6	487.6	1/4 IN SHALE LAYERS AT 487.85 AND 490.58
148.7	SPOON		UNDERCLAY	2.3	491.3	STIGMARIAN, SLIP FRACTURED

146.5 SPOON

CORE LOSS

1.5

493.5

SIDERITE BAND

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MAPID: 04500136000C    VERSION: 2

PROJECT: ISGS89

COUNTY: EDGAR                      TWP/RNG: 13N 10W    SECTION: 4    QUARTERS/FOOTAGES: 2000' S line, 73' W line  
 QUADRANGLE: SANDFORD                      LONGITUDE: -87.537307                      GEOLOGIST: POLLOCK  
 CONFIDENTIAL: N                      LATITUDE: 39.598498                      DATE COLLECTED: 2 / 11 / 1949  
 SURFACE ELEVATION (FT.): 640.0                      LOGGED (FT.): 495.0                      LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO.                      WELL TYPE: Coal Test  
 COMMENT: LOG BY HARRISON & SIEVER, CORE #2539

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
640.0			UNCLASSIFIED	83.2	0.0	
556.8	MODESTO		SILTY SHALE	1.0	83.2	
555.8	MODESTO		SHALE	7.0	84.2	
548.8	MODESTO		CLAYSTONE & SHALE	2.8	91.2	
546.0	MODESTO		SHALE	3.4	94.0	
542.6	MODESTO		COAL	0.3	97.4	
542.3	MODESTO		UNCLASSIFIED	3.3	97.7	
539.0	MODESTO		UNDERCLAY	3.1	101.0	
535.9	MODESTO		CLAYSTONE & SHALE	1.8	104.1	
534.1	MODESTO		UNCLASSIFIED	11.1	105.9	
523.0	MODESTO		CLAYSTONE & SHALE	0.6	117.0	
522.4	MODESTO		LIMESTONE	0.5	117.6	
521.9	MODESTO		CLAYSTONE & SHALE	4.8	118.1	RED
517.1	MODESTO		UNCLASSIFIED	4.1	122.9	
513.0	MODESTO		CLAYSTONE & SHALE	1.4	127.0	
511.6	MODESTO		SHALE	0.8	128.4	
510.7	MODESTO		UNCLASSIFIED	10.8	129.3	
500.0	MODESTO		SHALE	0.5	140.0	
499.5	MODESTO		SHALE	6.8	140.5	
492.7	MODESTO		SHALE	3.8	147.3	
488.8	MODESTO		LIMESTONE	0.5	151.2	
488.3	MODESTO		SHALE	4.8	151.7	
483.5	MODESTO		UNCLASSIFIED	0.5	156.5	
483.0	MODESTO		SHALE	9.1	157.0	PELECYPODS
473.9	MODESTO		LIMESTONE	0.5	166.1	
473.4	MODESTO		SHALE	0.7	166.6	
472.7	MODESTO		SHALE	9.3	167.3	
463.4	MODESTO		UNCLASSIFIED	0.4	176.6	
463.0	MODESTO		SHALE	0.5	177.0	
462.5	CARBONDALE	DANVILLE	COAL	5.8	177.5	
456.7	CARBONDALE		UNDERCLAY	0.4	183.3	
456.3	CARBONDALE		UNDERCLAY	1.7	183.7	
454.7	CARBONDALE		CLAYSTONE & SHALE	3.8	185.3	
450.8	CARBONDALE	BANKSTON FORK	LIMESTONE	1.8	189.2	
449.1	CARBONDALE		CLAYSTONE & SHALE	0.1	190.9	
449.0	CARBONDALE	ENERGY	SANDSTONE	3.8	191.0	
445.2	CARBONDALE	ENERGY	UNCLASSIFIED	2.2	194.8	
443.0	CARBONDALE	ENERGY	SANDSTONE	0.8	197.0	
442.2	CARBONDALE	ENERGY	SANDSTONE	8.7	197.8	

433.6	CARBONDALE	ENERGY	SANDSTONE	7.8	206.4	
425.7	CARBONDALE	ENERGY	SANDSTONE	1.8	214.3	
424.0	CARBONDALE	ENERGY	SHALE	14.8	216.0	
409.2	CARBONDALE	ENERGY	SHALE	22.7	230.8	
386.6	CARBONDALE	ENERGY	SHALE	17.2	253.4	
369.4	CARBONDALE	ENERGY	UNCLASSIFIED	1.4	270.6	
368.0	CARBONDALE	ENERGY	SHALE	2.1	272.0	INTR/LAMINAT
365.9	CARBONDALE	ENERGY	SHALE	4.3	274.1	
361.6	CARBONDALE	ENERGY	SHALE	6.1	278.4	SIDERITE
355.5	CARBONDALE	ENERGY	BLACK SHALE	0.3	284.5	
355.2	CARBONDALE	ENERGY	SHALE	1.4	284.8	
353.8	CARBONDALE	ENERGY	SIDERITE	0.2	286.2	
353.7	CARBONDALE	ENERGY	SHALE	4.7	286.3	
349.0	CARBONDALE	ENERGY	UNCLASSIFIED	1.0	291.0	
348.0	CARBONDALE	ENERGY	BLACK SHALE	1.2	292.0	
346.8	CARBONDALE	HERRIN	COAL	1.8	293.2	
345.0	CARBONDALE		UNDERCLAY	1.0	295.0	
344.1	CARBONDALE		CLAYSTONE & SHALE	3.1	295.9	
341.0	CARBONDALE		SHALE	4.2	299.0	
336.8	CARBONDALE		SHALE	6.9	303.2	
329.9	CARBONDALE		BLACK SHALE	0.6	310.1	
329.3	CARBONDALE		SHALE	0.0	310.7	BONY COAL
329.3	CARBONDALE		UNCLASSIFIED	1.3	310.7	
328.0	CARBONDALE	BRIAR HILL	BONE COAL	0.1	312.0	
327.9	CARBONDALE		UNDERCLAY	0.1	312.1	
327.8	CARBONDALE		SANDSTONE	1.4	312.2	
326.4	CARBONDALE		SHALE	1.1	313.6	
325.3	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	314.7	
323.1	CARBONDALE		SHALE	0.1	316.9	
323.0	CARBONDALE	SPRINGFIELD	COAL	1.2	317.0	
321.8	CARBONDALE		UNDERCLAY	0.9	318.2	
320.9	CARBONDALE		CLAYSTONE & SHALE	1.0	319.1	
319.9	CARBONDALE		SILTY SHALE	0.3	320.1	
319.6	CARBONDALE		SILTSTONE	1.8	320.4	
317.8	CARBONDALE		SHALE	3.0	322.2	
314.8	CARBONDALE		SILTSTONE	7.1	325.2	CALCAREOUS
307.7	CARBONDALE		SHALE	8.4	332.3	CRINOID STEMS
299.3	CARBONDALE		SHALE	3.3	340.7	
296.0	CARBONDALE		UNCLASSIFIED	4.0	344.0	
292.0	CARBONDALE		SHALE	8.3	348.0	
283.7	CARBONDALE		SHALE	0.9	356.3	PELECYPODS, DRK GRAY
282.8	CARBONDALE		SHALE	3.1	357.2	
279.7	CARBONDALE		SHALE	2.9	360.3	
276.8	CARBONDALE		SIDERITE	0.0	363.2	
276.8	CARBONDALE	EXCELLO	BLACK SHALE	3.2	363.2	PELECYPODS,
273.6	CARBONDALE		UNCLASSIFIED	0.6	366.4	
273.0	CARBONDALE	HOUCHIN CREEK	COAL	0.7	367.0	
272.3	CARBONDALE		UNCLASSIFIED	1.3	367.7	

271.0	CARBONDALE		CLAYSTONE & SHALE	4.0	369.0	NON-CALC
267.0	CARBONDALE		SILTSTONE	4.7	373.0	
262.3	CARBONDALE		SILTSTONE	3.9	377.7	
258.4	CARBONDALE		UNCLASSIFIED	4.4	381.6	
254.0	CARBONDALE		SHALE	17.6	386.0	SIDERITE, LT GRAY
236.4	CARBONDALE		SHALE	1.5	403.6	DRK GRAY
234.9	CARBONDALE		UNCLASSIFIED	1.9	405.1	
233.0	CARBONDALE		CLAYSTONE & SHALE	1.8	407.0	COAL STREAK HORIZON IV
231.2	CARBONDALE		UNDERCLAY	0.8	408.8	
230.4	CARBONDALE		SILTSTONE	1.3	409.6	
229.1	CARBONDALE		SILTY SHALE	1.3	410.9	
227.7	CARBONDALE		SANDSTONE	1.8	412.3	
225.9	CARBONDALE		SILTY SHALE	0.5	414.1	
225.4	CARBONDALE		SANDSTONE	0.3	414.6	
225.1	CARBONDALE		SILTSTONE	0.8	414.9	
224.3	CARBONDALE		SANDSTONE	1.3	415.7	CARBONIZED PLANT DEBRIS, PYRITIC
223.1	CARBONDALE		SHALE	12.1	416.9	
211.0	CARBONDALE		BLACK SHALE	2.0	429.0	FISH SCALES,
209.0	CARBONDALE		SILTSTONE	3.4	431.0	CARBONACEOUS
205.6	CARBONDALE		SILTY SHALE	6.7	434.4	
198.9	CARBONDALE		BLACK SHALE	0.6	441.1	
198.3	CARBONDALE		SHALE	5.4	441.7	
192.9	CARBONDALE		LIMESTONE	0.3	447.1	
192.7	CARBONDALE		SHALE	2.2	447.3	
190.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	5.7	449.5	LINGULA, PELECYPODS, ORBICULOIDIA,
184.8	CARBONDALE	COLCHESTER	COAL	0.3	455.2	
184.5	SPOON		UNDERCLAY	1.0	455.5	
183.5	SPOON		CLAYSTONE & SHALE	2.0	456.5	
181.5	SPOON		SILTSTONE	4.2	458.5	SIDERITE
177.3	SPOON		SANDSTONE	6.8	462.7	ARGILLACEOUS
170.6	SPOON		SHALE	17.6	469.4	ANULARIA, STYLLARIA FRAGS
153.0	SPOON		SHALE	0.6	487.0	COALY PARTINGS AT BASE
152.4	SPOON	SEELYVILLE	COAL	0.2	487.6	
152.1	SPOON	SEELYVILLE	SHALE	0.0	487.9	BLUE/GRY
152.1	SPOON	SEELYVILLE	COAL	1.7	487.9	
150.5	SPOON	SEELYVILLE	SHALE	0.1	489.5	BONY COAL
150.4	SPOON	SEELYVILLE	COAL	0.9	489.6	
149.5	SPOON	SEELYVILLE	SHALE	0.1	490.5	
149.4	SPOON	SEELYVILLE	COAL	0.7	490.6	
148.7	SPOON		UNDERCLAY	1.1	491.3	
147.6	SPOON		SHALE	0.1	492.4	BONE COAL
147.5	SPOON		UNDERCLAY	1.0	492.5	
146.5	SPOON		UNCLASSIFIED	1.5	493.5	

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MAPID: 04500136000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 4 QUARTERS/FOOTAGES: 2000' S line, 73' W line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.537307 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.598498 DATE COLLECTED: 2 / 0 / 1949  
 SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 495.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. K WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
462.5	SHELburn	DANVILLE	COAL	5.8	177.5	
346.8	CARBONDALE	HERRIN	COAL	1.8	293.2	
313.0	CARBONDALE	SPRINGFIELD	COAL	1.2	327.0	
273.0	CARBONDALE	HOUCHIN CREEK	COAL	0.7	367.0	
184.8	CARBONDALE	COLCHESTER	COAL	0.3	455.2	
152.4	CARBONDALE	SEELYVILLE	COAL	3.6	487.6	

MAPID: 04500137000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 6 QUARTERS/FOOTAGES: 114' N line, 37' E line of SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.556552 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.599829 DATE COLLECTED: 3 / 0 / 1949  
 SURFACE ELEVATION (FT.): 635.0 LOGGED (FT.): 505.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. N WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
437.0	SHELburn	DANVILLE	COAL	5.3	198.0	
327.3	CARBONDALE	HERRIN	COAL	2.0	307.7	
304.0	CARBONDALE	SPRINGFIELD	COAL	4.4	331.0	
254.1	CARBONDALE	HOUCHIN CREEK	COAL	1.3	380.9	
215.8	CARBONDALE	SURVANT - UPPER	COAL	-	419.2	HORIZON
193.0	CARBONDALE	SURVANT - LOWER	COAL	-	442.0	HORIZON
166.4	CARBONDALE	COLCHESTER	COAL	-	468.6	HORIZON
137.5	CARBONDALE	SEELYVILLE	COAL	5.8	497.5	



MAPID: 04500137000C    VERSION: 2

PROJECT: ISGS89

COUNTY: EDGAR    TWP/RNG: 13N 10W    SECTION: 6    QUARTERS/FOOTAGES: 114' N line, 37' E line of SE

QUADRANGLE: SANDFORD    LONGITUDE: -87.556552    GEOLOGIST: POLLOCK

CONFIDENTIAL: N    LATITUDE: 39.599829    DATE COLLECTED: 3 / 3 / 1949

SURFACE ELEVATION (FT.): 635.0    LOGGED (FT.): 504.4    LOG TYPE: Survey Core Study

SOURCE: UNIVERSAL COAL WASHING CO.    WELL TYPE: Coal Test

COMMENT: LOG BY SEIVER & GOLDEN, CORE #2537

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.0			UNCLASSIFIED	131.8	0.0	
503.2	MODESTO		SHALE	4.3	131.8	
499.0	MODESTO		CARBONACEOUS SHALE	6.3	136.0	
492.7	MODESTO		CALCAREOUS SHALE	4.4	142.3	GRN/RED
488.2	MODESTO	WEST FRANKLIN	LIMESTONE	1.1	146.8	
487.2	MODESTO	WEST FRANKLIN	CALCAREOUS SHALE	1.8	147.8	CRINOIDS, BRACHS
485.3	MODESTO	WEST FRANKLIN	SILTY LIMESTONE	2.1	149.7	
483.3	MODESTO		CALCAREOUS SHALE	2.2	151.7	PELECYPODS
481.1	MODESTO		SHALE	2.0	153.9	NON-FOSSIL
479.1	MODESTO		SILTY LIMESTONE	1.4	155.9	
477.7	MODESTO		SHALE	2.7	157.3	
475.0	MODESTO		SHALE	17.0	160.0	SIDERITE, GRN/RED
458.0	MODESTO		SHALE	21.0	177.0	LT GRAY
437.0	CARBONDALE	DANVILLE	COAL	5.3	198.0	
431.7	CARBONDALE		UNDERCLAY	1.7	203.3	
430.0	CARBONDALE		CLAYSTONE & SHALE	6.0	205.0	CALCAREOUS
424.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.1	211.0	PYR/CARBONAC
422.9	CARBONDALE		CLAYSTONE & SHALE	2.1	212.1	
420.8	CARBONDALE	ENERGY	SILTSTONE	4.8	214.2	SANDY
416.1	CARBONDALE	ENERGY	SANDSTONE/SILTSTONE	11.3	218.9	
404.7	CARBONDALE	ENERGY	SILTSTONE	4.9	230.3	MICACEOUS
399.8	CARBONDALE	ENERGY	SHALE	47.1	235.2	SIDERITE, LT GRAY
352.7	CARBONDALE	ENERGY	SILTY SHALE	6.1	282.3	DRK GRAY
346.7	CARBONDALE	ENERGY	SHALE	7.8	288.3	SIDERITE
338.9	CARBONDALE	ENERGY	BLACK SHALE	0.5	296.1	
338.4	CARBONDALE	ENERGY	SIDERITE	0.3	296.6	SIDERITE
338.1	CARBONDALE	ENERGY	SHALE	10.2	296.9	
327.9	CARBONDALE	ENERGY	BLACK SHALE	0.6	307.1	SLATY
327.3	CARBONDALE	HERRIN	COAL	2.0	307.7	
325.3	CARBONDALE		UNDERCLAY	0.9	309.7	
324.4	CARBONDALE		CLAYSTONE & SHALE	1.3	310.6	CALCAREOUS
323.2	CARBONDALE		LIMESTONE	1.3	311.8	CLAYEY
321.9	CARBONDALE		SHALE	11.6	313.1	SIDERITE
310.3	CARBONDALE		SHALE	0.0	324.7	BONY COAL
310.3	CARBONDALE		SILTSTONE	2.9	324.7	
307.4	CARBONDALE	TURNER MINE	BLACK SHALE	3.4	327.6	
304.0	CARBONDALE	SPRINGFIELD	COAL	4.4	331.0	
299.6	CARBONDALE		UNDERCLAY	0.9	335.4	
298.7	CARBONDALE		SILTY SHALE	4.1	336.3	

294.6	CARBONDALE		LIMESTONE, SHALEY	1.8	340.4	
292.7	CARBONDALE		SILTSTONE	1.4	342.3	CALCAREOUS
291.3	CARBONDALE		SHALE	7.3	343.7	MED GRAY
284.0	CARBONDALE		SHALE	26.1	351.0	DRK GRAY
257.9	CARBONDALE	EXCELLO	BLACK SHALE	3.8	377.1	
254.1	CARBONDALE	HOUCHIN CREEK	COAL	1.3	380.9	
252.8	CARBONDALE		UNDERCLAY	2.3	382.2	
250.5	CARBONDALE		CLAYSTONE & SHALE	2.8	384.5	SILTY
247.7	CARBONDALE		SILTSTONE	26.9	387.3	
220.8	CARBONDALE		SHALE	5.0	414.2	MED GRAY
215.8	CARBONDALE		BLACK SHALE	0.4	419.2	
215.4	CARBONDALE	SURVANT	COAL	0.0	419.6	CARBONACEOUS SHALE
215.4	CARBONDALE		UNDERCLAY	1.6	419.6	
213.8	CARBONDALE		SANDSTONE/SILTSTONE	3.8	421.2	
210.1	CARBONDALE		SILTSTONE	13.3	424.9	
196.7	CARBONDALE		SHALE	3.2	438.3	CORDAITES
193.6	CARBONDALE		CLAYSTONE & SHALE	0.6	441.4	
193.0	CARBONDALE		BLACK SHALE	0.8	442.0	SLATEY
192.2	CARBONDALE		UNDERCLAY	0.4	442.8	
191.7	CARBONDALE		SILTSTONE	3.4	443.3	CARBONACEOUS
188.3	CARBONDALE		CARBONACEOUS SANDSTONE	1.2	446.7	
187.2	CARBONDALE		SILTSTONE	0.8	447.8	
186.3	CARBONDALE		SILTY SHALE	5.0	448.7	
181.3	CARBONDALE		SHALE	5.8	453.7	DK GRAY
175.5	CARBONDALE		BLACK SHALE	0.1	459.5	CRINOIDS, BRYOZOANS, PYRITIC
175.4	CARBONDALE		LIMESTONE	0.3	459.6	
175.1	CARBONDALE		SHALE	2.1	459.9	BRACHS
173.0	CARBONDALE		LIMESTONE	0.2	462.0	
172.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	6.2	462.2	
166.6	SPOON		FOSSILIFEROUS LIMESTONE	0.2	468.4	
166.4	SPOON		CLAYSTONE & SHALE	3.8	468.6	CALCAREOUS
162.6	SPOON		SILTY SHALE	0.8	472.4	
161.8	SPOON	PALZO	SANDSTONE	1.3	473.2	
160.5	SPOON	PALZO	SHALE	1.7	474.5	
158.8	SPOON	PALZO	SANDSTONE/SILTSTONE	13.8	476.2	
145.0	SPOON		SHALE	7.5	490.0	
137.5	SPOON	SEELYVILLE	COAL	0.1	497.5	SHALE & PYRITE BANDS
137.4	SPOON	SEELYVILLE	COAL	1.5	497.6	
135.9	SPOON	SEELYVILLE	SHALE	0.2	499.1	
135.7	SPOON	SEELYVILLE	COAL	1.7	499.3	
134.0	SPOON	SEELYVILLE	SHALE	0.3	501.0	CARBONACEOUS-BONY COAL
133.8	SPOON	SEELYVILLE	COAL	0.6	501.2	
133.1	SPOON	SEELYVILLE	PYRITE	0.1	501.9	BONE COAL
133.1	SPOON	SEELYVILLE	COAL	1.5	501.9	
131.6	SPOON	SEELYVILLE	UNDERCLAY	1.0	503.4	

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MAPID: 04500138000C    VERSION: 1

PROJECT: CONF

COUNTY: EDGAR                      TWP/RNG: 13N 10W    SECTION: 7    QUARTERS/FOOTAGES: 2218' S line, 47' E line  
QUADRANGLE: SANDFORD                      LONGITUDE: -87.556118                      GEOLOGIST: LOG BOOK  
CONFIDENTIAL: N                      LATITUDE: 39.584689                      DATE COLLECTED: 12 / 0 / 1948  
SURFACE ELEVATION (FT.): 636.0                      LOGGED (FT.): 541.0                      LOG TYPE: Survey Core Study  
SOURCE: UNIVERSAL COAL WASHING CO. G                      WELL TYPE: Coal Test  
COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
410.5	SHELBURN	DANVILLE	COAL	5.3	225.5
297.0	CARBONDALE	HERRIN	COAL	1.6	339.0
274.8	CARBONDALE	SPRINGFIELD	COAL	3.8	361.2
222.6	CARBONDALE	HOUCHIN CREEK	COAL	1.5	413.4
172.9	CARBONDALE	SURVANT	COAL	0.9	463.1
127.7	CARBONDALE	COLCHESTER	COAL	0.5	508.3
103.8	CARBONDALE	SEELYVILLE	COAL	5.9	532.2

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MAPID: 04500138000C    VERSION: 2

PROJECT: ISGS89

COUNTY: EDGAR                      TWP/RNG: 13N 10W    SECTION: 7    QUARTERS/FOOTAGES: 2218' S line, 47' E line  
 QUADRANGLE: SANDFORD                      LONGITUDE: -87.556118                      GEOLOGIST: POLLOCK  
 CONFIDENTIAL: N                      LATITUDE: 39.584689                      DATE COLLECTED: 12 / 0 / 1948  
 SURFACE ELEVATION (FT.): 636.0                      LOGGED (FT.): 541.0                      LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. #6                      WELL TYPE: Coal Test  
 COMMENT: LOG BY SIMON,HARRISON,SIEVER CORE#2417

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
636.0			UNCLASSIFIED	62.0	0.0	
574.0	MODESTO		SHALE	14.2	62.0	
559.8	MODESTO		SIDERITE	0.2	76.2	
559.7	MODESTO		SHALE	0.7	76.3	FOSSILIF.
559.0	MODESTO		FOSSILIFEROUS LIMESTONE	2.0	77.0	
557.0	MODESTO		SHALE	0.3	79.0	NON-CALC
556.7	MODESTO		LIMESTONE	2.0	79.3	PELECY., BRYOZ, CRINOIDS, FOSSILIF.
554.7	MODESTO		CALCAREOUS SHALE	0.8	81.3	
554.0	MODESTO		LIMESTONE	0.3	82.0	FOSSILIF.
553.7	MODESTO		BLACK SHALE	1.7	82.3	
552.0	MODESTO		COAL	0.6	84.0	
551.4	MODESTO		UNDERCLAY	1.1	84.6	
550.3	MODESTO		CLAYSTONE & SHALE	2.3	85.7	
548.1	MODESTO		SANDSTONE	8.4	87.9	CALC
539.7	MODESTO		SANDSTONE/SILTSTONE	6.0	96.3	
533.7	MODESTO		SILTSTONE	13.7	102.3	
520.0	MODESTO		SHALE	25.3	116.0	
494.7	MODESTO		SHALE	16.8	141.3	FOSSILIFEROUS
478.0	MODESTO		LIMESTONE	0.3	158.0	ARGILLAC.
477.7	MODESTO		BLACK SHALE	2.1	158.3	FISH SCALES,
475.5	MODESTO		COAL	0.0	160.5	BONY OR CARBONACEOUS SHALE
475.5	MODESTO		COAL	0.8	160.5	
474.7	MODESTO		CLAYSTONE & SHALE	1.1	161.3	FOSSILIF.
473.7	MODESTO		LIMESTONE	0.8	162.3	FOSSILIF.
472.8	MODESTO		SHALE	3.6	163.2	FOSSILIF.
469.2	MODESTO	WEST FRANKLIN	LIMESTONE	0.1	166.8	
469.2	MODESTO	WEST FRANKLIN	SHALE	4.5	166.8	CALC
464.7	MODESTO	WEST FRANKLIN	SILTY LIMESTONE	0.6	171.3	
464.1	MODESTO		CLAYSTONE & SHALE	6.1	171.9	
458.0	MODESTO		SHALE	10.3	178.0	NON-CALC, GRN- GRAY
447.7	MODESTO		SHALE	15.7	188.3	MED GRAY
432.0			SHALE	21.5	204.0	
410.5	CARBONDALE	DANVILLE	UNKNOWN	5.3	225.5	COAL REMOVED, NOT EXAMINED
405.2	CARBONDALE		UNDERCLAY	0.8	230.8	
404.4	CARBONDALE		CLAYSTONE & SHALE	6.3	231.6	CALC
398.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.6	237.8	FOSSILIF.
395.6	CARBONDALE		SHALE	0.3	240.4	
395.3	CARBONDALE	ENERGY	SILTSTONE	5.8	240.7	

389.6	CARBONDALE	ENERGY	SHALE	5.8	246.4	
383.8	CARBONDALE	ENERGY	SILTSTONE	0.3	252.2	
383.6	CARBONDALE	ENERGY	SHALE	10.7	252.4	
372.9	CARBONDALE	ENERGY	SILTSTONE	4.5	263.1	GREEN
368.4	CARBONDALE	ENERGY	SILTSTONE	2.6	267.6	GRAY
365.8	CARBONDALE	ENERGY	SANDSTONE	6.9	270.2	
358.9	CARBONDALE	ENERGY	SHALE	0.9	277.1	
358.0	CARBONDALE	ENERGY	SHALY SANDSTONE	2.9	278.0	
355.1	CARBONDALE	ENERGY	SANDSTONE	10.6	280.9	MASSIVE
344.5	CARBONDALE	ENERGY	SHALE	36.6	291.5	
307.9	CARBONDALE	ENERGY	BLACK SHALE	1.3	328.1	
306.6	CARBONDALE	ENERGY	SHALE	8.8	329.4	SIDERITE
297.8	CARBONDALE	ENERGY	BLACK SHALE	0.8	338.2	SLATY
297.1	CARBONDALE	HERRIN	COAL	0.2	338.9	
296.9	CARBONDALE	HERRIN	SHALE	0.1	339.1	BONY COAL
296.7	CARBONDALE	HERRIN	COAL	1.3	339.3	PYRITIC, BONY, CALCITE STRUCTURES
295.4	CARBONDALE		UNDERCLAY	2.2	340.6	
293.2	CARBONDALE		LIMESTONE	1.8	342.8	ARGILLAC
291.5	CARBONDALE		CLAYSTONE & SHALE	0.8	344.5	
290.7	CARBONDALE		SHALE	10.0	345.3	DRK GRAY
280.7	CARBONDALE		BLACK SHALE	0.3	355.3	
280.4	CARBONDALE	BRIAR HILL	COAL	0.9	355.6	
279.5	CARBONDALE		SILTSTONE	1.1	356.5	
278.4	CARBONDALE		SHALE	1.3	357.6	
277.2	CARBONDALE		CLAYSTONE & SHALE	0.2	358.8	
277.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.2	359.0	
274.8	CARBONDALE	SPRINGFIELD	COAL	3.8	361.2	
271.0	CARBONDALE		UNDERCLAY	0.5	365.0	SLIP FRACTURED, STIGMARIA, GRN GRAY
270.5	CARBONDALE		SILTSTONE	2.2	365.5	ARGILLACEOUS, GRN GRAY
268.3	CARBONDALE		SHALE	4.3	367.7	PYRITIC VEINLETS AND NODULES, GRN GRAY
264.1	CARBONDALE		SILTSTONE	0.5	371.9	ARGILLACEOUS, GRN GRAY
263.6	CARBONDALE		SANDSTONE	2.0	372.4	BIVALVES, ARGILLACEOUS, GRAY
261.6	CARBONDALE		SILTSTONE	2.6	374.4	SPARINGLY FOSSILIFEROUS, ARGILLACEOUS, G
259.0	CARBONDALE		SHALE	32.0	377.0	PYRITIC WITH SIDERITE CONCRETIONS, DRK G
227.0	CARBONDALE	EXCELLO	BLACK SHALE	4.4	409.0	PYRITIC, BLACK
222.6	CARBONDALE	HOUCHIN CREEK	COAL	-0.4	413.4	COPIED AS IN DESCRIPTION
223.0	CARBONDALE		UNDERCLAY	1.4	413.0	COPIED AS IN DESCRIPTION, GRAY
221.6	CARBONDALE		CLAYSTONE	2.2	414.4	LS NODULES, GRAY
219.4	CARBONDALE		SILTSTONE	3.2	416.6	D SLTST SH,
216.2	CARBONDALE		SHALE	12.3	419.8	N SH SLTST; X-BDD, JOINTS, GRN GRAY
204.0	CARBONDALE		SILTSTONE	1.0	432.0	D SLTST SH
203.0	CARBONDALE		SANDSTONE	1.3	433.0	X-BDD, GRAY
201.7	CARBONDALE		GRAY SHALE	25.6	434.3	SIDERITE BANDS IN BOTTOM .25 FT
176.2	CARBONDALE		BLACK SHALE	2.8	459.8	CALCAREOUS CONCRETION
173.3	CARBONDALE		SHALE	0.5	462.7	VERY CARBONACEOUS, DRK GRAY
172.9	CARBONDALE	SURVANT	COAL	0.0	463.1	PYRITIC

172.8	CARBONDALE		UNDERCLAY	0.9	463.2	STIGMARIA, DRK GRAY
171.9	CARBONDALE			0.6	464.1	SIDERITIC CALCAREOUS NODULES, DRK GRAY
171.3	CARBONDALE		SILTSTONE	5.3	464.7	N SLTST SS, GRAY
166.0	CARBONDALE		GRAY SHALE	16.0	470.0	
150.0	CARBONDALE		BLACK SHALE	2.3	486.0	SIDERITE IN BASE; BIVALVES
147.7	CARBONDALE		SHALE	4.9	488.3	
142.7	CARBONDALE		BLACK SHALE	2.5	493.3	PYRITIC, BIVALVES
140.2	CARBONDALE		GRAY SHALE	3.2	495.8	
137.1	CARBONDALE		LIMESTONE	0.3	498.9	FOSSILIFEROUS, SIDERITIC
136.8	CARBONDALE		SHALE	1.9	499.2	FOSSILIFEROUS (PLANTS AND BIVALVES), DRK
134.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	7.2	501.1	PYRITIC, FOSSILIFEROUS
127.7	CARBONDALE	COLCHESTER	COAL	0.8	508.3	BONY & PYRITIC LAYERS
127.0	SPOON		UNDERCLAY	1.7	509.0	DRK GRAY
125.3	SPOON			1.3	510.7	GRAY
124.1	SPOON	PALZO	SANDSTONE	8.8	511.9	GRAY
115.3	SPOON	PALZO	SHALE	2.8	520.7	SILTY LENSES, DRK GRAY
112.6	SPOON	PALZO	SILTSTONE	4.3	523.4	CARBONACEOUS PLANT DEBRIS
108.3	SPOON		SHALE	3.2	527.7	PYRITIC, SILTY, DRK GRAY
105.2	SPOON		BLACK SHALE	1.3	530.8	
103.8	SPOON		PYRITE	0.0	532.2	
103.8	SPOON	SEELYVILLE	COAL	5.9	532.2	
97.9	SPOON		UNDERCLAY	2.1	538.1	STIGMARIA, GRAY
95.7	SPOON		SILTSTONE	0.8	540.3	CARBONACEOUS, ARGILLACEOUS, GRAY

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MAPID: 04500954000C    VERSION: 1

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 13N 10W    SECTION: 29    QUARTERS/FOOTAGES: 50' S line, 50' W line of SE SW

QUADRANGLE: SANDFORD    LONGITUDE: -87.550269    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.535209    DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 630.2    LOGGED (FT.): 570.0    LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.    WELL TYPE: Structure Test

COMMENT: DRILLERS LOG, QUESTIONABLE THICKNESSES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.2			UNCONSOLIDATED	120.0	0.0	
510.2	MODESTO		SANDY SHALE	20.0	120.0	
490.2	MODESTO		SHALE	27.0	140.0	
463.2	MODESTO	CHAPEL	COAL	2.0	167.0	
461.2	MODESTO		SHALE	11.0	169.0	
450.2	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	180.0	BUFF
442.2	MODESTO		SHALE	12.0	188.0	
430.2	MODESTO		SHALE	37.0	200.0	
393.2	CARBONDALE	DANVILLE	COAL	4.0	237.0	
389.2	CARBONDALE		UNDERCLAY	11.0	241.0	
378.2	CARBONDALE	BANKSTON FORK	LIMESTONE	2.0	252.0	GRAY/BRN
376.2	CARBONDALE	ENERGY	SANDSTONE	46.0	254.0	
330.2	CARBONDALE	ENERGY	SHALE	52.0	300.0	
278.2	CARBONDALE	HERRIN	COAL	1.0	352.0	
277.2	CARBONDALE		UNDERCLAY	3.0	353.0	
274.2	CARBONDALE		FOSSILIFEROUS LIMESTONE	2.0	356.0	
272.2	CARBONDALE		SHALE	13.0	358.0	GRAY-GREEN TO BLACK
259.2	CARBONDALE	ST. DAVID	FOSSILIFEROUS LIMESTONE	1.0	371.0	SHALEY
258.2	CARBONDALE	SPRINGFIELD	COAL	4.0	372.0	
254.2	CARBONDALE		UNDERCLAY	2.0	376.0	
252.2	CARBONDALE		SANDSTONE	17.0	378.0	GRAY
235.2	CARBONDALE		SHALE	25.0	395.0	GRAY TO BLACK
210.2	CARBONDALE		CARBONACEOUS SHALE	15.0	420.0	
195.2	CARBONDALE		SANDSTONE/SHALE	75.0	435.0	GRAY
120.2	CARBONDALE		BLACK SHALE	17.0	510.0	
103.2	CARBONDALE	COLCHESTER	COAL	2.0	527.0	
101.2	SPOON		UNDERCLAY	2.0	529.0	
99.2	SPOON		SANDSTONE/SHALE	28.0	531.0	
71.2	SPOON	SEELYVILLE	COAL	6.0	559.0	
65.2	SPOON		UNDERCLAY	2.0	565.0	
63.2	SPOON		COAL	1.0	567.0	
62.2	SPOON		UNDERCLAY	2.0	568.0	

MAPID: 04500954000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 29 QUARTERS/FOOTAGES: 50' S line, 50' W line of SE SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.550269 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.535209 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 565.0 LOG TYPE: Drillers Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
450.0	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	180.0
393.0	CARBONDALE	DANVILLE	COAL	4.0	237.0
278.0	CARBONDALE	HERRIN	COAL	1.0	352.0
258.0	CARBONDALE	SPRINGFIELD	COAL	4.0	372.0
103.0	CARBONDALE	COLCHESTER	COAL	2.0	527.0
71.0	SPOON	SEELYVILLE	COAL	6.0	559.0

MAPID: 04500954000C VERSION: 3

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 29 QUARTERS/FOOTAGES: 50' S line, 50' W line of SE SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.550269 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.535209 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 630.2 LOGGED (FT.): 570.0 LOG TYPE: Drillers Log  
 SOURCE: SUN OIL CO. E-2-54 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
463.2			COAL	2.0	167.0
393.2	SHELBURN	DANVILLE	COAL	4.0	237.0
278.2	CARBONDALE	HERRIN	COAL	1.0	352.0
258.2	CARBONDALE	SPRINGFIELD	COAL	4.0	372.0
103.2	CARBONDALE	COLCHESTER	COAL	2.0	527.0
71.2	CARBONDALE	SEELYVILLE	COAL	6.0	559.0
63.2			COAL	1.0	567.0



MAPID: 04500315000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 10W

SECTION: 31

QUARTERS/FOOTAGES: SE SW NW

QUADRANGLE: SANDFORD

LONGITUDE: -87.570175

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.528738

DATE COLLECTED:

SURFACE ELEVATION (FT.): 571.0

LOGGED (FT.): 510.5

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
263.0	CARBONDALE	HERRIN	COAL	2.0	308.0	
242.0	CARBONDALE	SPRINGFIELD	COAL	4.0	329.0	
189.0	CARBONDALE	HOUCHIN CREEK	COAL	-	382.0	
93.0	CARBONDALE	COLCHESTER	COAL	-	478.0	
65.0	SPOON	SEELYVILLE	COAL	4.5	506.0	

MAPID: 04500900000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR

TWP/RNG: 13N 10W

SECTION: 31

QUARTERS/FOOTAGES: SW SE SW

QUADRANGLE: SANDFORD

LONGITUDE: -87.56784

GEOLOGIST: LOG BOOK

CONFIDENTIAL: N

LATITUDE: 39.521468

DATE COLLECTED: 0 / 0 / 1962

SURFACE ELEVATION (FT.): 567.4

LOGGED (FT.): 544.0

LOG TYPE: Drillers Log

SOURCE: SNOW HILL COAL CORP. 206

WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
374.6	SHELBURN	DANVILLE	COAL WITH SHALE	3.0	192.8	W/BLK SHALE
259.4	CARBONDALE	HERRIN	COAL WITH SHALE	2.0	308.0	W/BLK SLATE
234.4	CARBONDALE	SPRINGFIELD	COAL	5.0	333.0	
181.4	CARBONDALE	HOUCHIN CREEK	COAL	2.0	386.0	
117.4	CARBONDALE	SURVANT	COAL	1.0	450.0	
75.9	CARBONDALE	COLCHESTER	COAL	1.0	491.5	
49.1	CARBONDALE	SEELYVILLE	COAL	5.8	518.3	

MAPID: 04500900000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR    TWP/RNG: 13N 10W    SECTION: 31    QUARTERS/FOOTAGES: SW SE SW

QUADRANGLE: SANDFORD    LONGITUDE: -87.56784    GEOLOGIST: SROKA

CONFIDENTIAL: N    LATITUDE: 39.521468    DATE COLLECTED: 0 / 0 / 1962

SURFACE ELEVATION (FT.): 567.4    LOGGED (FT.): 544.0    LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP.    WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE NOT AT ISGS

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
567.4			UNCONSOLIDATED	88.0	0.0	
479.4	MODESTO	WOMAC	COAL	1.0	88.0	
478.4	MODESTO		UNDERCLAY	2.0	89.0	
476.4	MODESTO		SHALE	4.0	91.0	
472.4	MODESTO		SHALE	31.0	95.0	
441.4	MODESTO	CHAPEL	COAL	1.0	126.0	
440.4	MODESTO		UNDERCLAY	2.0	127.0	
438.4	MODESTO		SHALE	3.5	129.0	WITH LS NODULES
434.9	MODESTO		LIMESTONE	1.5	132.5	
433.4	MODESTO		SHALE	6.0	134.0	
427.4	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	140.0	
426.1	MODESTO	WEST FRANKLIN	SHALE	2.0	141.3	
424.1	MODESTO	WEST FRANKLIN	LIMESTONE	2.3	143.3	
421.9	MODESTO	WEST FRANKLIN	SHALE	0.4	145.5	
421.5	MODESTO	WEST FRANKLIN	LIMESTONE	0.3	145.9	
421.1	MODESTO		SHALE	12.3	146.3	
408.9	MODESTO		SHALE	22.0	158.5	
386.9	MODESTO		SHALE	4.5	180.5	
382.4	MODESTO		SHALE	7.8	185.0	
374.6	CARBONDALE	DANVILLE	SHALE/COAL	3.0	192.8	BLACK SHALE AND COAL
371.6	CARBONDALE		UNDERCLAY	5.0	195.8	FIRE CLAY
366.6	CARBONDALE		SHALE	4.2	200.8	
362.4	CARBONDALE	ENERGY	SHALE & SANDSTONE	27.0	205.0	SANDY SHALE
335.4	CARBONDALE	ENERGY	CALCAREOUS SANDSTONE	4.0	232.0	
331.4	CARBONDALE	ENERGY	SANDSTONE	18.0	236.0	
313.4	CARBONDALE	ENERGY	SANDY SHALE	11.0	254.0	
302.4	CARBONDALE	ENERGY	SHALE	43.0	265.0	WITH SIDERITE BANDS
259.4	CARBONDALE	HERRIN	SHALE/COAL	2.0	308.0	BLACK SHALE AND COAL
257.4	CARBONDALE		UNDERCLAY	3.0	310.0	FIRE CLAY
254.4	CARBONDALE		CALCAREOUS SHALE	5.0	313.0	
249.4	CARBONDALE		SHALE	14.0	318.0	
235.4	CARBONDALE	ST. DAVID	LIMESTONE	1.0	332.0	
234.4	CARBONDALE	SPRINGFIELD	SHALE/COAL	5.0	333.0	BLACK SHALE AND COAL
229.4	CARBONDALE		UNDERCLAY	4.0	338.0	FIRE CLAY
225.4	CARBONDALE		SANDSTONE	44.0	342.0	CALCAREOUS IN PART
181.4	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	2.0	386.0	BLACK SHALE AND COAL
179.4	CARBONDALE		UNDERCLAY	4.0	388.0	FIRE CLAY
175.4	CARBONDALE		SANDY SHALE	8.0	392.0	

167.4	CARBONDALE		SANDSTONE	50.0	400.0	
117.4	CARBONDALE	SURVANT	SHALE/COAL	1.0	450.0	BLACK SHALE AND COAL
116.4	CARBONDALE		UNDERCLAY	4.0	451.0	FIRE CLAY
112.4	CARBONDALE		SANDSTONE	30.0	455.0	
82.4	CARBONDALE		SHALE	3.0	485.0	
79.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	488.0	CORED 489-T.D.
75.9	CARBONDALE	COLCHESTER	COAL	1.0	491.5	
74.9	SPOON		UNDERCLAY	0.3	492.5	FIRE CLAY
74.6	SPOON		CARBONACEOUS SHALE	0.8	492.8	
73.9	SPOON		SANDSTONE	2.7	493.5	GRAY
71.2	SPOON		CORE LOSS	10.3	496.2	
60.9	SPOON		SHALE	11.1	506.5	N SH SLTST
49.8	SPOON		BLACK SHALE	0.7	517.6	
49.1	SPOON	SEELYVILLE	COAL	5.8	518.3	
43.4	SPOON		UNDERCLAY	1.3	524.0	STIGMARIAN, CARBONACEOUS
42.1	SPOON		SILTSTONE & SHALE	2.7	525.3	
39.5	SPOON		SANDSTONE	2.8	527.9	GRAY
36.7	SPOON		SILTSTONE	2.4	530.7	SHALEY LOWER PART
34.3	SPOON		SILTY SHALE	1.0	533.1	CARBONACEOUS
33.3	SPOON		BLACK SHALE	0.3	534.1	
33.1	SPOON		CORE LOSS	1.3	534.3	
31.8	SPOON		COAL	0.2	535.6	
31.6	SPOON		UNDERCLAY	0.3	535.8	STIGMARIAN, CARBONACEOUS
31.3	SPOON		SILTSTONE	7.9	536.1	GRAY

**MAPID:** 04500955000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 10W    **SECTION:** 31    **QUARTERS/FOOTAGES:** 50' S line, 200' W line  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.573004    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.52073    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 563.7    **LOGGED (FT.):** 512.0    **LOG TYPE:** Drillers Log  
**SOURCE:** SUN OIL CO.    E-3-54    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	OVERBURDEN	COMMENT
385.7	SHELBURN	DANVILLE	COAL	2.0	178.0	
285.7	CARBONDALE	HERRIN	COAL	2.0	278.0	
251.7	CARBONDALE	SPRINGFIELD	COAL WITH SHALE	4.0	312.0	W/BLK SHALE
199.7	CARBONDALE	HOUCHIN CREEK	COAL	2.0	364.0	
129.7	CARBONDALE	SURVANT	COAL	6.0	434.0	
60.7	CARBONDALE	SEELYVILLE	COAL	6.0	503.0	

MAPID: 04500955000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR                      TWP/RNG: 13N 10W    SECTION: 31    QUARTERS/FOOTAGES: 50' S line, 200' W line

QUADRANGLE: SANDFORD                      LONGITUDE: -87.573004                      GEOLOGIST: SROKA

CONFIDENTIAL: N                      LATITUDE: 39.52073                      DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 563.7                      LOGGED (FT.): 512.0                      LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.                      WELL TYPE: Structure Test

COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
563.7			UNCONSOLIDATED	90.0	0.0	
473.7	MODESTO		SANDY SHALE	33.0	90.0	
440.7	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	123.0	
437.7	MODESTO		SHALE	52.0	126.0	GRAY TO DARK GRAY
385.7	CARBONDALE	DANVILLE	COAL	2.0	178.0	
383.7	CARBONDALE		UNDERCLAY/SHALE	20.0	180.0	
363.7	CARBONDALE	ENERGY	SANDSTONE	40.0	200.0	GRAY
323.7	CARBONDALE	ENERGY	SHALE	38.0	240.0	
285.7	CARBONDALE	HERRIN	COAL	2.0	278.0	
283.7	CARBONDALE		SHALE	21.0	280.0	
262.7	CARBONDALE		LIMESTONE	2.0	301.0	BRN/GRAY
260.7	CARBONDALE		SANDSTONE	9.0	303.0	
251.7	CARBONDALE	SPRINGFIELD	SHALE/COAL	4.0	312.0	BLACK SHALE AND COAL
247.7	CARBONDALE		SHALE	48.0	316.0	
199.7	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	2.0	364.0	BLACK SHALE AND COAL
197.7	CARBONDALE		SHALE	9.0	366.0	
188.7	CARBONDALE		SANDSTONE	20.0	375.0	
168.7	CARBONDALE		LIMESTONE & CONGLOMERATE	5.0	395.0	LS CONGLOMERATE
163.7	CARBONDALE		SANDSTONE	34.0	400.0	
129.7	CARBONDALE	SURVANT	SHALE/COAL	6.0	434.0	BLACK SHALE AND COAL
123.7	CARBONDALE		SHALE	20.0	440.0	
103.7	CARBONDALE		BLACK SHALE	20.0	460.0	
83.7	SPOON		SHALE	23.0	480.0	
60.7			COAL	6.0	503.0	
54.7			UNDERCLAY	3.0	509.0	

MAPID: 04500204000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 32 QUARTERS/FOOTAGES: SW SW SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.553747 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.521382 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 551.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
447.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	183.0	
392.0	CARBONDALE	DANVILLE	COAL	4.0	238.0	
282.0	CARBONDALE	HERRIN	COAL	2.0	348.0	
263.0	CARBONDALE	SPRINGFIELD	COAL	4.0	367.0	
215.0	CARBONDALE	HOUCHIN CREEK	COAL	-	415.0	
113.0	CARBONDALE	COLCHESTER	COAL	-	517.0	
84.0	SPOON	SEELYVILLE	COAL	5.0	546.0	

MAPID: 04500878000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 32 QUARTERS/FOOTAGES: SE SW SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.542052 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.5213 DATE COLLECTED: 0 / 0 / 1962  
 SURFACE ELEVATION (FT.): 628.0 LOGGED (FT.): 581.3 LOG TYPE: Drillers Log  
 SOURCE: SNOW HILL COAL CORP. 205 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
379.7	SHELBURN	DANVILLE	COAL	5.1	248.3	
264.0	CARBONDALE	HERRIN	COAL	2.0	364.0	
241.0	CARBONDALE	SPRINGFIELD	COAL	5.0	387.0	
188.0	CARBONDALE	HOUCHIN CREEK	COAL	5.0	440.0	
130.0	CARBONDALE	SURVANT	COAL	2.0	498.0	
86.2	CARBONDALE	COLCHESTER	COAL	2.3	541.8	
54.0	CARBONDALE	SEELYVILLE	COAL	5.8	574.0	

MAPID: 04500878000C VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR TWP/RNG: 13N 10W SECTION: 32 QUARTERS/FOOTAGES: SE SW SE

QUADRANGLE: SANDFORD LONGITUDE: -87.542052 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.5213 DATE COLLECTED: 1 / 0 / 1962

SURFACE ELEVATION (FT.): 628.0 LOGGED (FT.): 589.9 LOG TYPE: Multiple log types

SOURCE: SNOW HILL COAL CORP. WELL TYPE: Coal Test

COMMENT: DRILLERS LOG & CORE; CORE #4294

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
628.0			UNCONSOLIDATED	188.0	0.0	
440.0	MODESTO		SHALE	1.0	188.0	
439.0	MODESTO		LIMESTONE	0.5	189.0	
438.5	MODESTO		SHALE	3.5	189.5	
435.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	193.0	
434.0	MODESTO		SHALE	16.0	194.0	
418.0	MODESTO		CALCAREOUS SHALE	15.0	210.0	
403.0	MODESTO		SHALE	23.3	225.0	WITH SIDERITE BANDS
379.7	CARBONDALE	DANVILLE	COAL	5.1	248.3	
374.7	CARBONDALE		UNDERCLAY	4.7	253.3	FIRE CLAY
370.0	CARBONDALE		LIMESTONE	0.5	258.0	
369.5	CARBONDALE		SHALE	2.5	258.5	
367.0	CARBONDALE		LIMESTONE	1.0	261.0	
366.0	CARBONDALE		SHALE	0.3	262.0	
365.7	CARBONDALE		LIMESTONE	0.3	262.3	
365.3	CARBONDALE		SHALE	7.3	262.7	
358.0	CARBONDALE	ENERGY	SHALE	40.0	270.0	WITH SIDERITE BANDS
318.0	CARBONDALE	ENERGY	SANDY SHALE	46.0	310.0	WITH SIDERITE BANDS
272.0	CARBONDALE	ENERGY	BLACK SHALE	1.0	356.0	
271.0	CARBONDALE	ENERGY	SHALE	7.0	357.0	
264.0	CARBONDALE	HERRIN	COAL	2.0	364.0	
262.0	CARBONDALE		UNDERCLAY	2.0	366.0	FIRE CLAY
260.0	CARBONDALE		SHALE	17.0	368.0	WITH SIDERITE BANDS
243.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	385.0	
241.0	CARBONDALE	SPRINGFIELD	COAL	5.0	387.0	
236.0	CARBONDALE		UNDERCLAY	4.0	392.0	FIRE CLAY
232.0	CARBONDALE		SHALE	2.0	396.0	WITH SIDERITE BANDS
230.0	CARBONDALE		SANDSTONE	42.0	398.0	
188.0	CARBONDALE	HOUCHIN CREEK	SHALE/COAL	5.0	440.0	BLACK SHALE AND COAL
183.0	CARBONDALE		UNDERCLAY	2.0	445.0	FIRE CLAY
181.0	CARBONDALE		SANDSTONE	51.0	447.0	
130.0			SHALE/COAL	2.0	498.0	BLACK SHALE AND COAL
128.0	CARBONDALE		SANDSTONE/SHALE	37.0	500.0	SANDY SH
91.0	CARBONDALE		SHALE	2.4	537.0	CORED TO T.D.
88.6	CARBONDALE	COLCHESTER	BLACK SHALE	2.6	539.4	FUSINIZED PLANTS 539.375- 539.5
86.1	SPOON		SHALY SILTSTONE	1.4	541.9	
84.7	SPOON		CLAYSTONE & SILTSTONE	2.9	543.3	LS NODULES PRESENT
81.7	SPOON		SHALY SILTSTONE	2.9	546.3	

78.9	SPOON		SANDSTONE	15.2	549.1	SH PARTINGS AT 30 AND 45
63.7	SPOON		SILTY SHALE	5.7	564.3	SIDERITE NODULES PRESENT
58.1	SPOON		SANDSTONE	1.1	569.9	W/CARBONIZED PLANTS
57.0	SPOON		SILTSTONE	1.9	571.0	W/CALAMITIES LEAF FRAGMENTS
55.1	SPOON			8.0	572.9	WITH FEW SIDERITE LENSES IN LOWER PART
47.1	SPOON		BLACK SHALE	1.7	580.9	INCLUDES DRK.GRAY SH
45.4	SPOON	SEELYVILLE	COAL	5.8	582.6	
39.7	SPOON		UNDERCLAY	1.5	588.3	

**MAPID:** 04500956000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 10W    **SECTION:** 32    **QUARTERS/FOOTAGES:** 1750' S line, 1200' E line  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.54055    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.525207    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 617.8    **LOGGED (FT.):** 575.0    **LOG TYPE:** Drillers Log  
**SOURCE:** SUN OIL CO.    E-1-53    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
385.8	SHELBURN	DANVILLE	COAL	3.0	232.0	
270.8	CARBONDALE	HERRIN	COAL	3.0	347.0	
252.8	CARBONDALE	SPRINGFIELD	COAL	3.0	365.0	
195.8	CARBONDALE	HOUCHIN CREEK	COAL	3.0	422.0	
141.8	CARBONDALE	SURVANT	COAL	0.0	476.0	TRACE OF COAL
85.8	CARBONDALE	COLCHESTER	COAL	1.0	532.0	
57.8	CARBONDALE	SEELYVILLE	COAL WITH SHALE	9.0	560.0	W/2 OF CLAY

MAPID: 04500956000C    VERSION: 2

PROJECT: ISGS88

COUNTY: EDGAR                    TWP/RNG: 13N 10W    SECTION: 32    QUARTERS/FOOTAGES: 1750' S line, 1200' E line

QUADRANGLE: SANDFORD                    LONGITUDE: -87.54055                    GEOLOGIST: SROKA

CONFIDENTIAL: N                    LATITUDE: 39.525207                    DATE COLLECTED: 11 / 0 / 1959

SURFACE ELEVATION (FT.): 617.8                    LOGGED (FT.): 573.0                    LOG TYPE: Drillers Log

SOURCE: SUN OIL CO.                    WELL TYPE: Structure Test

COMMENT: DRILLERS LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
617.8			UNCONSOLIDATED	152.0	0.0	
465.8	MODESTO		SHALE	18.0	152.0	
447.8	MODESTO	WEST FRANKLIN	FOSSILIFEROUS LIMESTONE	4.0	170.0	
443.8	MODESTO		SHALE	6.0	174.0	
437.8	MODESTO		SHALE	15.0	180.0	
422.8	MODESTO		SHALE	37.0	195.0	
385.8	CARBONDALE	DANVILLE	COAL	3.0	232.0	
382.8	CARBONDALE		UNDERCLAY	6.0	235.0	
376.8	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	241.0	BROWN
373.8	CARBONDALE	ENERGY	SANDSTONE	56.0	244.0	
317.8	CARBONDALE	ENERGY	SHALE	47.0	300.0	
270.8	CARBONDALE	HERRIN	COAL	3.0	347.0	
267.8	CARBONDALE		UNDERCLAY/SHALE	13.0	350.0	GRAY
254.8	CARBONDALE	ST. DAVID	LIMESTONE	2.0	363.0	TAN
252.8	CARBONDALE	SPRINGFIELD	COAL	3.0	365.0	
249.8	CARBONDALE		SHALE	12.0	368.0	
237.8	CARBONDALE		LIMESTONE	1.0	380.0	GRAY/BRN
236.8	CARBONDALE		SHALE	39.0	381.0	
197.8	CARBONDALE	EXCELLO	BLACK SHALE	2.0	420.0	
195.8	CARBONDALE	HOUCHIN CREEK	COAL	3.0	422.0	
192.8	CARBONDALE		SANDSTONE	51.0	425.0	TRACE OF COAL AT BASE
141.8	CARBONDALE		SANDSTONE/SHALE	15.0	476.0	
126.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	41.0	491.0	INCLUDES DARK GRAY SHALE
85.8	CARBONDALE	COLCHESTER	COAL	1.0	532.0	
84.8	SPOON		SANDSTONE/SHALE	17.0	533.0	
67.8	SPOON		SHALE	10.0	550.0	
57.8	SPOON	SEELYVILLE	COAL	6.0	560.0	
51.8	SPOON		UNDERCLAY	2.0	566.0	
49.8	SPOON		COAL	1.0	568.0	
48.8	SPOON		UNDERCLAY	1.0	569.0	
47.8	SPOON		SANDY SHALE	3.0	570.0	



**MAPID:** 04500958000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 10W    **SECTION:** 32    **QUARTERS/FOOTAGES:** 50' S line, 50' E line  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.536371    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.520485    **DATE COLLECTED:** 0 / 0 / 1954  
**SURFACE ELEVATION (FT.):** 637.0    **LOGGED (FT.):** 590.0    **LOG TYPE:** Survey Core Study  
**SOURCE:** SUN OIL CO.    E-1-54    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
457.0			COAL	1.0	180.0	DEPTH EST.
385.0	SHELburn	DANVILLE	COAL	4.0	252.0	
272.0	CARBONDALE	HERRIN	COAL	10.0	365.0	
252.0	CARBONDALE	SPRINGFIELD	COAL	4.0	385.0	
57.0	CARBONDALE	SEELYVILLE	COAL	10.0	580.0	

**MAPID:** 04500958000C    **VERSION:** 2    **PROJECT:** ISGS88  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 10W    **SECTION:** 32    **QUARTERS/FOOTAGES:** 50' S line, 50' E line  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.536371    **GEOLOGIST:** SROKA  
**CONFIDENTIAL:** N    **LATITUDE:** 39.520485    **DATE COLLECTED:** 0 / 0 / 1954  
**SURFACE ELEVATION (FT.):** 637.0    **LOGGED (FT.):** 590.0    **LOG TYPE:** Drillers Log  
**SOURCE:** SUN OIL CO.    **WELL TYPE:** Structure Test  
**COMMENT:** QUESTIONABLE THICKNESSES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
637.0			UNCLASSIFIED	125.0	0.0	
512.0	MODESTO		SANDSTONE	27.0	125.0	
485.0	MODESTO		UNCLASSIFIED	28.0	152.0	
457.0	MODESTO	CHAPEL	COAL	1.0	180.0	
456.0	MODESTO		UNCLASSIFIED	15.0	181.0	
441.0	MODESTO		LIMESTONE	2.0	196.0	
439.0	MODESTO		UNCLASSIFIED	2.0	198.0	
437.0	MODESTO		LIMESTONE	1.0	200.0	
436.0	MODESTO		UNCLASSIFIED	51.0	201.0	
385.0	CARBONDALE	DANVILLE	COAL	4.0	252.0	
381.0	CARBONDALE		UNDERCLAY/SHALE	8.0	256.0	
373.0	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	264.0	
370.0	CARBONDALE		UNCLASSIFIED	98.0	267.0	
272.0	CARBONDALE	HERRIN	COAL	10.0	365.0	QUESTIONABLE THICKNESS
262.0	CARBONDALE		UNCLASSIFIED	6.0	375.0	
256.0	CARBONDALE		BLACK SHALE	4.0	381.0	
252.0	CARBONDALE	SPRINGFIELD	COAL	4.0	385.0	
248.0			UNCLASSIFIED	191.0	389.0	
57.0	SPOON	SEELYVILLE	COAL WITH SHALE	10.0	580.0	QUESTIONABLE THICKNESS

MAPID: 04500139000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 1 QUARTERS/FOOTAGES: 398' N line, 70' W line of NE

QUADRANGLE: SANDFORD LONGITUDE: -87.583464 GEOLOGIST: LOG BOOK

CONFIDENTIAL: N LATITUDE: 39.606141 DATE COLLECTED: 0 / 0 / 1949

SURFACE ELEVATION (FT.): 668.0 LOGGED (FT.): 608.0 LOG TYPE: Survey Core Study

SOURCE: UNIVERSAL COAL WASHING CO. J WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
359.4	SHELburn	DANVILLE	COAL	5.3	308.6	
251.2	CARBONDALE	HERRIN	COAL	2.1	416.8	
228.7	CARBONDALE	SPRINGFIELD	COAL	4.0	439.3	
168.2	CARBONDALE	HOUCHIN CREEK	COAL	1.3	499.8	
119.6	CARBONDALE	SURVANT - UPPER	COAL	1.4	548.4	
108.8	CARBONDALE	SURVANT - LOWER	COAL	0.7	559.2	
82.4	CARBONDALE	COLCHESTER	COAL	0.3	585.6	
70.6	CARBONDALE	SEELYVILLE	COAL	4.2	597.4	

MAPID: 04500316000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 3 QUARTERS/FOOTAGES: NE NW NW

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.626697 GEOLOGIST: C TREWORYG

CONFIDENTIAL: N LATITUDE: 39.606153 DATE COLLECTED:

SURFACE ELEVATION (FT.): 701.0 LOGGED (FT.): 651.5 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
358.0	CARBONDALE	DANVILLE	COAL	3.5	343.0	
249.0	CARBONDALE	HERRIN	COAL	1.5	452.0	
232.0	CARBONDALE	SPRINGFIELD	COAL	2.5	469.0	
163.0	CARBONDALE	HOUCHIN CREEK	COAL	-	538.0	
76.0	CARBONDALE	COLCHESTER	COAL	-	625.0	
55.0	SPOON	SEELYVILLE	COAL	5.5	646.0	

MAPID: 04500683000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 10 QUARTERS/FOOTAGES: 330' S line, 355' E line of NW

QUADRANGLE: SANDFORD LONGITUDE: -87.621952 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.586323 DATE COLLECTED:

SURFACE ELEVATION (FT.): 650.0 LOGGED (FT.): 629.5 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
322.0	CARBONDALE	DANVILLE	COAL	2.5	328.0
215.0	CARBONDALE	HERRIN	COAL	1.0	435.0
195.0	CARBONDALE	SPRINGFIELD	COAL	4.0	455.0
130.0	CARBONDALE	HOUCHIN CREEK	COAL	-	520.0
50.0	CARBONDALE	COLCHESTER	COAL	-	600.0
25.0	SPOON	SEELYVILLE	COAL	4.5	625.0

MAPID: 04500858000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 13 QUARTERS/FOOTAGES: NE NW SW

QUADRANGLE: SANDFORD LONGITUDE: -87.589111 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.570299 DATE COLLECTED:

SURFACE ELEVATION (FT.): 661.0 LOGGED (FT.): 621.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
338.0	CARBONDALE	DANVILLE	COAL	4.0	323.0
243.0	CARBONDALE	HERRIN	COAL	-	418.0
222.0	CARBONDALE	SPRINGFIELD	COAL	2.5	439.0
169.0	CARBONDALE	HOUCHIN CREEK	COAL	-	492.0
69.0	CARBONDALE	COLCHESTER	COAL	-	592.0
45.0	SPOON	SEELYVILLE	COAL	5.0	616.0

MAPID: 04500594000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 11W

SECTION: 15

QUARTERS/FOOTAGES: SE NE SW

QUADRANGLE: SANDFORD

LONGITUDE: -87.621482

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.568149

DATE COLLECTED:

SURFACE ELEVATION (FT.): 683.0

LOGGED (FT.): 654.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: SPLIT #3, POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
386.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	297.0
335.0	CARBONDALE	DANVILLE	COAL	3.5	348.0
232.0	CARBONDALE	HERRIN	COAL	-	451.0
210.0	CARBONDALE	SPRINGFIELD	COAL	-	473.0
151.0	CARBONDALE	HOUCHIN CREEK	COAL	-	532.0
59.0	CARBONDALE	COLCHESTER	COAL	-	624.0
33.0	SPOON	SEELYVILLE	COAL	4.0	650.0

MAPID: 04500844000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 11W

SECTION: 18

QUARTERS/FOOTAGES: 2310' S line, 496' E line

QUADRANGLE: PARIS SOUTH

LONGITUDE: -87.668666

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.570024

DATE COLLECTED:

SURFACE ELEVATION (FT.): 705.0

LOGGED (FT.): 750.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
331.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	374.0
275.0	CARBONDALE	DANVILLE	COAL	3.5	430.0
166.0	CARBONDALE	HERRIN	COAL	-	539.0
149.0	CARBONDALE	SPRINGFIELD	COAL	-	556.0
92.0	CARBONDALE	HOUCHIN CREEK	COAL	-	613.0
-13.0	CARBONDALE	COLCHESTER	COAL	-	718.0
-40.0	SPOON	SEELYVILLE	COAL	5.0	745.0

MAPID: 04500321000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 20 QUARTERS/FOOTAGES: NW SW SE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.656523 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.551951 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 720.0 LOGGED (FT.): 747.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: SPLIT #3, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
349.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	371.0	
295.0	CARBONDALE	DANVILLE	COAL	4.0	425.0	
186.0	CARBONDALE	HERRIN	COAL	-	534.0	
166.0	CARBONDALE	SPRINGFIELD	COAL	2.5	554.0	
113.0	CARBONDALE	HOUCHIN CREEK	COAL	-	607.0	
-2.0	CARBONDALE	COLCHESTER	COAL	-	722.0	
-23.0	SPOON	SEELYVILLE	COAL	4.0	743.0	

MAPID: 04500322000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 21 QUARTERS/FOOTAGES: NE SE SE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.630813 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.551818 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 678.0 LOGGED (FT.): 660.5 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
386.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	292.0	
327.0	CARBONDALE	DANVILLE	COAL	4.0	351.0	
220.0	CARBONDALE	HERRIN	COAL	-	458.0	
201.0	CARBONDALE	SPRINGFIELD	COAL	2.5	477.0	
146.0	CARBONDALE	HOUCHIN CREEK	COAL	-	532.0	
41.0	CARBONDALE	COLCHESTER	COAL	-	637.0	
22.0	SPOON	SEELYVILLE	COAL	4.5	656.0	

MAPID: 04500140000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 22 QUARTERS/FOOTAGES: 924' S line, 2462' E line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.619626 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.551783 DATE COLLECTED: 0 / 0 / 1948  
 SURFACE ELEVATION (FT.): 578.0 LOGGED (FT.): 566.5 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. H WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
313.2	SHELburn	DANVILLE	COAL	4.6	264.8	
213.5	CARBONDALE	HERRIN	COAL	1.8	364.5	
195.4	CARBONDALE	SPRINGFIELD	COAL	2.8	382.6	
41.8	CARBONDALE	COLCHESTER	COAL	0.3	536.2	
24.2	CARBONDALE	SEELYVILLE	COAL	3.8	553.8	

MAPID: 04500325000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 24 QUARTERS/FOOTAGES: NE NW NW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.589067 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.563015 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 600.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
418.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	222.0	
346.0	CARBONDALE	DANVILLE	COAL	4.0	294.0	
240.0	CARBONDALE	HERRIN	COAL	-	400.0	
217.0	CARBONDALE	SPRINGFIELD	COAL	4.5	423.0	
166.0	CARBONDALE	HOUCHIN CREEK	COAL	-	474.0	
69.0	CARBONDALE	COLCHESTER	COAL	-	571.0	
44.0	SPOON	SEELYVILLE	COAL	4.0	596.0	

MAPID: 04500016000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 26 QUARTERS/FOOTAGES: SW SW

QUADRANGLE: SANDFORD LONGITUDE: -87.60863 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.536697 DATE COLLECTED: 0 / 0 / 1912

SURFACE ELEVATION (FT.): LOGGED (FT.): 562.0 LOG TYPE: Drillers Log

SOURCE: PEABODY COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	79.0	0.0	
-	BOND		SHALE	22.8	79.0	
-	BOND		BLACK SHALE	2.5	101.8	
-	BOND		COAL	0.7	104.3	
-	BOND		UNDERCLAY	2.0	105.0	
-	BOND		GRAY SHALE	5.0	107.0	
-	BOND		SANDY SHALE	17.0	112.0	
-	BOND	CARTHAGE	LIMESTONE	2.6	129.0	
-	MODESTO		SANDSTONE	2.4	131.6	
-	MODESTO		SANDY SHALE	1.0	134.0	
-	MODESTO		SANDSTONE	1.0	135.0	
-	MODESTO		SHALE	34.0	136.0	
-	MODESTO		GRAY SHALE	13.2	170.0	GRAY "SLATE" W/ FLINT BANDS
-	MODESTO		DARK SHALE	1.3	183.2	SLATE
-	MODESTO	CHAPEL	COAL	0.9	184.4	
-	MODESTO		UNDERCLAY	5.0	185.3	
-	MODESTO	WEST FRANKLIN	CALCAREOUS SHALE	3.4	190.3	
-	MODESTO	WEST FRANKLIN	LIMESTONE	1.3	193.8	
-	MODESTO	WEST FRANKLIN	CALCAREOUS SHALE	3.0	195.0	
-	MODESTO		CLAYSTONE	2.3	198.0	
-	MODESTO		SHALE	0.7	200.3	
-	MODESTO		CLAYSTONE	1.0	201.0	
-	MODESTO		SHALE	2.0	202.0	
-	MODESTO		GRAY SHALE	33.0	204.0	
-	MODESTO		LIMESTONE	0.5	237.0	
-	MODESTO		BLACK SHALE	7.5	237.5	
-	MODESTO		BLUE SHALE	5.6	245.0	
-	CARBONDALE	DANVILLE	COAL WITH SHALE	5.1	250.6	POOR COAL:PARTINGS OF JACK & PYRITE
-	CARBONDALE		BLACK SHALE	2.3	255.7	
-	CARBONDALE	BANKSTON FORK	LIMESTONE W/ SHALE	5.0	258.0	
-	CARBONDALE	BANKSTON FORK	BLUE SHALE	3.0	263.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	6.0	266.0	
-	CARBONDALE		CALCAREOUS SHALE	2.5	272.0	
-	CARBONDALE		SHALE	33.5	274.5	
-	CARBONDALE		BLACK SHALE & LIMESTONE	18.0	308.0	
-	CARBONDALE	ENERGY	BLUE SHALE	7.5	326.0	
-	CARBONDALE	ENERGY	BLACK SHALE	1.5	333.5	
-	CARBONDALE	ENERGY	GRAY SHALE	13.5	335.0	

-	CARBONDALE	ENERGY	BLACK SHALE	0.8	348.5	
-	CARBONDALE	HERRIN	COAL W/ BLACK SHALE	2.2	349.3	
-	CARBONDALE		SHALE	2.0	351.5	
-	CARBONDALE		LIMESTONE	0.8	353.5	
-	CARBONDALE		SHALE	4.7	354.3	
-	CARBONDALE		SHALE	8.0	359.0	* WITH BONDS OF LS AND BK SLATE
-	CARBONDALE		SANDSTONE	2.0	367.0	
-	CARBONDALE		BLUE SHALE	0.6	369.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	369.6	
-	CARBONDALE	SPRINGFIELD	COAL	4.3	371.6	
-	CARBONDALE		UNDERCLAY	0.6	375.9	
-	CARBONDALE		LIMESTONE W/ SHALE	9.5	376.5	
-	CARBONDALE		SANDSTONE	8.5	386.0	
-	CARBONDALE		SHALE	23.5	394.5	INCLUDES GRAY SHALE AND BLUE SLATE
-	CARBONDALE	EXCELLO	BLACK SHALE	3.0	418.0	
-	CARBONDALE	HOUCHIN CREEK	COAL	1.0	421.0	
-	CARBONDALE		LIMESTONE	3.0	422.0	
-	CARBONDALE		SANDSTONE	7.0	425.0	
-	CARBONDALE		SHALE	7.0	432.0	
-	CARBONDALE		LIMESTONE	1.0	439.0	
-	CARBONDALE		SANDSTONE	14.6	440.0	
-	CARBONDALE		SHALE & SANDSTONE	17.4	454.6	
-	CARBONDALE		SANDSTONE	31.5	472.0	
-	CARBONDALE		DARK SHALE	4.5	503.5	
-	CARBONDALE		GRAY SHALE	4.8	508.0	
-	CARBONDALE		BLACK SHALE	0.8	512.8	
-	CARBONDALE		GRAY SHALE	2.5	513.5	
-	CARBONDALE		BLACK SHALE	0.3	516.0	
-	CARBONDALE		GRAY SHALE	9.0	516.3	
-	CARBONDALE		BLACK SHALE	0.7	525.3	
-	CARBONDALE		DARK SHALE	5.5	526.0	
-	CARBONDALE	COLCHESTER	COAL	0.5	531.5	
-	SPOON		SHALE	7.0	532.0	
-	SPOON	PALZO	SANDSTONE	4.0	539.0	
-	SPOON	PALZO	SANDSTONE/SHALE	2.0	543.0	
-	SPOON		BLUE SHALE	8.5	545.0	SLATE
-	SPOON	SEELYVILLE	COAL	5.9	553.5	
-	SPOON		UNDERCLAY	1.9	559.4	
-	SPOON		SANDSTONE	0.7	561.3	

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MAPID: 04500016000C    VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 11W

SECTION: 26

QUARTERS/FOOTAGES: SW SW

QUADRANGLE: SANDFORD

LONGITUDE: -87.60863

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.536697

DATE COLLECTED:

SURFACE ELEVATION (FT.): 582.0

LOGGED (FT.): 560.0

LOG TYPE: Drillers Log

SOURCE:

WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
388.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	194.0	
331.0	CARBONDALE	DANVILLE	COAL WITH SHALE	5.1	251.0	POOR COAL:PARTINGS OF JACK & PYRITE
233.0	CARBONDALE	HERRIN	COAL	2.1	349.0	
210.0	CARBONDALE	SPRINGFIELD	COAL	4.3	372.0	
161.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	421.0	
50.0	CARBONDALE	COLCHESTER	COAL	0.5	532.0	
28.0	SPOON	SEELYVILLE	COAL	6.0	554.0	

MAPID: 04500017000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 26 QUARTERS/FOOTAGES: 1550' S line, 3370' E line of SE

QUADRANGLE: SANDFORD LONGITUDE: -87.60438 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.539185 DATE COLLECTED:

SURFACE ELEVATION (FT.): 589.0 LOGGED (FT.): 557.7 LOG TYPE: Drillers Log

SOURCE: ELBRIDGE COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
589.0			UNCONSOLIDATED	81.0	0.0	
508.0	BOND		GRAY SHALE	17.0	81.0	
491.0	BOND		BLACK SHALE	1.0	98.0	
490.0	BOND		COAL	1.0	99.0	
489.0	BOND		CLAYSTONE	4.0	100.0	
485.0	BOND		UNCLASSIFIED	16.0	104.0	
469.0	MODESTO		GRAY SHALE	61.8	120.0	
407.2	MODESTO	CHAPEL	COAL	0.5	181.8	
406.7	MODESTO		UNDERCLAY	6.0	182.3	
400.7	MODESTO	WEST FRANKLIN	LIMESTONE	2.3	188.3	
398.3	MODESTO		GRAY SHALE	60.2	190.7	
338.2	CARBONDALE	DANVILLE	COAL	1.8	250.8	
336.3	CARBONDALE		UNDERCLAY	4.5	252.7	
331.8	CARBONDALE		CLAYSTONE	6.0	257.2	
325.8	CARBONDALE		GRAY SHALE	102.0	263.2	21' GRAY SLATE
223.8	CARBONDALE		BLACK SHALE	1.0	365.2	
222.8	CARBONDALE	SPRINGFIELD	COAL	4.2	366.2	
218.7	CARBONDALE		UNDERCLAY	3.7	370.3	
215.0	CARBONDALE		SANDSTONE	6.0	374.0	
209.0	CARBONDALE		LIMESTONE	2.0	380.0	
207.0	CARBONDALE		SANDSTONE	14.0	382.0	
193.0	CARBONDALE		CLAYSTONE	2.0	396.0	
191.0	CARBONDALE		BLUE SHALE	16.8	398.0	
174.2	CARBONDALE	EXCELLO	BLACK SHALE	1.0	414.8	
173.1	CARBONDALE	HOUCHIN CREEK	COAL	0.5	415.9	
172.7	CARBONDALE		UNDERCLAY	3.0	416.3	
169.7	CARBONDALE		SANDSTONE	6.0	419.3	
163.7	CARBONDALE		GRAY SHALE	7.5	425.3	
156.2	CARBONDALE		LIMESTONE	2.5	432.8	
153.7	CARBONDALE		GRAY SHALE	14.0	435.3	
139.7	CARBONDALE		LIMESTONE	3.0	449.3	
136.7	CARBONDALE		SANDSTONE	28.0	452.3	
108.7	CARBONDALE		BLUE SHALE	14.0	480.3	
94.7	CARBONDALE		SANDSTONE	15.0	494.3	
79.7	CARBONDALE		BLACK SHALE	1.0	509.3	
78.7	CARBONDALE		SANDSTONE	12.5	510.3	
66.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	522.8	
62.7	CARBONDALE	COLCHESTER	COAL	1.0	526.3	
61.7	SPOON	PALZO	SANDSTONE	12.5	527.3	

49.2	SPOON	PALZO	BROWN SHALE	3.0	539.8
46.2	SPOON	PALZO	SANDSTONE	8.5	542.8
37.7	SPOON	SEELYVILLE	COAL	6.2	551.3

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**MAPID:** 04500017000C    **VERSION:** 2    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 11W    **SECTION:** 26    **QUARTERS/FOOTAGES:** 1550' S line, 3370' E line of SE  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.60438    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.539185    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 589.0    **LOGGED (FT.):** 558.1    **LOG TYPE:** Drillers Log  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
400.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	189.0
338.0	CARBONDALE	DANVILLE	COAL	0.5	251.0
224.0	CARBONDALE	SPRINGFIELD	COAL	4.0	365.0
174.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	415.0
62.0	CARBONDALE	COLCHESTER	COAL	1.0	527.0
37.0	SPOON	SEELYVILLE	COAL	6.1	552.0

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MAPID: 04500019000C VERSION: 1

PROJECT: NCRDS87

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 27 QUARTERS/FOOTAGES: 1150' S line, 250' E line of SE

QUADRANGLE: SANDFORD LONGITUDE: -87.611835 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.538041 DATE COLLECTED:

SURFACE ELEVATION (FT.): 632.3 LOGGED (FT.): 611.0 LOG TYPE: Drillers Log

SOURCE: ELDRIDGE COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
632.3			UNCONSOLIDATED	120.0	0.0	
512.3			UNCLASSIFIED	4.0	120.0	
508.3			SANDSTONE	1.5	124.0	
506.8			GRAY SHALE	23.5	125.5	
483.3	MODESTO		BLACK SHALE	5.3	149.0	UNCERTAIN CORRELATION
478.0	MODESTO		COAL	0.8	154.3	UNCERTAIN CORRELATION
477.2	MODESTO		UNDERCLAY	32.5	155.1	
444.7	MODESTO		LIMESTONE	0.5	187.6	
444.2	MODESTO		GRAY SHALE	43.0	188.1	
401.2	MODESTO		BLACK SHALE	2.0	231.1	UNCERTAIN CORRELATION
399.2	MODESTO		COAL	0.5	233.1	UNCERTAIN CORRELATION
398.7	MODESTO		UNDERCLAY	1.0	233.6	
397.7	MODESTO		GRAY SHALE	16.0	234.6	
381.7	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	250.6	
378.7	MODESTO		UNDERCLAY	4.4	253.6	
374.3	MODESTO		SHALE	23.0	258.0	
351.3	MODESTO		SANDSTONE	4.0	281.0	
347.3	MODESTO		SHALE	12.0	285.0	
335.3	MODESTO		SANDSTONE	6.2	297.0	
329.1	CARBONDALE	DANVILLE	COAL	1.6	303.2	UNCERTAIN CORRELATION
327.5	CARBONDALE		UNDERCLAY	3.3	304.8	
324.3	CARBONDALE		SHALE	3.0	308.0	
321.3	CARBONDALE	ENERGY	SANDSTONE	23.0	311.0	
298.3	CARBONDALE	ENERGY	GRAY SHALE	4.0	334.0	
294.3	CARBONDALE	ENERGY	SANDSTONE	12.0	338.0	
282.3	CARBONDALE	ENERGY	GRAY SHALE	52.0	350.0	
230.3	CARBONDALE	HERRIN	COAL	2.6	402.0	
227.7	CARBONDALE		UNDERCLAY	4.0	404.6	
223.7	CARBONDALE		SANDSTONE	6.0	408.6	
217.7	CARBONDALE		LIMESTONE	0.5	414.6	
217.2	CARBONDALE		GRAY SHALE	9.9	415.1	
207.3	CARBONDALE	SPRINGFIELD	COAL	0.8	425.0	UNCERTAIN CORRELATION
206.5	CARBONDALE		UNDERCLAY	3.0	425.8	
203.5	CARBONDALE		SHALE	6.8	428.8	
196.7	CARBONDALE		LIMESTONE	17.0	435.6	
179.7	CARBONDALE		SHALE	19.0	452.6	
160.7	CARBONDALE	EXCELLO	BLACK SHALE	4.0	471.6	UNCERTAIN CORRELATION
156.7	CARBONDALE	HOUCHIN CREEK	COAL	1.0	475.6	UNCERTAIN CORRELATION

155.7	CARBONDALE		UNDERCLAY	3.4	476.6
152.3	CARBONDALE		SHALE	5.0	480.0
147.3	CARBONDALE		SANDSTONE	44.8	485.0
102.5	CARBONDALE		DARK SHALE	1.0	529.8
101.5			COAL	1.0	530.8
100.5	CARBONDALE		SANDSTONE	22.2	531.8
78.3	CARBONDALE		SHALE	13.2	554.0
65.1	CARBONDALE		DARK SHALE	15.8	567.2
49.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.2	583.0
47.1	CARBONDALE	COLCHESTER	COAL	1.0	585.2
46.1	SPOON		UNDERCLAY	1.8	586.2
44.3	SPOON		SANDSTONE	14.0	588.0
30.3	SPOON		SHALE	2.0	602.0
28.3	SPOON	SEELYVILLE	COAL	6.0	604.0
22.3	SPOON		UNDERCLAY	1.0	610.0

**MAPID:** 04500019000C    **VERSION:** 2    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 11W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 1150' S line, 250' E line of SE  
**QUADRANGLE:** SANDFORD    **LONGITUDE:** -87.611835    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.538041    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 632.0    **LOGGED (FT.):** 610.0    **LOG TYPE:** Drillers Log  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN COMMENT
382.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	250.0
329.0	CARBONDALE	DANVILLE	COAL	1.6	303.0
230.0	CARBONDALE	HERRIN	COAL	2.3	402.0
207.0	CARBONDALE	SPRINGFIELD	COAL	0.8	425.0
156.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	476.0
47.0	CARBONDALE	COLCHESTER	COAL	1.0	585.0
28.0	SPOON	SEELYVILLE	COAL	6.0	604.0

MAPID: 04500327000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 28 QUARTERS/FOOTAGES: SE SW NW  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.644897 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.542867 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 719.0 LOGGED (FT.): 716.5 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
502.0	BOND	CARTHAGE	LIMESTONE	2.0	217.0
373.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	346.0
317.0	CARBONDALE	DANVILLE	COAL	3.0	402.0
211.0	CARBONDALE	HERRIN	COAL	-	508.0
188.0	CARBONDALE	SPRINGFIELD	COAL	2.5	531.0
132.0	CARBONDALE	HOUCHIN CREEK	COAL	-	587.0
29.0	CARBONDALE	COLCHESTER	COAL	-	690.0
7.0	SPOON	SEELYVILLE	COAL	4.5	712.0

MAPID: 04500328000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 30 QUARTERS/FOOTAGES: 550' N line, 175' W line of NW NW SE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.675807 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.540513 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 765.0 LOGGED (FT.): 766.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
359.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	406.0
313.0	CARBONDALE	DANVILLE	COAL	3.5	452.0
207.0	CARBONDALE	HERRIN	COAL	-	558.0
186.0	CARBONDALE	SPRINGFIELD	COAL	3.0	579.0
136.0	CARBONDALE	HOUCHIN CREEK	COAL	-	629.0
36.0	CARBONDALE	COLCHESTER	COAL	-	729.0
3.0	SPOON	SEELYVILLE	COAL	4.0	762.0

MAPID: 04500865000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 11W

SECTION: 32

QUARTERS/FOOTAGES: SE NE NE

QUADRANGLE: PARIS SOUTH

LONGITUDE: -87.649583

GEOLOGIST: C TREWORY

CONFIDENTIAL: N

LATITUDE: 39.532007

DATE COLLECTED:

SURFACE ELEVATION (FT.): 727.0

LOGGED (FT.): 729.0

LOG TYPE: Nuclear Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
307.0	CARBONDALE	DANVILLE	COAL	6.0	420.0
202.0	CARBONDALE	HERRIN	COAL	2.0	525.0
179.0	CARBONDALE	SPRINGFIELD	COAL	4.0	548.0
125.0	CARBONDALE	HOUCHIN CREEK	COAL	2.5	602.0
19.0	CARBONDALE	COLCHESTER	COAL	-	708.0
4.0	SPOON	SEELYVILLE	COAL	6.0	723.0

MAPID: 04500892000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 11W

SECTION: 32

QUARTERS/FOOTAGES: SE SE NW

QUADRANGLE: PARIS SOUTH

LONGITUDE: -87.658922

GEOLOGIST: C TREWORY

CONFIDENTIAL: N

LATITUDE: 39.528422

DATE COLLECTED:

SURFACE ELEVATION (FT.): 638.0

LOGGED (FT.): 646.5

LOG TYPE: Nuclear Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
359.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	279.0
305.0	CARBONDALE	DANVILLE	COAL	4.0	333.0
201.0	CARBONDALE	HERRIN	COAL	3.5	437.0
185.0	CARBONDALE	SPRINGFIELD	COAL	3.0	453.0
129.0	CARBONDALE	HOUCHIN CREEK	COAL	-	509.0
23.0	CARBONDALE	COLCHESTER	COAL	-	615.0
-2.0	SPOON	SEELYVILLE	COAL	6.5	640.0

MAPID: 04500974000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 32 QUARTERS/FOOTAGES: SE SE SW  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.658951 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.521188 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 653.0 LOGGED (FT.): 609.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
417.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	236.0	
363.0	CARBONDALE	DANVILLE	COAL	4.0	290.0	
260.0	CARBONDALE	HERRIN	COAL	2.5	393.0	
242.0	CARBONDALE	SPRINGFIELD	COAL	2.5	411.0	
189.0	CARBONDALE	HOUCHIN CREEK	COAL	-	464.0	
89.0	CARBONDALE	COLCHESTER	COAL	-	564.0	
49.0	SPOON	SEELYVILLE	COAL	5.0	604.0	

MAPID: 04501018000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 32 QUARTERS/FOOTAGES: 1395' S line, 800' W line of SE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.65492 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.524134 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 628.0 LOGGED (FT.): 586.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
362.0	CARBONDALE	DANVILLE	COAL	4.5	266.0	
251.0	CARBONDALE	HERRIN	COAL	3.0	377.0	
238.0	CARBONDALE	SPRINGFIELD	COAL	2.5	390.0	
178.0	CARBONDALE	HOUCHIN CREEK	COAL	-	450.0	
76.0	CARBONDALE	COLCHESTER	COAL	-	552.0	
48.0	SPOON	SEELYVILLE	COAL	6.0	580.0	



MAPID: 04500329000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 33 QUARTERS/FOOTAGES: NE NW SW  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.644877 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.526591 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 709.0 LOGGED (FT.): 705.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
359.0	MODESTO	WEST FRANKLIN	LIMESTONE	3.0	350.0	
309.0	CARBONDALE	DANVILLE	COAL	-	400.0	
213.0	CARBONDALE	HERRIN	COAL	-	496.0	
192.0	CARBONDALE	SPRINGFIELD	COAL	3.0	517.0	
139.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	570.0	
27.0	CARBONDALE	COLCHESTER	COAL	-	682.0	
9.0	SPOON	SEELYVILLE	COAL	5.0	700.0	

MAPID: 04500899000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 33 QUARTERS/FOOTAGES: 230' N line, 330' W line of SW NE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.637815 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.53046 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 699.0 LOGGED (FT.): 712.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
357.0	MODESTO	WEST FRANKLIN	LIMESTONE	-	342.0	
300.0	CARBONDALE	DANVILLE	COAL	4.0	399.0	
199.0	CARBONDALE	HERRIN	COAL	-	500.0	
180.0	CARBONDALE	SPRINGFIELD	COAL	3.0	519.0	
121.0	CARBONDALE	HOUCHIN CREEK	COAL	-	578.0	
10.0	CARBONDALE	COLCHESTER	COAL	-	689.0	
-7.0	SPOON	SEELYVILLE	COAL	6.0	706.0	

MAPID: 04500330000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 34 QUARTERS/FOOTAGES: NE NE SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.612067 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.526752 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 684.0 LOGGED (FT.): 660.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
388.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	296.0
336.0	CARBONDALE	DANVILLE	COAL	5.0	348.0
229.0	CARBONDALE	HERRIN	COAL	-	455.0
212.0	CARBONDALE	SPRINGFIELD	COAL	-	472.0
164.0	CARBONDALE	HOUCHIN CREEK	COAL	-	520.0
47.0	CARBONDALE	COLCHESTER	COAL	-	637.0
30.0	SPOON	SEELYVILLE	COAL	6.0	654.0

MAPID: 04500942000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 36 QUARTERS/FOOTAGES: 600' S line, 500' W line of NE NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.576545 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.5331 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 562.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
422.0	MODESTO	WEST FRANKLIN	LIMESTONE	4.0	188.0
363.0	CARBONDALE	DANVILLE	COAL	5.0	247.0
256.0	CARBONDALE	HERRIN	COAL	2.5	354.0
233.0	CARBONDALE	SPRINGFIELD	COAL	3.5	377.0
181.0	CARBONDALE	HOUCHIN CREEK	COAL	-	429.0
80.0	CARBONDALE	COLCHESTER	COAL	-	530.0
54.0	SPOON	SEELYVILLE	COAL	6.0	556.0

MAPID: 04501021000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 36 QUARTERS/FOOTAGES: 2100' S line, 1925' E line of SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.580548 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.52634 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 572.0 LOGGED (FT.): 512.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: SPLT #7?, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
378.0	CARBONDALE	DANVILLE	COAL	4.5	194.0
266.0	CARBONDALE	HERRIN	COAL	2.5	306.0
244.0	CARBONDALE	SPRINGFIELD	COAL	3.0	328.0
192.0	CARBONDALE	HOUCHIN CREEK	COAL	-	380.0
88.0	CARBONDALE	COLCHESTER	COAL	-	484.0
66.0	SPOON	SEELYVILLE	COAL	6.0	506.0

MAPID: 04501023000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 11W SECTION: 36 QUARTERS/FOOTAGES: 1030' S line, 800' W line of SW  
 QUADRANGLE: SANDFORD LONGITUDE: -87.589518 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.52332 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 645.0 LOGGED (FT.): 556.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
407.0	CARBONDALE	DANVILLE	COAL	5.5	238.0
298.0	CARBONDALE	HERRIN	COAL	2.5	347.0
279.0	CARBONDALE	SPRINGFIELD	COAL	3.5	366.0
230.0	CARBONDALE	HOUCHIN CREEK	COAL	-	415.0
120.0	CARBONDALE	COLCHESTER	COAL	-	525.0
95.0	SPOON	SEELYVILLE	COAL	6.0	550.0

MAPID: 04500025000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR    TWP/RNG: 13N 12W    SECTION: 11    QUARTERS/FOOTAGES: 4750' S line, 475' E line

QUADRANGLE: PARIS SOUTH    LONGITUDE: -87.70464    GEOLOGIST: R. SMITH

CONFIDENTIAL: N    LATITUDE: 39.601686    DATE COLLECTED:

SURFACE ELEVATION (FT.): 742.6    LOGGED (FT.): 637.0    LOG TYPE: Drillers Log

SOURCE: LINEBARGER ?    WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
742.6			UNCONSOLIDATED	159.0	0.0	
583.6	MATTOON		LIMESTONE	2.0	159.0	
581.6	MATTOON		SHALE	38.0	161.0	
543.6	BOND	MILLERSVILLE	LIMESTONE	4.0	199.0	
539.6	BOND	MILLERSVILLE	GRAY SHALE	10.0	203.0	
529.6	BOND	MILLERSVILLE	LIMESTONE	4.0	213.0	
525.6	BOND	MILLERSVILLE	SHALE	13.0	217.0	
512.6	BOND	MILLERSVILLE	LIMESTONE	10.0	230.0	
502.6	BOND		SHALE	3.0	240.0	
499.6	BOND		COAL	1.5	243.0	
498.1	BOND		UNDERCLAY	0.8	244.5	
497.3	BOND		COAL	1.5	245.3	
495.8	BOND		SHALE	53.3	246.8	INCLUDING 3' BL. SLATE AT BASE
442.6	BOND		UNDERCLAY	5.0	300.0	
437.6	BOND		BLACK SHALE	3.0	305.0	
434.6	BOND		GRAY SHALE	14.5	308.0	
420.1	BOND		BLACK SHALE	1.0	322.5	
419.1	BOND		COAL	1.0	323.5	
418.1	BOND		UNDERCLAY	1.0	324.5	
417.1	BOND		COAL	1.0	325.5	
416.1	BOND		UNDERCLAY	4.5	326.5	
411.6	MODESTO		SHALE	38.0	331.0	
373.6	MODESTO		DARK SHALE	4.0	369.0	
369.6	MODESTO		COAL	0.5	373.0	
369.1	MODESTO		UNDERCLAY	3.5	373.5	
365.6	MODESTO		GRAY SHALE	88.0	377.0	
277.6	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	465.0	
272.6	MODESTO		SHALE	58.0	470.0	
214.6	CARBONDALE	DANVILLE	COAL	2.8	528.0	
211.8	CARBONDALE		SHALE	63.2	530.8	
148.6	CARBONDALE	ENERGY	SANDSTONE	6.0	594.0	
142.6	CARBONDALE	ENERGY	SHALE	32.0	600.0	
110.6	CARBONDALE	HERRIN	COAL	4.3	632.0	
106.3	CARBONDALE		UNDERCLAY	0.7	636.3	

MAPID: 04500025000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 12W SECTION: 11 QUARTERS/FOOTAGES: 4750' S line, 475' E line

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.70464 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.601686 DATE COLLECTED:

SURFACE ELEVATION (FT.): 743.0 LOGGED (FT.): 636.3 LOG TYPE: Drillers Log

SOURCE: WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
278.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	465.0
215.0	CARBONDALE	DANVILLE	COAL	2.9	528.0
111.0	CARBONDALE	HERRIN	COAL	4.3	632.0

MAPID: 04500347000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 12W SECTION: 24 QUARTERS/FOOTAGES: 990' N line, 332' W line of NE NE

QUADRANGLE: PARIS SOUTH LONGITUDE: -87.686633 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.571884 DATE COLLECTED:

SURFACE ELEVATION (FT.): 734.0 LOGGED (FT.): 806.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
304.0	MODESTO	WEST FRANKLIN	LIMESTONE	8.0	430.0
244.0	CARBONDALE	DANVILLE	COAL	2.0	490.0
138.0	CARBONDALE	HERRIN	COAL	-	596.0
114.0	CARBONDALE	SPRINGFIELD	COAL	-	620.0
59.0	CARBONDALE	HOUCHIN CREEK	COAL	-	675.0
-39.0	CARBONDALE	COLCHESTER	COAL	-	773.0
-66.0	SPOON	SEELYVILLE	COAL	6.0	800.0

MAPID: 04500350000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 12W SECTION: 27 QUARTERS/FOOTAGES: NW SE NE  
 QUADRANGLE: PARIS SOUTH LONGITUDE: -87.72321 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.554622 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 695.0 LOGGED (FT.): 814.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
243.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	452.0
189.0	CARBONDALE	DANVILLE	COAL	-	506.0
74.0	CARBONDALE	HERRIN	COAL	2.0	621.0
56.0	CARBONDALE	SPRINGFIELD	COAL	2.0	639.0
1.0	CARBONDALE	HOUCHIN CREEK	COAL	-	694.0
-84.0	CARBONDALE	COLCHESTER	COAL	-	779.0
-115.0	SPOON	SEELYVILLE	COAL	4.0	810.0

MAPID: 04500994000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 13W SECTION: 3 QUARTERS/FOOTAGES: 660' N line, 660' E line of NW SW  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.850164 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.605686 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 696.0 LOGGED (FT.): 356.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
472.0	CARBONDALE	HERRIN	COAL	3.5	224.0
453.0	CARBONDALE	SPRINGFIELD	COAL	-	243.0
408.0	CARBONDALE	HOUCHIN CREEK	COAL	-	288.0
340.0	CARBONDALE	COLCHESTER	COAL	-	356.0

MAPID: 04500393000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 13W SECTION: 4 QUARTERS/FOOTAGES: NE SE NW  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.863156 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.609912 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 690.0 LOGGED (FT.): 364.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
450.0	CARBONDALE	HERRIN	COAL	3.0	240.0
431.0	CARBONDALE	SPRINGFIELD	COAL	-	259.0
391.0	CARBONDALE	HOUCHIN CREEK	COAL	-	299.0
326.0	CARBONDALE	COLCHESTER	COAL	-	364.0

MAPID: 04500397000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 13W SECTION: 4 QUARTERS/FOOTAGES: SE SE SE  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.853766 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.600886 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 693.0 LOGGED (FT.): 347.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
478.0	CARBONDALE	HERRIN	COAL	2.5	215.0	
460.0	CARBONDALE	SPRINGFIELD	COAL	-	233.0	
423.0	CARBONDALE	HOUCHIN CREEK	COAL	-	270.0	
346.0	CARBONDALE	COLCHESTER	COAL	-	347.0	

MAPID: 04501258000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 13W SECTION: 8 QUARTERS/FOOTAGES: SW NW NE  
 QUADRANGLE: KANSAS LONGITUDE: -87.879496 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.596598 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 690.0 LOGGED (FT.): 372.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
536.0	CARBONDALE	DANVILLE	COAL	-	154.0	
436.0	CARBONDALE	HERRIN	COAL	2.0	254.0	
421.0	CARBONDALE	SPRINGFIELD	COAL	-	269.0	
384.0	CARBONDALE	HOUCHIN CREEK	COAL	-	306.0	
318.0	CARBONDALE	COLCHESTER	COAL	-	372.0	

MAPID: 04500432000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 13W SECTION: 10 QUARTERS/FOOTAGES: SW NW NE  
 QUADRANGLE: GRANDVIEW LONGITUDE: -87.841914 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.597594 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 701.0 LOGGED (FT.): 362.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
463.0	CARBONDALE	HERRIN	COAL	2.0	238.0	
448.0	CARBONDALE	SPRINGFIELD	COAL	-	253.0	
407.0	CARBONDALE	HOUCHIN CREEK	COAL	-	294.0	
339.0	CARBONDALE	COLCHESTER	COAL	-	362.0	

**MAPID:** 04500916000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 13W    **SECTION:** 17    **QUARTERS/FOOTAGES:** SW NW NE  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.878963    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.581945    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 693.0    **LOGGED (FT.):** 391.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
530.0	CARBONDALE	DANVILLE	COAL	-	163.0
421.0	CARBONDALE	HERRIN	COAL	1.5	272.0
404.0	CARBONDALE	SPRINGFIELD	COAL	1.5	289.0
354.0	CARBONDALE	HOUCHIN CREEK	COAL	-	339.0
302.0	CARBONDALE	COLCHESTER	COAL	-	391.0

**MAPID:** 04500929000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 13W    **SECTION:** 18    **QUARTERS/FOOTAGES:** 990' N line, 330' W line  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.905943    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.58129    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 700.0    **LOGGED (FT.):** 376.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.0	CARBONDALE	DANVILLE	COAL	-	169.0
419.0	CARBONDALE	HERRIN	COAL	2.0	281.0
404.0	CARBONDALE	SPRINGFIELD	COAL	1.5	296.0
368.0	CARBONDALE	HOUCHIN CREEK	COAL	-	332.0
324.0	CARBONDALE	COLCHESTER	COAL	-	376.0

**MAPID:** 04522096000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 13N 14W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 415' N line, 1320' E line  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.912622    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.612066    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):** 682.0    **LOGGED (FT.):** 250.6    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY PG-31    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
682.0			UNCONSOLIDATED	50.0	0.0
632.0			ROCK	197.0	50.0
435.0	CARBONDALE	HERRIN	COAL	3.6	247.0



MAPID: 04522096000C    VERSION: 2

PROJECT: CONF

COUNTY: EDGAR    TWP/RNG: 13N 14W    SECTION: 1    QUARTERS/FOOTAGES: 415' N line, 1320' E line

QUADRANGLE: KANSAS    LONGITUDE: -87.912622    GEOLOGIST: LOG BOOK

CONFIDENTIAL: N    LATITUDE: 39.612066    DATE COLLECTED: 10 / 0 / 1971

SURFACE ELEVATION (FT.): 682.0    LOGGED (FT.): 472.0    LOG TYPE: Electric Log

SOURCE: HYDROCARBON SURVEY    PG-31    WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

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MAPID: 04522346000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 2 QUARTERS/FOOTAGES:

QUADRANGLE: KANSAS LONGITUDE: -87.93627 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.605752 DATE COLLECTED: 8 / 9 / 1989

SURFACE ELEVATION (FT.): LOGGED (FT.): 255.4 LOG TYPE: Multiple log types

SOURCE: AMCO-IL #AM-8921A WELL TYPE: Coal Test

COMMENT: DRILLERS LOG&CORE 1069115.13N-611071.53E

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			CLAY	1.5	0.0	UNITS 1 THRU 22 FROM DRILLER'S LOG; BRN
-			CLAY	11.5	1.5	TAN
-			CLAY	40.0	13.0	GRY
-	MODESTO		CALCAREOUS SANDSTONE	2.0	53.0	
-	MODESTO		SHALE	5.0	55.0	TAN
-	MODESTO		SHALE	17.0	60.0	GRY
-	MODESTO		SHALE/COAL	3.0	77.0	
-	MODESTO		SHALE	3.5	80.0	GRY
-	MODESTO	WEST FRANKLIN	LIMESTONE	2.5	83.5	
-	MODESTO		SHALE	8.0	86.0	GRY
-	MODESTO		SHALE	6.0	94.0	MIX
-	MODESTO		SANDSTONE	3.0	100.0	
-	MODESTO		GREEN SHALE	11.0	103.0	
-	MODESTO		SHALE	4.0	114.0	
-	MODESTO		SHALE	7.0	118.0	GRY
-	CARBONDALE	DANVILLE	COAL	2.0	125.0	
-	CARBONDALE		SHALE	9.0	127.0	GRY
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	136.0	
-	CARBONDALE	ENERGY	SANDSTONE	33.0	139.0	
-	CARBONDALE	ENERGY	SHALE	24.0	172.0	GRY
-	CARBONDALE	ENERGY	SANDSTONE	22.0	196.0	
-	CARBONDALE	ENERGY	SHALE	22.0	218.0	GRY
-	CARBONDALE	ENERGY	SHALE	0.3	240.0	UNITS 23 THRU 36 FROM CORE; GRY
-	CARBONDALE	ENERGY	SIDERITE	0.1	240.3	BRN
-	CARBONDALE	ENERGY	SHALE	0.9	240.4	GRY
-	CARBONDALE	ENERGY	SIDERITE	0.1	241.3	BRN
-	CARBONDALE	ENERGY	SHALE	4.4	241.4	W/SIDERITE BANDS; GRY
-	CARBONDALE	ENERGY	CARBONACEOUS SHALE	0.1	245.8	
-	CARBONDALE	HERRIN	COAL	2.6	245.9	RASHY LENSES
-	CARBONDALE	HERRIN	SHALY COAL	0.1	248.5	
-	CARBONDALE	HERRIN	COAL	1.1	248.6	
-	CARBONDALE	HERRIN	SILTY SHALE	0.0	249.7	
-	CARBONDALE	HERRIN	COAL	1.4	249.7	
-	CARBONDALE		SHALE	0.0	251.1	GRY
-	CARBONDALE		SHALE	0.6	251.2	SLICKENSIDED; GRY
-	CARBONDALE		CALCAREOUS SHALE	3.6	251.8	W/LS NODULES SLICKENSIDED

MAPID: 04522351000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 2 QUARTERS/FOOTAGES:

QUADRANGLE: KANSAS LONGITUDE: -87.93627 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.605752 DATE COLLECTED: 8 / 9 / 1989

SURFACE ELEVATION (FT.): 677.0 LOGGED (FT.): 259.0 LOG TYPE: Gamma Ray Density

SOURCE: AMCO-IL #AM-8921 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
677.0			UNCONSOLIDATED	62.0	0.0	
615.0	MODESTO		SHALE & SILTSTONE	62.0	62.0	
553.0	CARBONDALE	DANVILLE	COAL	3.0	124.0	
550.0	CARBONDALE		SHALE & SILTSTONE	8.5	127.0	
541.5	CARBONDALE	BANKSTON FORK	LIMESTONE	3.5	135.5	
538.0	CARBONDALE	ENERGY	SHALE & SILTSTONE	6.0	139.0	
532.0	CARBONDALE	ENERGY	SANDSTONE	4.5	145.0	
527.5	CARBONDALE	ENERGY	SILTSTONE	13.5	149.5	
514.0	CARBONDALE	ENERGY	SILTY SHALE	11.0	163.0	
503.0	CARBONDALE	ENERGY	SHALE	13.5	174.0	
489.5	CARBONDALE	ENERGY	SANDY SILTSTONE	2.5	187.5	
487.0	CARBONDALE	ENERGY	SILTY SHALE	5.0	190.0	
482.0	CARBONDALE	ENERGY	SANDY SILTSTONE	11.0	195.0	
471.0	CARBONDALE	ENERGY	SHALE	3.0	206.0	
468.0	CARBONDALE	ENERGY	SANDSTONE	8.0	209.0	
460.0	CARBONDALE	ENERGY	SHALE	28.3	217.0	W/SIDERITE
431.7	CARBONDALE	HERRIN	COAL	1.2	245.3	EXPANDED SCALE LOG 235-255
430.5	CARBONDALE	HERRIN	SHALE	0.1	246.5	
430.4	CARBONDALE	HERRIN	COAL	1.4	246.6	
429.0	CARBONDALE	HERRIN	SHALE	0.2	248.0	
428.9	CARBONDALE	HERRIN	COAL	1.3	248.1	
427.6	CARBONDALE		UNDERCLAY	9.7	249.4	

MAPID: 04500786000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 3 QUARTERS/FOOTAGES: SE NE NW

QUADRANGLE: KANSAS LONGITUDE: -87.95656 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.610064 DATE COLLECTED:

SURFACE ELEVATION (FT.): 665.0 LOGGED (FT.): 300.0 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: #6 CUTOUT?, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
565.0	CARBONDALE	DANVILLE	COAL	-	100.0	
430.0	CARBONDALE	HERRIN	COAL	3.0	235.0	
365.0	CARBONDALE	HOUCHIN CREEK	COAL	-	300.0	

MAPID: 04500503000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 10 QUARTERS/FOOTAGES: SE NW NW  
 QUADRANGLE: KANSAS LONGITUDE: -87.960917 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.595471 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 680.0 LOGGED (FT.): 328.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: #6 OUT?, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
530.0	CARBONDALE	DANVILLE	COAL	-	150.0
403.0	CARBONDALE	HERRIN	COAL	4.0	277.0
352.0	CARBONDALE	HOUCHIN CREEK	COAL	-	328.0

MAPID: 04522097000C VERSION: 1

PROJECT: ISGS96

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 11 QUARTERS/FOOTAGES: 60' S line, 1405' W line  
 QUADRANGLE: KANSAS LONGITUDE: -87.940042 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.583874 DATE COLLECTED: 0 / 0 / 1976  
 SURFACE ELEVATION (FT.): 691.0 LOGGED (FT.): 289.7 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY PG-30 WELL TYPE: Coal Test  
 COMMENT: DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
691.0			UNCONSOLIDATED	78.0	0.0
613.0			ROCK	208.0	78.0
405.0	CARBONDALE	HERRIN	COAL	3.7	286.0

MAPID: 04522097000C VERSION: 2

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 13N 14W SECTION: 11 QUARTERS/FOOTAGES: 60' S line, 1405' W line  
 QUADRANGLE: KANSAS LONGITUDE: -87.940042 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.583874 DATE COLLECTED: 10 / 0 / 1971  
 SURFACE ELEVATION (FT.): 691.0 LOGGED (FT.): 452.0 LOG TYPE: Electric Log  
 SOURCE: HYDROCARBON SURVEY PG-30 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 04500209000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 14W

SECTION: 15

QUARTERS/FOOTAGES: NE SE NW

QUADRANGLE: KANSAS

LONGITUDE: -87.955604

GEOLOGIST: C TREWORY

CONFIDENTIAL: N

LATITUDE: 39.579019

DATE COLLECTED:

SURFACE ELEVATION (FT.): 690.0

LOGGED (FT.): 408.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
498.0	CARBONDALE	DANVILLE	COAL	-	192.0	
391.0	CARBONDALE	HERRIN	COAL	-	299.0	
372.0	CARBONDALE	SPRINGFIELD	COAL	-	318.0	
336.0	CARBONDALE	HOUCHIN CREEK	COAL	-	354.0	
282.0	CARBONDALE	COLCHESTER	COAL	-	408.0	

MAPID: 04500510000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 13N 14W

SECTION: 27

QUARTERS/FOOTAGES: 660' N line, 660' E line of NW NW

QUADRANGLE: KANSAS

LONGITUDE: -87.960536

GEOLOGIST: C TREWORY

CONFIDENTIAL: N

LATITUDE: 39.552415

DATE COLLECTED:

SURFACE ELEVATION (FT.): 705.0

LOGGED (FT.): 360.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
484.0	CARBONDALE	DANVILLE	COAL	2.0	221.0	
361.0	CARBONDALE	HERRIN	COAL	-	344.0	
349.0	CARBONDALE	SPRINGFIELD	COAL	4.0	356.0	

MAPID: 04500035000C VERSION: 1

PROJECT: NCRDS87

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 4 QUARTERS/FOOTAGES: SW NW

QUADRANGLE: ST. BERNICE LONGITUDE: -87.537407 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.688812 DATE COLLECTED:

SURFACE ELEVATION (FT.): LOGGED (FT.): 266.0 LOG TYPE: Drillers Log

SOURCE: MIAMI COAL CO. WELL TYPE: Coal Test

COMMENT: IMPRECISE LOCATION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	9.0	0.0	
-	CARBONDALE		SHALE	15.8	9.0	
-	CARBONDALE	DANVILLE	COAL	6.0	24.8	
-	CARBONDALE		UNDERCLAY	2.3	30.8	
-	CARBONDALE		SHALE	97.0	33.0	MOST OF THIS UNIT IS ENERGY SHALE
-	CARBONDALE	ENERGY	BLACK SHALE	3.5	130.0	BASE OF ENERGY SHALE
-	CARBONDALE	HERRIN	COAL	1.4	133.5	
-	CARBONDALE		UNDERCLAY	1.1	134.9	
-	CARBONDALE		UNCLASSIFIED	7.0	136.0	
-	CARBONDALE		SHALE	7.0	143.0	
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.8	150.0	
-	CARBONDALE	SPRINGFIELD	COAL	3.3	152.8	
-	CARBONDALE		UNDERCLAY	0.9	156.1	
-	CARBONDALE		SANDSTONE/SHALE	17.0	157.0	
-	CARBONDALE		SHALE	51.2	174.0	
-	CARBONDALE	EXCELLO	BLACK SHALE	5.5	225.2	
-	CARBONDALE		UNDERCLAY	1.3	230.7	
-	CARBONDALE		SHALE	24.0	232.0	
-	CARBONDALE		BLACK SHALE	4.4	256.0	
-	CARBONDALE		GRAY SHALE	1.0	260.4	
-	CARBONDALE	SURVANT	COAL	3.1	261.4	
-	CARBONDALE		CALCAREOUS SHALE	1.5	264.5	

MAPID: 04500035000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 4 QUARTERS/FOOTAGES: SW NW

QUADRANGLE: ST. BERNICE LONGITUDE: -87.537407 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.688812 DATE COLLECTED:

SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 233.0 LOG TYPE: Drillers Log

SOURCE: IND IV 265'3.1, GOOD LOG WELL TYPE: Coal Test

COMMENT: IND IV 265'3.1, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
523.0	CARBONDALE	DANVILLE	COAL	6.0	27.0	
415.0	CARBONDALE	HERRIN	COAL	1.5	135.0	
395.0	CARBONDALE	SPRINGFIELD	COAL	3.3	155.0	
317.0	CARBONDALE	HOUCHIN CREEK	COAL	-	233.0	

MAPID: 04500165000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 6 QUARTERS/FOOTAGES: 2025' S line, 1275' E line

QUADRANGLE: ST. BERNICE LONGITUDE: -87.562871 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.685342 DATE COLLECTED:

SURFACE ELEVATION (FT.): 622.0 LOGGED (FT.): 493.5 LOG TYPE: Drillers Log

SOURCE: INTERSTATE COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
622.0			UNCONSOLIDATED	18.0	0.0	
604.0	MODESTO		SANDSTONE	15.0	18.0	
589.0	MODESTO		SHALE	56.0	33.0	
533.0	MODESTO		BLACK SHALE	1.0	89.0	
532.0	MODESTO		SHALE	82.0	90.0	
450.0	MODESTO		UNCLASSIFIED	3.0	172.0	
447.0	CARBONDALE	DANVILLE	COAL	4.0	175.0	
443.0	CARBONDALE		UNDERCLAY	5.0	179.0	
438.0	CARBONDALE	ENERGY	SANDSTONE	59.0	184.0	
379.0	CARBONDALE	ENERGY	GRAY SHALE	39.0	243.0	
340.0	CARBONDALE	ENERGY	BLACK SHALE	1.4	282.0	
338.6	CARBONDALE	HERRIN	COAL	0.6	283.4	
338.0	CARBONDALE		GRAY SHALE	2.0	284.0	
336.0	CARBONDALE		SANDSTONE	2.0	286.0	
334.0	CARBONDALE		SHALE	10.5	288.0	
323.5	CARBONDALE		BLACK SHALE	1.0	298.5	
322.5	CARBONDALE		UNCLASSIFIED	1.5	299.5	
321.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	301.0	
320.0	CARBONDALE	SPRINGFIELD	COAL	4.3	302.0	
315.7	CARBONDALE		UNDERCLAY	4.7	306.3	
311.0	CARBONDALE		SANDSTONE	2.0	311.0	
309.0	CARBONDALE		SHALE	76.0	313.0	
233.0	CARBONDALE		BLACK SHALE	5.0	389.0	
228.0	CARBONDALE		CLAYSTONE	4.0	394.0	
224.0	CARBONDALE		SHALE	15.5	398.0	SLATE
208.5	CARBONDALE	SURVANT	COAL	3.7	413.5	
204.8	CARBONDALE		SHALE	37.8	417.2	
167.0	CARBONDALE		BLACK SHALE	2.0	455.0	
165.0	CARBONDALE		COAL	1.0	457.0	
164.0	CARBONDALE		UNDERCLAY	2.0	458.0	
162.0	CARBONDALE		SANDSTONE	9.0	460.0	
153.0	CARBONDALE		GRAY SHALE	2.0	469.0	
151.0	CARBONDALE	COLCHESTER	COAL	1.0	471.0	
150.0	SPOON		UNDERCLAY	4.0	472.0	
146.0	SPOON		SHALE	4.0	476.0	
142.0	SPOON	PALZO	SANDSTONE	2.0	480.0	
140.0	SPOON		GRAY SHALE	4.6	482.0	
135.4	SPOON	SEELYVILLE	COAL	6.2	486.6	
129.2	SPOON		UNDERCLAY	0.8	492.8	

128.5 SPOON

UNCLASSIFIED

0.0 493.5

MAPID: 04500165000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 6 QUARTERS/FOOTAGES: 2025' S line, 1275' E line

QUADRANGLE: ST. BERNICE LONGITUDE: -87.562871 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.685342 DATE COLLECTED:

SURFACE ELEVATION (FT.): 622.0 LOGGED (FT.): 493.2 LOG TYPE: Drillers Log

SOURCE: WELL TYPE: Coal Test

COMMENT: IND IV 413 3.7, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
447.0	CARBONDALE	DANVILLE	COAL	4.0	175.0
339.0	CARBONDALE	HERRIN	COAL	0.6	283.0
320.0	CARBONDALE	SPRINGFIELD	COAL	4.3	302.0
233.0	CARBONDALE	HOUCHIN CREEK	COAL	-	389.0
151.0	CARBONDALE	COLCHESTER	COAL	1.0	471.0
135.0	SPOON	SEELYVILLE	COAL	6.2	487.0



MAPID: 04500036000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR    TWP/RNG: 14N 10W    SECTION: 9    QUARTERS/FOOTAGES: SW SW

QUADRANGLE: ST. BERNICE    LONGITUDE: -87.536789    GEOLOGIST: R. SMITH

CONFIDENTIAL: N    LATITUDE: 39.666963    DATE COLLECTED:

SURFACE ELEVATION (FT.): 620.0    LOGGED (FT.): 397.0    LOG TYPE: Drillers Log

SOURCE: MIAMI COAL CO.    WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
620.0			UNCONSOLIDATED	26.0	0.0	
594.0	MODESTO		SANDSTONE	38.0	26.0	
556.0	MODESTO		BLUE SHALE	7.8	64.0	
548.2	MODESTO		SHALE/COAL	1.2	71.8	
547.0	MODESTO		UNDERCLAY	2.0	73.0	
545.0	MODESTO		SHALE	79.2	75.0	
465.8	MODESTO		BLACK SHALE	1.3	154.2	
464.5	CARBONDALE	DANVILLE	COAL	4.5	155.5	
460.0	CARBONDALE		UNDERCLAY	2.0	160.0	
458.0	CARBONDALE	ENERGY	SHALE	96.0	162.0	
362.0	CARBONDALE	ENERGY	BLACK SHALE	3.0	258.0	
359.0	CARBONDALE	ENERGY	CLAYSTONE	1.0	261.0	
358.0	CARBONDALE	ENERGY	GRAY SHALE	3.0	262.0	SAND SALTE, GRAY
355.0	CARBONDALE	ENERGY	BLACK SHALE	3.0	265.0	
352.0	CARBONDALE	HERRIN	COAL	0.8	268.0	
351.2	CARBONDALE		UNDERCLAY	1.3	268.8	
350.0	CARBONDALE		SAND	3.0	270.0	
347.0	CARBONDALE		BLUE SHALE	12.0	273.0	SLATE
335.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	285.0	SLATE
333.5	CARBONDALE	SPRINGFIELD	COAL	4.9	286.5	
328.6	CARBONDALE		UNDERCLAY	0.6	291.4	
328.0	CARBONDALE		SHALE	51.0	292.0	
277.0	CARBONDALE	EXCELLO	BLACK SHALE	5.0	343.0	
272.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	348.0	
271.0	CARBONDALE		UNDERCLAY	4.0	349.0	
267.0	CARBONDALE		SANDSTONE	32.0	353.0	
235.0	CARBONDALE		BROWN SHALE	2.8	385.0	
232.2	CARBONDALE		SHALE/COAL	1.0	387.8	
231.2	CARBONDALE		BLUE SHALE	1.3	388.8	SLATE
230.0	CARBONDALE		BLACK SHALE	1.0	390.0	SLATE
229.0	CARBONDALE		BLUE SHALE	1.0	391.0	SLATE
228.0	CARBONDALE	SURVANT	COAL	4.2	392.0	
223.8	CARBONDALE		UNDERCLAY	0.8	396.2	

MAPID: 04500036000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 9 QUARTERS/FOOTAGES: SW SW

QUADRANGLE: ST. BERNICE LONGITUDE: -87.536789 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.666963 DATE COLLECTED:

SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 349.0 LOG TYPE: Drillers Log

SOURCE: WELL TYPE: Coal Test

COMMENT: INDIV 392' 4.1, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
454.0	CARBONDALE	DANVILLE	COAL	4.5	156.0
342.0	CARBONDALE	HERRIN	COAL	0.8	268.0
323.0	CARBONDALE	SPRINGFIELD	COAL	4.9	287.0
262.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	348.0

MAPID: 04500037000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 9 QUARTERS/FOOTAGES: SW NW

QUADRANGLE: ST. BERNICE LONGITUDE: -87.537034 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.674198 DATE COLLECTED:

SURFACE ELEVATION (FT.): LOGGED (FT.): 378.0 LOG TYPE: Drillers Log

SOURCE: MIAMI COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	28.0	0.0	
-	MODESTO		BLUE SHALE	16.0	28.0	
-	MODESTO		CLAYSTONE	2.0	44.0	
-	MODESTO		BLUE SHALE	85.5	46.0	
-	MODESTO		BLACK SHALE	1.5	131.5	
-	CARBONDALE	DANVILLE	COAL	2.8	133.0	
-	CARBONDALE		BLACK SHALE	1.2	135.8	
-	CARBONDALE		CLAYSTONE	2.0	137.0	
-	CARBONDALE	ENERGY	SHALE	89.0	139.0	SLATE
-	CARBONDALE	ENERGY	BLACK SHALE	1.0	228.0	
-	CARBONDALE	ENERGY	BLUE SHALE	9.3	229.0	SLATE
-	CARBONDALE	ENERGY	BLACK SHALE	1.0	238.3	
-	CARBONDALE	HERRIN	COAL	2.2	239.3	
-	CARBONDALE		BLACK SHALE	1.6	241.4	
-	CARBONDALE		SHALE	14.0	243.0	INCLUDES BLUE SLATE
-	CARBONDALE	TURNER MINE	BLACK SHALE	2.3	257.0	
-	CARBONDALE	SPRINGFIELD	COAL	4.5	259.3	
-	CARBONDALE		SHALE	56.3	263.8	INCLUDES BLUE SLATE
-	CARBONDALE		BLACK SHALE	4.5	320.0	
-	CARBONDALE		BLUE SHALE	0.5	324.5	SLATE
-	CARBONDALE		SANDSTONE	5.0	325.0	
-	CARBONDALE		SHALE	10.0	330.0	INCLUDES BLUE SLATE
-	CARBONDALE		SANDSTONE/SHALE	14.0	340.0	
-	CARBONDALE		SANDSTONE	18.3	354.0	
-	CARBONDALE	SURVANT	COAL	3.5	372.3	
-	CARBONDALE		UNDERCLAY	2.2	375.8	

MAPID: 04500513000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 17 QUARTERS/FOOTAGES: 165' S line, 990' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.542282 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.651127 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 623.0 LOGGED (FT.): 467.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: INDIV 400 4.5, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
458.0	CARBONDALE	DANVILLE	COAL	5.0	165.0
341.0	CARBONDALE	HERRIN	COAL	1.0	282.0
319.0	CARBONDALE	SPRINGFIELD	COAL	4.5	304.0
257.0	CARBONDALE	HOUCHIN CREEK	COAL	-	366.0
181.0	CARBONDALE	COLCHESTER	COAL	-	442.0
161.0	SPOON	SEELYVILLE	COAL	5.0	462.0

MAPID: 04500514000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 18 QUARTERS/FOOTAGES: NW NE SE  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.561101 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.657063 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 513.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: INDIV 450 4.5, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
422.0	CARBONDALE	DANVILLE	COAL	4.5	208.0
300.0	CARBONDALE	HERRIN	COAL	3.5	330.0
283.0	CARBONDALE	SPRINGFIELD	COAL	5.0	347.0
220.0	CARBONDALE	HOUCHIN CREEK	COAL	-	410.0
141.0	CARBONDALE	COLCHESTER	COAL	-	489.0
122.0	SPOON	SEELYVILLE	COAL	5.0	508.0

MAPID: 04500120000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 20 QUARTERS/FOOTAGES: NE NW NE  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.544538 GEOLOGIST: R. SMITH  
 CONFIDENTIAL: N LATITUDE: 39.649771 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 615.0 LOGGED (FT.): 430.0 LOG TYPE: Drillers Log  
 SOURCE: PYRAMID COAL CO. (VICTORY MINE) WELL TYPE: Coal Test  
 COMMENT: BETWEEN PRONGS TO CREEK FORK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.0			UNCONSOLIDATED	5.0	0.0	
610.0	MODESTO		BLUE SHALE	44.0	5.0	
566.0	MODESTO		UNCLASSIFIED	1.0	49.0	"JACK"
565.0	MODESTO		CLAYSTONE	4.0	50.0	
561.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.5	54.0	
559.5	MODESTO		BLUE SHALE	71.5	55.5	
488.0	CARBONDALE	DANVILLE	SHALE/COAL	1.8	127.0	*JACK AND COAL
486.2	CARBONDALE	DANVILLE	COAL	3.3	128.8	
482.9	CARBONDALE	DANVILLE	ROCK	0.2	132.1	BAND
482.7	CARBONDALE	DANVILLE	COAL	0.8	132.3	
481.9	CARBONDALE		UNDERCLAY	3.9	133.1	
478.0	CARBONDALE		BLUE SHALE	4.0	137.0	
474.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.7	141.0	
472.3	CARBONDALE	ENERGY	SHALE	23.3	142.7	
449.0	CARBONDALE	ENERGY	SANDSTONE	7.0	166.0	
442.0	CARBONDALE	ENERGY	BLUE SHALE	69.5	173.0	
372.5	CARBONDALE	ENERGY	BLACK SHALE	1.0	242.5	
371.5	CARBONDALE	HERRIN	COAL	1.5	243.5	
370.0	CARBONDALE		UNDERCLAY	2.5	245.0	
367.5	CARBONDALE		BLUE SHALE	1.0	247.5	
366.5	CARBONDALE		LIMESTONE	1.5	248.5	
365.0	CARBONDALE		BLUE SHALE	11.0	250.0	
354.0	CARBONDALE		UNCLASSIFIED	2.5	261.0	BOULDER
351.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.5	263.5	
349.0	CARBONDALE	SPRINGFIELD	COAL	4.8	266.0	
344.2	CARBONDALE		UNDERCLAY	0.8	270.8	
343.5	CARBONDALE		LIMESTONE	2.5	271.5	
341.0	CARBONDALE		BLUE SHALE	53.5	274.0	
287.5	CARBONDALE		BLACK SHALE	0.7	327.5	
286.8	CARBONDALE		UNCLASSIFIED	2.8	328.2	BLACK ROCK
284.0	CARBONDALE	EXCELLO	BLACK SHALE	2.5	331.0	
281.5	CARBONDALE	HOUCHIN CREEK	COAL	1.0	333.5	
280.5	CARBONDALE		UNDERCLAY	1.5	334.5	
279.0	CARBONDALE		GRAY SHALE	15.2	336.0	
263.8	CARBONDALE		BLACK SHALE	3.8	351.2	
260.0	CARBONDALE		BLUE SHALE	7.0	355.0	
253.0	CARBONDALE	SURVANT	COAL	1.3	362.0	
251.7	CARBONDALE		BLUE SHALE	35.8	363.3	
216.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	7.0	399.0	

209.0	CARBONDALE	COLCHESTER	COAL	2.0	406.0
207.0	SPOON		UNDERCLAY	1.5	408.0
205.5	SPOON		SHALE	13.9	409.5
191.6	SPOON	SEELYVILLE	COAL	5.8	423.4
185.7	SPOON		UNDERCLAY	0.8	429.3

**MAPID:** 04500120000C    **VERSION:** 2    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 10W    **SECTION:** 20    **QUARTERS/FOOTAGES:** NE NW NE  
**QUADRANGLE:** ST. BERNICE    **LONGITUDE:** -87.544538    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.649771    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 610.0    **LOGGED (FT.):** 428.9    **LOG TYPE:** Drillers Log  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** INDIV 362 1.3, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
556.0	MODESTO	WEST FRANKLIN	LIMESTONE	2.0	54.0	
481.0	CARBONDALE	DANVILLE	COAL	4.1	129.0	
366.0	CARBONDALE	HERRIN	COAL	1.5	244.0	
344.0	CARBONDALE	SPRINGFIELD	COAL	4.8	266.0	
276.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	334.0	
204.0	CARBONDALE	COLCHESTER	COAL	2.0	406.0	
187.0	SPOON	SEELYVILLE	COAL	5.9	423.0	

**MAPID:** 04590001000C    **VERSION:** 1    **PROJECT:** NCRDS92  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 10W    **SECTION:** 21    **QUARTERS/FOOTAGES:** NE SW SW SW  
**QUADRANGLE:** ST. BERNICE    **LONGITUDE:** -87.536772    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.637446    **DATE COLLECTED:** 5 / 2 / 1986  
**SURFACE ELEVATION (FT.):** 615.0    **LOGGED (FT.):** 166.6    **LOG TYPE:** Drillers Log  
**SOURCE:** PEABODY COAL CO.    31672-C    **WELL TYPE:** Coal Test  
**COMMENT:** TEST HOLE FROM UNIVERSAL MINE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.0			UNCONSOLIDATED	30.2	0.0	GLACIAL DRIFT, SURFACE DEPOSITS
584.8	MODESTO		SANDY SHALE	34.6	30.2	
550.2	MODESTO		SANDY SHALE	16.4	64.8	
533.8	MODESTO		DARK SHALE	0.2	81.2	DK SH W/ CO
533.6	MODESTO		UNDERCLAY	3.6	81.4	
530.0	MODESTO		SANDY SHALE	44.9	85.0	
485.2	MODESTO		SANDY SHALE	29.1	129.8	
456.1	CARBONDALE	DANVILLE	COAL	6.4	158.9	
449.7	CARBONDALE		UNDERCLAY	1.3	165.3	

MAPID: 04500039000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 28 QUARTERS/FOOTAGES:

QUADRANGLE: ST. BERNICE LONGITUDE: -87.535346 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.628933 DATE COLLECTED:

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

SOURCE: CROWN HILL COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	10.0	0.0	
-	MODESTO		BLUE SHALE	8.0	10.0	
-	MODESTO		BLACK SHALE	2.0	18.0	
-	MODESTO		CLAYSTONE	2.0	20.0	
-	MODESTO		SHALE	78.0	22.0	
-	MODESTO		BLACK SHALE	2.9	100.0	
-	CARBONDALE	DANVILLE	COAL	0.6	102.9	SEEMS TOO THIN
-	CARBONDALE		UNCLASSIFIED	2.5	103.5	
-	CARBONDALE		UNDERCLAY	5.0	106.0	
-	CARBONDALE		GRAY SHALE	4.0	111.0	
-	CARBONDALE	BANKSTON FORK	LIMESTONE	3.0	115.0	
-	CARBONDALE	ENERGY	SHALE	89.0	118.0	
-	CARBONDALE	ENERGY	BLACK SHALE	4.7	207.0	
-	CARBONDALE	HERRIN	COAL	0.8	211.7	
-	CARBONDALE		UNDERCLAY	2.5	212.5	
-	CARBONDALE		SANDSTONE	1.0	215.0	
-	CARBONDALE		SHALE	12.0	216.0	
-	CARBONDALE		LIMESTONE	2.9	228.0	
-	CARBONDALE		GRAY SHALE	1.5	230.9	
-	CARBONDALE	SPRINGFIELD	COAL	4.0	232.4	
-	CARBONDALE		UNDERCLAY	2.0	236.4	
-	CARBONDALE		LIMESTONE	3.0	238.4	
-	CARBONDALE		SHALE	7.0	241.4	
-	CARBONDALE		LIMESTONE AND SANDSTONE	4.0	248.4	
-	CARBONDALE		BLUE SHALE	33.0	252.4	
-	CARBONDALE	EXCELLO	BLACK SHALE	6.5	285.4	
-	CARBONDALE	HOUCHIN CREEK	COAL	1.0	291.9	
-	CARBONDALE		UNDERCLAY	2.5	292.9	
-	CARBONDALE		BLUE SHALE	3.5	295.4	
-	CARBONDALE		LIMESTONE	2.5	298.9	
-	CARBONDALE		BROWN SHALE	19.5	301.4	
-	CARBONDALE		SHALE	1.2	320.9	SLATE
-	CARBONDALE	SURVANT - UPPER	COAL	0.4	322.1	
-	CARBONDALE		BROWN SHALE	9.7	322.5	SHALE PARTING
-	CARBONDALE	SURVANT - LOWER	COAL	1.3	332.2	
-	CARBONDALE		BROWN SHALE	3.0	333.4	
-	CARBONDALE		SANDSTONE	4.0	336.4	
-	CARBONDALE		SANDY SHALE	24.0	340.4	SANDY SLATE

-	CARBONDALE	MECCA QUARRY	BLACK SHALE	11.5	364.4
-	CARBONDALE	COLCHESTER	COAL	0.5	375.9
-	SPOON		DARK SHALE	2.0	376.4
-	SPOON		UNDERCLAY	5.0	378.4
-	SPOON		DARK SHALE	9.0	383.4
-	SPOON	SEELYVILLE	COAL	1.0	392.4
-	SPOON	SEELYVILLE	UNKNOWN	1.5	393.4
-	SPOON	SEELYVILLE	COAL	3.0	394.9
-	SPOON		UNDERCLAY	2.1	397.9

**MAPID:** 04500141000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 10W    **SECTION:** 29    **QUARTERS/FOOTAGES:** 1045' S line, 601' E line of NE  
**QUADRANGLE:** ST. BERNICE    **LONGITUDE:** -87.54055    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.631819    **DATE COLLECTED:** 0 / 0 / 1949  
**SURFACE ELEVATION (FT.):** 539.0    **LOGGED (FT.):** 397.0    **LOG TYPE:** Survey Core Study  
**SOURCE:** UNIVERSAL COAL WASHING CO. E    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN COMMENT
442.5	SHELBURN	DANVILLE	COAL	5.3	96.5
329.4	CARBONDALE	HERRIN	COAL	1.7	209.6
306.5	CARBONDALE	SPRINGFIELD	COAL	4.5	232.5
247.5	CARBONDALE	HOUCHIN CREEK	COAL	1.1	291.5
214.2	CARBONDALE	SURVANT - UPPER	COAL	1.2	324.8
195.6	CARBONDALE	SURVANT - LOWER	COAL	1.7	343.4
166.7	CARBONDALE	COLCHESTER	COAL	1.2	372.3
148.5	CARBONDALE	SEELYVILLE	COAL	4.9	390.5



MAPID: 04500142000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 30 QUARTERS/FOOTAGES: 103' S line, 3236' E line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.568212 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.622009 DATE COLLECTED: 10 / 0 / 1948  
 SURFACE ELEVATION (FT.): 632.6 LOGGED (FT.): 572.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. B WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
385.1	SHELburn	DANVILLE	COAL	5.5	247.5
266.7	CARBONDALE	HERRIN	COAL	2.0	365.9
241.1	CARBONDALE	SPRINGFIELD	COAL	4.7	391.5
178.2	CARBONDALE	HOUCHIN CREEK	COAL	1.1	454.4
138.8	CARBONDALE	SURVANT - UPPER	COAL	0.5	493.8
128.7	CARBONDALE	SURVANT - LOWER	COAL	0.3	503.9
100.8	CARBONDALE	COLCHESTER	COAL	0.7	531.8
79.3	CARBONDALE	SEELYVILLE	COAL	6.1	553.3

MAPID: 04500143000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 31 QUARTERS/FOOTAGES: 35' S line, 45' E line of SE SE NE SE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.556614 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.611006 DATE COLLECTED: 0 / 0 / 1949  
 SURFACE ELEVATION (FT.): 627.7 LOGGED (FT.): 502.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. L WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
440.6	SHELburn	DANVILLE	COAL	4.8	187.1
325.7	CARBONDALE	HERRIN	COAL	1.3	302.0
301.6	CARBONDALE	SPRINGFIELD	COAL	0.9	326.1
246.2	CARBONDALE	HOUCHIN CREEK	COAL	1.1	381.5
204.2	CARBONDALE	SURVANT - UPPER	COAL	0.8	423.5
184.9	CARBONDALE	SURVANT - LOWER	COAL	0.7	442.8
162.5	CARBONDALE	COLCHESTER	COAL	0.9	465.2
135.3	CARBONDALE	SEELYVILLE	COAL	4.7	492.4

MAPID: 04500144000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 32 QUARTERS/FOOTAGES: 1840' N line, 41' E line  
 QUADRANGLE: SANDFORD LONGITUDE: -87.538133 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.616707 DATE COLLECTED: 10 / 0 / 1948  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 483.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. C WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
438.0	SHELburn	DANVILLE	COAL	6.0	162.0	
330.7	CARBONDALE	HERRIN	COAL	1.4	269.3	
306.6	CARBONDALE	SPRINGFIELD	COAL	2.8	293.4	
248.1	CARBONDALE	HOUCHIN CREEK	COAL	1.4	351.9	
209.0	CARBONDALE	SURVANT - UPPER	COAL	0.9	391.0	
188.4	CARBONDALE	SURVANT - LOWER	COAL	1.1	411.6	
138.1	CARBONDALE	SEELYVILLE	COAL WITH SHALE	5.3	461.9	

MAPID: 04500853000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 10W SECTION: 32 QUARTERS/FOOTAGES: NE SE NE  
 QUADRANGLE: SANDFORD LONGITUDE: -87.539164 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.617265 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 619.0 LOGGED (FT.): 482.5 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
499.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	120.0	
443.0	CARBONDALE	DANVILLE	COAL	4.5	176.0	
336.0	CARBONDALE	HERRIN	COAL	-	283.0	
310.0	CARBONDALE	SPRINGFIELD	COAL	4.5	309.0	
253.0	CARBONDALE	HOUCHIN CREEK	COAL	-	366.0	
166.0	CARBONDALE	COLCHESTER	COAL	-	453.0	
142.0	SPOON	SEELYVILLE	COAL	5.5	477.0	

MAPID: 04500520000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 11W SECTION: 9 QUARTERS/FOOTAGES: SW NW SW  
 QUADRANGLE: PARIS NORTH LONGITUDE: -87.64853 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.669516 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 679.0 LOGGED (FT.): 625.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
371.0	CARBONDALE	DANVILLE	COAL	4.0	308.0	
264.0	CARBONDALE	HERRIN	COAL	1.5	415.0	
253.0	CARBONDALE	SPRINGFIELD	COAL	-	426.0	
151.0	CARBONDALE	HOUCHIN CREEK	COAL	-	528.0	
71.0	CARBONDALE	COLCHESTER	COAL	-	608.0	
54.0	SPOON	SEELYVILLE	COAL	-	625.0	

MAPID: 04500040000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 11W SECTION: 14 QUARTERS/FOOTAGES: 1700' S line, 800' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.596601 GEOLOGIST: R. SMITH  
 CONFIDENTIAL: N LATITUDE: 39.655205 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 657.0 LOGGED (FT.): 245.3 LOG TYPE: Drillers Log  
 SOURCE: J.J. BLACKMAN WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
657.0			UNCONSOLIDATED	8.0	0.0	
649.0	BOND		SHALE	60.0	8.0	
589.0	BOND		CLAYSTONE	5.0	68.0	
584.0	BOND		SHALE	25.8	73.0	
558.2	BOND		COAL	1.4	98.8	
556.7	BOND		CLAYSTONE & SHALE	13.8	100.3	
542.9	BOND	CARTHAGE	LIMESTONE	1.3	114.1	
541.6	MODESTO		SHALE	33.0	115.4	INCLUDES BROWN SH, CLAY SH, & SAND SLATE
508.6	MODESTO		BLACK SHALE	2.5	148.4	
506.1	MODESTO		CLAYSTONE & SHALE	39.3	150.9	
466.7	MODESTO		BLUE SHALE	23.0	190.3	
443.7	MODESTO		BLACK SHALE	6.0	213.3	
437.7	MODESTO		COAL	0.3	219.3	
437.5	MODESTO		SHALE	25.8	219.5	

MAPID: 04500041000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 14N 11W

SECTION: 15

QUARTERS/FOOTAGES: NE NE NE

QUADRANGLE: ST. BERNICE

LONGITUDE: -87.613501

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.664012

DATE COLLECTED:

SURFACE ELEVATION (FT.): 698.0

LOGGED (FT.): 620.0

LOG TYPE: Electric Log

SOURCE:

WELL TYPE: Oil and Gas Test

COMMENT: POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
378.0	CARBONDALE	DANVILLE	COAL	4.0	320.0	
243.0	CARBONDALE	HERRIN	COAL	-	455.0	
78.0	CARBONDALE	COLCHESTER	COAL	-	620.0	

MAPID: 04501218000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR

TWP/RNG: 14N 11W

SECTION: 23

QUARTERS/FOOTAGES: SW SW SW

QUADRANGLE: ST. BERNICE

LONGITUDE: -87.611074

GEOLOGIST: LOG BOOK

CONFIDENTIAL: N

LATITUDE: 39.636875

DATE COLLECTED: 9 / 17 / 1966

SURFACE ELEVATION (FT.): 670.0

LOGGED (FT.): 431.0

LOG TYPE: Drillers Log

SOURCE: TRUAX-TRAER COAL CO PA-3

WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
648.0			COAL	1.5	22.0	
581.0			COAL	0.5	89.0	
545.0			COAL	1.5	125.0	
490.5			COAL	0.5	179.5	
356.0	SHELBURN	DANVILLE	COAL	5.8	314.0	
243.1	CARBONDALE	HERRIN	COAL	2.0	426.9	

MAPID: 04500145000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 14N 11W SECTION: 25 QUARTERS/FOOTAGES: 1232' N line, 1355' W line of NW  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.588592 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.63269 DATE COLLECTED: 11 / 0 / 1948  
 SURFACE ELEVATION (FT.): 644.1 LOGGED (FT.): 577.0 LOG TYPE: Survey Core Study  
 SOURCE: UNIVERSAL COAL WASHING CO. F WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
370.8	SHELburn	DANVILLE	COAL	4.6	273.3
259.3	CARBONDALE	HERRIN	COAL	0.5	384.8
237.1	CARBONDALE	SPRINGFIELD	COAL	2.5	407.0
167.3	CARBONDALE	HOUCHIN CREEK	COAL	0.1	476.8
114.3	CARBONDALE	SURVANT	COAL	1.2	529.8
92.3	CARBONDALE	COLCHESTER	COAL	0.5	551.8
75.2	CARBONDALE	SEELYVILLE	COAL	4.7	568.9

MAPID: 04500847000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 12W SECTION: 13 QUARTERS/FOOTAGES: SE SE SE  
 QUADRANGLE: PARIS NORTH LONGITUDE: -87.687343 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.663337 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 668.0 LOGGED (FT.): 660.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
323.0	CARBONDALE	DANVILLE	COAL	3.0	345.0
213.0	CARBONDALE	HERRIN	COAL	2.5	455.0
199.0	CARBONDALE	SPRINGFIELD	COAL	-	469.0
128.0	CARBONDALE	HOUCHIN CREEK	COAL	-	540.0
38.0	CARBONDALE	COLCHESTER	COAL	-	630.0
8.0	SPOON	SEELYVILLE	COAL	-	660.0

MAPID: 04500859000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 13W SECTION: 6 QUARTERS/FOOTAGES: 318' N line, 50' W line of SW SW  
 QUADRANGLE: BROCTON LONGITUDE: -87.909142 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.689626 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 667.0 LOGGED (FT.): 0.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

MAPID: 04500834000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 13W SECTION: 7 QUARTERS/FOOTAGES: 100' N line, 330' E line of NW SE  
 QUADRANGLE: BROCTON LONGITUDE: -87.897506 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.679207 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 672.0 LOGGED (FT.): 0.0 LOG TYPE: Nuclear Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

MAPID: 04500122000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 13W SECTION: 14 QUARTERS/FOOTAGES: NE SE NE  
 QUADRANGLE: REDMON LONGITUDE: -87.81711 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.669832 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 676.0 LOGGED (FT.): 671.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
316.0	MODESTO	WEST FRANKLIN	LIMESTONE	6.0	360.0
261.0	CARBONDALE	DANVILLE	COAL	-	415.0
156.0	CARBONDALE	HERRIN	COAL	-	520.0
66.0	CARBONDALE	HOUCHIN CREEK	COAL	-	610.0
5.0	CARBONDALE	COLCHESTER	COAL	-	671.0

MAPID: 04500548000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 13W SECTION: 20 QUARTERS/FOOTAGES: NW NE SE  
 QUADRANGLE: BROCTON LONGITUDE: -87.875631 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.649713 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 667.0 LOGGED (FT.): 249.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.0	CARBONDALE	HERRIN	COAL	6.5	140.0
467.0	CARBONDALE	HOUCHIN CREEK	COAL	-	200.0
418.0	CARBONDALE	COLCHESTER	COAL	-	249.0

MAPID: 04500861000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 2 QUARTERS/FOOTAGES: 35' S line, 85' E line of SW NE

QUADRANGLE: BROCTON LONGITUDE: -87.933163 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.693529 DATE COLLECTED:

SURFACE ELEVATION (FT.): 664.0 LOGGED (FT.): 115.0 LOG TYPE: Electric Log

SOURCE: COMMENT: GOOD LOG WELL TYPE: Oil and Gas Test

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
549.0	CARBONDALE	HOUCHIN CREEK	COAL	-	115.0	

MAPID: 04522350000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 3 QUARTERS/FOOTAGES:

QUADRANGLE: BROCTON LONGITUDE: -87.956932 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.69312 DATE COLLECTED: 8 / 11 / 1989

SURFACE ELEVATION (FT.): 661.5 LOGGED (FT.): 139.0 LOG TYPE: Gamma Ray Density

SOURCE: AMCO-IL #AM-8925 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
661.5			UNCONSOLIDATED	99.0	0.0	
562.5	CARBONDALE	ENERGY	SHALE	18.3	99.0	W/SIDERITE
544.2	CARBONDALE	HERRIN	COAL	4.3	117.3	EXPANDED SCALE LOG 108-127
539.9	CARBONDALE		UNDERCLAY	4.5	121.6	
535.5	CARBONDALE		LIMESTONE	2.5	126.0	
533.0	CARBONDALE		SHALE	10.5	128.5	

MAPID: 04500046000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 10 QUARTERS/FOOTAGES: SW SW

QUADRANGLE: BROCTON LONGITUDE: -87.963623 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.672942 DATE COLLECTED:

SURFACE ELEVATION (FT.): 657.0 LOGGED (FT.): 405.5 LOG TYPE: Drillers Log

SOURCE: LOUILLA OIL CO. WELL TYPE: Oil and Gas Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
657.0			UNCONSOLIDATED	61.0	0.0	
596.0	CARBONDALE	ENERGY	GRAY SHALE	34.0	61.0	
562.0	CARBONDALE	ENERGY	SANDY SHALE	53.8	95.0	
508.2	CARBONDALE	HERRIN	COAL	4.2	148.8	UNCERTAIN CORRELATION
504.0	CARBONDALE		SHALE	3.4	153.0	
500.6	CARBONDALE		LIMESTONE	2.3	156.4	
498.2	CARBONDALE		SHALE	4.1	158.8	
494.2	CARBONDALE	TURNER MINE	BLACK SHALE	0.8	162.8	
493.4	CARBONDALE		SHALE	6.6	163.6	
486.8			SANDSTONE	10.8	170.2	
476.0			SHALE	20.5	181.0	
455.5			BLACK SHALE	5.5	201.5	
450.0			SANDY SHALE	19.5	207.0	
430.5			COAL	0.3	226.5	
430.2			SHALE	19.3	226.8	
411.0			SANDSTONE	24.4	246.0	
386.6			SHALE	15.5	270.4	
371.1			SANDSTONE	28.5	285.9	
342.6			SHALE	91.1	314.4	

MAPID: 04500046000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 10 QUARTERS/FOOTAGES: SW SW

QUADRANGLE: BROCTON LONGITUDE: -87.963623 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.672942 DATE COLLECTED:

SURFACE ELEVATION (FT.): 657.0 LOGGED (FT.): 226.3 LOG TYPE: Drillers Log

SOURCE: CHEM ANAL, FAIR LOG WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
508.0	CARBONDALE	HERRIN	COAL	4.1	149.0	
494.0	CARBONDALE	SPRINGFIELD	COAL	-	163.0	
431.0	CARBONDALE	HOUCHIN CREEK	COAL	0.3	226.0	



MAPID: 04522349000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 10 QUARTERS/FOOTAGES:

QUADRANGLE: BROCTON LONGITUDE: -87.956568

GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.678631

DATE COLLECTED: 8 / 15 / 1989

SURFACE ELEVATION (FT.): 634.8 LOGGED (FT.): 116.0

LOG TYPE: Gamma Ray Density

SOURCE: AMCO-IL #AM-8928

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
634.8			UNCONSOLIDATED	74.0	0.0	
560.8	CARBONDALE		ROCK	11.0	74.0	
549.8	CARBONDALE	HERRIN	COAL	4.2	85.0	
545.6	CARBONDALE		UNCLASSIFIED	4.1	89.2	
541.5	CARBONDALE		LIMESTONE	2.7	93.3	UNDERCLAY LIMESTONE
538.8	CARBONDALE		UNCLASSIFIED	3.0	96.0	
535.8	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	99.0	
533.8	CARBONDALE		UNCLASSIFIED	15.0	101.0	NO COALS

MAPID: 04500047000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 13 QUARTERS/FOOTAGES: SW NW

QUADRANGLE: BROCTON LONGITUDE: -87.925196

GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.666062

DATE COLLECTED:

SURFACE ELEVATION (FT.): 663.0 LOGGED (FT.): 240.0

LOG TYPE: Drillers Log

SOURCE: LOUILLA OIL CO.

WELL TYPE: Oil and Gas Test

COMMENT: LOCATION UNSURE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
663.0			UNCONSOLIDATED	100.0	0.0	
563.0	CARBONDALE	DANVILLE	COAL	3.0	100.0	
560.0	CARBONDALE		SHALE	30.0	103.0	SLATE
530.0	CARBONDALE		UNCLASSIFIED	28.0	133.0	
502.0	CARBONDALE		SHALE	4.0	161.0	SLATE
498.0	CARBONDALE	HERRIN	COAL	4.0	165.0	UNCERTAIN COORELATION
494.0	CARBONDALE		SHALE	25.0	169.0	
469.0	CARBONDALE		BLACK SHALE	10.0	194.0	
459.0	CARBONDALE		SANDSTONE	22.5	204.0	
436.5	CARBONDALE		SHALE	13.5	226.5	

MAPID: 04500047000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 13 QUARTERS/FOOTAGES: SW NW  
 QUADRANGLE: BROCTON LONGITUDE: -87.925196 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.666062 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 663.0 LOGGED (FT.): 169.0 LOG TYPE: Drillers Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.0	CARBONDALE	DANVILLE	COAL	3.0	100.0
498.0	CARBONDALE	HERRIN	COAL	4.0	165.0

MAPID: 04500830000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 13 QUARTERS/FOOTAGES: NE SE SW  
 QUADRANGLE: BROCTON LONGITUDE: -87.919255 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.65976 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 668.0 LOGGED (FT.): 126.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: SPLT #6,#3, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
557.0	CARBONDALE	HERRIN	COAL	4.0	111.0
542.0	CARBONDALE	SPRINGFIELD	COAL	-	126.0

MAPID: 04500570000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 14 QUARTERS/FOOTAGES: SE SE NW  
 QUADRANGLE: BROCTON LONGITUDE: -87.938286 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.66518 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 667.0 LOGGED (FT.): 224.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
529.0	CARBONDALE	HERRIN	COAL	4.0	138.0
512.0	CARBONDALE	SPRINGFIELD	COAL	-	155.0
474.0	CARBONDALE	HOUCHIN CREEK	COAL	-	193.0
443.0	CARBONDALE	COLCHESTER	COAL	-	224.0

**MAPID:** 04522098000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 14    **QUARTERS/FOOTAGES:** 27' N line, 104' E line of NW NW  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.9424    **GEOLOGIST:** C TREWORY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.671473    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 142.0    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY    CO-76-4    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
661.0			UNCONSOLIDATED	81.0	0.0	
580.0			ROCK	57.0	81.0	
523.0	CARBONDALE	HERRIN	COAL	4.0	138.0	

**MAPID:** 04522098000C    **VERSION:** 2    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 14    **QUARTERS/FOOTAGES:** 27' N line, 104' E line of NW NW  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.9424    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.671473    **DATE COLLECTED:** 10 / 20 / 1976  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 207.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    CO-76-4    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04522864000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 14    **QUARTERS/FOOTAGES:** SE SE SE  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.928565    **GEOLOGIST:** C TREWORY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.657925    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 160.0    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY    75-D-2    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	77.0	0.0	
-			ROCK	123.0	77.0	
-	CARBONDALE	HERRIN	COAL	3.8	200.0	

MAPID: 04522348000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 23 QUARTERS/FOOTAGES:

QUADRANGLE: BROCTON LONGITUDE: -87.936894 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.649707 DATE COLLECTED: 8 / 11 / 1989

SURFACE ELEVATION (FT.): 662.0 LOGGED (FT.): 263.0 LOG TYPE: Multiple log types

SOURCE: AMCO-IL #AM-8924 WELL TYPE: Coal Test

COMMENT: DRILLERS LOG&CORE 1088934.47N-610916.79E

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
662.0			CLAY	2.0	0.0	UNITS 1 THRU 15 FROM DRILLER'S LOG; BLK
660.0			CLAY	8.0	2.0	TAN
652.0			CLAY	6.0	10.0	GRY
646.0			SAND	2.0	16.0	
644.0			CLAY	4.0	18.0	GRY
640.0			SAND	3.0	22.0	
637.0			SILT	5.0	25.0	BRN
632.0			SANDY CLAY	32.0	30.0	GRY
600.0			SAND & GRAVEL	2.0	62.0	
598.0			GRAVEL	8.0	64.0	
590.0	CARBONDALE	ENERGY	SHALE	4.0	72.0	
586.0	CARBONDALE	ENERGY	SANDSTONE	2.0	76.0	
584.0	CARBONDALE	ENERGY	SHALE	2.0	78.0	GRY
582.0	CARBONDALE	ENERGY	SANDSTONE	12.0	80.0	
570.0	CARBONDALE	ENERGY	SHALE	63.0	92.0	GRY
507.0	CARBONDALE	ENERGY	SHALE	1.8	155.0	UNITS 16 THRU 32 FROM CORE; GRY
505.2	CARBONDALE	ENERGY	SIDERITE	0.1	156.8	BRN
505.2	CARBONDALE	ENERGY	SHALE	1.2	156.8	GRY
504.0	CARBONDALE	ENERGY	SIDERITE	0.1	158.0	BRN
503.9	CARBONDALE	ENERGY	SHALE	1.7	158.1	GRY
502.2	CARBONDALE	ENERGY	SIDERITE	0.1	159.8	BRN
502.2	CARBONDALE	ENERGY	SHALE	0.9	159.8	GRY
501.3	CARBONDALE	HERRIN	COAL	2.8	160.7	
498.5	CARBONDALE	HERRIN	SHALE	0.1	163.5	
498.4	CARBONDALE	HERRIN	COAL	0.5	163.6	
497.9	CARBONDALE	HERRIN	SHALE	0.2	164.1	
497.7	CARBONDALE	HERRIN	COAL	0.3	164.3	
497.4	CARBONDALE		BLACK SHALE	0.0	164.6	
497.4	CARBONDALE		SHALE	0.8	164.6	GRY/GRN
496.6	CARBONDALE		SHALE	1.7	165.4	GRY
495.0	CARBONDALE		LIMESTONE	0.6	167.0	GRY
494.5	CARBONDALE		CALCAREOUS SHALE	2.2	167.5	W/SMALL LS NODULES
492.2	CARBONDALE		SHALE	17.2	169.8	UNITS 33 THRU 37 FROM DRILLER'S LOG; GRY
475.0	CARBONDALE		SANDSTONE	2.0	187.0	
473.0	CARBONDALE		SHALE	26.0	189.0	GRY
447.0	CARBONDALE		SANDSTONE	18.0	215.0	
429.0	CARBONDALE		SHALE	30.0	233.0	GRY

**MAPID:** 04500855000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 24    **QUARTERS/FOOTAGES:** 660' N line, 660' E line of NW  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.920386    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.655231    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 669.0    **LOGGED (FT.):** 240.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
533.0	CARBONDALE	HERRIN	COAL	4.0	136.0
519.0	CARBONDALE	SPRINGFIELD	COAL	-	150.0
429.0	CARBONDALE	COLCHESTER	COAL	-	240.0

**MAPID:** 04522865000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 25    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.926681    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.642211    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 203.8    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY 75-D-3    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-			UNCONSOLIDATED	78.0	0.0
-			ROCK	78.0	78.0
-	CARBONDALE	HERRIN	COAL	4.0	156.0

**MAPID:** 04500779000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 34    **QUARTERS/FOOTAGES:** 165' S line, 680' E line of SE  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.948369    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.613313    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 670.0    **LOGGED (FT.):** 341.0    **LOG TYPE:** Nuclear Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
439.0	CARBONDALE	HERRIN	COAL	4.0	231.0
383.0	CARBONDALE	HOUCHIN CREEK	COAL	-	287.0
329.0	CARBONDALE	COLCHESTER	COAL	-	341.0

MAPID: 04522347000C VERSION: 1

PROJECT: ISGS90

COUNTY: EDGAR TWP/RNG: 14N 14W SECTION: 34 QUARTERS/FOOTAGES:

QUADRANGLE: KANSAS LONGITUDE: -87.95553 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.6201 DATE COLLECTED: 8 / 10 / 1989

SURFACE ELEVATION (FT.): 679.0 LOGGED (FT.): 264.9 LOG TYPE: Multiple log types

SOURCE: AMCO-IL #AM-8923 WELL TYPE: Coal Test

COMMENT: DRILLERS LOG&CORE 1077222.11N-609141.8E

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
679.0			CLAY	1.0	0.0	UNITS 1 THRU 23 FROM DRILLER'S LOG; BRN
678.0			CLAY	13.0	1.0	TAN
665.0			CLAY	4.0	14.0	GRY
661.0			SAND & GRAVEL	4.0	18.0	
657.0			CLAY	15.0	22.0	GRY
642.0			SAND & GRAVEL	2.0	37.0	
640.0			SILT	4.0	39.0	BRN
636.0			CLAY	17.0	43.0	GRY
619.0				2.0	60.0	
617.0			CLAY	20.0	62.0	GRY
597.0	MODESTO		SHALE	3.5	82.0	GRY
593.5	MODESTO	WEST FRANKLIN	LIMESTONE	3.5	85.5	
590.0	MODESTO		SHALE	5.0	89.0	GRY
585.0	MODESTO		SHALE	4.0	94.0	MIX
581.0	MODESTO		SHALE	2.0	98.0	GRY
579.0	MODESTO		SANDSTONE	10.0	100.0	
569.0			SHALE	8.0	110.0	GRY
561.0			SHALE	4.0	118.0	
557.0			LIMESTONE	0.3	122.0	
556.7			SHALE	16.7	122.3	GRY
540.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.0	139.0	
539.0	CARBONDALE	ENERGY	SHALE	1.0	140.0	GRY
538.0	CARBONDALE	ENERGY	SANDSTONE	89.0	141.0	
449.0	CARBONDALE	ENERGY	SILTY SHALE	3.0	230.0	UNITS 24-35 FROM CORE SMALL SHOW OF O&G
446.0	CARBONDALE	ENERGY	SILTY SHALE	0.6	233.0	W/COAL SPARS THRU OUT & ONE COAL BOND
445.4	CARBONDALE	ENERGY	SANDSTONE	5.8	233.6	LOCALIZED COAL SPARS/A SHOW OF OIL & GAS
439.5	CARBONDALE	ENERGY	SILTSTONE	0.4	239.5	W/GRAY ARENACEOUS BANDS SLICKENSIDED; GR
439.2	CARBONDALE	ENERGY	SILTSTONE	0.8	239.8	W/GRAY ARENACEOUS BANDS; GRY
438.4	CARBONDALE	ENERGY	SANDSTONE	0.3	240.6	SHOW OF O&G/VERY SM CARBONACEOUS STREAKS
438.1	CARBONDALE	ENERGY	SHALE	17.9	240.9	W/SIDERITE NODULES AND BANDS; GRY
420.2	CARBONDALE	HERRIN	COAL	2.5	258.8	W/RASHY BAND
417.7	CARBONDALE	HERRIN	SILTY SHALE	0.0	261.3	
417.7	CARBONDALE	HERRIN	COAL	1.5	261.3	W/SMALL PYRITE LENSE
416.2	CARBONDALE		GREEN SHALE	1.1	262.8	
415.2	CARBONDALE		CALCAREOUS SHALE	1.1	263.8	LS NODULES

**MAPID:** 04522866000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 34    **QUARTERS/FOOTAGES:** SE SE SE SE  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.946537    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.613333    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 251.0    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY    75-D-1    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-			UNCONSOLIDATED	42.0	0.0
-			ROCK	205.0	42.0
-	CARBONDALE	HERRIN	COAL	4.0	247.0

**MAPID:** 04521343000C    **VERSION:** 1    **PROJECT:** ISGS96  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 2620' S line, 75' W line  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.926704    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.620305    **DATE COLLECTED:** 0 / 0 / 1976  
**SURFACE ELEVATION (FT.):** 678.0    **LOGGED (FT.):** 237.4    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY    CO-76-7    **WELL TYPE:** Coal Test  
**COMMENT:** DATA FROM 1976 COMPANY MAP

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
678.0			UNCONSOLIDATED	68.0	0.0
610.0			ROCK	166.0	68.0
444.0	CARBONDALE	HERRIN	COAL	3.4	234.0

**MAPID:** 04521343000C    **VERSION:** 2    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 14N 14W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 2620' S line, 75' W line  
**QUADRANGLE:** KANSAS    **LONGITUDE:** -87.926704    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.620305    **DATE COLLECTED:** 10 / 28 / 1976  
**SURFACE ELEVATION (FT.):** 678.0    **LOGGED (FT.):** 250.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    CO-76-7-CC    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 04500147000C VERSION: 1

PROJECT: NCRDS95

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 4 QUARTERS/FOOTAGES: 2650' S line, 5220' E line  
 QUADRANGLE: SCOTTLAND LONGITUDE: -87.540273 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.774921 DATE COLLECTED: 12 / 15 / 1949  
 SURFACE ELEVATION (FT.): 624.0 LOGGED (FT.): 208.8 LOG TYPE: Other Core Study  
 SOURCE: PAUL WEIR ST. BERNICE 13 WELL TYPE: Coal Test  
 COMMENT: COMPLETE CORE DESCRIPTION AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
553.5	CARBONDALE	DANVILLE	COAL	3.9	70.5	
441.7	CARBONDALE	HERRIN	COAL	2.2	182.3	TOP 2" BONY
420.4	CARBONDALE	SPRINGFIELD	COAL	3.5	203.6	TOP 1.75" BONEY

MAPID: 04500147000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 4 QUARTERS/FOOTAGES: 2650' S line, 5220' E line  
 QUADRANGLE: SCOTTLAND LONGITUDE: -87.540273 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.774921 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 624.0 LOGGED (FT.): 206.5 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
554.0	CARBONDALE	DANVILLE	COAL	3.8	70.0	
442.0	CARBONDALE	HERRIN	COAL	2.1	182.0	
421.0	CARBONDALE	SPRINGFIELD	COAL	3.5	203.0	

MAPID: 04500150000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 6 QUARTERS/FOOTAGES: 3420' S line, 1075' E line  
 QUADRANGLE: SCOTTLAND LONGITUDE: -87.563814 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.776006 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 619.0 LOGGED (FT.): 221.0 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
535.0	CARBONDALE	DANVILLE	COAL	4.0	84.0	
420.0	CARBONDALE	HERRIN	COAL	2.1	199.0	
402.0	CARBONDALE	SPRINGFIELD	COAL	4.0	217.0	



MAPID: 04500148000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 7 QUARTERS/FOOTAGES: 5052' S line, 4400' E line

QUADRANGLE: SCOTTLAND LONGITUDE: -87.575758 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.765934 DATE COLLECTED:

SURFACE ELEVATION (FT.): 585.0 LOGGED (FT.): 339.0 LOG TYPE: Survey Core Study

SOURCE: WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
422.0	CARBONDALE	HERRIN	COAL	2.0	163.0	
402.0	CARBONDALE	SPRINGFIELD	COAL	-	183.0	
247.0	CARBONDALE	COLCHESTER	COAL	1.0	338.0	

MAPID: 04500149000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 7 QUARTERS/FOOTAGES: 975' S line, 50' E line

QUADRANGLE: SCOTTLAND LONGITUDE: -87.559928 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.754681 DATE COLLECTED:

SURFACE ELEVATION (FT.): 618.0 LOGGED (FT.): 211.7 LOG TYPE: Survey Core Study

SOURCE: WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
431.0	CARBONDALE	HERRIN	COAL	1.5	187.0	
410.0	CARBONDALE	SPRINGFIELD	COAL	3.7	208.0	

MAPID: 04500151000C VERSION: 1

PROJECT: NCRDS87

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 8 QUARTERS/FOOTAGES: 4575' S line, 2850' E line

QUADRANGLE: SCOTTLAND LONGITUDE: -87.551286 GEOLOGIST: WEIBEL

CONFIDENTIAL: N LATITUDE: 39.764734 DATE COLLECTED: 11 / 0 / 1949

SURFACE ELEVATION (FT.): 602.0 LOGGED (FT.): 388.7 LOG TYPE: Survey Core Study

SOURCE: PAUL WEIR WELL TYPE: Diamond Drill

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
602.0			UNCONSOLIDATED	59.3	0.0	
542.7	CARBONDALE	DANVILLE	COAL	4.7	59.3	
538.0	CARBONDALE		UNDERCLAY	4.4	64.0	
533.7	CARBONDALE		SHALE	5.4	68.3	
528.2	CARBONDALE	ENERGY	SILTSTONE	15.8	73.8	
512.5	CARBONDALE	ENERGY	SHALE	10.0	89.5	
502.5	CARBONDALE	ENERGY	SANDSTONE	33.8	99.5	
468.7	CARBONDALE	ENERGY	SHALE	32.8	133.3	
435.9	CARBONDALE	ENERGY	BLACK SHALE	4.8	166.1	
431.1	CARBONDALE	HERRIN	COAL	2.2	170.9	
428.9	CARBONDALE		UNDERCLAY	0.6	173.1	
428.2	CARBONDALE		SHALE	11.4	173.8	
416.8	CARBONDALE	TURNER MINE	BLACK SHALE	6.0	185.2	
410.8	CARBONDALE	SPRINGFIELD	COAL	4.2	191.2	
406.7	CARBONDALE		UNDERCLAY	1.1	195.3	
405.6	CARBONDALE		SHALE	1.3	196.4	
404.3	CARBONDALE		LIMESTONE	0.6	197.7	
403.7	CARBONDALE		SHALE	7.5	198.3	
396.2	CARBONDALE		SILTSTONE	11.7	205.8	
384.6	CARBONDALE		SHALE	64.8	217.4	
319.7	CARBONDALE	EXCELLO	BLACK SHALE	5.4	282.3	
314.3	CARBONDALE	HOUCHIN CREEK	COAL	0.8	287.7	
313.5	CARBONDALE		UNDERCLAY	0.2	288.5	
313.3	CARBONDALE		SHALE	29.4	288.7	
283.9	CARBONDALE		BLACK SHALE	6.4	318.1	
277.5	CARBONDALE		SILTSTONE	1.6	324.5	
275.9	CARBONDALE		SHALE	6.8	326.1	
269.1	CARBONDALE		SANDSTONE	1.8	332.9	
267.3	CARBONDALE		SHALE	25.8	334.7	
241.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	10.4	360.5	
231.1	CARBONDALE	COLCHESTER	COAL	1.3	370.9	UNCERTAIN CORRELATION
229.7	SPOON		UNDERCLAY	2.3	372.3	
227.5	SPOON		SHALE	0.3	374.5	
227.2	SPOON		BLACK SHALE	1.0	374.8	
226.2	SPOON		BONE COAL	0.1	375.8	
226.0	SPOON		DARK SHALE	0.3	376.0	
225.8	SPOON		SHALE	0.5	376.2	
225.2	SPOON		SILTSTONE	0.9	376.8	
224.3	SPOON		SHALE	1.4	377.7	

222.9	SPOON		DARK SHALE	1.3	379.1
221.6	SPOON	SEELYVILLE	COAL	2.4	380.4
219.2	SPOON	SEELYVILLE	SHALE	0.3	382.8
218.9	SPOON	SEELYVILLE	COAL	2.3	383.1
216.6	SPOON		UNDERCLAY	0.8	385.4
215.9	SPOON		SANDSTONE	2.6	386.1

**MAPID:** 04500151000C    **VERSION:** 2    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 10W    **SECTION:** 8    **QUARTERS/FOOTAGES:** 4575' S line, 2850' E line  
**QUADRANGLE:** SCOTTLAND    **LONGITUDE:** -87.551286    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.764734    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 602.0    **LOGGED (FT.):** 384.7    **LOG TYPE:** Survey Core Study  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.0	CARBONDALE	DANVILLE	COAL	4.7	59.0
431.0	CARBONDALE	HERRIN	COAL	2.2	171.0
411.0	CARBONDALE	SPRINGFIELD	COAL	4.1	191.0
314.0	CARBONDALE	HOUCHIN CREEK	COAL	0.9	288.0
231.0	CARBONDALE	COLCHESTER	COAL	1.3	371.0
222.0	SPOON	SEELYVILLE	COAL	4.7	380.0

**MAPID:** 04500152000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 10W    **SECTION:** 8    **QUARTERS/FOOTAGES:** 680' S line, 25' E line  
**QUADRANGLE:** SCOTTLAND    **LONGITUDE:** -87.541015    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.754141    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 621.0    **LOGGED (FT.):** 288.8    **LOG TYPE:** Survey Core Study  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
451.0	CARBONDALE	HERRIN	COAL	1.8	170.0
431.0	CARBONDALE	SPRINGFIELD	COAL	3.8	190.0
333.0	CARBONDALE	HOUCHIN CREEK	COAL	0.8	288.0

MAPID: 04500153000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 17 QUARTERS/FOOTAGES: 2620' S line, 3250' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.552455 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.74495 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 563.0 LOGGED (FT.): 352.0 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: INDIV 301'5.3, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
412.0	CARBONDALE	HERRIN	COAL	1.8	151.0
389.0	CARBONDALE	SPRINGFIELD	COAL	4.0	174.0
302.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	261.0
226.0	CARBONDALE	COLCHESTER	COAL	1.8	337.0
217.0	SPOON	SEELYVILLE	COAL	6.0	346.0

MAPID: 04500154000C VERSION: 1

PROJECT: NCRDS95

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 18 QUARTERS/FOOTAGES: 2220' S line, 5230' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.575603 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.744193 DATE COLLECTED: 11 / 5 / 1979  
 SURFACE ELEVATION (FT.): 548.6 LOGGED (FT.): 359.2 LOG TYPE: Other Core Study  
 SOURCE: PAUL WEIR ST. BERNICE 9 WELL TYPE: Coal Test  
 COMMENT: COMPLETE CORE DESCRIPTION AVAILABLE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
428.7	CARBONDALE	HERRIN	COAL	1.5	119.9
409.0	CARBONDALE	SPRINGFIELD	COAL	2.8	139.6
334.8	CARBONDALE	EXCELLO	BLACK SHALE	4.8	213.8
330.0	CARBONDALE	HOUCHIN CREEK	CARBONACEOUS SHALE	1.8	218.6
278.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.3	270.3
276.1	CARBONDALE	COLCHESTER	COAL	0.5	272.5

MAPID: 04500154000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 18 QUARTERS/FOOTAGES: 2220' S line, 5230' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.575603 GEOLOGIST: C TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.744193 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 549.0 LOGGED (FT.): 273.5 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
429.0	CARBONDALE	HERRIN	COAL	1.5	120.0
409.0	CARBONDALE	SPRINGFIELD	COAL	2.9	140.0
330.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	219.0
276.0	CARBONDALE	COLCHESTER	COAL	0.5	273.0

MAPID: 04500155000C VERSION: 1

PROJECT: NCRDS95

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 20 QUARTERS/FOOTAGES: 750' S line, 75' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.542024 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.726732 DATE COLLECTED: 9 / 23 / 1949  
 SURFACE ELEVATION (FT.): 574.0 LOGGED (FT.): 356.8 LOG TYPE: Other Core Study  
 SOURCE: PAUL WEIR ST. BERNICE 8 WELL TYPE: Coal Test  
 COMMENT: DETAILED CORE DESCRIPTION ON FILE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
574.0	CARBONDALE		UNCONSOLIDATED	131.0	0.0	
443.0	CARBONDALE		SHALE	11.7	131.0	
431.3	CARBONDALE	SPRINGFIELD	COAL	3.8	142.7	
427.5	CARBONDALE		UNDERCLAY	1.8	146.5	
425.7	CARBONDALE		SHALE	0.4	148.3	DEPTH ADJUSTED TO CORE MARKER
425.2	CARBONDALE		SILTSTONE	1.9	148.8	
423.3	CARBONDALE		SHALE	62.8	150.7	
360.5	CARBONDALE	EXCELLO	BLACK SHALE	3.3	213.5	
357.2	CARBONDALE	HOUCHIN CREEK	COAL	0.2	216.8	
357.0	CARBONDALE		SILTSTONE	0.8	217.0	
356.2	CARBONDALE		SHALE	11.3	217.8	
344.8	CARBONDALE		SILTSTONE	0.9	229.2	
345.0	CARBONDALE		SHALE	3.3	229.0	DEPTH ADJUSTED TO CORE MARKER
341.7	CARBONDALE		SANDSTONE	1.8	232.3	
340.0	CARBONDALE		SHALE	2.3	234.0	
337.7	CARBONDALE		SILTSTONE	0.8	236.3	
336.8	CARBONDALE		GRAY SHALE	7.0	237.2	
330.6	CARBONDALE	SURVANT	COAL	1.4	243.4	DEPTH ADJUSTED TO CORE MARKER
329.2	CARBONDALE		SHALE	0.1	244.8	
329.1	CARBONDALE		COAL	1.0	244.9	
328.1	CARBONDALE		GRAY SHALE	0.6	245.9	
327.5	CARBONDALE		SILTSTONE	2.3	246.5	
325.2	CARBONDALE		SHALE	2.4	248.8	SILTSTONE IN LOWER 0.75'
322.8	CARBONDALE		SANDSTONE	2.7	251.2	
320.2	CARBONDALE		SILTSTONE	0.8	253.8	
319.3	CARBONDALE		GRAY SHALE	25.3	254.7	
294.0	CARBONDALE		BLACK SHALE	3.7	280.0	
290.8	CARBONDALE	COLCHESTER	COAL	0.8	283.2	DEPTH ADJUSTED TO CORE MARKER
290.1	SPOON		UNDERCLAY/SHALE	3.1	283.9	
287.0	SPOON		SHALE	24.2	287.0	SOME THIN SAND & SILT LAYERS
262.8	SPOON		SANDSTONE	10.4	311.2	
252.4	SPOON		COAL	0.1	321.6	
252.3	SPOON		SANDSTONE	2.9	321.7	SOME THIN SHALE LAYERS
249.4	SPOON		COAL	0.1	324.6	
249.3	SPOON		SANDSTONE	18.2	324.7	
231.2	SPOON		COAL	0.1	342.8	
231.0	SPOON		SANDSTONE	3.0	343.0	
228.0	SPOON		COAL	0.1	346.0	

227.9 SPOON

SANDSTONE

10.8 346.1

MAPID: 04500155000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 20 QUARTERS/FOOTAGES: 750' S line, 75' E line  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.542024 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.726732 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 574.0 LOGGED (FT.): 283.8 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: INDIV 243'2.6, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
431.0	CARBONDALE	SPRINGFIELD	COAL	3.9	143.0
357.0	CARBONDALE	HOUCHIN CREEK	COAL	0.1	217.0
291.0	CARBONDALE	COLCHESTER	COAL	0.8	283.0

MAPID: 04500058000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 32 QUARTERS/FOOTAGES: NW NW  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.556813 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.706936 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 528.0 LOGGED (FT.): 170.3 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: IND IV 283'4.3, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
473.0	CARBONDALE	DANVILLE	COAL	7.0	55.0
383.0	CARBONDALE	HERRIN	COAL	1.5	145.0
365.0	CARBONDALE	SPRINGFIELD	COAL	7.3	163.0

MAPID: 04500125000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 32 QUARTERS/FOOTAGES: SE SE

QUADRANGLE: ST. BERNICE LONGITUDE: -87.542335 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.696131 DATE COLLECTED:

SURFACE ELEVATION (FT.): 528.0 LOGGED (FT.): 286.5 LOG TYPE: Drillers Log

SOURCE: MIAMI COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
528.0			UNCONSOLIDATED	14.0	0.0	
514.0	MODESTO		BLUE SHALE	22.4	14.0	
491.6	CARBONDALE	DANVILLE	COAL	5.7	36.4	
485.9	CARBONDALE		UNDERCLAY	3.9	42.1	
482.0	CARBONDALE	ENERGY	SANDY SHALE	32.0	46.0	
450.0	CARBONDALE	ENERGY	BLUE SHALE	64.1	78.0	
385.9	CARBONDALE	ENERGY	BLACK SHALE	0.9	142.1	
385.0	CARBONDALE	HERRIN	COAL	1.5	143.0	
383.5	CARBONDALE		UNDERCLAY	2.5	144.5	
381.0	CARBONDALE		SHALE	2.0	147.0	
379.0	CARBONDALE		LIMESTONE	2.3	149.0	
376.7	CARBONDALE		SHALE	1.2	151.3	
375.5	CARBONDALE		BLUE SHALE	3.5	152.5	
372.0	CARBONDALE	TURNER MINE	BLACK SHALE	5.5	156.0	
366.5	CARBONDALE	SPRINGFIELD	COAL	3.5	161.5	
363.0	CARBONDALE		UNDERCLAY	2.0	165.0	
361.0	CARBONDALE		SHALE	69.0	167.0	
292.0	CARBONDALE	EXCELLO	BLACK SHALE	6.0	236.0	SOME COAL
286.0	CARBONDALE	HOUCHIN CREEK	COAL	3.0	242.0	
283.0	CARBONDALE		SHALE	11.0	245.0	
272.0	CARBONDALE		SANDSTONE	15.0	256.0	
257.0	CARBONDALE		BLUE SHALE	10.7	271.0	
246.3	CARBONDALE	SURVANT	COAL	4.3	281.7	
242.0	CARBONDALE		UNDERCLAY	0.5	286.0	

MAPID: 04500125000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 32 QUARTERS/FOOTAGES: SE SE

QUADRANGLE: ST. BERNICE LONGITUDE: -87.542335 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.696131 DATE COLLECTED:

SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 242.0 LOG TYPE: Survey Core Study

SOURCE: WELL TYPE: Coal Test

COMMENT: IND IV 282'4.3, FAIR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
514.0	CARBONDALE	DANVILLE	COAL	5.7	36.0	
407.0	CARBONDALE	HERRIN	COAL	1.5	143.0	
388.0	CARBONDALE	SPRINGFIELD	COAL	3.5	162.0	
308.0	CARBONDALE	HOUCHIN CREEK	COAL	-	242.0	

MAPID: 04500146000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 32 QUARTERS/FOOTAGES: 322' S line, 43' W line of SE

QUADRANGLE: ST. BERNICE LONGITUDE: -87.549326 GEOLOGIST: LOG BOOK

CONFIDENTIAL: N LATITUDE: 39.695184 DATE COLLECTED: 9 / 0 / 1948

SURFACE ELEVATION (FT.): 599.0 LOGGED (FT.): 415.0 LOG TYPE: Survey Core Study

SOURCE: UNIVERSAL COAL WASHING CO. A WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
496.2	SHELburn	DANVILLE	COAL	4.8	102.8	
387.7	CARBONDALE	HERRIN	COAL	1.4	211.3	
370.7	CARBONDALE	SPRINGFIELD	COAL	3.8	228.3	
278.2	CARBONDALE	HOUCHIN CREEK	COAL	0.5	320.8	
258.0	CARBONDALE	SURVANT	COAL	3.5	341.0	
206.3	CARBONDALE	COLCHESTER	COAL	1.1	392.7	
191.7	CARBONDALE	SEELYVILLE	COAL	1.3	407.3	SPLIT
189.8	CARBONDALE	SEELYVILLE	COAL	4.0	409.2	SPLIT

MAPID: 04500172000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 10W SECTION: 32 QUARTERS/FOOTAGES: 1850' S line, 4750' E line

QUADRANGLE: ST. BERNICE LONGITUDE: -87.557023 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.699367 DATE COLLECTED:

SURFACE ELEVATION (FT.): 602.0 LOGGED (FT.): 135.5 LOG TYPE: Survey Core Study

SOURCE: WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
564.0	MODESTO	WEST FRANKLIN	LIMESTONE	1.0	38.0	
471.0	CARBONDALE	DANVILLE	COAL	4.5	131.0	



MAPID: 04501200000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 11W SECTION: 11 QUARTERS/FOOTAGES: 46' S line, 85' E line of SW NE

QUADRANGLE: SCOTTLAND LONGITUDE: -87.60048 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.759094 DATE COLLECTED:

SURFACE ELEVATION (FT.): 620.0 LOGGED (FT.): 393.0 LOG TYPE: Nuclear Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: CHECK PICKS, POOR LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
400.0	CARBONDALE	HERRIN	COAL	2.0	220.0	
381.0	CARBONDALE	SPRINGFIELD	COAL	-	239.0	
281.0	CARBONDALE	HOUCHIN CREEK	COAL	-	339.0	
227.0	CARBONDALE	COLCHESTER	COAL	-	393.0	

MAPID: 04500582000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 11W SECTION: 13 QUARTERS/FOOTAGES: NW SE SW

QUADRANGLE: ST. BERNICE LONGITUDE: -87.589538 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.740191 DATE COLLECTED:

SURFACE ELEVATION (FT.): 602.0 LOGGED (FT.): 463.5 LOG TYPE: Electric Log

SOURCE: WELL TYPE: Oil and Gas Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
444.0	CARBONDALE	DANVILLE	COAL	4.5	158.0	
342.0	CARBONDALE	HERRIN	COAL	2.0	260.0	
322.0	CARBONDALE	SPRINGFIELD	COAL	2.0	280.0	
232.0	CARBONDALE	HOUCHIN CREEK	COAL	-	370.0	
158.0	CARBONDALE	COLCHESTER	COAL	-	444.0	
144.0	SPOON	SEELYVILLE	COAL	5.5	458.0	

MAPID: 04500848000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 11W SECTION: 23 QUARTERS/FOOTAGES: SE SW SW  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.610405 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.723698 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 511.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: IND IV 444'4.5, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
430.0	CARBONDALE	DANVILLE	COAL	3.5	200.0
327.0	CARBONDALE	HERRIN	COAL	2.0	303.0
310.0	CARBONDALE	SPRINGFIELD	COAL	-	320.0
213.0	CARBONDALE	HOUCHIN CREEK	COAL	-	417.0
136.0	CARBONDALE	COLCHESTER	COAL	-	494.0
124.0	SPOON	SEELYVILLE	COAL	5.0	506.0

MAPID: 04501219000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 15N 11W SECTION: 31 QUARTERS/FOOTAGES: NW SE SW  
 QUADRANGLE: PARIS NORTH LONGITUDE: -87.681751 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.708917 DATE COLLECTED: 9 / 13 / 1966  
 SURFACE ELEVATION (FT.): 652.0 LOGGED (FT.): 391.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO PA-2 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.0			COAL	0.8	112.0
369.5	SHELBURN	DANVILLE	COAL	4.0	282.5
265.0	CARBONDALE	HERRIN	COAL	2.3	387.0

MAPID: 04500583000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 11W SECTION: 36 QUARTERS/FOOTAGES: NE NW SE  
 QUADRANGLE: ST. BERNICE LONGITUDE: -87.581871 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.700437 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 596.0 LOGGED (FT.): 517.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: IND IV 434'4.5, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
396.0	CARBONDALE	DANVILLE	COAL	2.5	200.0
288.0	CARBONDALE	HERRIN	COAL	2.0	308.0
270.0	CARBONDALE	SPRINGFIELD	COAL	2.0	326.0
186.0	CARBONDALE	HOUCHIN CREEK	COAL	-	410.0
116.0	CARBONDALE	COLCHESTER	COAL	-	480.0
84.0	SPOON	SEELYVILLE	COAL	5.0	512.0

**MAPID:** 04501220000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 12W    **SECTION:** 8    **QUARTERS/FOOTAGES:** SW NW SE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.772499    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.76754    **DATE COLLECTED:** 9 / 7 / 1966  
**SURFACE ELEVATION (FT.):** 654.0    **LOGGED (FT.):** 449.5    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    PA-1    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
478.0			COAL	2.3	176.0
433.5			COAL	1.0	220.5
310.0	SHELBURN	DANVILLE	COAL	3.0	344.0
210.1	CARBONDALE	HERRIN	COAL	2.9	443.9

**MAPID:** 04501135000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 13W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 1' S line, 1280' W line of SE SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.817348    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.776565    **DATE COLLECTED:** 1 / 9 / 1968  
**SURFACE ELEVATION (FT.):** 668.0    **LOGGED (FT.):** 424.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-97    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
418.5			COAL	0.3	249.5
353.5	SHELBURN	DANVILLE	COAL	3.2	314.5
263.8	CARBONDALE	HERRIN	COAL	3.7	404.2
248.9	CARBONDALE	SPRINGFIELD	COAL	0.2	419.1

**MAPID:** 04501136000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 13W    **SECTION:** 2    **QUARTERS/FOOTAGES:** 599' N line, 31' W line of NW SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.836187    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.782658    **DATE COLLECTED:** 12 / 11 / 1967  
**SURFACE ELEVATION (FT.):** 655.0    **LOGGED (FT.):** 420.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-93    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
451.6			COAL	0.7	203.4
409.3			COAL	0.5	245.7
337.0	SHELBURN	DANVILLE	COAL	3.4	318.0
256.6	CARBONDALE	HERRIN	COAL	5.1	398.4
238.4	CARBONDALE	SPRINGFIELD	COAL	0.3	416.6

**MAPID:** 04501137000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 13W    **SECTION:** 2    **QUARTERS/FOOTAGES:** SE SE SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.828062    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.777378    **DATE COLLECTED:** 1 / 22 / 1968  
**SURFACE ELEVATION (FT.):** 668.0    **LOGGED (FT.):** 455.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-98    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
438.4			COAL	0.8	229.6	
394.2			COAL	0.5	273.8	
324.6	SHELBURN	DANVILLE	COAL	2.8	343.4	
239.5	CARBONDALE	HERRIN	COAL	5.2	428.5	
223.2	CARBONDALE	SPRINGFIELD	COAL	0.8	444.8	

**MAPID:** 04501117000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 13W    **SECTION:** 3    **QUARTERS/FOOTAGES:** 58' N line, 1315' W line of NW NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.737444    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.792049    **DATE COLLECTED:** 12 / 6 / 1967  
**SURFACE ELEVATION (FT.):** 650.0    **LOGGED (FT.):** 312.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-92    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
485.9			COAL	2.3	164.1	
453.7			COAL	1.4	196.3	
439.2			COAL	0.6	210.8	
422.1			COAL	0.3	227.9	W/SULPHUR
405.8			COAL	0.8	244.2	

MAPID: 04500062000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 15N 13W SECTION: 6 QUARTERS/FOOTAGES: NW SE SE

QUADRANGLE: NEWMAN LONGITUDE: -87.896739 GEOLOGIST: SROKA

CONFIDENTIAL: N LATITUDE: 39.777866 DATE COLLECTED: 0 / 0 / 1920

SURFACE ELEVATION (FT.): 661.0 LOGGED (FT.): 921.0 LOG TYPE: Drillers Log

SOURCE: LOUILLA OIL CO. WELL TYPE: Oil and Gas Test

COMMENT: CORE DESCRIP. (MYLIUS AND THURSTON)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
661.0			UNCONSOLIDATED	88.6	0.0	
572.4	CARBONDALE	ENERGY	SHALE	14.8	88.6	CARBONATE NODULES
557.6	CARBONDALE	ENERGY	SHALE	13.8	103.4	CARBONATE NODULES
543.7	CARBONDALE	ENERGY	BLACK SHALE	0.4	117.3	
543.3	CARBONDALE	HERRIN	COAL	5.9	117.7	
537.4	CARBONDALE		UNDERCLAY	0.4	123.6	
537.0	CARBONDALE		SHALE	19.0	124.0	
518.0	CARBONDALE		SHALE	39.8	143.0	CALCAREOUS AT BASE
478.2	CARBONDALE	EXCELLO	BLACK SHALE	3.3	182.8	WITH COAL STREAKS
474.9	CARBONDALE	HOUCHIN CREEK	COAL	1.3	186.1	
473.6	CARBONDALE		SHALE	7.3	187.4	
466.2	CARBONDALE		SHALE	45.6	194.8	MICACEOUS
420.7	CARBONDALE		SHALE	4.2	240.3	CARBONATE NODULES
416.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.3	244.5	
415.2	CARBONDALE	COLCHESTER	COAL	1.5	245.8	
413.7	SPOON		SHALE	2.1	247.3	
411.7	SPOON		BLACK SHALE	2.2	249.3	
409.5	SPOON		SHALE	11.0	251.5	
398.5	SPOON		SHALE	32.4	262.5	
366.1	SPOON		SANDSTONE	11.1	294.9	CONGLOMERATIC
355.0	MISSISSIPPIAN		SHALE	512.4	306.0	TOP OF MISSISSIPPIAN
-157.4	MISSISSIPPIAN		SHALE	73.6	818.4	SPORES, PLANTS, LINGULA; BROWN-OLIVE GRN
-231.0	MISSISSIPPIAN		LIMESTONE	29.0	892.0	DOLONITIC AND SHALEY IN PLACES

MAPID: 04500062000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 13W SECTION: 6 QUARTERS/FOOTAGES: NW SE SE  
 QUADRANGLE: NEWMAN LONGITUDE: -87.896739 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.777866 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 661.0 LOGGED (FT.): 247.5 LOG TYPE: Survey Core Study  
 SOURCE: WELL TYPE: Coal Test  
 COMMENT: CHEM ANAL, GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
543.0	CARBONDALE	HERRIN	COAL	5.9	118.0	
475.0	CARBONDALE	HOUCHIN CREEK	COAL	1.3	186.0	
415.0	CARBONDALE	COLCHESTER	COAL	1.5	246.0	

MAPID: 04500584000C VERSION: 1

PROJECT: CGT-ECILL

COUNTY: EDGAR TWP/RNG: 15N 13W SECTION: 11 QUARTERS/FOOTAGES: SW NE SW  
 QUADRANGLE: HUME LONGITUDE: -87.830335 GEOLOGIST: C TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.766373 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 668.0 LOGGED (FT.): 530.0 LOG TYPE: Electric Log  
 SOURCE: WELL TYPE: Oil and Gas Test  
 COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
378.0	MODESTO	WEST FRANKLIN	LIMESTONE	5.0	290.0	
314.0	CARBONDALE	DANVILLE	COAL	2.0	354.0	
224.0	CARBONDALE	HERRIN	COAL	4.0	444.0	
217.0	CARBONDALE	SPRINGFIELD	COAL	3.0	451.0	
138.0	CARBONDALE	HOUCHIN CREEK	COAL	-	530.0	

MAPID: 04522099000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 15N 14W SECTION: 1 QUARTERS/FOOTAGES: 25' S line, 22' W line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.929906 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.774108 DATE COLLECTED: 5 / 0 / 1971  
 SURFACE ELEVATION (FT.): 652.0 LOGGED (FT.): 339.0 LOG TYPE: Electric Log  
 SOURCE: HYDROCARBON SURVEY PC-17 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 04500065000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR

TWP/RNG: 15N 14W

SECTION: 2

QUARTERS/FOOTAGES: SE NW NW

QUADRANGLE: NEWMAN

LONGITUDE: -87.945897

GEOLOGIST: SROKA

CONFIDENTIAL: N

LATITUDE: 39.788987

DATE COLLECTED:

SURFACE ELEVATION (FT.): 651.0

LOGGED (FT.): 896.0

LOG TYPE:

SOURCE: LOUILLA OIL CO

WELL TYPE: Oil and Gas Test

COMMENT: CORE DESCRIP. (MYLIUS AND THURSTON)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
651.0			UNCONSOLIDATED	95.0	0.0	SUMMARY AS IN BULL #54, LOG 54
556.0	CARBONDALE		SHALE	61.0	95.0	
495.0	CARBONDALE		SHALE	10.0	156.0	CALCAREOUS
485.0	CARBONDALE		LIMESTONE	2.6	166.0	
482.4	CARBONDALE		SHALE	28.8	168.6	CARBONATE NODULES
453.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	197.4	CALCAREOUS
450.1	CARBONDALE	COLCHESTER	COAL	1.7	200.9	
448.4	SPOON		UNDERCLAY	0.7	202.6	FIRECLAY IN CORE DESCRIP.
447.7	SPOON		SANDSTONE	27.7	203.3	LS NEAR BASE; SLIGHT OIL 215-224
420.1	SPOON		SHALE	17.3	230.9	CARBONATE NODULES
402.7	SPOON		BLACK SHALE	1.5	248.3	PYRITIC
401.2	SPOON		COAL	0.6	249.8	
400.7	SPOON		SHALE	1.8	250.3	
398.9	SPOON		SHALE	19.3	252.1	SANDY SHALE, MICACEOUS
379.6	SPOON		BLACK SHALE	0.5	271.4	
379.1	SPOON		COAL	1.1	271.9	
378.0	SPOON		SHALE	5.3	273.0	
372.7	SPOON		SHALE	3.6	278.3	PYRITIC
369.2	SPOON		BLACK SHALE	0.3	281.8	
368.9	SPOON		SHALE	2.9	282.1	
366.0	SPOON		SHALE	12.0	285.0	PYRITIC
354.0	MISSISSIPPIAN		SHALE	146.8	297.0	SOME CARBONATE BANDS; TOP OF MISS.
207.2	MISSISSIPPIAN		SANDSTONE	184.6	443.8	
22.7	MISSISSIPPIAN		SHALE	128.9	628.3	WITH LS LENSES
-106.3	MISSISSIPPIAN		SHALE	30.0	757.3	MICACEOUS; SANDY TOWARD BASE
-136.3	MISSISSIPPIAN		SHALE	4.5	787.3	
-140.8	MISSISSIPPIAN		SHALE	74.3	791.8	SPORE EXINES, LINGULA
-215.0			LIMESTONE	7.3	866.0	OILY; LOG INDICATES THIS AS TOP OF DEV.
-222.3			LIMESTONE	2.8	873.3	
-225.2			LIMESTONE	19.8	876.2	CHERTY

**MAPID:** 0452210000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 3    **QUARTERS/FOOTAGES:** 56' S line, 65' E line  
**QUADRANGLE:** NEWMAN    **LONGITUDE:** -87.949405    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.774038    **DATE COLLECTED:** 5 / 0 / 1971  
**SURFACE ELEVATION (FT.):** 650.0    **LOGGED (FT.):** 329.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PC-16    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04500067000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 12    **QUARTERS/FOOTAGES:** 330' N line, 1656' W line  
**QUADRANGLE:** NEWMAN    **LONGITUDE:** -87.924039    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.773172    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 655.0    **LOGGED (FT.):** 270.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
385.0	CARBONDALE	COLCHESTER	COAL	-	270.0	

**MAPID:** 04521877000C    **VERSION:** 1    **PROJECT:** ISGS90  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 14    **QUARTERS/FOOTAGES:** 35' N line, 50' W line of NW NW  
**QUADRANGLE:** NEWMAN    **LONGITUDE:** -87.948534    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.759095    **DATE COLLECTED:** 8 / 21 / 1973  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 199.0    **LOG TYPE:** Drillers Log  
**SOURCE:** ZEIGLER COAL CO. HOLE #165    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
661.0			UNCONSOLIDATED	10.0	0.0	
651.0			CLAY	107.0	10.0	
544.0			GRAVEL	13.0	117.0	
531.0			UNCONSOLIDATED	57.0	130.0	



**MAPID:** 04500597000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 15    **QUARTERS/FOOTAGES:** 660' S line, 330' W line  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.966341    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.746232    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 665.0    **LOGGED (FT.):** 230.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN	COMMENT
435.0	CARBONDALE	COLCHESTER	COAL	-	230.0	

**MAPID:** 04500860000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 22    **QUARTERS/FOOTAGES:** 184' S line, 36' E line  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.948188    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.73045    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 667.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Nuclear Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** FAIR LOG

**MAPID:** 04500845000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 23    **QUARTERS/FOOTAGES:** 49' S line, 40' E line of NE NE  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.929455    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.741252    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 674.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** GOOD LOG

**MAPID:** 04500778000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 15N 14W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 350' S line, 310' W line of SE SE SE  
**QUADRANGLE:** BROCTON    **LONGITUDE:** -87.949231    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.716103    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** POOR LOG

MAPID: 04500070000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR    TWP/RNG: 16N 10W    SECTION: 29    QUARTERS/FOOTAGES: NW NE

QUADRANGLE: SCOTTLAND    LONGITUDE: -87.54872    GEOLOGIST: R. SMITH

CONFIDENTIAL: N    LATITUDE: 39.808725    DATE COLLECTED: 7 / 9 / 1887

SURFACE ELEVATION (FT.): 625.0    LOGGED (FT.): 334.0    LOG TYPE: Drillers Log

SOURCE: ILLIANA COAL CO.    WELL TYPE: Coal Test

COMMENT: LOCATION UNSURE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
625.0			UNCONSOLIDATED	60.0	0.0	
565.0	CARBONDALE	ENERGY	SHALE	60.0	60.0	
505.0	CARBONDALE	HERRIN	COAL	1.2	120.0	
503.8	CARBONDALE		SHALE	26.0	121.2	
477.8	CARBONDALE	SPRINGFIELD	BLACK SHALE & CLAY	3.8	147.2	COAL TURNER MINE SH ON TOP
474.0	CARBONDALE		SAND/CLAY	30.0	151.0	SAND AND CLAY
444.0	CARBONDALE		BLUE SHALE	19.0	181.0	
425.0	CARBONDALE		DARK SHALE	30.0	200.0	
395.0	CARBONDALE	EXCELLO	BLACK SHALE	4.0	230.0	
391.0	CARBONDALE	HOUCHIN CREEK	COAL	3.5	234.0	
387.5	CARBONDALE		SANDSTONE	8.5	237.5	
379.0	CARBONDALE		BLUE SHALE	10.0	246.0	
369.0	CARBONDALE		SANDSTONE	4.0	256.0	
365.0	CARBONDALE		SHALE	4.0	260.0	
361.0	CARBONDALE	SURVANT	COAL	1.0	264.0	
360.0	CARBONDALE		SHALE	10.0	265.0	
350.0	CARBONDALE		SANDSTONE	10.0	275.0	
340.0	CARBONDALE		SANDSTONE/SHALE	5.0	285.0	
335.0	CARBONDALE		SANDSTONE	13.0	290.0	
322.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	13.0	303.0	
309.0	CARBONDALE	COLCHESTER	COAL	2.5	316.0	
306.5	SPOON		BLACK SHALE	5.5	318.5	
301.0	SPOON	SEELYVILLE	COAL	4.0	324.0	
297.0	SPOON		CLAYSTONE & SHALE	6.0	328.0	WHITE CLAY AND DARK SH

MAPID: 04500071000C    VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR                    TWP/RNG: 16N 10W    SECTION: 29    QUARTERS/FOOTAGES: NW NE

QUADRANGLE: SCOTTLAND                    LONGITUDE: -87.54872                    GEOLOGIST: R. SMITH

CONFIDENTIAL: N                    LATITUDE: 39.808725                    DATE COLLECTED: 12 / 27 / 1887

SURFACE ELEVATION (FT.): 620.0                    LOGGED (FT.): 390.0                    LOG TYPE: Drillers Log

SOURCE: ILLIANA COAL CO.                    WELL TYPE: Coal Test

COMMENT: LOCATION UNSURE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
620.0			UNCONSOLIDATED	30.0	0.0	
590.0	CARBONDALE	ENERGY	SANDSTONE	45.0	30.0	
545.0	CARBONDALE	ENERGY	BLUE SHALE	35.0	75.0	
510.0	CARBONDALE	ENERGY	UNCLASSIFIED	5.0	110.0	
505.0	CARBONDALE	HERRIN	COAL	1.5	115.0	
503.5	CARBONDALE		UNCLASSIFIED	12.0	116.5	
491.5	CARBONDALE		CLAYSTONE	7.0	128.5	
484.5	CARBONDALE	TURNER MINE	BLACK SHALE	4.0	135.5	BLACK "JACK"
480.5	CARBONDALE	SPRINGFIELD	COAL	3.5	139.5	
477.0	CARBONDALE		SHALE	73.0	143.0	
404.0	CARBONDALE	EXCELLO	BLACK SHALE	4.0	216.0	
400.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	220.0	
398.5	CARBONDALE		SHALE	38.5	221.5	
360.0	CARBONDALE	SURVANT	COAL	2.0	260.0	
358.0	CARBONDALE		SHALE	2.0	262.0	
356.0	CARBONDALE		SANDSTONE	2.0	264.0	
354.0	CARBONDALE		SHALE	34.0	266.0	
320.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	10.0	300.0	
310.0	CARBONDALE		UNCLASSIFIED	4.0	310.0	
306.0	CARBONDALE	COLCHESTER	COAL	2.0	314.0	
304.0	SPOON		COAL WITH SHALE	4.0	316.0	
300.0	SPOON		DARK SHALE	4.0	320.0	
296.0	SPOON		UNCLASSIFIED	4.0	324.0	
292.0	SPOON	SEELYVILLE	COAL	4.0	328.0	
288.0	SPOON		SHALE	2.0	332.0	
286.0	SPOON		DARK SHALE	2.0	334.0	
284.0	SPOON		COAL	1.0	336.0	
283.0	SPOON		SHALE	3.0	337.0	
280.0	SPOON		DARK SHALE	5.0	340.0	
275.0	SPOON		SHALE	5.0	345.0	
270.0	SPOON		UNCLASSIFIED	3.0	350.0	
267.0	SPOON		COAL	3.0	353.0	
264.0	SPOON		UNCLASSIFIED	3.5	356.0	
260.5	SPOON		SHALE	17.5	359.5	
243.0	SPOON		DARK SHALE	3.0	377.0	
240.0	SPOON		SHALE	10.0	380.0	

MAPID: 04500072000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 16N 10W SECTION: 29 QUARTERS/FOOTAGES: SW NW

QUADRANGLE: SCOTTLAND LONGITUDE: -87.558252 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.804883 DATE COLLECTED:

SURFACE ELEVATION (FT.): 635.0 LOGGED (FT.): 200.0 LOG TYPE: Drillers Log

SOURCE: SAMUEL SCOTT, SR WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.0			UNCONSOLIDATED	30.0	0.0	
605.0	CARBONDALE	ENERGY	SANDSTONE	5.0	30.0	
600.0	CARBONDALE	ENERGY	SANDY SHALE	40.0	35.0	
560.0	CARBONDALE	ENERGY	SHALE	54.0	75.0	
506.0	CARBONDALE	ENERGY	CLAYSTONE & SHALE	7.5	129.0	
498.5	CARBONDALE	HERRIN	COAL	1.5	136.5	
497.0	CARBONDALE		UNDERCLAY	1.5	138.0	
495.5	CARBONDALE		SHALE	10.5	139.5	AND HARD ROCK
485.0	CARBONDALE		PYRITE	1.0	150.0	
484.0	CARBONDALE	SPRINGFIELD	COAL	3.3	151.0	
480.7	CARBONDALE		UNDERCLAY	5.8	154.3	
475.0	CARBONDALE		SHALE	40.0	160.0	

MAPID: 04500073000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 16N 10W SECTION: 30 QUARTERS/FOOTAGES: SE NE

QUADRANGLE: SCOTTLAND LONGITUDE: -87.563004 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.804792 DATE COLLECTED:

SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 156.5 LOG TYPE: Drillers Log

SOURCE: SAMUEL SCOTT, SR WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.0			UNCONSOLIDATED	88.0	0.0	
542.0	CARBONDALE	ENERGY	SANDY SHALE	18.0	88.0	
524.0	CARBONDALE	ENERGY	SANDSTONE	16.0	106.0	
508.0	CARBONDALE	ENERGY	SANDY SHALE	7.0	122.0	
501.0	CARBONDALE		CLAYSTONE & SHALE	24.5	129.0	THIS INTERVAL SHOULD CONTAIN HERRIN COAL
476.5	CARBONDALE	SPRINGFIELD	COAL	2.5	153.5	UNCERTAIN CORRELATION
474.0	CARBONDALE		UNDERCLAY	0.5	156.0	

MAPID: 04500156000C VERSION: 1

PROJECT: NCRDS95

COUNTY: EDGAR TWP/RNG: 16N 10W SECTION: 32 QUARTERS/FOOTAGES: 1170' S line, 3060' E line

QUADRANGLE: SCOTTLAND LONGITUDE: -87.552344 GEOLOGIST: C.TREWORY

CONFIDENTIAL: N LATITUDE: 39.784623 DATE COLLECTED: 11 / 23 / 1949

SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 352.1 LOG TYPE: Other Core Study

SOURCE: PAUL WEIR ST. BERNICE 11 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.0			UNCONSOLIDATED	45.8	0.0	
564.2	CARBONDALE		SHALE	6.7	45.8	
557.5	CARBONDALE		SANDSTONE	15.0	52.5	
542.5	CARBONDALE		SHALE	1.8	67.5	
541.2	CARBONDALE		SILTSTONE	16.7	68.8	
524.6	CARBONDALE		SHALE	58.1	85.4	
466.5	CARBONDALE		DARK SHALE	2.0	143.5	DARK GRAY TO BLACK
463.5	CARBONDALE	HERRIN	COAL	1.8	146.5	
461.7	CARBONDALE		UNDERCLAY	0.4	148.3	
461.2	CARBONDALE		CLAYSTONE & SILTSTONE	2.4	148.8	
458.8	CARBONDALE		SHALE	15.1	151.2	
443.7	CARBONDALE		LIMESTONE	0.2	166.3	
443.6	CARBONDALE		BLACK SHALE	1.0	166.4	
442.6	CARBONDALE	SPRINGFIELD	COAL	2.5	167.4	0.04' CORE LOSS
440.0	CARBONDALE		UNDERCLAY	1.1	170.0	
439.0	CARBONDALE		CLAYSTONE & SILTSTONE	1.9	171.0	
437.0	CARBONDALE		LIMESTONE	0.6	173.0	
436.5	CARBONDALE		SHALE	2.3	173.5	
434.2	CARBONDALE		SANDSTONE	17.0	175.8	
417.2	CARBONDALE		SILTSTONE	25.6	192.8	
391.6	CARBONDALE		SHALE	35.2	218.4	
356.4	CARBONDALE	EXCELLO	BLACK SHALE	2.7	253.6	WITH A 4" CONCRETION
353.7	CARBONDALE	HOUCHIN CREEK	COAL	0.9	256.3	DEPTH ADJUSTED TO CORE MARKER
352.8	CARBONDALE		UNDERCLAY	0.3	257.2	
352.5	CARBONDALE		SANDSTONE	2.2	257.5	
350.3	CARBONDALE		SHALE	19.5	259.7	
330.9	CARBONDALE		SANDSTONE	0.4	279.1	
330.5	CARBONDALE		SHALE	1.7	279.5	
328.8	CARBONDALE		SILTSTONE	1.9	281.2	
326.9	CARBONDALE		SHALE	6.8	283.1	
320.1	CARBONDALE		LIMESTONE	1.4	289.9	
318.7	CARBONDALE		UNDERCLAY	0.5	291.3	DEPTH ADJUSTED TO CORE MARKER
318.2	CARBONDALE		SHALE	7.3	291.8	
310.9	CARBONDALE	SURVANT	COAL	2.1	299.1	
308.8	CARBONDALE		CARBONACEOUS SHALE	1.0	301.2	
307.8	CARBONDALE		SHALE	36.3	302.2	
271.5	CARBONDALE		BLACK SHALE	2.8	338.5	PYRITE IN LOWER 6"
268.7	CARBONDALE	COLCHESTER	COAL	0.5	341.3	DEPTH ADJUSTED TO CORE MARKER
268.2	CARBONDALE	COLCHESTER	SHALE	0.0	341.8	

268.1	CARBONDALE	COLCHESTER	COAL	1.0	341.9
267.1	CARBONDALE	COLCHESTER	SHALE	0.1	342.9
267.0	CARBONDALE	COLCHESTER	COAL	0.2	343.0
266.8	SPOON		UNDERCLAY	0.8	343.2
266.1	SPOON		SHALE	3.5	343.9
262.5	SPOON	SEELYVILLE	COAL	1.0	347.5
261.5	SPOON	SEELYVILLE	SHALE	0.8	348.5
260.7	SPOON	SEELYVILLE	COAL	0.8	349.3
259.9	SPOON	SEELYVILLE	PYRITE	0.1	350.1
259.9	SPOON	SEELYVILLE	COAL	2.0	350.1

**MAPID:** 04500601000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 11W    **SECTION:** 5    **QUARTERS/FOOTAGES:** SW SW NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.633772    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.874868    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 687.0    **LOGGED (FT.):** 425.0    **LOG TYPE:** Electric Log  
**SOURCE:**    **WELL TYPE:** Oil and Gas Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
551.0	CARBONDALE	DANVILLE	COAL	3.5	136.0
455.0	CARBONDALE	HERRIN	COAL	2.0	232.0
347.0	CARBONDALE	HOUCHIN CREEK	COAL	-	340.0
262.0	CARBONDALE	COLCHESTER	COAL	-	425.0

MAPID: 04500074000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR

TWP/RNG: 16N 11W

SECTION: 25

QUARTERS/FOOTAGES: NE NW NW

QUADRANGLE: SCOTTLAND

LONGITUDE: -87.593105

GEOLOGIST: R. SMITH

CONFIDENTIAL: N

LATITUDE: 39.808886

DATE COLLECTED: 0 / 0 / 1907

SURFACE ELEVATION (FT.): 630.0

LOGGED (FT.): 378.0

LOG TYPE: Drillers Log

SOURCE: SAMUEL SCOTT SR.

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.0			UNCONSOLIDATED	20.0	0.0	
610.0	MODESTO		SHALE	14.5	20.0	
595.5	CARBONDALE	DANVILLE	COAL	3.7	34.5	
591.8	CARBONDALE		UNDERCLAY	9.8	38.2	
582.0	CARBONDALE	ENERGY	SANDY SHALE	11.0	48.0	
571.0	CARBONDALE	ENERGY	SANDSTONE	66.0	59.0	
505.0	CARBONDALE	ENERGY	LIMESTONE	2.0	125.0	QUESTIONABLE LITHOLOGY
503.0	CARBONDALE	ENERGY	SHALE	12.0	127.0	
491.0	CARBONDALE	HERRIN	COAL	3.8	139.0	
487.2	CARBONDALE		UNDERCLAY	4.2	142.8	
483.0	CARBONDALE		SHALE	10.0	147.0	
473.0	CARBONDALE	TURNER MINE	BLACK SHALE	4.5	157.0	
468.5	CARBONDALE	SPRINGFIELD	COAL	2.3	161.5	
466.2	CARBONDALE		UNDERCLAY	2.7	163.8	
463.5	CARBONDALE		SHALE	26.5	166.5	
437.0	CARBONDALE		DARK SHALE	39.0	193.0	
398.0	CARBONDALE	EXCELLO	BLACK SHALE	2.5	232.0	
395.5	CARBONDALE	HOUCHIN CREEK	COAL	1.0	234.5	
394.5	CARBONDALE		UNDERCLAY	1.5	235.5	
393.0	CARBONDALE		LIMESTONE	2.0	237.0	
391.0	CARBONDALE		SANDSTONE	7.0	239.0	
384.0	CARBONDALE		DARK SHALE	10.0	246.0	
374.0	CARBONDALE		SHALE	17.0	256.0	
357.0	CARBONDALE		SANDSTONE	8.0	273.0	
349.0	CARBONDALE		BROWN SHALE	25.0	281.0	
324.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	7.5	306.0	
316.5	CARBONDALE	COLCHESTER	COAL	2.0	313.5	
314.5	SPOON		UNDERCLAY	8.5	315.5	
306.0	SPOON		GRAY SHALE	13.0	324.0	
293.0	SPOON		SANDSTONE	41.0	337.0	

MAPID: 04500074000C VERSION: 2

PROJECT: CGT-ECILL

COUNTY: EDGAR

TWP/RNG: 16N 11W

SECTION: 25

QUARTERS/FOOTAGES: NE NW NW

QUADRANGLE: SCOTTLAND

LONGITUDE: -87.593105

GEOLOGIST: C TREWORYG

CONFIDENTIAL: N

LATITUDE: 39.808886

DATE COLLECTED:

SURFACE ELEVATION (FT.): 630.0

LOGGED (FT.): 315.0

LOG TYPE: Drillers Log

SOURCE:

WELL TYPE: Coal Test

COMMENT: GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
595.0	CARBONDALE	DANVILLE	COAL	3.7	35.0	
491.0	CARBONDALE	HERRIN	COAL	3.8	139.0	
469.0	CARBONDALE	SPRINGFIELD	COAL	2.3	161.0	
396.0	CARBONDALE	HOUCHIN CREEK	COAL	1.0	234.0	
317.0	CARBONDALE	COLCHESTER	COAL	2.0	313.0	

MAPID: 04501138000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR

TWP/RNG: 16N 12W

SECTION: 2

QUARTERS/FOOTAGES: NE NE NW

QUADRANGLE: GEORGETOWN

LONGITUDE: -87.683612

GEOLOGIST: LOG BOOK

CONFIDENTIAL: N

LATITUDE: 39.879999

DATE COLLECTED: 11 / 6 / 1959

SURFACE ELEVATION (FT.): 701.0

LOGGED (FT.): 313.0

LOG TYPE: Drillers Log

SOURCE: TRUAX-TRAER COAL CO RF-7

WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
478.2	SHELBURN	DANVILLE	COAL	3.3	222.8	
393.7	CARBONDALE	HERRIN	COAL	3.1	307.3	



MAPID: 04501139000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 3 QUARTERS/FOOTAGES: 2118' S line, 1143' W line of SW  
 QUADRANGLE: CHRISMAN LONGITUDE: -87.709598 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.872907 DATE COLLECTED: 4 / 28 / 1960  
 SURFACE ELEVATION (FT.): 702.0 LOGGED (FT.): 796.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-28 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
463.5	SHELburn	DANVILLE	COAL	4.3	238.5	
356.4	CARBONDALE	HERRIN	COAL	3.7	345.6	
339.2	CARBONDALE	SPRINGFIELD	COAL	0.1	362.8	
257.0	CARBONDALE	HOUCHIN CREEK	COAL	1.5	445.0	
161.6	CARBONDALE	COLCHESTER	COAL	0.7	540.4	SPLIT
148.1	CARBONDALE	COLCHESTER	COAL	1.3	553.9	SPLIT
132.7	CARBONDALE	SEELYVILLE	COAL	0.1	569.3	
120.2			COAL	0.7	581.8	
111.4			COAL	1.2	590.6	
21.6	SPOON	ROCK ISLAND	COAL	0.6	680.4	MINSHALL
0.0	TRADEWATER	POPE CREEK	COAL	2.3	702.0	UPPER BLOCK

MAPID: 04501106000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 4 QUARTERS/FOOTAGES: 98' S line, 19' W line  
 QUADRANGLE: CHRISMAN LONGITUDE: -87.728704 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.866139 DATE COLLECTED: 10 / 16 / 1967  
 SURFACE ELEVATION (FT.): 718.0 LOGGED (FT.): 410.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-79 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
429.1	SHELburn	DANVILLE	COAL	3.2	288.9	
343.0	CARBONDALE	HERRIN	COAL	3.3	375.0	

MAPID: 04501118000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 4 QUARTERS/FOOTAGES: 189' N line, 1875' E line  
 QUADRANGLE: GEORGETOWN LONGITUDE: -87.717024 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.880398 DATE COLLECTED: 3 / 0 / 1967  
 SURFACE ELEVATION (FT.): 710.0 LOGGED (FT.): 364.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-115 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
456.4	SHELburn	DANVILLE	COAL	2.8	253.6	
374.2	CARBONDALE	HERRIN	COAL	3.4	335.8	

MAPID: 04500128000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 5 QUARTERS/FOOTAGES: SW NW SW

QUADRANGLE: CHRISMAN LONGITUDE: -87.74623 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.870509 DATE COLLECTED:

SURFACE ELEVATION (FT.): 705.0 LOGGED (FT.): 394.2 LOG TYPE: Drillers Log

SOURCE: BUNSEN COAL CO. WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
705.0			UNCLASSIFIED	304.0	0.0	
401.0	CARBONDALE	DANVILLE	COAL	2.5	304.0	
398.5	CARBONDALE		UNKNOWN	84.5	306.5	
314.0	CARBONDALE	HERRIN	COAL	3.2	391.0	

MAPID: 04501107000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 7 QUARTERS/FOOTAGES: 53' S line, 23' E line

QUADRANGLE: CHRISMAN LONGITUDE: -87.747339 GEOLOGIST: LOG BOOK

CONFIDENTIAL: N LATITUDE: 39.851135 DATE COLLECTED: 10 / 0 / 1967

SURFACE ELEVATION (FT.): 698.0 LOGGED (FT.): 405.0 LOG TYPE: Drillers Log

SOURCE: TRUAX-TRAEER COAL CO RF-80 WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
591.5			COAL	1.3	106.5	
567.5			COAL	0.5	130.5	
413.2	SHELBURN	DANVILLE	COAL	3.0	284.8	
327.0	CARBONDALE	HERRIN	COAL	3.5	371.0	

MAPID: 04501140000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 8 QUARTERS/FOOTAGES: SW SW SW SE

QUADRANGLE: CHRISMAN LONGITUDE: -87.737322 GEOLOGIST: LOG BOOK

CONFIDENTIAL: N LATITUDE: 39.851533 DATE COLLECTED: 1 / 2 / 1968

SURFACE ELEVATION (FT.): 680.0 LOGGED (FT.): 360.0 LOG TYPE: Drillers Log

SOURCE: TRUAX-TRAEER COAL CO RF-96 WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
431.3	SHELBURN	DANVILLE	COAL	3.1	248.7	
344.5	CARBONDALE	HERRIN	COAL	3.1	335.5	

**MAPID:** 04501169000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 8    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.746765    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.86531    **DATE COLLECTED:** 11 / 1 / 1967  
**SURFACE ELEVATION (FT.):** 730.0    **LOGGED (FT.):** 460.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-84    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
516.9			COAL	1.0	213.1	
408.3	SHELBURN	DANVILLE	COAL	1.8	321.7	
323.4	CARBONDALE	HERRIN	COAL	4.4	406.6	

**MAPID:** 04501170000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 1350' S line, 550' W line of SW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.72455    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.858044    **DATE COLLECTED:** 7 / 26 / 1960  
**SURFACE ELEVATION (FT.):** 699.0    **LOGGED (FT.):** 359.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-34    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
432.5	SHELBURN	DANVILLE	COAL	4.0	266.5	
343.7	CARBONDALE	HERRIN	COAL	2.3	355.3	

**MAPID:** 04501201000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 13    **QUARTERS/FOOTAGES:** SE SE NE NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.663328    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.84833    **DATE COLLECTED:** 8 / 2 / 1960  
**SURFACE ELEVATION (FT.):** 655.0    **LOGGED (FT.):** 257.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-35    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
505.5	SHELBURN	DANVILLE	COAL	2.0	149.5	
403.9	CARBONDALE	HERRIN	COAL	2.8	251.1	

MAPID: 04501108000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 18 QUARTERS/FOOTAGES: 1328' S line, 16' E line  
 QUADRANGLE: CHRISMAN LONGITUDE: -87.747243 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.840069 DATE COLLECTED: 10 / 15 / 1967  
 SURFACE ELEVATION (FT.): 659.0 LOGGED (FT.): 378.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-78 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
580.4			COAL	0.5	78.6
560.4			COAL	1.8	98.6
509.9			COAL	0.8	149.1
479.2			COAL	0.5	179.8
402.6	SHELburn	DANVILLE	COAL	3.3	256.4
326.7	CARBONDALE	HERRIN	COAL	4.3	332.3

MAPID: 04501142000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 18 QUARTERS/FOOTAGES: SW NW NE  
 QUADRANGLE: HUME LONGITUDE: -87.755439 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.848299 DATE COLLECTED: 12 / 18 / 1959  
 SURFACE ELEVATION (FT.): 679.0 LOGGED (FT.): 335.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-18 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
428.0	SHELburn	DANVILLE	COAL	3.0	251.0
350.2	CARBONDALE	HERRIN	COAL	3.6	328.8

MAPID: 04501143000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 18 QUARTERS/FOOTAGES: SE SW SE  
 QUADRANGLE: HUME LONGITUDE: -87.753074 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.837304 DATE COLLECTED: 11 / 9 / 1967  
 SURFACE ELEVATION (FT.): 657.0 LOGGED (FT.): 354.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-85 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
589.6			COAL	0.8	67.4
565.1			COAL	0.4	91.9
519.8			COAL	0.7	137.2
411.2	SHELburn	DANVILLE	COAL	2.9	245.8
305.8	CARBONDALE	SPRINGFIELD	COAL	0.3	351.2

**MAPID:** 04501144000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 19    **QUARTERS/FOOTAGES:** SE SE SE SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.757215    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.822425    **DATE COLLECTED:** 9 / 7 / 1960  
**SURFACE ELEVATION (FT.):** 650.0    **LOGGED (FT.):** 375.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-40    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
507.0			COAL	3.0	143.0	
385.0	SHELBURN	DANVILLE	COAL	4.0	265.0	
309.4	CARBONDALE	HERRIN	COAL	3.3	340.6	

**MAPID:** 04501145000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 22    **QUARTERS/FOOTAGES:** SW SW SW NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.709092    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.82955    **DATE COLLECTED:** 7 / 7 / 1960  
**SURFACE ELEVATION (FT.):** 653.0    **LOGGED (FT.):** 309.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-31    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
441.0	SHELBURN	DANVILLE	COAL	3.2	212.0	
349.7	CARBONDALE	HERRIN	COAL	2.5	303.3	

**MAPID:** 04501146000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 24    **QUARTERS/FOOTAGES:** SW SW SE NW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.666664    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.829803    **DATE COLLECTED:** 8 / 9 / 1960  
**SURFACE ELEVATION (FT.):** 653.0    **LOGGED (FT.):** 264.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-36    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
496.5	SHELBURN	DANVILLE	COAL	2.5	156.5	
393.8	CARBONDALE	HERRIN	COAL	2.7	259.2	

**MAPID:** 04501147000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 30    **QUARTERS/FOOTAGES:** SE SE NE SE  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.747776    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.811196    **DATE COLLECTED:** 7 / 13 / 1960  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 285.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-32    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
380.8	SHELburn	DANVILLE	COAL	3.7	279.2	

**MAPID:** 04501148000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 30    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.76552    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.821584    **DATE COLLECTED:** 10 / 19 / 1967  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 352.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-81    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
520.3			COAL	0.8	139.7	
410.7	SHELburn	DANVILLE	COAL	2.9	249.3	
328.5	CARBONDALE	HERRIN	COAL	3.0	331.5	
310.7	CARBONDALE	SPRINGFIELD	COAL	0.3	349.3	

**MAPID:** 04501109000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 31    **QUARTERS/FOOTAGES:** 44' S line, 24' W line of SW  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.747347    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.792453    **DATE COLLECTED:** 9 / 14 / 1968  
**SURFACE ELEVATION (FT.):** 663.0    **LOGGED (FT.):** 474.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-70    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
558.6			COAL	2.9	104.4	
507.7			COAL	0.7	155.3	
482.2			COAL	1.3	180.8	
429.3			COAL	0.4	233.7	
391.3			COAL	0.3	271.7	
309.7	SHELburn	DANVILLE	COAL	3.3	353.3	
215.3	CARBONDALE	HERRIN	COAL	3.1	447.7	
195.7	CARBONDALE	SPRINGFIELD	COAL	1.8	467.3	

**MAPID:** 04501149000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 31    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.765644    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.806475    **DATE COLLECTED:** 9 / 6 / 1967  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 402.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-67    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.6			COAL	0.6	105.4
533.0			COAL	2.0	127.0
485.5			COAL	0.8	174.5
371.0	SHELBURN	DANVILLE	COAL	2.8	289.0
280.5	CARBONDALE	HERRIN	COAL	3.2	379.5
260.7	CARBONDALE	SPRINGFIELD	COAL	1.7	399.3

**MAPID:** 04501150000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 31    **QUARTERS/FOOTAGES:** SE SE NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.757914    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.800508    **DATE COLLECTED:** 9 / 8 / 1967  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 443.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-68    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.2			COAL	1.7	79.8
524.8			COAL	0.7	136.2
500.0			COAL	0.4	161.0
333.6	SHELBURN	DANVILLE	COAL	2.8	327.4
240.2	CARBONDALE	HERRIN	COAL	3.3	420.8
222.2	CARBONDALE	SPRINGFIELD	COAL	1.2	438.8

MAPID: 04500135000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 16N 12W SECTION: 32 QUARTERS/FOOTAGES: 150' S line, 2750' E line

QUADRANGLE: CHRISMAN LONGITUDE: -87.738077 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.792624 DATE COLLECTED: 4 / 14 / 1947

SURFACE ELEVATION (FT.): 649.1 LOGGED (FT.): 599.8 LOG TYPE: Drillers Log

SOURCE: BELL AND ZOLLAR COAL CO. WELL TYPE: Coal Test

COMMENT: ISGS CORE DESCRIPTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
649.1			UNCONSOLIDATED	38.0	0.0	
611.1			LIMESTONE	2.1	38.0	
609.0			CORE LOSS	0.9	40.1	
608.1			CLAYSTONE & SHALE	4.0	41.0	
604.1			SHALE	42.3	45.0	
561.8			GRAY & BLACK SHALE	0.5	87.3	
561.3			LIMESTONE	2.3	87.8	
559.1			BLACK SHALE	1.3	90.0	
557.8			COAL	0.4	91.3	
557.3			UNDERCLAY	1.8	91.8	
555.6			SILTSTONE	9.5	93.5	
546.1			GRAY SHALE	12.8	103.0	
533.3			COAL	1.3	115.8	
532.1			UNDERCLAY	0.6	117.0	
531.5			CLAYSTONE & SHALE	7.6	117.6	
523.9			SHALE	2.6	125.2	
521.3			LIMESTONE	0.4	127.8	
520.9			CLAYSTONE & SHALE	0.8	128.2	
520.1			CORE LOSS	7.0	129.0	
513.1			SHALE	1.9	136.0	
511.2			LIMESTONE	0.8	137.9	
510.3			SILTSTONE	2.9	138.8	
507.4			SHALE	3.8	141.7	
503.7			SILTSTONE	4.1	145.4	
499.6			SHALE	4.3	149.5	
495.3			SILTSTONE	1.4	153.8	
493.9			CORE LOSS	0.8	155.2	
493.1			CLAYSTONE & SHALE	0.2	156.0	
492.9			SILTSTONE	2.4	156.2	
490.5			LIMESTONE	1.8	158.6	
488.7			BLACK SHALE	0.4	160.4	
488.3			COAL	0.6	160.8	
487.8	MODESTO		UNDERCLAY	0.2	161.3	
487.6	MODESTO		CLAYSTONE & SHALE	4.1	161.5	
483.5	MODESTO		SILTSTONE	8.4	165.6	
475.1	MODESTO		SHALE	27.5	174.0	
447.6	MODESTO		BLACK SHALE	1.7	201.5	
445.9	MODESTO	PIRTLE (IN)	COAL	0.4	203.2	UNCERTAIN CORRELATION
445.6	MODESTO		CLAYSTONE & SHALE	4.4	203.5	



441.2	MODESTO		SHALE	0.5	207.9
440.7	MODESTO		SILTSTONE	2.7	208.4
438.0	MODESTO		SHALE	64.2	211.1
373.8	MODESTO		CORE LOSS	0.7	275.3
373.2	CARBONDALE	DANVILLE	COAL	1.5	275.9
371.7	CARBONDALE		CORE LOSS	0.6	277.4
371.1	CARBONDALE		UNDERCLAY	0.7	278.0
370.4	CARBONDALE		CLAYSTONE & SHALE	5.4	278.7
365.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.7	284.1
363.3	CARBONDALE	ENERGY	SILTSTONE	1.3	285.8
362.1	CARBONDALE	ENERGY	SANDSTONE	41.3	287.0
320.8	CARBONDALE	ENERGY	SILTSTONE	8.4	328.3
312.4	CARBONDALE	ENERGY	SHALE	0.7	336.7
311.8	CARBONDALE	ENERGY	SILTSTONE	0.2	337.3
311.6	CARBONDALE	ENERGY	SHALE	39.4	337.5
272.2	CARBONDALE	HERRIN	COAL	3.0	376.9
269.2	CARBONDALE		UNDERCLAY	1.7	379.9
267.5	CARBONDALE		CLAYSTONE & SHALE	5.6	381.6
262.0	CARBONDALE		SHALE	0.5	387.1
261.4	CARBONDALE		CLAYSTONE & SHALE	0.8	387.7
260.6	CARBONDALE		LIMESTONE	0.5	388.5
260.1	CARBONDALE		SHALE	2.8	389.0
257.3	CARBONDALE		CORE LOSS	3.3	391.8
254.1	CARBONDALE		CLAYSTONE & SHALE	1.6	395.0
252.5	CARBONDALE		LIMESTONE	0.6	396.6
252.0	CARBONDALE		SILTSTONE	0.5	397.1
251.5	CARBONDALE		SANDSTONE	4.4	397.6
247.1	CARBONDALE		SILTSTONE	28.0	402.0
219.1	CARBONDALE		SHALE	12.3	430.0
206.8	CARBONDALE		SILTSTONE	2.8	442.3
204.0	CARBONDALE		SHALE	1.0	445.1
203.0	CARBONDALE		SILTSTONE	0.6	446.1
202.4	CARBONDALE		GRAY SHALE	34.9	446.7
167.5	CARBONDALE	EXCELLO	BLACK SHALE	4.9	481.6
162.6	CARBONDALE		GRAY SHALE	0.8	486.5
161.8	CARBONDALE	HOUCHIN CREEK	COAL	0.9	487.3
160.9	CARBONDALE		UNDERCLAY	1.4	488.2
159.5	CARBONDALE		GRAY SHALE	3.0	489.6
156.5	CARBONDALE		SILTSTONE	1.9	492.6
154.6	CARBONDALE		SHALE	1.7	494.5
152.9	CARBONDALE		SILTSTONE	0.3	496.2
152.6	CARBONDALE		GRAY SHALE	5.8	496.5
146.8	CARBONDALE		SILTSTONE	1.2	502.3
145.6	CARBONDALE		GRAY SHALE	0.9	503.5
144.7	CARBONDALE		SILTSTONE	6.1	504.4
138.6	CARBONDALE		GRAY SHALE	32.1	510.5
106.5	CARBONDALE		SANDSTONE	0.8	542.6
105.8	CARBONDALE		SHALE	6.8	543.3

99.0	CARBONDALE		CORE LOSS	0.4	550.1	
98.6	CARBONDALE		SANDSTONE	6.3	550.5	
92.3	CARBONDALE		GRAY SHALE	0.3	556.8	
92.0	CARBONDALE		SANDSTONE	1.3	557.1	
90.8	CARBONDALE		BLACK SHALE	1.3	558.3	
89.5	CARBONDALE		GRAY SHALE	2.8	559.6	
86.8	CARBONDALE		BLACK SHALE	0.5	562.3	
86.3	CARBONDALE		LIMESTONE	0.1	562.8	
86.2	CARBONDALE		GRAY SHALE	0.1	562.9	W/PYRITE
86.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.2	563.0	
84.9	CARBONDALE	COLCHESTER	COAL	1.4	564.2	
83.6	SPOON		CLAYSTONE & SHALE	0.4	565.5	
83.2	SPOON		SILTSTONE	7.8	565.9	
75.4	SPOON		SANDSTONE	1.1	573.7	
74.3	SPOON		SHALE	0.4	574.8	
73.9	SPOON		SANDSTONE	2.5	575.2	
71.4	SPOON		SILTSTONE	0.6	577.7	
70.8	SPOON		GRAY SHALE	9.1	578.3	
61.8	SPOON		GRAY & BLACK SHALE	0.3	587.3	
61.5	SPOON		GRAY SHALE	5.1	587.6	
56.4	SPOON	SEELYVILLE	COAL	1.3	592.7	
55.1	SPOON		UNDERCLAY	0.8	594.0	
54.3	SPOON		CLAYSTONE & SHALE	1.2	594.8	
53.2	SPOON		SHALE	3.9	595.9	

**MAPID:** 04500135000C    **VERSION:** 2    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 12W    **SECTION:** 32    **QUARTERS/FOOTAGES:** 150' S line, 2750' E line  
**QUADRANGLE:** CHRISMAN    **LONGITUDE:** -87.738077    **GEOLOGIST:** C TREWORY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.792624    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 649.0    **LOGGED (FT.):** 594.3    **LOG TYPE:** Survey Core Study  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** GOOD LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN COMMENT
373.0	CARBONDALE	DANVILLE	COAL	1.5	276.0
272.0	CARBONDALE	HERRIN	COAL	2.9	377.0
161.0	CARBONDALE	HOUCHIN CREEK	COAL	0.9	488.0
85.0	CARBONDALE	COLCHESTER	COAL	1.3	564.0
56.0	SPOON	SEELYVILLE	COAL	1.3	593.0

**MAPID:** 04522101000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 75' N line, 50' W line  
**QUADRANGLE:** SIDELL    **LONGITUDE:** -87.78459    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.880671    **DATE COLLECTED:** 12 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 693.0    **LOGGED (FT.):** 400.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-60    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04522102000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 2    **QUARTERS/FOOTAGES:** 75' S line, 150' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.80323    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.865421    **DATE COLLECTED:** 12 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 709.0    **LOGGED (FT.):** 440.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-59    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04522103000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 2    **QUARTERS/FOOTAGES:** 30' N line, 45' W line  
**QUADRANGLE:** SIDELL    **LONGITUDE:** -87.803564    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.880482    **DATE COLLECTED:** 6 / 0 / 1971  
**SURFACE ELEVATION (FT.):** 695.0    **LOGGED (FT.):** 400.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PC-35    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501151000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 3    **QUARTERS/FOOTAGES:** 35' N line, 237' E line of NE NE NE  
**QUADRANGLE:** SIDELL    **LONGITUDE:** -87.804932    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.879613    **DATE COLLECTED:** 12 / 11 / 1959  
**SURFACE ELEVATION (FT.):** 699.0    **LOGGED (FT.):** 395.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-11    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
503.0			COAL	1.2	196.0	
363.5	SHELBURN	DANVILLE	COAL	2.3	335.5	
314.9	CARBONDALE	HERRIN	COAL	4.2	384.1	

**MAPID:** 04522104000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 3    **QUARTERS/FOOTAGES:** 5' N line, 1330' W line  
**QUADRANGLE:** SIDELL    **LONGITUDE:** -87.818218    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.880659    **DATE COLLECTED:** 11 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 700.0    **LOGGED (FT.):** 414.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PA-40    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04500081000C    **VERSION:** 1    **PROJECT:** CGT-ECILL  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 4    **QUARTERS/FOOTAGES:** SE SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.834941    **GEOLOGIST:** C TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.867325    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 714.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Drillers Log  
**SOURCE:**    **WELL TYPE:** Coal Test  
**COMMENT:** FAIR LOG

**MAPID:** 04522105000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 6    **QUARTERS/FOOTAGES:** 45' N line, 1240' E line  
**QUADRANGLE:** SIDELL    **LONGITUDE:** -87.865948    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.879988    **DATE COLLECTED:** 5 / 0 / 1971  
**SURFACE ELEVATION (FT.):** 723.0    **LOGGED (FT.):** 372.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PD-13    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 045HCS0PD132 VERSION: 1

PROJECT: NCRDS91

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 6 QUARTERS/FOOTAGES: 100' N line, 700' E line  
 QUADRANGLE: SIDELL LONGITUDE: -87.864013 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.87984 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 296.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-13 WELL TYPE: Coal Test  
 COMMENT: ISGA MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	168.0	0.0	
-			ROCK	124.0	168.0	
-	CARBONDALE	HERRIN	COAL	4.0	292.0	

MAPID: 04522106000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 7 QUARTERS/FOOTAGES: 40' N line, 10' E line  
 QUADRANGLE: HUME LONGITUDE: -87.86142 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.865264 DATE COLLECTED: 9 / 0 / 1970  
 SURFACE ELEVATION (FT.): 710.0 LOGGED (FT.): 400.0 LOG TYPE: Electric Log  
 SOURCE: HYDROCARBON SURVEY PA-34 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 045HCSOPD14Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 7 QUARTERS/FOOTAGES: 2350' S line, 150' W line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.880203 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.8573 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-14 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

**MAPID:** 04501171000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 8    **QUARTERS/FOOTAGES:** SW SW SW SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.860673    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.851283    **DATE COLLECTED:** 6 / 24 / 1960  
**SURFACE ELEVATION (FT.):** 687.0    **LOGGED (FT.):** 591.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-29    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
463.0	CARBONDALE	HERRIN	COAL	5.5	224.0	
422.1	CARBONDALE	SPRINGFIELD	COAL	1.5	264.9	
408.0	CARBONDALE	HOUCHIN CREEK	COAL	0.5	279.0	
346.0			COAL	0.5	341.0	
334.0			COAL	1.6	353.0	

**MAPID:** 04501119000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 268' N line, 620' E line of NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.83957    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.86474    **DATE COLLECTED:** 8 / 1 / 1968  
**SURFACE ELEVATION (FT.):** 718.0    **LOGGED (FT.):** 410.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-154    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
516.8			COAL	1.3	201.2	
381.3	SHELBURN	DANVILLE	COAL	4.8	336.7	
339.7	CARBONDALE	HERRIN	COAL	5.5	378.3	
315.5	CARBONDALE	SPRINGFIELD	COAL	2.2	402.5	

**MAPID:** 04501152000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 292' S line, 59' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.841975    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.85167    **DATE COLLECTED:** 8 / 6 / 1968  
**SURFACE ELEVATION (FT.):** 690.0    **LOGGED (FT.):** 395.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-156    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
555.0			COAL	1.3	135.0	
508.7			COAL	0.9	181.3	
376.7	SHELBURN	DANVILLE	COAL	4.7	313.3	
333.2	CARBONDALE	HERRIN	COAL	5.3	356.8	
308.5	CARBONDALE	SPRINGFIELD	COAL	1.6	381.5	

**MAPID:** 04522107000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 70' N line, 45' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.84201    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.865308    **DATE COLLECTED:** 6 / 0 / 1971  
**SURFACE ELEVATION (FT.):** 719.0    **LOGGED (FT.):** 418.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PD-29    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 045HCS0PD29Z    **VERSION:** 1    **PROJECT:** NCRDS91  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 150' N line, 150' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.841636    **GEOLOGIST:** C.TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.865084    **DATE COLLECTED:** 12 / 0 / 1974  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 382.1    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY NO. PD-29    **WELL TYPE:** Coal Test  
**COMMENT:** ISGS MAP LIBRARY 4103 i5, 1-27 & 28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
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-			UNCONSOLIDATED	221.0	0.0	
-			ROCK	156.0	221.0	
-	CARBONDALE	HERRIN	COAL	5.1	377.0	

**MAPID:** 04522108000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 141' N line, 35' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.822747    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.864941    **DATE COLLECTED:** 6 / 0 / 1971  
**SURFACE ELEVATION (FT.):** 721.0    **LOGGED (FT.):** 398.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PD-30    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501153000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 11    **QUARTERS/FOOTAGES:** NE NE SE NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.794983    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.86117    **DATE COLLECTED:** 4 / 15 / 1960  
**SURFACE ELEVATION (FT.):** 703.0    **LOGGED (FT.):** 377.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-25    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
518.5			COAL	1.0	184.5
387.5	SHELburn	DANVILLE	COAL	3.0	315.5
333.8	CARBONDALE	HERRIN	COAL	5.5	369.2

**MAPID:** 04501154000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 12    **QUARTERS/FOOTAGES:** 217' N line, 1662' E line of NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.774866    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.865101    **DATE COLLECTED:** 8 / 10 / 1960  
**SURFACE ELEVATION (FT.):** 735.0    **LOGGED (FT.):** 416.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-37    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
489.0			COAL	3.7	246.0
401.0	SHELburn	DANVILLE	COAL	4.0	334.0
326.3	CARBONDALE	HERRIN	COAL	5.3	408.7

**MAPID:** 04500130000C    **VERSION:** 1    **PROJECT:** NCRDS88  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 13    **QUARTERS/FOOTAGES:** SW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.783796    **GEOLOGIST:** R. SMITH  
**CONFIDENTIAL:** N    **LATITUDE:** 39.848058    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 694.0    **LOGGED (FT.):** 369.9    **LOG TYPE:** Drillers Log  
**SOURCE:** BUNSEN COAL CO.    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
694.0			UNCLASSIFIED	295.0	0.0
399.0	CARBONDALE	DANVILLE	COAL	3.7	295.0
395.3	CARBONDALE		UNKNOWN	66.3	298.7
329.0	CARBONDALE	HERRIN	COAL	4.9	365.0



**MAPID:** 04522109000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 13    **QUARTERS/FOOTAGES:** 1320' S line, 1320' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.780289    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.839902    **DATE COLLECTED:** 12 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 670.0    **LOGGED (FT.):** 400.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-51    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-    -    NO COAL PICKS

**MAPID:** 04501141000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 14    **QUARTERS/FOOTAGES:** NE NE SW NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.790351    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.846674    **DATE COLLECTED:** 8 / 18 / 1960  
**SURFACE ELEVATION (FT.):** 700.0    **LOGGED (FT.):** 412.5    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-38    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

569.0			COAL	2.8	131.0	
549.0			COAL	3.5	151.0	
503.0			COAL	2.5	197.0	
383.8	SHELburn	DANVILLE	COAL	4.2	316.2	
311.0	CARBONDALE	HERRIN	COAL	4.4	389.0	
289.5	CARBONDALE	SPRINGFIELD	COAL	0.7	410.5	

**MAPID:** 04501155000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 15    **QUARTERS/FOOTAGES:** SW SW NW SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.822566    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.840329    **DATE COLLECTED:** 7 / 28 / 1960  
**SURFACE ELEVATION (FT.):** 683.0    **LOGGED (FT.):** 334.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-33    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

481.0			COAL	2.0	202.0	
355.3	CARBONDALE	DANVILLE	COAL	5.1	327.7	

**MAPID:** 0452211000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 15    **QUARTERS/FOOTAGES:** 1470' N line, 10' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.804094    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.846784    **DATE COLLECTED:** 8 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 697.0    **LOGGED (FT.):** 410.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PA-14    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-    -    NO COAL PICKS

**MAPID:** 0450112000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 16    **QUARTERS/FOOTAGES:** 96' N line, 62' W line of SE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.832455    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.843263    **DATE COLLECTED:** 8 / 0 / 1968  
**SURFACE ELEVATION (FT.):** 692.0    **LOGGED (FT.):** 410.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAEER COAL CO    RF-155    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

499.0			SHALY COAL	1.5	193.0	SLATEY
497.0			SHALY COAL	1.7	195.0	SLATEY
466.7			SHALY COAL	0.5	225.3	SLATEY
367.9	SHELBURN	DANVILLE	COAL	4.7	324.1	
322.6	CARBONDALE	HERRIN	COAL	4.8	369.4	
296.2	CARBONDALE	SPRINGFIELD	COAL	0.8	395.8	

**MAPID:** 0452211000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 16    **QUARTERS/FOOTAGES:** 40' N line, 5' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.823144    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.850769    **DATE COLLECTED:** 9 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 701.0    **LOGGED (FT.):** 460.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PA-33    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-    -    NO COAL PICKS

**MAPID:** 04522112000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 16    **QUARTERS/FOOTAGES:** 200' S line, 40' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.823322    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.836754    **DATE COLLECTED:** 9 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 668.0    **LOGGED (FT.):** 430.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-28    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-    -    NO COAL PICKS

**MAPID:** 04522113000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 17    **QUARTERS/FOOTAGES:** 100' N line, 10' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.842223    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.850586    **DATE COLLECTED:** 9 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 680.0    **LOGGED (FT.):** 441.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-30    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-    -    NO COAL PICKS

**MAPID:** 045HCSOPB30Z    **VERSION:** 1    **PROJECT:** CGT-MISC  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 17    **QUARTERS/FOOTAGES:** 150' N line, 150' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.842724    **GEOLOGIST:** C TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.850447    **DATE COLLECTED:** 2 / 0 / 1974  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 344.5    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY NO. PB-30    **WELL TYPE:** Coal Test  
**COMMENT:** ISGS MAP LIBRARY 4103 I5.1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	

-			UNCONSOLIDATED	98.0	0.0	
-			ROCK	241.0	98.0	
-	CARBONDALE	HERRIN	COAL	5.5	339.0	

MAPID: 045HCSOPA25Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 18 QUARTERS/FOOTAGES: 500' S line, 150' E line  
 QUADRANGLE: HUME LONGITUDE: -87.86174 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.837664 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PA-25 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN COMMENT
-	CARBONDALE	HERRIN	COAL	0.0	COAL ERODED

MAPID: 045HCSOPD19Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 19 QUARTERS/FOOTAGES: 2600' N line, 2300' E line  
 QUADRANGLE: HUME LONGITUDE: -87.869499 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.829062 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-19 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN COMMENT
-	CARBONDALE	HERRIN	COAL	0.0	COAL ERODED

MAPID: 04501156000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 20 QUARTERS/FOOTAGES: SW SW SW SW  
 QUADRANGLE: HUME LONGITUDE: -87.860732 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.822298 DATE COLLECTED: 11 / 20 / 1967  
 SURFACE ELEVATION (FT.): 652.0 LOGGED (FT.): 455.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-88 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501157000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 20    **QUARTERS/FOOTAGES:** 76' N line, 365' E line of NE NW NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.848269    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.835996    **DATE COLLECTED:** 11 / 27 / 1967  
**SURFACE ELEVATION (FT.):** 650.0    **LOGGED (FT.):** 306.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-89    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
414.4	SHELburn	DANVILLE	COAL	4.8	235.6	
370.4	CARBONDALE	HERRIN	COAL	4.6	279.6	
347.2	CARBONDALE	SPRINGFIELD	COAL	1.1	302.8	

**MAPID:** 04501172000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 20    **QUARTERS/FOOTAGES:** SW SW SW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.860667    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.829516    **DATE COLLECTED:** 12 / 18 / 1967  
**SURFACE ELEVATION (FT.):** 652.0    **LOGGED (FT.):** 455.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-95    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04522114000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 21    **QUARTERS/FOOTAGES:** 100' S line, 1320' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.837498    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.822282    **DATE COLLECTED:** 12 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 650.0    **LOGGED (FT.):** 396.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PA-46    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501158000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 22    **QUARTERS/FOOTAGES:** NW SW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.821985    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.831708    **DATE COLLECTED:** 11 / 15 / 1967  
**SURFACE ELEVATION (FT.):** 659.0    **LOGGED (FT.):** 386.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-87    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
484.3			COAL	1.0	174.7
357.6	SHELBURN	DANVILLE	COAL	3.8	301.4
276.4	CARBONDALE	SPRINGFIELD	COAL	1.9	382.6

**MAPID:** 04501159000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 23    **QUARTERS/FOOTAGES:** NW NW NW NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.793967    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.835689    **DATE COLLECTED:** 7 / 5 / 1960  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 284.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-30    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.0			COAL	0.5	97.0
545.5			COAL	3.0	114.5
500.0			COAL	2.0	160.0
382.5	SHELBURN	DANVILLE	COAL	3.8	277.5

**MAPID:** 04501160000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 23    **QUARTERS/FOOTAGES:** NE NW NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.790989    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.835232    **DATE COLLECTED:** 8 / 30 / 1960  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 371.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-39    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.0			COAL	0.5	97.0
545.5			COAL	3.0	114.5
500.0			SHALY COAL	2.0	160.0 SLATEY
382.5	CARBONDALE	DANVILLE	COAL	3.7	277.5 WITH CLAY SEAMS
309.8	CARBONDALE	HERRIN	COAL	4.9	350.2

**MAPID:** 04501173000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 24    **QUARTERS/FOOTAGES:** 34' S line, 17' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.785034    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.821627    **DATE COLLECTED:** 12 / 14 / 1967  
**SURFACE ELEVATION (FT.):** 657.0    **LOGGED (FT.):** 365.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-94    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
510.8			COAL	0.8	146.2	
475.6			COAL	0.6	181.4	
391.9	SHELburn	DANVILLE	COAL	2.3	265.1	
316.6	CARBONDALE	HERRIN	COAL	4.8	340.4	
294.8	CARBONDALE	SPRINGFIELD	COAL	0.8	362.2	

**MAPID:** 04522115000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 24    **QUARTERS/FOOTAGES:** 10' S line, 300' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.76718    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.822062    **DATE COLLECTED:** 8 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 654.0    **LOGGED (FT.):** 320.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PA-13    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501161000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 26    **QUARTERS/FOOTAGES:** SW SW SW SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.803519    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.807385    **DATE COLLECTED:** 9 / 12 / 1967  
**SURFACE ELEVATION (FT.):** 662.0    **LOGGED (FT.):** 375.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-69    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
566.5			COAL	0.5	95.5	
543.0			COAL	1.7	119.0	
495.3			COAL	0.5	166.7	
459.6			COAL	0.4	202.4	
383.2	SHELburn	DANVILLE	COAL	2.7	278.8	
308.7	CARBONDALE	HERRIN	COAL	3.9	353.3	
290.6	CARBONDALE	SPRINGFIELD	COAL	1.4	371.4	

**MAPID:** 0450111000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 41' S line, 2008' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.811297    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.80708    **DATE COLLECTED:** 9 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 659.0    **LOGGED (FT.):** 385.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-71    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
489.0			COAL	1.0	170.0	
456.3			COAL	0.3	202.7	
371.3	SHELburn	DANVILLE	COAL	3.3	287.7	
297.1	CARBONDALE	HERRIN	COAL	4.5	361.9	
277.5	CARBONDALE	SPRINGFIELD	COAL	1.4	381.5	

**MAPID:** 0450111000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 23' N line, 60' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.804341    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.82163    **DATE COLLECTED:** 9 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 658.0    **LOGGED (FT.):** 393.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-72    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
488.4			COAL	1.2	169.6	
369.9	SHELburn	DANVILLE	COAL	4.3	288.1	
298.7	CARBONDALE	HERRIN	COAL	4.3	359.3	
279.3	CARBONDALE	SPRINGFIELD	COAL	1.1	378.7	

**MAPID:** 04501112000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 71' N line, 5' W line of NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.823161    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.82164    **DATE COLLECTED:** 9 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 654.0    **LOGGED (FT.):** 393.5    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-73    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
474.9			COAL	0.9	179.1	
350.6	SHELburn	DANVILLE	COAL	4.3	303.4	
286.2	CARBONDALE	HERRIN	COAL	5.8	367.8	
264.7	CARBONDALE	SPRINGFIELD	COAL	3.2	389.3	



**MAPID:** 04522116000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 15' N line, 60' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.80434    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.821652    **DATE COLLECTED:** 10 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 440.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-42    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 04501162000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 28    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.841628    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.821587    **DATE COLLECTED:** 11 / 29 / 1967  
**SURFACE ELEVATION (FT.):** 649.0    **LOGGED (FT.):** 318.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAEER COAL CO    RF-90    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
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408.1	SHELBURN	DANVILLE	COAL	4.8	240.9
355.3	CARBONDALE	HERRIN	COAL	5.1	293.7
335.5	CARBONDALE	SPRINGFIELD	COAL	2.4	313.5

**MAPID:** 045HCSOPC10Z    **VERSION:** 1    **PROJECT:** CGT-MISC  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 30    **QUARTERS/FOOTAGES:** 150' S line, 700' W line  
**QUADRANGLE:** NEWMAN    **LONGITUDE:** -87.877821    **GEOLOGIST:** C.TREWORGY  
**CONFIDENTIAL:** N    **LATITUDE:** 39.807385    **DATE COLLECTED:** 2 / 0 / 1974  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY NO. PC-10    **WELL TYPE:** Coal Test  
**COMMENT:** ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
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-	CARBONDALE	HERRIN	COAL	0.0	COAL ERODED
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MAPID: 04501163000C    VERSION: 1

PROJECT: CONF

COUNTY: EDGAR    TWP/RNG: 16N 13W    SECTION: 31    QUARTERS/FOOTAGES: NE NE NE NE

QUADRANGLE: HUME    LONGITUDE: -87.861958    GEOLOGIST: LOG BOOK

CONFIDENTIAL: N    LATITUDE: 39.806611    DATE COLLECTED: 12 / 4 / 1967

SURFACE ELEVATION (FT.): 651.0    LOGGED (FT.): 455.0    LOG TYPE: Drillers Log

SOURCE: TRUAX-TRAER COAL CO    RF-91    WELL TYPE: Coal Test

COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
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NO COAL TO 455'

MAPID: 04500134000C VERSION: 1

PROJECT: NCRDS88

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 32 QUARTERS/FOOTAGES: 2225' S line, 4580' E line

QUADRANGLE: HUME LONGITUDE: -87.85867 GEOLOGIST: R. SMITH

CONFIDENTIAL: N LATITUDE: 39.798595 DATE COLLECTED: 3 / 0 / 1947

SURFACE ELEVATION (FT.): 647.9 LOGGED (FT.): 288.8 LOG TYPE: Drillers Log

SOURCE: BELL AND ZOLLER COAL CO. WELL TYPE: Coal Test

COMMENT: ALL COALS LESS THAN 1.1 FT. THICK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
647.9			UNCONSOLIDATED	157.2	0.0	CARBONDALE FORMATION ERODED
490.7			COAL	0.8	157.2	PROBABLY SPOON FORMATION OR OLDER
489.9			UNDERCLAY	2.3	158.0	
487.6			SILTSTONE	1.6	160.3	
486.0			CORE LOSS	11.1	161.9	
474.9			COAL	0.4	173.0	
474.5			UNDERCLAY	1.6	173.4	
472.9			SILTSTONE	1.0	175.0	
471.9			SHALE	5.3	176.0	
466.6			SILTSTONE	0.7	181.3	
465.9			GRAY SHALE	2.0	182.0	
463.9			BLACK SHALE	0.5	184.0	
463.4			CORE LOSS	2.5	184.5	
460.9			COAL	0.3	187.0	
460.6			BLACK SHALE	0.4	187.3	
460.1			UNDERCLAY	0.5	187.8	
459.6			CORE LOSS	2.8	188.3	
456.9			SILTSTONE	2.8	191.0	
454.1			GRAY SHALE	1.7	193.8	
452.4			CLAYSTONE & SHALE	2.0	195.5	
450.4			GRAY SHALE	4.1	197.5	
446.3			CLAYSTONE & SHALE	2.8	201.6	
443.6			BLACK SHALE	0.7	204.3	
442.9			COAL	1.1	205.0	
441.8			UNDERCLAY	0.5	206.1	
441.3			SILTSTONE	3.9	206.6	
437.4			SHALE	9.5	210.5	
427.9			GRAY & BLACK SHALE	1.3	220.0	
426.6			GRAY SHALE	2.2	221.3	
424.4			CLAYSTONE & SHALE	0.8	223.5	
423.6			SHALE	5.5	224.3	
418.1			SILTSTONE	59.1	229.8	

**MAPID:** 04501164000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 32    **QUARTERS/FOOTAGES:** SE SE SE SE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.842894    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.792867    **DATE COLLECTED:** 11 / 13 / 1967  
**SURFACE ELEVATION (FT.):** 652.0    **LOGGED (FT.):** 275.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-86    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
468.2	SHELburn	DANVILLE	COAL	1.8	183.8
398.7	CARBONDALE	HERRIN	COAL	5.8	253.3

**MAPID:** 04501113000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 33    **QUARTERS/FOOTAGES:** SE SE SE SE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.823861    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.792802    **DATE COLLECTED:** 10 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 659.0    **LOGGED (FT.):** 418.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-74    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
450.3			COAL	0.5	208.7
415.0			COAL	0.7	244.0
337.9	SHELburn	DANVILLE	COAL	3.8	321.1
261.8	CARBONDALE	HERRIN	COAL	4.8	397.2
245.5	CARBONDALE	SPRINGFIELD	COAL	0.8	413.5

**MAPID:** 04501165000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 33    **QUARTERS/FOOTAGES:** NW NE NE  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.826875    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.806123    **DATE COLLECTED:** 9 / 26 / 1960  
**SURFACE ELEVATION (FT.):** 651.0    **LOGGED (FT.):** 403.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-42    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
463.6			COAL	0.5	187.4
427.0			COAL	1.0	224.0
340.5	SHELburn	DANVILLE	COAL	2.5	310.5
271.0	CARBONDALE	HERRIN	COAL	5.0	380.0
251.7	CARBONDALE	SPRINGFIELD	COAL	1.8	399.3

**MAPID:** 04501166000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 33    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.841668    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.806592    **DATE COLLECTED:** 10 / 30 / 1967  
**SURFACE ELEVATION (FT.):** 652.0    **LOGGED (FT.):** 318.3    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-83    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
427.4	SHELburn	DANVILLE	COAL	3.8	224.6
359.0	CARBONDALE	HERRIN	COAL	6.1	293.0
335.5	CARBONDALE	SPRINGFIELD	COAL	1.1	316.5

**MAPID:** 04501114000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 34    **QUARTERS/FOOTAGES:** 499' S line, 64' E line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.804562    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.793691    **DATE COLLECTED:** 10 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 408.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-75    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.5			COAL	0.7	123.5
513.9			COAL	1.0	147.1
425.5			COAL	0.3	235.5
357.5	SHELburn	DANVILLE	COAL	2.5	303.5
270.8	CARBONDALE	HERRIN	COAL	3.7	390.2
255.3	CARBONDALE	SPRINGFIELD	COAL	0.7	405.7

**MAPID:** 04501115000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 34    **QUARTERS/FOOTAGES:** 375' N line, 150' E line of SW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.814306    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.79862    **DATE COLLECTED:** 10 / 0 / 1967  
**SURFACE ELEVATION (FT.):** 659.0    **LOGGED (FT.):** 405.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-77    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.6			COAL	1.1	121.4
515.9			COAL	2.2	143.1
465.4			COAL	0.5	193.6
351.5	SHELburn	DANVILLE	COAL	3.8	307.5
275.9	CARBONDALE	HERRIN	COAL	4.8	383.1
257.7	CARBONDALE	SPRINGFIELD	COAL	1.3	401.3

MAPID: 04501116000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 36 QUARTERS/FOOTAGES: 45' S line, 30' W line  
 QUADRANGLE: HUME LONGITUDE: -87.78502 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.792384 DATE COLLECTED: 10 / 0 / 1967  
 SURFACE ELEVATION (FT.): 660.0 LOGGED (FT.): 416.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-76 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.2			COAL	0.5	122.8
516.1			COAL	1.5	143.9
426.1			COAL	0.3	233.9
354.7	SHELBURN	DANVILLE	COAL	2.8	305.3
262.2	CARBONDALE	HERRIN	COAL	3.3	397.8
248.3	CARBONDALE	SPRINGFIELD	COAL	1.7	411.7

MAPID: 04501167000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 13W SECTION: 36 QUARTERS/FOOTAGES: NE SE NW  
 QUADRANGLE: HUME LONGITUDE: -87.776863 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.802338 DATE COLLECTED: 9 / 13 / 1960  
 SURFACE ELEVATION (FT.): 658.0 LOGGED (FT.): 404.0 LOG TYPE: Drillers Log  
 SOURCE: TRUAX-TRAER COAL CO RF-41 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.0			COAL	1.2	100.0
528.0			COAL	0.5	130.0
442.5			COAL	2.0	215.5
368.5	SHELBURN	DANVILLE	COAL	2.5	289.5
282.1	CARBONDALE	HERRIN	COAL	2.3	375.9
263.8	CARBONDALE	SPRINGFIELD	COAL	1.3	394.2

**MAPID:** 04501168000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 36    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.784546    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.806478    **DATE COLLECTED:** 10 / 24 / 1967  
**SURFACE ELEVATION (FT.):** 661.0    **LOGGED (FT.):** 400.0    **LOG TYPE:** Drillers Log  
**SOURCE:** TRUAX-TRAER COAL CO    RF-82    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
558.1			COAL	0.7	102.9	
532.9			COAL	0.5	128.1	
485.2			COAL	0.8	175.8	
445.4			COAL	0.9	215.6	
371.5	SHELburn	DANVILLE	COAL	3.3	289.5	
283.7	CARBONDALE	HERRIN	COAL	3.9	377.3	
265.5	CARBONDALE	SPRINGFIELD	COAL	1.4	395.5	

**MAPID:** 04522117000C    **VERSION:** 1    **PROJECT:** CONF  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 13W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 30' N line, 300' W line  
**QUADRANGLE:** HUME    **LONGITUDE:** -87.784064    **GEOLOGIST:** LOG BOOK  
**CONFIDENTIAL:** N    **LATITUDE:** 39.806855    **DATE COLLECTED:** 9 / 0 / 1970  
**SURFACE ELEVATION (FT.):** 660.0    **LOGGED (FT.):** 422.0    **LOG TYPE:** Electric Log  
**SOURCE:** HYDROCARBON SURVEY    PB-27    **WELL TYPE:** Coal Test  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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

**MAPID:** 045HCS0PC032    **VERSION:** 1    **PROJECT:** CGT-MISC  
**COUNTY:** EDGAR    **TWP/RNG:** 16N 14W    **SECTION:** 3    **QUARTERS/FOOTAGES:** 100' S line, 300' E line  
**QUADRANGLE:** NEWMAN    **LONGITUDE:** -87.919491    **GEOLOGIST:** C.TREWORYG  
**CONFIDENTIAL:** N    **LATITUDE:** 39.86556    **DATE COLLECTED:** 2 / 0 / 1974  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Company map  
**SOURCE:** HYDROCARBON SURVEY NO. PC-3    **WELL TYPE:** Coal Test  
**COMMENT:** ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 045HCS0PD01Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 3 QUARTERS/FOOTAGES: 150' N line, 150' W line  
 QUADRANGLE: ALLERTON LONGITUDE: -87.937065 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.879538 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-1 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 045HCSOPA34Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 7 QUARTERS/FOOTAGES: 100' N line, 50' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.975534 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.864917 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 274.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PA-34 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	142.0	0.0	
-			ROCK	127.0	142.0	
-	CARBONDALE	HERRIN	COAL	5.0	269.0	

MAPID: 045HCSOPC19Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 12 QUARTERS/FOOTAGES: 150' S line, 2500' W line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.890509 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.851186 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PC-19 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED



MAPID: 045HCSOPC18Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 12 QUARTERS/FOOTAGES: 150' S line, 200' W line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.898743 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.851146 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PC-18 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 045HCSOPD10Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 13 QUARTERS/FOOTAGES: 200' S line, 150' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.881023 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.836718 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-10 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 045HCSOPC06Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 22 QUARTERS/FOOTAGES: 100' N line, 100' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.918535 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.835897 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PC-6 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 045HCSOPC07Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 23 QUARTERS/FOOTAGES: 150' N line, 150' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.899823 GEOLOGIST: C.TREWORY  
 CONFIDENTIAL: N LATITUDE: 39.835876 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PC-7 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	HERRIN	COAL	0.0		COAL ERODED

MAPID: 04522118000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 34 QUARTERS/FOOTAGES: 1000' S line, 2200' W line of NE  
 QUADRANGLE: NEWMAN LONGITUDE: -87.919598 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.802418 DATE COLLECTED: 5 / 0 / 1971  
 SURFACE ELEVATION (FT.): 642.0 LOGGED (FT.): 268.0 LOG TYPE: Electric Log  
 SOURCE: HYDROCARBON SURVEY PC-9 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 045HCSOPC09Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 34 QUARTERS/FOOTAGES: 1400' N line, 950' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.921387 GEOLOGIST: C TREWORYG  
 CONFIDENTIAL: N LATITUDE: 39.803096 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 102.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PC-9 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 I5.1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCONSOLIDATED	64.0	0.0	
-			ROCK	32.0	64.0	
-	CARBONDALE	HERRIN	COAL	6.0	96.0	

MAPID: 04521754000C VERSION: 1

PROJECT: ISGS95

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 35 QUARTERS/FOOTAGES: NW NE  
 QUADRANGLE: NEWMAN LONGITUDE: -87.906241 GEOLOGIST: BARGH  
 CONFIDENTIAL: N LATITUDE: 39.805123 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 645.0 LOGGED (FT.): 129.3 LOG TYPE: Drillers Log  
 SOURCE: ZEIGLER COAL CO. 44 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
645.0			UNCONSOLIDATED	112.0	0.0	
533.0	CARBONDALE	ENERGY	SHALE	6.0	112.0	CLYSH BNDS: GRY
527.0	CARBONDALE	ENERGY	SHALE	3.0	118.0	MD GRY
524.0	CARBONDALE	ENERGY	SHALE	0.5	121.0	CLYSH BNDS
523.5	CARBONDALE	ENERGY	SOFT SHALE	1.8	121.5	
521.7	CARBONDALE	HERRIN	COAL	5.3	123.3	

MAPID: 04522119000C VERSION: 1

PROJECT: CONF

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 35 QUARTERS/FOOTAGES: 75' S line, 8' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.898956 GEOLOGIST: LOG BOOK  
 CONFIDENTIAL: N LATITUDE: 39.792488 DATE COLLECTED: 5 / 0 / 1971  
 SURFACE ELEVATION (FT.): 644.0 LOGGED (FT.): 314.0 LOG TYPE: Electric Log  
 SOURCE: HYDROCARBON SURVEY PD-9 WELL TYPE: Coal Test  
 COMMENT: TOPS & THICK. FROM COAL SEC. LOG BOOK

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

MAPID: 045HCSOPD09Z VERSION: 1

PROJECT: CGT-MISC

COUNTY: EDGAR TWP/RNG: 16N 14W SECTION: 35 QUARTERS/FOOTAGES: 200' S line, 100' E line  
 QUADRANGLE: NEWMAN LONGITUDE: -87.899292 GEOLOGIST: C.TREWORGY  
 CONFIDENTIAL: N LATITUDE: 39.792835 DATE COLLECTED: 2 / 0 / 1974  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 107.0 LOG TYPE: Company map  
 SOURCE: HYDROCARBON SURVEY NO. PD-9 WELL TYPE: Coal Test  
 COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT OVERBURDEN	COMMENT
-			UNCONSOLIDATED	56.0	0.0
-			ROCK	45.0	56.0
-	CARBONDALE	HERRIN	COAL	6.0	101.0