

Status Report

Total Records: 151

Top 3 County Records		Top 3 Log Type Records		Top 3 Coal Records		Top 3 Member Records	
Morgan	151	Drillers Log	151	COLCHESTER	100	COLCHESTER COAL	100
				HERRIN	66	HERRIN COAL	66
				SPRINGFIELD	26	SPRINGFIELD COAL	26

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
DANVILLE	COAL	121.7	88.0	150.1	2.6	1.3	5.0
ANNA	SHALE	75.7	67.0	84.2	2.5	1.0	5.9
HERRIN	COAL	115.4	28.5	221.0	2.8	0.8	5.5
ST. DAVID	LIMESTONE	110.5	83.9	128.5	1.3	0.4	5.0
TURNER MINE	SHALE	120.3	84.3	230.0	1.5	0.3	3.0
SPRINGFIELD	COAL	149.2	85.9	355.0	3.9	1.0	6.2
EXCELLO	SHALE	94.5	94.5	94.5	1.6	1.6	1.6
HOUCHIN CREEK	COAL	162.7	96.1	219.4	2.2	0.1	3.7
KERTON CREEK	COAL	171.4	153.2	206.0	3.2	2.3	5.0
MECCA QUARRY	SHALE	337.0	337.0	337.0	3.5	3.5	3.5
COLCHESTER	COAL	212.6	63.1	412.0	2.3	0.8	3.0
				Net Coal	17.1		

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: 13770002000C **VERSION:** 1 **PROJECT:** NCRDS
COUNTY: MORGAN **TWP/RNG:** 13N 8W **SECTION:** 2 **QUARTERS/FOOTAGES:** 2500' N line, 1600' E line
QUADRANGLE: WAVERLY **LONGITUDE:** -89.950719 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 39.60225 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 690.0 **LOGGED (FT.):** 965.0 **LOG TYPE:** Drillers Log
SOURCE: UTAH INTERNATIONAL 04C18 **WELL TYPE:** Coal Test
COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
690.0			UNCLASSIFIED	218.0	0.0	
472.0			LIMESTONE	3.0	218.0	
469.0	CARBONDALE	HERRIN	COAL	2.0	221.0	UNCERTAIN CORRELATION
467.0			DARK SHALE	3.0	223.0	
464.0			LIMESTONE	14.0	226.0	
450.0			GREEN SHALE	80.0	240.0	
370.0			BLACK SHALE	4.0	320.0	
366.0			SANDSTONE	23.0	324.0	
343.0			SHALE	8.0	347.0	
335.0	CARBONDALE	SPRINGFIELD	COAL	1.0	355.0	UNCERTAIN CORRELATION
334.0	CARBONDALE		DARK SHALE	34.0	356.0	
300.0	CARBONDALE		LIMESTONE	5.0	390.0	
295.0	CARBONDALE		SHALE	17.0	395.0	
278.0	CARBONDALE	COLCHESTER	COAL	2.0	412.0	UNCERTAIN CORRELATION
276.0			BLACK SHALE	146.0	414.0	
130.0			SHALE	5.0	560.0	
125.0			LIMESTONE	120.0	565.0	
5.0			BLACK SHALE	75.0	685.0	

-70.0	SHALE	20.0	760.0
-90.0	LIMESTONE	245.0	780.0

MAPID: 13770003000C **VERSION:** 1 **PROJECT:** NCRDS
COUNTY: MORGAN **TWP/RNG:** 13N 8W **SECTION:** 9 **QUARTERS/FOOTAGES:** 2080' S line, 910' E line
QUADRANGLE: WAVERLY **LONGITUDE:** -89.985737 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 39.585612 **DATE COLLECTED:** 0 / 0 / 1950
SURFACE ELEVATION (FT.): 668.0 **LOGGED (FT.):** 980.0 **LOG TYPE:** Drillers Log
SOURCE: UTAH INTERNATIONAL 05C203 **WELL TYPE:** Coal Test
COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
668.0			UNCLASSIFIED	317.0	0.0	
351.0			BLACK SHALE	5.0	317.0	
346.0	CARBONDALE	SPRINGFIELD	COAL	1.0	322.0	
345.0			UNCLASSIFIED	657.0	323.0	

MAPID: 13770004000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 13N 8W SECTION: 10 QUARTERS/FOOTAGES: 960' N line, 1050' E line

QUADRANGLE: WAVERLY LONGITUDE: -89.967331 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.591718 DATE COLLECTED: 0 / 0 / 1961

SURFACE ELEVATION (FT.): 672.0 LOGGED (FT.): 777.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 06C321 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
672.0			NO RECORD	15.0	0.0
657.0			SANDSTONE	3.0	15.0
654.0			DARK SHALE	45.0	18.0
609.0			COAL	2.0	63.0
607.0			SHALE	10.0	65.0
597.0			LIMESTONE	15.0	75.0
582.0			SHALE	35.0	90.0
547.0			LIMESTONE	25.0	125.0
522.0			SHALE	30.0	150.0
492.0			LIMESTONE	45.0	180.0
447.0			SHALE	135.0	225.0
312.0	CARBONDALE	COLCHESTER	COAL	2.0	360.0
310.0			SHALE	58.0	362.0
252.0			COAL	2.0	420.0
250.0			SHALE	128.0	422.0
122.0			LIMESTONE	53.0	550.0
69.0			SHALE	27.0	603.0
42.0			LIMESTONE	30.0	630.0
12.0			SHALE	105.0	660.0
-93.0			SANDSTONE	5.0	765.0
-98.0			LIMESTONE	7.0	770.0

MAPID: 13770005000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 13N 8W SECTION: 15 QUARTERS/FOOTAGES: 910' S line, 2160' E line

QUADRANGLE: WAVERLY LONGITUDE: -89.970972 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.568127 DATE COLLECTED: 0 / 0 / 1947

SURFACE ELEVATION (FT.): 608.0 LOGGED (FT.): 901.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 07C39 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.0			UNCLASSIFIED	105.0	0.0
503.0				4.0	105.0
499.0			UNCLASSIFIED	18.0	109.0
481.0				2.0	127.0
479.0			UNCLASSIFIED	80.0	129.0
399.0			COAL	3.0	209.0
396.0			UNCLASSIFIED	38.0	212.0
358.0			COAL	6.0	250.0
352.0			UNCLASSIFIED	43.0	256.0
309.0	CARBONDALE	SPRINGFIELD	COAL	4.0	299.0
305.0			UNCLASSIFIED	598.0	303.0

MAPID: 13770006000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 13N 8W SECTION: 16 QUARTERS/FOOTAGES: 1660' N line, 390' E line

QUADRANGLE: WAVERLY LONGITUDE: -89.983722 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.575321 DATE COLLECTED: 0 / 0 / 1953

SURFACE ELEVATION (FT.): 658.0 LOGGED (FT.): 1035.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 08C178 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
658.0			NO RECORD	65.0	0.0	
593.0			DARK SHALE	59.0	65.0	
534.0			GREEN SHALE	21.0	124.0	
513.0	SHELBURN	DANVILLE	COAL	5.0	145.0	UNCERTAIN CORRELATION
508.0	SHELBURN		LIMESTONE	15.0	150.0	
493.0	SHELBURN		SHALE	10.0	165.0	
483.0	SHELBURN		LIMESTONE	20.0	175.0	
463.0	CARBONDALE	HERRIN	COAL	5.0	195.0	UNCERTAIN CORRELATION
458.0	CARBONDALE		DARK SHALE	95.0	200.0	
363.0	CARBONDALE	SPRINGFIELD	COAL	5.0	295.0	
358.0			DARK SHALE	20.0	300.0	
338.0			LIMESTONE	10.0	320.0	
328.0			DARK SHALE	50.0	330.0	COAL STREAKS
278.0			SANDY SHALE	10.0	380.0	
268.0			SANDSTONE	10.0	390.0	
258.0			SHALE	14.0	400.0	
244.0			LIMESTONE	116.0	414.0	
128.0			GREEN SHALE	30.0	530.0	
98.0			LIMESTONE	15.0	560.0	
83.0			SHALE	31.0	575.0	
52.0			UNCLASSIFIED	19.0	606.0	
33.0			LIMESTONE	191.0	625.0	
-158.0			SHALE	219.0	816.0	

MAPID: 1377010000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 13N 8W SECTION: 16 QUARTERS/FOOTAGES: 1660' N line, 390' E line

QUADRANGLE: WAVERLY LONGITUDE: -89.983715 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.575349 DATE COLLECTED: 0 / 0 / 1953

SURFACE ELEVATION (FT.): 658.0 LOGGED (FT.): 1035.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 08C178 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
658.0			NO RECORD	65.0	0.0	
593.0			DARK SHALE	59.0	65.0	
534.0			GREEN SHALE	21.0	124.0	
513.0	SHELBURN	DANVILLE	COAL	5.0	145.0	UNCERTAIN CORRELATION
508.0	SHELBURN		LIMESTONE	15.0	150.0	
493.0	SHELBURN		SHALE	10.0	165.0	
483.0	SHELBURN		LIMESTONE	15.0	175.0	
468.0			SHALE	10.0	190.0	
458.0			LIMESTONE	5.0	200.0	
453.0			SHALE	20.0	205.0	
433.0			BLACK SHALE	45.0	225.0	
388.0				45.0	270.0	
343.0			BLACK SHALE	65.0	315.0	
278.0			SANDY SHALE	10.0	380.0	
268.0			SANDSTONE	10.0	390.0	
258.0			SHALE	14.0	400.0	
244.0			LIMESTONE	116.0	414.0	
128.0			GREEN SHALE	30.0	530.0	
98.0			LIMESTONE	15.0	560.0	
83.0			SHALE	31.0	575.0	
52.0			UNCLASSIFIED	19.0	606.0	
33.0			LIMESTONE	191.0	625.0	
-158.0			SHALE	219.0	816.0	

MAPID: 13770007000C **VERSION:** 1 **PROJECT:** NCRDS
COUNTY: MORGAN **TWP/RNG:** 13N 8W **SECTION:** 22 **QUARTERS/FOOTAGES:** 2630' N line, 850' E line
QUADRANGLE: WAVERLY **LONGITUDE:** -89.966225 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 39.558419 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 606.0 **LOGGED (FT.):** 910.0 **LOG TYPE:** Drillers Log
SOURCE: UTAH INTERNATIONAL 09C40 **WELL TYPE:** Coal Test
COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
606.0			UNCLASSIFIED	343.0	0.0	
263.0			LIMESTONE	4.0	343.0	
259.0	CARBONDALE	COLCHESTER	COAL	1.0	347.0	
258.0			LIMESTONE	7.0	348.0	
251.0			UNCLASSIFIED	555.0	355.0	

MAPID: 13770101000C **VERSION:** 1 **PROJECT:** NCRDS
COUNTY: MORGAN **TWP/RNG:** 13N 8W **SECTION:** 22 **QUARTERS/FOOTAGES:** 2630' N line, 850' E line
QUADRANGLE: WAVERLY **LONGITUDE:** -89.966207 **GEOLOGIST:** LOUCHIOS
CONFIDENTIAL: N **LATITUDE:** 39.55846 **DATE COLLECTED:** 0 / 0 / 1948
SURFACE ELEVATION (FT.): 606.0 **LOGGED (FT.):** 910.0 **LOG TYPE:** Drillers Log
SOURCE: UTAH INTERNATIONAL 09C40 **WELL TYPE:** Coal Test
COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
606.0			UNCLASSIFIED	343.0	0.0	
263.0			LIMESTONE	4.0	343.0	
259.0	CARBONDALE	COLCHESTER	COAL	1.0	347.0	
258.0			LIMESTONE	7.0	348.0	

MAPID: 13720803000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 5 **QUARTERS/FOOTAGES:** 2100' N line, 45' E line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.114909 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.601562 **DATE COLLECTED:** 9 / 7 / 1981
SURFACE ELEVATION (FT.): 680.0 **LOGGED (FT.):** 305.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-72 **WELL TYPE:** Coal Test
COMMENT: TOTAL DEPTH UNREADABLE-LOOKS LIKE 305'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
394.5	CARBONDALE	COLCHESTER	COAL	0.6	285.5	
393.9	CARBONDALE	COLCHESTER	SHALE	0.4	286.1	PARTING
393.5	CARBONDALE	COLCHESTER	COAL	0.4	286.5	

MAPID: 13720804000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 11 **QUARTERS/FOOTAGES:** SE SE NW
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.069029 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.58715 **DATE COLLECTED:** 9 / 3 / 1981
SURFACE ELEVATION (FT.): 665.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-60 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
484.8	CARBONDALE	HERRIN	COAL	0.9	180.2	
483.9	CARBONDALE	HERRIN	SHALE	0.4	181.1	PARTING
483.5	CARBONDALE	HERRIN	COAL	1.4	181.5	

MAPID: 13720805000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 15 **QUARTERS/FOOTAGES:** 1450' S line, 1100' W line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.091781 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.567858 **DATE COLLECTED:** 9 / 5 / 1981
SURFACE ELEVATION (FT.): 651.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-65 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
525.6	CARBONDALE	HERRIN	COAL	0.6	125.4	
525.0	CARBONDALE	HERRIN	SHALE	0.3	126.0	PARTING
524.7	CARBONDALE	HERRIN	COAL	1.6	126.3	
523.1	CARBONDALE	HERRIN	SHALE	0.5	127.9	PARTING
522.6	CARBONDALE	HERRIN	COAL	1.3	128.4	
394.9	CARBONDALE	COLCHESTER	COAL	2.5	256.1	
353.2	SPOON		COAL	1.2	297.8	
346.9	SPOON		COAL	2.5	304.1	
338.1	SPOON		COAL	1.1	312.9	

MAPID: 13720806000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 17 **QUARTERS/FOOTAGES:** 325' S line, 2225' E line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.122456 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.564975 **DATE COLLECTED:** 9 / 6 / 1981
SURFACE ELEVATION (FT.): 642.0 **LOGGED (FT.):** 254.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-68 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
411.8	CARBONDALE	COLCHESTER	COAL	2.8	230.2	

MAPID: 13720807000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 26 **QUARTERS/FOOTAGES:** 250' S line, 1100' E line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.061269 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.536197 **DATE COLLECTED:** 9 / 4 / 1981
SURFACE ELEVATION (FT.): 612.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-63 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
378.0	CARBONDALE	COLCHESTER	COAL	2.6	234.0	
330.6	SPOON		COAL	1.4	281.4	
329.2	SPOON		SHALE	0.6	282.8	PARTING
328.6	SPOON		COAL	0.6	283.4	
323.6	SPOON		COAL	2.7	288.4	

MAPID: 13700177000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 33 **QUARTERS/FOOTAGES:** 10' N line, 2505' E line of SE SW
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.113106 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.52417 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 85.0 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 59 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
532.3	CARBONDALE	HERRIN	COAL	1.6	67.7	

MAPID: 13720808000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 9W **SECTION:** 33 **QUARTERS/FOOTAGES:** 250' N line, 650' W line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.111561 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.534643 **DATE COLLECTED:** 9 / 5 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-66 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
384.1	CARBONDALE	COLCHESTER	COAL	2.5	235.9	
341.4	SPOON		COAL	2.7	278.6	

MAPID: 13720809000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 1 **QUARTERS/FOOTAGES:** 1000' S line, 1500' W line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.16724 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.595364 **DATE COLLECTED:** 9 / 7 / 1981
SURFACE ELEVATION (FT.): 680.0 **LOGGED (FT.):** 310.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-73 **WELL TYPE:** Coal Test
COMMENT: EXACT DAY UNREADABLE EITHER 7TH OR 8TH

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
522.6	CARBONDALE	HERRIN	COAL	4.5	157.4	NAME AND THKNSS UNRELIABLE-BAD LOG COPY
394.3	CARBONDALE	COLCHESTER	COAL	1.0	285.7	THCKNESS GUESSED DUE TO BAD LOG COPY

MAPID: 13720810000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 5 **QUARTERS/FOOTAGES:** 200' N line, 1800' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.233843 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.60685 **DATE COLLECTED:** 9 / 3 / 1981
SURFACE ELEVATION (FT.): 688.0 **LOGGED (FT.):** 270.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-59 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
441.5	CARBONDALE	COLCHESTER	COAL	2.6	246.5	

MAPID: 13720811000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 10 **QUARTERS/FOOTAGES:** 150' N line, 1300' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.19577 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.592885 **DATE COLLECTED:** 9 / 23 / 1981
SURFACE ELEVATION (FT.): 687.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-91 **WELL TYPE:** Coal Test
COMMENT: ELECTRIC LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.4	CARBONDALE	HERRIN	COAL	1.9	115.6	

MAPID: 13720811000C **VERSION:** 2 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 10 **QUARTERS/FOOTAGES:** 150' N line, 1300' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.19577 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.592885 **DATE COLLECTED:** 9 / 23 / 1981
SURFACE ELEVATION (FT.): 687.0 **LOGGED (FT.):** 277.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-91 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR HERRIN HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.4	CARBONDALE	DANVILLE	COAL	1.9	115.6	ONLY LOGGED COAL, LOG STATES '#6 ?'
424.1	CARBONDALE	COLCHESTER	COAL	2.5	262.9	

MAPID: 13720812000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 10 **QUARTERS/FOOTAGES:** 50' N line, 10' W line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.209362 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.593063 **DATE COLLECTED:** 9 / 23 / 1981
SURFACE ELEVATION (FT.): 670.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-92 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
437.3	CARBONDALE	COLCHESTER	COAL	2.6	232.7	

MAPID: 13720813000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 11 **QUARTERS/FOOTAGES:** 1500' N line, 800' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.175411 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.588675 **DATE COLLECTED:** 9 / 6 / 1981
SURFACE ELEVATION (FT.): 682.0 **LOGGED (FT.):** 255.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-69 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
466.3	CARBONDALE	COLCHESTER	COAL	2.3	215.7	
448.5	SPOON		COAL	1.6	233.5	
447.9	SPOON		SHALE	0.4	234.1	PARTING
446.5	SPOON		COAL	0.5	235.5	

MAPID: 13720814000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 13 **QUARTERS/FOOTAGES:** 1900' S line, 100' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.154086 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.568709 **DATE COLLECTED:** 9 / 7 / 1981
SURFACE ELEVATION (FT.): 652.0 **LOGGED (FT.):** 260.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-71 **WELL TYPE:** Coal Test
COMMENT: ELECTRIC LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
541.4	CARBONDALE	HERRIN	COAL	1.6	110.6	

MAPID: 13720814000C **VERSION:** 2 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 13 **QUARTERS/FOOTAGES:** 1900' S line, 100' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.154086 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.568709 **DATE COLLECTED:** 9 / 7 / 1981
SURFACE ELEVATION (FT.): 652.0 **LOGGED (FT.):** 260.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-71 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
541.4	CARBONDALE	HERRIN	COAL	1.6	110.6	ONLY LOG'D COAL, NAME ILLEGIBLE-ASSUMED 5
405.4	CARBONDALE	COLCHESTER	COAL	2.6	246.6	

MAPID: 13720821000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 14 **QUARTERS/FOOTAGES:** SE SW NW
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.187483 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.572184 **DATE COLLECTED:** 9 / 24 / 1981
SURFACE ELEVATION (FT.): 652.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-94 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
420.0	CARBONDALE	COLCHESTER	COAL	2.6	232.0	

MAPID: 13720822000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 17 QUARTERS/FOOTAGES: NW NE SE

QUADRANGLE: NORTONVILLE LONGITUDE: -90.231016 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.570118 DATE COLLECTED: 9 / 25 / 1981

SURFACE ELEVATION (FT.): 660.0 LOGGED (FT.): 101.0 LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-99 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN	COMMENT
-			UNCLASSIFIED	101.0		NO COAL FOUND

MAPID: 13720815000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 19 QUARTERS/FOOTAGES: 1000' N line, 3500' W line

QUADRANGLE: MANCHESTER LONGITUDE: -90.251552 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.561031 DATE COLLECTED: 9 / 5 / 1981

SURFACE ELEVATION (FT.): 675.0 LOGGED (FT.): 258.0 LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-64 WELL TYPE: Coal Test

COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN	COMMENT
470.0	CARBONDALE	COLCHESTER	COAL	2.3	205.0	
423.2	SPOON		COAL	2.2	251.8	ONLY LOGGED COAL, LOG LISTS 2.2P'

MAPID: 13720823000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 22 QUARTERS/FOOTAGES: SW SE NW

QUADRANGLE: NORTONVILLE LONGITUDE: -90.203545 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.557693 DATE COLLECTED: 9 / 24 / 1981

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 220.0 LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-93 WELL TYPE: Coal Test

COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	UNIT OVERBURDEN	COMMENT
457.3	CARBONDALE	COLCHESTER	COAL	2.5	182.7	

MAPID: 1370016000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 29 **QUARTERS/FOOTAGES:** 12' S line, 1950' W line of NW SW
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.239475 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.538494 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 579.2 **LOGGED (FT.):** 36.3 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 42 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.7	CARBONDALE	HERRIN	COAL	5.1	28.5	

MAPID: 13700161000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 29 **QUARTERS/FOOTAGES:** 460' N line, 1337' E line of SE NE
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.232421 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.544418 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 633.9 **LOGGED (FT.):** 76.1 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 43 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
562.6	CARBONDALE	HERRIN	COAL	3.3	71.3	

MAPID: 13700162000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 29 **QUARTERS/FOOTAGES:** 654' S line, 1710' W line of NW NE
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.23098 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.547497 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 638.7 **LOGGED (FT.):** 100.0 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 44 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
546.4	CARBONDALE	HERRIN	COAL	1.4	92.3	

MAPID: 13700171000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 29 **QUARTERS/FOOTAGES:** 8' N line, 0' line of SW NE
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.234702 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.544326 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 637.4 **LOGGED (FT.):** 77.1 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 53 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
566.4	CARBONDALE	HERRIN	COAL	2.9	71.0	

MAPID: 13700172000C VERSION: 1

PROJECT: EIA-DOE

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 29 QUARTERS/FOOTAGES: 12' S line, 1960' W line of NW SW
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.239439 GEOLOGIST: JACOBSON
 CONFIDENTIAL: N LATITUDE: 39.538494 DATE COLLECTED:
 SURFACE ELEVATION (FT.): 579.2 LOGGED (FT.): 33.6 LOG TYPE: Drillers Log
 SOURCE: NORTHERN ILLINOIS COAL CORP. 54C WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.6	CARBONDALE	HERRIN	COAL	4.8	28.6	

MAPID: 13700152000C VERSION: 1

PROJECT: EIA-DOE

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 30 QUARTERS/FOOTAGES: 1350' N line, 12' E line of NW SW
 QUADRANGLE: MANCHESTER LONGITUDE: -90.259963 GEOLOGIST: JACOBSON
 CONFIDENTIAL: N LATITUDE: 39.538421 DATE COLLECTED:
 SURFACE ELEVATION (FT.): 604.4 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log
 SOURCE: NORTHERN ILLINOIS COAL CORP. 34 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
532.8	CARBONDALE	HERRIN	COAL	3.3	71.6	

MAPID: 13700158000C VERSION: 1

PROJECT: EIA-DOE

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 30 QUARTERS/FOOTAGES: 1294' S line, 880' E line of NW SE
 QUADRANGLE: MANCHESTER LONGITUDE: -90.254287 GEOLOGIST: JACOBSON
 CONFIDENTIAL: N LATITUDE: 39.542088 DATE COLLECTED:
 SURFACE ELEVATION (FT.): 636.9 LOGGED (FT.): 124.7 LOG TYPE: Drillers Log
 SOURCE: NORTHERN ILLINOIS COAL CORP. 40 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
565.3	CARBONDALE	HERRIN	COAL	1.5	71.6	

MAPID: 13700173000C VERSION: 1

PROJECT: EIA-DOE

COUNTY: MORGAN TWP/RNG: 13N 10W SECTION: 30 QUARTERS/FOOTAGES: 8' S line, 680' E line of NW SE
 QUADRANGLE: MANCHESTER LONGITUDE: -90.253558 GEOLOGIST: JACOBSON
 CONFIDENTIAL: N LATITUDE: 39.538537 DATE COLLECTED:
 SURFACE ELEVATION (FT.): 637.4 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log
 SOURCE: NORTHERN ILLINOIS COAL CORP. 55 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
570.5	CARBONDALE	HERRIN	COAL	4.0	66.9	

MAPID: 13700174000C **VERSION:** 1 **PROJECT:** EIA-DOE
COUNTY: MORGAN **TWP/RNG:** 13N 10W **SECTION:** 30 **QUARTERS/FOOTAGES:** 509' N line, 11' E line of SW SW
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.25997 **GEOLOGIST:** JACOBSON
CONFIDENTIAL: N **LATITUDE:** 39.537129 **DATE COLLECTED:**
SURFACE ELEVATION (FT.): 627.0 **LOGGED (FT.):** 75.0 **LOG TYPE:** Drillers Log
SOURCE: NORTHERN ILLINOIS COAL CORP. 56 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
580.2	CARBONDALE	HERRIN	COAL	1.5	46.8	

MAPID: 13720816000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 11W **SECTION:** 1 **QUARTERS/FOOTAGES:** 900' S line, 50' E line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.26367 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.595507 **DATE COLLECTED:** 8 / 21 / 1981
SURFACE ELEVATION (FT.): 660.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-52 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
457.0	CARBONDALE	COLCHESTER	COAL	2.4	203.0	

MAPID: 13720817000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 11W **SECTION:** 13 **QUARTERS/FOOTAGES:** 2200' S line, 700' W line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.280336 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.570411 **DATE COLLECTED:** 8 / 30 / 1981
SURFACE ELEVATION (FT.): 680.0 **LOGGED (FT.):** 238.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-57 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR DANVILLE HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
563.6	CARBONDALE	HERRIN	COAL	1.3	116.4	
562.3	CARBONDALE	HERRIN	SHALE	0.4	117.7	PARTING
561.9	CARBONDALE	HERRIN	COAL	2.1	118.1	
532.6	CARBONDALE	HOUCHIN CREEK	COAL	3.7	147.4	
526.8	CARBONDALE	KERTON CREEK	COAL	3.2	153.2	
485.8	CARBONDALE	COLCHESTER	COAL	2.2	194.2	

MAPID: 13720818000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 11W **SECTION:** 13 **QUARTERS/FOOTAGES:** 1000' N line, 300' E line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.264926 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.575826 **DATE COLLECTED:** 9 / 7 / 1981
SURFACE ELEVATION (FT.): 685.0 **LOGGED (FT.):** 258.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-70 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
546.8	CARBONDALE	HERRIN	COAL	1.0	138.2	
545.8	CARBONDALE	HERRIN	SHALE	0.4	139.2	PARTING
545.4	CARBONDALE	HERRIN	COAL	2.0	139.6	
518.9	CARBONDALE	HOUCHIN CREEK	COAL	1.7	166.1	COMPANY CALLED THIS THE #4B
514.2	CARBONDALE	KERTON CREEK	COAL	2.3	170.8	
453.9	CARBONDALE	COLCHESTER	COAL	2.5	231.1	

MAPID: 13720819000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 11W **SECTION:** 24 **QUARTERS/FOOTAGES:** 70' N line, 730' E line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.266619 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.563939 **DATE COLLECTED:** 9 / 23 / 1981
SURFACE ELEVATION (FT.): 685.0 **LOGGED (FT.):** 198.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-90 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
495.8	CARBONDALE	COLCHESTER	COAL	2.6	189.2	

MAPID: 13720820000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 13N 11W **SECTION:** 25 **QUARTERS/FOOTAGES:** 10' N line, 200' E line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.264955 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.549386 **DATE COLLECTED:** 9 / 4 / 1981
SURFACE ELEVATION (FT.): 641.0 **LOGGED (FT.):** 221.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-62 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
471.0	CARBONDALE	COLCHESTER	COAL	0.6	170.0	
470.4	CARBONDALE	COLCHESTER	SHALE	0.4	170.6	PARTING
470.0	CARBONDALE	COLCHESTER	COAL	1.7	171.0	THICKNESS ILLEGIBLE- ASSUMED 1.7'

MAPID: 13720773000C VERSION: 1

PROJECT: NCRDS95

COUNTY: MORGAN TWP/RNG: 14N 8W SECTION: 28 QUARTERS/FOOTAGES: 2510' S line, 1000' E line

QUADRANGLE: NEW BERLIN LONGITUDE: -89.986541 GEOLOGIST: C TREWORY

CONFIDENTIAL: N LATITUDE: 39.630458 DATE COLLECTED: 4 / 28 / 1981

SURFACE ELEVATION (FT.): 680.0 LOGGED (FT.): 368.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL MOR-81-01 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
680.0			UNKNOWN	26.0	0.0
654.0			SHALE	24.0	26.0
630.0			SHALE WITH LIMESTONE	2.0	50.0
628.0			GRAY SHALE	1.0	52.0
627.0			BLACK SHALE	3.0	53.0
624.0			SHALE	6.0	56.0
618.0			SHALE WITH LIMESTONE	2.0	62.0
616.0			SHALE & SANDSTONE	17.0	64.0
599.0			GRAY SHALE	14.0	81.0
585.0			SANDY SHALE	15.0	95.0
570.0			SANDY SHALE	14.0	110.0
556.0			SANDY SHALE	10.0	124.0
546.0			SHALE	9.0	134.0
537.0			GRAY SHALE	2.0	143.0
535.0			BLACK SHALE	2.0	145.0
533.0			DARK CLAYSTONE	7.0	147.0
526.0			SHALE WITH LIMESTONE	3.0	154.0
523.0			SHALE	5.0	157.0
518.0			GRAY SHALE	4.0	162.0
514.0			LIMESTONE	4.0	166.0
510.0			GRAY SHALE	12.0	170.0
498.0			SANDY SHALE	5.0	182.0
493.0			GRAY SHALE	3.0	187.0
490.0			BLACK SHALE	2.0	190.0
488.0			SANDY SHALE	4.0	192.0
484.0			SHALE	4.0	196.0
480.0			LIMESTONE	4.0	200.0
476.0			GRAY SHALE	4.0	204.0
472.0			BLACK SHALE	1.0	208.0
471.0	CARBONDALE	HERRIN	COAL	1.3	209.0
469.7	CARBONDALE	HERRIN	COAL W/ PYRITE	0.3	210.3
469.4	CARBONDALE	HERRIN	COAL	3.9	210.6
465.5	CARBONDALE		UNDERCLAY	6.5	214.5
459.0	CARBONDALE		GRAY SHALE	1.0	221.0
458.0	CARBONDALE		SHALE	5.0	222.0
453.0	CARBONDALE		LIMESTONE	2.0	227.0
451.0	CARBONDALE		SHALE WITH LIMESTONE	1.0	229.0
450.0	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	230.0
448.0	CARBONDALE		SHALE	3.0	232.0

445.0	CARBONDALE		SANDY SHALE	14.0	235.0
431.0	CARBONDALE		SHALE	5.0	249.0
426.0	CARBONDALE		SANDY SHALE	32.0	254.0
394.0	CARBONDALE		SHALE	14.5	286.0
379.5	CARBONDALE		SANDY SHALE	9.5	300.5
370.0	CARBONDALE		SHALE	24.0	310.0
346.0	CARBONDALE		GRAY SHALE	1.0	334.0
345.0	CARBONDALE		LIMESTONE	2.0	335.0
343.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	337.0
339.5	CARBONDALE	COLCHESTER	COAL	2.2	340.5
337.3	SPOON		UNDERCLAY	1.3	342.7
336.0	SPOON		CLAYSTONE & LIMESTONE	2.0	344.0
334.0	SPOON		GRAY SHALE	3.0	346.0
331.0	SPOON		LIMESTONE	2.0	349.0
329.0	SPOON		GRAY SHALE	11.0	351.0
318.0	SPOON		SHALE WITH LIMESTONE	3.0	362.0
315.0	SPOON		GRAY SHALE	3.0	365.0

MAPID: 1377000000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 14N 8W SECTION: 33 QUARTERS/FOOTAGES: 1340' S line, 780' E line

QUADRANGLE: WAVERLY LONGITUDE: -89.985664 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.612569 DATE COLLECTED: 0 / 0 / 1938

SURFACE ELEVATION (FT.): 676.0 LOGGED (FT.): 945.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 03C2 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
676.0			NO RECORD	81.0	0.0	
595.0			SANDSTONE	40.0	81.0	
555.0			BLACK SHALE	10.0	121.0	
545.0			SHALE	39.0	131.0	
506.0	CARBONDALE	HERRIN	COAL WITH SHALE	5.0	170.0	UNCERTAIN CORRELATION
501.0			SHALE	10.0	175.0	
491.0			LIMESTONE	5.0	185.0	
486.0			SHALE	10.0	190.0	
476.0			LIMESTONE	5.0	200.0	
471.0			SHALE	20.0	205.0	
451.0			BLACK SHALE	45.0	225.0	
406.0			COAL WITH SHALE	45.0	270.0	
361.0			BLACK SHALE	25.0	315.0	
336.0			LIMESTONE	5.0	340.0	
331.0			SHALE	60.0	345.0	
271.0			LIMESTONE	15.0	405.0	
256.0			SANDSTONE	15.0	420.0	
241.0			LIMESTONE	115.0	435.0	
126.0			GREEN SHALE	10.0	550.0	
116.0			SHALE	90.0	560.0	
26.0			LIMESTONE	35.0	650.0	
-9.0			SHALE	35.0	685.0	
-44.0			LIMESTONE	225.0	720.0	

MAPID: 13720824000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 3 **QUARTERS/FOOTAGES:** 86' N line, 105' E line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.079035 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.695206 **DATE COLLECTED:** 8 / 18 / 1981
SURFACE ELEVATION (FT.): 665.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-39 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
533.4	CARBONDALE	HERRIN	COAL	0.8	131.6	
532.6	CARBONDALE	HERRIN	SHALE	0.6	132.4	PARTING
532.0	CARBONDALE	HERRIN	COAL	1.0	133.0	
396.1	CARBONDALE	COLCHESTER	COAL	2.4	268.9	

MAPID: 13720825000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 4 **QUARTERS/FOOTAGES:** 45' S line, 2450' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.107282 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.681008 **DATE COLLECTED:** 9 / 9 / 1981
SURFACE ELEVATION (FT.): 671.0 **LOGGED (FT.):** 294.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-75 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
548.9	CARBONDALE	DANVILLE	COAL	1.7	122.1	
521.5	CARBONDALE	HERRIN	COAL	1.9	149.5	
388.6	CARBONDALE	COLCHESTER	COAL	2.4	282.4	

MAPID: 13720826000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 6 **QUARTERS/FOOTAGES:** 325' S line, 110' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.135461 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.68145 **DATE COLLECTED:** 9 / 11 / 1981
SURFACE ELEVATION (FT.): 640.0 **LOGGED (FT.):** 299.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-78 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
406.3	CARBONDALE	COLCHESTER	COAL	2.4	233.7	
395.4	SPOON		COAL	1.1	244.6	

MAPID: 13720827000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 11 **QUARTERS/FOOTAGES:** 675' S line, 840' E line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.062563 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.668476 **DATE COLLECTED:** 9 / 12 / 1981
SURFACE ELEVATION (FT.): 690.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-80 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR DANVILLE HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
505.7	CARBONDALE	HERRIN	COAL	1.6	184.3	
504.1	CARBONDALE	HERRIN	SHALE	0.7	185.9	PARTING
503.4	CARBONDALE	HERRIN	COAL	1.0	186.6	

MAPID: 13720866000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 14 **QUARTERS/FOOTAGES:** 2200' S line, 2000' E line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.066542 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.658257 **DATE COLLECTED:** 9 / 29 / 1981
SURFACE ELEVATION (FT.): 696.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-103 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR DANVILLE HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
501.4			COAL	1.3	194.6	
500.1			SHALE	0.4	195.9	PARTING
499.7			COAL	1.6	196.3	THICKNESS EITHER 1.6' OR 1.5'

MAPID: 13720828000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 16 **QUARTERS/FOOTAGES:** 2000' S line, 2100' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.10839 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.657187 **DATE COLLECTED:** 9 / 10 / 1981
SURFACE ELEVATION (FT.): 690.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-77 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
388.2	CARBONDALE	COLCHESTER	COAL	2.5	301.8	

MAPID: 13720829000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 20 **QUARTERS/FOOTAGES:** 2450' N line, 45' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.134245 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.644993 **DATE COLLECTED:** 9 / 9 / 1981
SURFACE ELEVATION (FT.): 691.0 **LOGGED (FT.):** 303.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-74 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
540.9	CARBONDALE	DANVILLE	COAL	1.7	150.1	
514.5	CARBONDALE	HERRIN	COAL	2.6	176.5	

MAPID: 13720830000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 24 **QUARTERS/FOOTAGES:** 2400' N line, 1450' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.054022 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.645672 **DATE COLLECTED:** 9 / 12 / 1981
SURFACE ELEVATION (FT.): 694.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-82 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
500.2	CARBONDALE	HERRIN	COAL	1.1	193.8	
499.1	CARBONDALE	HERRIN	SHALE	0.4	194.9	PARTING
498.7	CARBONDALE	HERRIN	COAL	3.6	195.3	

MAPID: 13720867000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 24 **QUARTERS/FOOTAGES:** 2450' N line, 1450' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.054021 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.645534 **DATE COLLECTED:** 9 / 28 / 1981
SURFACE ELEVATION (FT.): 685.0 **LOGGED (FT.):** 295.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-101 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
480.8	CARBONDALE	HERRIN	COAL	4.7	204.2	.7PARTING,2.5(.7)/1.5,ONLY LOGGED COAL

MAPID: 13720868000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 25 **QUARTERS/FOOTAGES:** 1975' N line, 1400' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.054035 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.632472 **DATE COLLECTED:** 9 / 29 / 1981
SURFACE ELEVATION (FT.): 685.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-105 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
492.1			COAL	2.1	192.9	

MAPID: 13720831000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 28 **QUARTERS/FOOTAGES:** 2225' S line, 35' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.11556 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.628249 **DATE COLLECTED:** 9 / 4 / 1981
SURFACE ELEVATION (FT.): 702.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-61 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
521.8	CARBONDALE	HERRIN	COAL	3.2	180.2	

MAPID: 13720832000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 30 **QUARTERS/FOOTAGES:** 36' S line, 115' E line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.134755 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.621961 **DATE COLLECTED:** 9 / 21 / 1981
SURFACE ELEVATION (FT.): 693.0 **LOGGED (FT.):** 309.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-86 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR DANVILLE HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
519.1	CARBONDALE	HERRIN	COAL	1.6	173.9	
517.5	CARBONDALE	HERRIN	SHALE	0.8	175.5	PARTING
516.7	CARBONDALE	HERRIN	COAL	1.6	176.3	
473.6	CARBONDALE	HOUCHIN CREEK	COAL	1.6	219.4	
403.5	CARBONDALE	COLCHESTER	COAL	2.5	289.5	

MAPID: 13720833000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 9W **SECTION:** 34 **QUARTERS/FOOTAGES:** 2550' N line, 1525' E line
QUADRANGLE: FRANKLIN **LONGITUDE:** -90.082934 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.61532 **DATE COLLECTED:** 9 / 6 / 1981
SURFACE ELEVATION (FT.): 686.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-67 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
481.6	CARBONDALE	HERRIN	COAL	0.7	204.4	
480.9	CARBONDALE	HERRIN	SHALE	0.5	205.1	PARTING
480.4	CARBONDALE	HERRIN	COAL	3.2	205.6	

MAPID: 13720834000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 4 **QUARTERS/FOOTAGES:** 38' S line, 60' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.228221 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.680045 **DATE COLLECTED:** 9 / 29 / 1981
SURFACE ELEVATION (FT.): 629.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-104 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
358.4			COAL	3.4	270.6	

MAPID: 13720835000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 8 **QUARTERS/FOOTAGES:** 1521' N line, 30' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.228519 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.675742 **DATE COLLECTED:** 9 / 11 / 1981
SURFACE ELEVATION (FT.): 640.0 **LOGGED (FT.):** 271.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-79 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
540.1	CARBONDALE	DANVILLE	COAL	2.3	99.9	
515.8	CARBONDALE	HERRIN	COAL	2.6	124.2	
513.2	CARBONDALE	HERRIN	SHALE	0.6	126.8	PARTING
512.6	CARBONDALE	HERRIN	COAL	1.9	127.4	
489.9	CARBONDALE	HOUCHIN CREEK	COAL	3.6	150.1	COMPANY CALLED THIS THE #4B
484.5	CARBONDALE	KERTON CREEK	COAL	2.4	155.5	
429.4	CARBONDALE	COLCHESTER	COAL	2.6	210.6	

MAPID: 13720836000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 9 **QUARTERS/FOOTAGES:** NW NE NW
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.222563 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.679028 **DATE COLLECTED:** 9 / 25 / 1981
SURFACE ELEVATION (FT.): 640.0 **LOGGED (FT.):** 258.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-98 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
500.8	CARBONDALE	DANVILLE	COAL	2.5	139.2	
477.6	CARBONDALE	HERRIN	COAL	3.2	162.4	
474.4	CARBONDALE	HERRIN	SHALE	0.4	165.6	PARTING
474.0	CARBONDALE	HERRIN	COAL	1.7	166.0	
443.0	CARBONDALE	HOUCHIN CREEK	COAL	1.8	197.0	
437.2	CARBONDALE	HOUCHIN CREEK	COAL	0.8	202.8	
434.0	CARBONDALE	KERTON CREEK	COAL	5.0	206.0	
395.6	CARBONDALE	COLCHESTER	COAL	2.6	244.4	

MAPID: 13720837000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 12 **QUARTERS/FOOTAGES:** 12' N line, 25' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.154033 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.680214 **DATE COLLECTED:** 9 / 21 / 1981
SURFACE ELEVATION (FT.): 640.0 **LOGGED (FT.):** 265.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-87 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
411.2	CARBONDALE	COLCHESTER	COAL	2.2	228.8	

MAPID: 13720838000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 13 **QUARTERS/FOOTAGES:** 35' N line, 95' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.154248 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.66497 **DATE COLLECTED:** 9 / 21 / 1981
SURFACE ELEVATION (FT.): 660.0 **LOGGED (FT.):** 320.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-84 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
568.2	CARBONDALE	DANVILLE	COAL	1.8	91.8	
406.8	CARBONDALE	COLCHESTER	COAL	2.2	253.2	
369.5	SPOON		COAL	2.3	290.5	
361.2	SPOON		COAL	2.4	298.8	

MAPID: 13720839000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 16 **QUARTERS/FOOTAGES:** 14' N line, 30' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.22825 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.665263 **DATE COLLECTED:** 9 / 21 / 1981
SURFACE ELEVATION (FT.): 665.0 **LOGGED (FT.):** 245.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-83 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
577.0	CARBONDALE	DANVILLE	COAL	1.9	88.0	
552.4	CARBONDALE	HERRIN	COAL	1.0	112.6	
430.7	CARBONDALE	COLCHESTER	COAL	2.1	234.3	

MAPID: 13720840000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 16 **QUARTERS/FOOTAGES:** NW NW NW
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.227209 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.664392 **DATE COLLECTED:** 9 / 22 / 1981
SURFACE ELEVATION (FT.): 658.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-89 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
544.8	CARBONDALE	HERRIN	COAL	1.3	113.2	ONLY LOGGED COAL, NAME WAS #4? IN LOG
416.8	CARBONDALE	COLCHESTER	COAL	2.5	241.2	

MAPID: 13720841000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 17 **QUARTERS/FOOTAGES:** 185' S line, 210' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.246533 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.651189 **DATE COLLECTED:** 9 / 10 / 1981
SURFACE ELEVATION (FT.): 635.0 **LOGGED (FT.):** 286.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-81 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
431.2	CARBONDALE	COLCHESTER	COAL	2.6	203.8	

MAPID: 13720842000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 27 **QUARTERS/FOOTAGES:** 200' S line, 87' W line
QUADRANGLE: NORTONVILLE **LONGITUDE:** -90.209722 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.622321 **DATE COLLECTED:** 9 / 21 / 1981
SURFACE ELEVATION (FT.): 682.0 **LOGGED (FT.):** 276.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-85 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
538.0	CARBONDALE	DANVILLE	COAL	3.2	144.0	
423.3	CARBONDALE	COLCHESTER	COAL	2.4	258.7	

MAPID: 13720843000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 10W **SECTION:** 30 **QUARTERS/FOOTAGES:** 1500' S line, 33' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.247669 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.626066 **DATE COLLECTED:** 9 / 10 / 1981
SURFACE ELEVATION (FT.): 660.0 **LOGGED (FT.):** 315.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-76 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
413.6	CARBONDALE	COLCHESTER	COAL	3.0	246.4	
380.7	SPOON		COAL	2.3	279.3	
375.6	SPOON		COAL	1.3	284.4	

MAPID: 13720844000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 11W **SECTION:** 1 **QUARTERS/FOOTAGES:** 2690' S line, 2600' E line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.271592 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.6875 **DATE COLLECTED:** 8 / 22 / 1981
SURFACE ELEVATION (FT.): 622.0 **LOGGED (FT.):** 242.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-53 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
431.6	CARBONDALE	COLCHESTER	COAL	2.2	190.4	
402.5	SPOON		COAL	1.2	219.5	ONLY LOGGED COAL, RECORD LISTED "1.2P"

MAPID: 13720845000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 11W **SECTION:** 13 **QUARTERS/FOOTAGES:** 20' S line, 150' W line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.280864 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.651328 **DATE COLLECTED:** 8 / 21 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 249.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-50 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
429.0	CARBONDALE	COLCHESTER	COAL	2.3	191.0	

MAPID: 13720846000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 11W **SECTION:** 18 **QUARTERS/FOOTAGES:** 30' S line, 677' E line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.358771 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.651919 **DATE COLLECTED:** 9 / 25 / 1981
SURFACE ELEVATION (FT.): 645.0 **LOGGED (FT.):** 247.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-97 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
441.6	CARBONDALE	COLCHESTER	COAL	2.3	203.4	

MAPID: 13720847000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 14N 11W **SECTION:** 25 **QUARTERS/FOOTAGES:** 120' S line, 316' W line
QUADRANGLE: MANCHESTER **LONGITUDE:** -90.280817 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.622728 **DATE COLLECTED:** 8 / 21 / 1981
SURFACE ELEVATION (FT.): 639.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-51 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
437.4	CARBONDALE	COLCHESTER	COAL	2.8	201.6	

MAPID: 13770001000C VERSION: 1

PROJECT: NCRDS

COUNTY: MORGAN TWP/RNG: 15N 8W SECTION: 27 QUARTERS/FOOTAGES: 600' S line, 230' W line

QUADRANGLE: NEW BERLIN LONGITUDE: -89.98344 GEOLOGIST: LOUCHIOS

CONFIDENTIAL: N LATITUDE: 39.712562 DATE COLLECTED:

SURFACE ELEVATION (FT.): 657.0 LOGGED (FT.): 862.0 LOG TYPE: Drillers Log

SOURCE: UTAH INTERNATIONAL 02C496 WELL TYPE: Coal Test

COMMENT: CODED COAL LOG

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
657.0			NO RECORD	103.0	0.0
554.0			UNCLASSIFIED	2.0	103.0
552.0			SHALE	155.0	105.0
397.0			COAL	5.0	260.0
392.0			SHALE	15.0	265.0
377.0			COAL	4.0	280.0
373.0			SHALE	161.0	284.0
212.0			LIMESTONE	169.0	445.0
43.0			SHALE	60.0	614.0
-17.0			LIMESTONE	61.0	674.0
-78.0			SANDSTONE	30.0	735.0
-108.0			LIMESTONE	97.0	765.0

MAPID: 13700195000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 15N 8W SECTION: 30 QUARTERS/FOOTAGES: SW NW SW

QUADRANGLE: ALEXANDER LONGITUDE: -90.040446 GEOLOGIST: MCCracken

CONFIDENTIAL: N LATITUDE: 39.715082 DATE COLLECTED: 11 / 28 / 1958

SURFACE ELEVATION (FT.): 665.0 LOGGED (FT.): 191.0 LOG TYPE: Drillers Log

SOURCE: DONAN TP-2 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
665.0	PLEISTOCENE		UNCONSOLIDATED	105.0	0.0	
560.0			CLAYSTONE & SILTSTONE	15.0	105.0	
545.0			SHALE	2.8	120.0	
542.2			LIMESTONE	0.3	122.8	
542.0			SHALE	0.7	123.0	
541.3			SANDSTONE	0.5	123.7	
540.8			SHALE	5.8	124.2	
535.0			CLAYSTONE & SILTSTONE	6.3	130.0	
528.7			LIMESTONE	3.8	136.3	
524.9	CARBONDALE		CLAYSTONE & SILTSTONE	1.7	140.1	
523.2	CARBONDALE	SPRINGFIELD	COAL	3.3	141.8	
519.9	CARBONDALE		UNDERCLAY	3.5	145.1	
516.4	CARBONDALE		CLAYSTONE & SILTSTONE	3.2	148.6	
513.2	CARBONDALE		SHALE	4.8	151.8	
508.4	CARBONDALE		LIMESTONE	0.8	156.6	
507.6	CARBONDALE		SHALE	4.0	157.4	
503.6	CARBONDALE		CLAYSTONE & SILTSTONE	0.3	161.4	
503.2	CARBONDALE		LIMESTONE	0.5	161.8	
502.7	CARBONDALE		CLAYSTONE & SILTSTONE	8.9	162.3	
493.8	CARBONDALE		SHALE	0.1	171.2	COALY
493.7	CARBONDALE		CLAYSTONE & SILTSTONE	7.0	171.3	
486.7	CARBONDALE		SHALE	12.8	178.3	W/SS&LS

MAPID: 13720869000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 15N 9W SECTION: 4 QUARTERS/FOOTAGES: 550' S line, 12' E line

QUADRANGLE: PRENTICE LONGITUDE: -90.098565 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.769679 DATE COLLECTED: 8 / 16 / 1981

SURFACE ELEVATION (FT.): 631.0 LOGGED (FT.): 301.0 LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-35 WELL TYPE: Coal Test

COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
422.8	CARBONDALE	COLCHESTER	COAL	2.7	208.2	
367.8	SPOON		COAL	1.9	263.2	
346.6	SPOON		COAL	1.2	284.4	

MAPID: 13720870000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 5 **QUARTERS/FOOTAGES:** 300' S line, 1800' W line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.129352 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.768571 **DATE COLLECTED:** 8 / 15 / 1981
SURFACE ELEVATION (FT.): 630.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-33 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
543.0	CARBONDALE	HERRIN	COAL	2.8	87.0	
407.4			COAL	2.2	222.6	
348.4	SPOON		COAL	1.7	281.6	

MAPID: 13720848000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 11 **QUARTERS/FOOTAGES:** 850' N line, 1225' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.065678 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.766422 **DATE COLLECTED:** 8 / 19 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 243.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-45 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
418.7	CARBONDALE	COLCHESTER	COAL	2.6	201.3	

MAPID: 13720849000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 13 **QUARTERS/FOOTAGES:** 80' S line, 65' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.060651 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.739818 **DATE COLLECTED:** 8 / 29 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 243.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-56 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
542.7	CARBONDALE	HERRIN	COAL	1.0	77.3	
541.7	CARBONDALE	HERRIN	SHALE	0.4	78.3	PARTING
541.3	CARBONDALE	HERRIN	COAL	1.3	78.7	
394.2	CARBONDALE	COLCHESTER	COAL	2.8	225.8	

MAPID: 1372085000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 15N 9W SECTION: 19 QUARTERS/FOOTAGES: 98' N line, 87' E line

QUADRANGLE: JACKSONVILLE LONGITUDE: -90.136101

GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.738244

DATE COLLECTED: 8 / 17 / 1981

SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 254.0

LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-38

WELL TYPE: Coal Test

COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.6	CARBONDALE	HERRIN	COAL	1.7	102.4
389.3	CARBONDALE	COLCHESTER	COAL	2.4	240.7

MAPID: 13700196000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 15N 9W SECTION: 20 QUARTERS/FOOTAGES: SE SE NW

QUADRANGLE: JACKSONVILLE LONGITUDE: -90.127605 GEOLOGIST: MCCracken

CONFIDENTIAL: N LATITUDE: 39.732121 DATE COLLECTED: 12 / 3 / 1958

SURFACE ELEVATION (FT.): 634.0 LOGGED (FT.): 180.0 LOG TYPE: Drillers Log

SOURCE: DONAN TP-6 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
634.0	PLEISTOCENE		UNCONSOLIDATED	42.7	0.0
591.3	CARBONDALE		LIMESTONE	0.5	42.7
590.8	CARBONDALE		SHALE	11.0	43.2
579.8	CARBONDALE		CLAYSTONE & SILTSTONE	29.8	54.2
550.1	CARBONDALE		BLACK SHALE	1.3	83.9
548.8	CARBONDALE		SHALE	1.4	85.2
547.4	CARBONDALE		LIMESTONE	0.9	86.6
546.5	CARBONDALE	HERRIN	COAL	1.4	87.5
545.1	CARBONDALE		UNDERCLAY	1.9	88.9
543.2	CARBONDALE		SANDSTONE	7.1	90.8
536.2	CARBONDALE		LIMESTONE	0.8	97.8
535.4	CARBONDALE		CLAYSTONE & SILTSTONE	0.1	98.6
535.3	CARBONDALE		SANDSTONE	0.4	98.7
534.9	CARBONDALE		CLAYSTONE & SILTSTONE	0.5	99.1
534.4	CARBONDALE		LIMESTONE	0.9	99.6
533.5	CARBONDALE		CLAYSTONE & SILTSTONE	4.3	100.5
529.2	CARBONDALE		LIMESTONE	3.5	104.8
525.7	CARBONDALE		CLAYSTONE & SILTSTONE	6.2	108.3
519.5	CARBONDALE		LIMESTONE	4.2	114.5
515.3	CARBONDALE		CLAYSTONE & SILTSTONE	0.3	118.7
515.1	CARBONDALE	SPRINGFIELD	COAL	3.4	118.9
511.7	CARBONDALE		UNDERCLAY	2.7	122.3
509.0	CARBONDALE		SHALE	6.0	125.0
503.0	CARBONDALE		LIMESTONE	0.3	131.0
502.7	CARBONDALE		CLAYSTONE & SILTSTONE	0.6	131.3
502.2	CARBONDALE		SHALE	4.5	131.8
497.7	CARBONDALE		CLAYSTONE & SILTSTONE	12.7	136.3
485.0	CARBONDALE		CLAYSTONE & SILTSTONE	31.0	149.0

MAPID: 13720851000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 21 **QUARTERS/FOOTAGES:** 725' N line, 1900' E line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.105056 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.736818 **DATE COLLECTED:** 8 / 29 / 1981
SURFACE ELEVATION (FT.): 645.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-55 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
546.4	CARBONDALE	HERRIN	COAL	0.8	98.6	
406.8	CARBONDALE	COLCHESTER	COAL	2.5	238.2	

MAPID: 13720871000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 25 **QUARTERS/FOOTAGES:** 520' S line, 45' W line
QUADRANGLE: ALEXANDER **LONGITUDE:** -90.060005 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.71175 **DATE COLLECTED:** 9 / 28 / 1981
SURFACE ELEVATION (FT.): 667.0 **LOGGED (FT.):** 280.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-102 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
535.6	CARBONDALE	HERRIN	COAL	3.0	131.4	#5 OR #6 COAL, 0.4'PARTING, 1.5/0.4/1.1'
400.6	CARBONDALE	COLCHESTER	COAL	2.4	266.4	

MAPID: 13720872000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 9W **SECTION:** 32 **QUARTERS/FOOTAGES:** 1100' N line, 1475' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.130294 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.706362 **DATE COLLECTED:** 9 / 26 / 1981
SURFACE ELEVATION (FT.): 650.0 **LOGGED (FT.):** 275.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-100 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
552.3	CARBONDALE	DANVILLE	COAL	1.3	97.7	ONLY LOGGED COAL, LOG READS ' #7 ? '
525.6	CARBONDALE	HERRIN	COAL	2.0	124.4	
384.9	CARBONDALE	COLCHESTER	COAL	0.8	265.1	
384.1	CARBONDALE	COLCHESTER	SHALE	0.4	265.9	PARTING
383.7	CARBONDALE	COLCHESTER	COAL	0.9	266.3	

MAPID: 13720873000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 4 **QUARTERS/FOOTAGES:** 55' S line, 110' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.208203 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.767922 **DATE COLLECTED:** 8 / 13 / 1981
SURFACE ELEVATION (FT.): 589.0 **LOGGED (FT.):** 257.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-28 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
390.8	CARBONDALE	COLCHESTER	COAL	2.5	198.2	
381.2	SPOON		COAL	1.0	207.8	
359.4	SPOON		COAL	1.1	229.6	

MAPID: 13720852000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 6 **QUARTERS/FOOTAGES:** 80' S line, 230' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.248549 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.767942 **DATE COLLECTED:** 8 / 18 / 1981
SURFACE ELEVATION (FT.): 613.0 **LOGGED (FT.):** 252.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-41 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
408.7	CARBONDALE	COLCHESTER	COAL	0.4	204.3	
408.3	CARBONDALE	COLCHESTER	SHALE	0.5	204.7	PARTING
407.8	CARBONDALE	COLCHESTER	COAL	1.4	205.2	

MAPID: 13720853000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 11 **QUARTERS/FOOTAGES:** 143' N line, 645' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.175369 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.766856 **DATE COLLECTED:** 8 / 18 / 1981
SURFACE ELEVATION (FT.): 627.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-40 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
433.8	CARBONDALE	COLCHESTER	COAL	2.4	193.2	

MAPID: 13720856000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 24 **QUARTERS/FOOTAGES:** 825' N line, 700' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.170311 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.735427 **DATE COLLECTED:** 8 / 30 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 244.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-58 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
445.6	CARBONDALE	COLCHESTER	COAL	0.7	174.4	
444.9	CARBONDALE	COLCHESTER	SHALE	0.4	175.1	PARTING
444.5	CARBONDALE	COLCHESTER	COAL	1.4	175.5	
411.0	SPOON		COAL	1.3	209.0	

MAPID: 13720854000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 32 **QUARTERS/FOOTAGES:** 210' S line, 610' E line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.23093 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.694522 **DATE COLLECTED:** 9 / 24 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 253.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-95 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
546.7	CARBONDALE	HERRIN	COAL	1.0	73.3	
423.8	CARBONDALE	COLCHESTER	COAL	2.5	196.2	

MAPID: 13720874000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 10W **SECTION:** 36 **QUARTERS/FOOTAGES:** 35' N line, 1450' W line
QUADRANGLE: JACKSONVILLE **LONGITUDE:** -90.16779 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.708758 **DATE COLLECTED:** 9 / 22 / 1981
SURFACE ELEVATION (FT.): 598.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-88 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
394.6	CARBONDALE	COLCHESTER	COAL	2.4	203.4	

MAPID: 13720875000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 2 **QUARTERS/FOOTAGES:** 40' S line, 1000' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.283743 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.767492 **DATE COLLECTED:** 8 / 11 / 1981
SURFACE ELEVATION (FT.): 603.0 **LOGGED (FT.):** 219.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-20 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		
				UNIT	OVERBURDEN	COMMENT
466.4	CARBONDALE	COLCHESTER	COAL	3.0	136.6	ONLY LOGGED COAL
438.6	SPOON		COAL	1.5	164.4	ONLY LOGGED COAL

MAPID: 13720876000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 4 **QUARTERS/FOOTAGES:** 1200' S line, 700' W line
QUADRANGLE: CONCORD **LONGITUDE:** -90.334406 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.771072 **DATE COLLECTED:** 8 / 11 / 1981
SURFACE ELEVATION (FT.): 601.0 **LOGGED (FT.):** 195.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-21 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		
				UNIT	OVERBURDEN	COMMENT
452.2	CARBONDALE	COLCHESTER	COAL	2.3	148.8	ONLY LOGGED COAL

MAPID: 13720855000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 16 **QUARTERS/FOOTAGES:** 40' S line, 1050' E line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.321898 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.738768 **DATE COLLECTED:** 8 / 20 / 1981
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 176.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-48 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		
				UNIT	OVERBURDEN	COMMENT
453.6	CARBONDALE	COLCHESTER	COAL	2.4	126.4	

MAPID: 13720857000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 17 **QUARTERS/FOOTAGES:** 15' S line, 1125' W line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.35107 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.73892 **DATE COLLECTED:** 8 / 22 / 1981
SURFACE ELEVATION (FT.): 590.0 **LOGGED (FT.):** 175.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-54 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
464.1	CARBONDALE	COLCHESTER	COAL	2.5	125.9	

MAPID: 13720858000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 32 **QUARTERS/FOOTAGES:** 45' N line, 2400' W line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.34696 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.709436 **DATE COLLECTED:** 8 / 21 / 1981
SURFACE ELEVATION (FT.): 618.0 **LOGGED (FT.):** 189.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-49 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
460.4	CARBONDALE	COLCHESTER	COAL	1.1	157.6	
459.3	CARBONDALE	COLCHESTER	SHALE	0.4	158.7	PARTING
458.9	CARBONDALE	COLCHESTER	COAL	1.0	159.1	

MAPID: 13720877000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 15N 11W **SECTION:** 34 **QUARTERS/FOOTAGES:** 1400' N line, 950' E line
QUADRANGLE: LYNNVILLE **LONGITUDE:** -90.302977 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.705314 **DATE COLLECTED:** 9 / 25 / 1981
SURFACE ELEVATION (FT.): 643.0 **LOGGED (FT.):** 230.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-96 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
547.4	CARBONDALE	HERRIN	COAL	1.7	95.6	
433.0	CARBONDALE	COLCHESTER	COAL	2.2	210.0	

MAPID: 13720878000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 15N 12W SECTION: 1 QUARTERS/FOOTAGES: 30' S line, 200' E line
 QUADRANGLE: CONCORD LONGITUDE: -90.37235 GEOLOGIST: C TREWORGY
 CONFIDENTIAL: N LATITUDE: 39.768199 DATE COLLECTED: 7 / 31 / 1981
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 300.0 LOG TYPE: Drillers Log
 SOURCE: PHILLIPS COAL CO. MO-1 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	15.0		
595.0			UNKNOWN	0.0	15.0	TOP OF BEDROCK
595.0	CARBONDALE		CLAYSTONE	65.0	15.0	
530.0	CARBONDALE		SHALE	16.0	80.0	
514.0	CARBONDALE		SANDSTONE	12.0	96.0	
502.0	CARBONDALE		SHALE	29.0	108.0	CBY
473.0	CARBONDALE	COLCHESTER	COAL	1.9	137.0	
471.1	SPOON		SHALE	9.1	138.9	
462.0	SPOON		LIMESTONE	4.0	148.0	
458.0	SPOON		SHALE	30.0	152.0	
428.0	SPOON		LIMESTONE	38.0	182.0	
390.0	SPOON		LIMESTONE	16.0	220.0	
374.0	SPOON		SHALE	29.0	236.0	
345.0	SPOON		SANDSTONE	10.0	265.0	
335.0	SPOON		SHALE	25.0	275.0	

MAPID: 13720880000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 15N 12W SECTION: 5 QUARTERS/FOOTAGES: 136' S line, 1440' E line
 QUADRANGLE: CHAPIN LONGITUDE: -90.451509 GEOLOGIST: C TREWORGY
 CONFIDENTIAL: N LATITUDE: 39.76861 DATE COLLECTED: 8 / 11 / 1981
 SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 177.0 LOG TYPE: Drillers Log
 SOURCE: PHILLIPS COAL CO. MO-18 WELL TYPE: Coal Test
 COMMENT: BAD LOG COPY-SECTION # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
496.8	CARBONDALE	COLCHESTER	COAL	2.2	143.2	ONLY LOGGED COAL

MAPID: 1372066000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 4 **QUARTERS/FOOTAGES:** 1980' S line, 75' E line
QUADRANGLE: PLEASANT PLAINS **LONGITUDE:** -89.994685 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.863534 **DATE COLLECTED:** 8 / 20 / 1970
SURFACE ELEVATION (FT.): 626.0 **LOGGED (FT.):** 112.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q500 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
626.0	PLEISTOCENE		UNCONSOLIDATED	88.0	0.0	
538.0	PLEISTOCENE		SHALE	17.0	88.0	
521.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	105.0	
520.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	105.5	
519.5	CARBONDALE	SPRINGFIELD	COAL	4.8	106.5	
514.7	CARBONDALE		UNDERCLAY	0.7	111.3	

MAPID: 13720661000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 5 **QUARTERS/FOOTAGES:** 5' S line, 815' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.015998 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.858057 **DATE COLLECTED:** 5 / 6 / 1970
SURFACE ELEVATION (FT.): 616.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q415P **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
616.0	PLEISTOCENE		UNCONSOLIDATED	113.2	0.0	
502.8			LIMESTONE	2.2	113.2	
500.6			SANDY SHALE	19.6	115.4	

MAPID: 13720662000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 9 **QUARTERS/FOOTAGES:** 1330' N line, 5' W line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.013095 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.854394 **DATE COLLECTED:** 0 / 0 / 1970
SURFACE ELEVATION (FT.): 618.0 **LOGGED (FT.):** 140.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q367 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
618.0	PLEISTOCENE		UNCONSOLIDATED	112.0	0.0	
506.0			SHALE	28.0	112.0	W/LIME BANDS

MAPID: 13720663000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 9 **QUARTERS/FOOTAGES:** 1660' S line, 180' W line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.012525 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.847968 **DATE COLLECTED:** 7 / 29 / 1970
SURFACE ELEVATION (FT.): 630.0 **LOGGED (FT.):** 140.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q2594 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.0	PLEISTOCENE		UNCONSOLIDATED	119.0	0.0	
511.0			SHALE	21.0	119.0	W/LIME BANDS

MAPID: 13720664000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 9 **QUARTERS/FOOTAGES:** 2310' S line, 2640' W line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.003701 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.849861 **DATE COLLECTED:** 0 / 0 / 1970
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 140.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q288C **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
620.0	PLEISTOCENE		UNCONSOLIDATED	135.0	0.0	
485.0			SHALE	5.0	135.0	

MAPID: 13720665000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 9 **QUARTERS/FOOTAGES:** 1320' N line, 5' E line
QUADRANGLE: PLEASANT PLAINS **LONGITUDE:** -89.994427 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.854426 **DATE COLLECTED:** 8 / 20 / 1970
SURFACE ELEVATION (FT.): 628.0 **LOGGED (FT.):** 114.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON Q375 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
628.0	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	
548.0	CARBONDALE		LIMESTONE	2.0	80.0	
546.0	CARBONDALE		SHALE	23.0	82.0	
523.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	105.0	
522.5	CARBONDALE	TURNER MINE	BLACK SHALE	3.0	105.5	
519.5	CARBONDALE	SPRINGFIELD	COAL	4.5	108.5	
515.0	CARBONDALE		UNDERCLAY	1.0	113.0	

MAPID: 13720666000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 16 QUARTERS/FOOTAGES: 2640' N line, 5' E line
 QUADRANGLE: PLEASANT PLAINS LONGITUDE: -89.99432 GEOLOGIST: MCCRACKEN
 CONFIDENTIAL: N LATITUDE: 39.836299 DATE COLLECTED: 8 / 21 / 1970
 SURFACE ELEVATION (FT.): 635.0 LOGGED (FT.): 145.0 LOG TYPE: Drillers Log
 SOURCE: COMMONWEALTH EDISON Q125 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.0	PLEISTOCENE		UNCONSOLIDATED	108.0	0.0	
527.0	CARBONDALE		SHALE	10.5	108.0	
516.5	CARBONDALE		LIMESTONE & SHALE	5.5	118.5	
511.0	CARBONDALE		LIMESTONE	14.0	124.0	
497.0	CARBONDALE		COAL	1.0	138.0	
496.0	CARBONDALE		UNDERCLAY	6.0	139.0	

MAPID: 13720667000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 17 QUARTERS/FOOTAGES: 1320' N line, 2640' E line
 QUADRANGLE: PRENTICE LONGITUDE: -90.022569 GEOLOGIST: MCCRACKEN
 CONFIDENTIAL: N LATITUDE: 39.839737 DATE COLLECTED: 7 / 31 / 1970
 SURFACE ELEVATION (FT.): 635.0 LOGGED (FT.): 111.0 LOG TYPE: Drillers Log
 SOURCE: COMMONWEALTH EDISON Q163 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.0	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
570.0	CARBONDALE	HERRIN	SHALE/COAL	2.0	65.0	
568.0	CARBONDALE		SHALE	6.0	67.0	
562.0	CARBONDALE		LIMESTONE	9.0	73.0	
553.0	CARBONDALE		SHALE WITH LIMESTONE	13.0	82.0	
540.0	CARBONDALE		SHALE	8.0	95.0	
532.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	103.0	
531.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	104.0	
529.5	CARBONDALE	SPRINGFIELD	COAL	0.5	105.5	BONE
529.0	CARBONDALE	SPRINGFIELD	COAL	4.5	106.0	
524.5	CARBONDALE		UNDERCLAY	0.5	110.5	

MAPID: 13720668000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 17 QUARTERS/FOOTAGES: 1320' S line, 1320' E line

QUADRANGLE: PRENTICE LONGITUDE: -90.017658 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.832701 DATE COLLECTED: 8 / 1 / 1970

SURFACE ELEVATION (FT.): 638.0 LOGGED (FT.): 119.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON Q65 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
638.0	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0
580.0	CARBONDALE		SHALE	13.0	58.0
567.0	CARBONDALE	ANNA	BLACK SHALE	2.0	71.0
565.0	CARBONDALE	HERRIN	COAL	2.0	73.0
563.0	CARBONDALE		LIMESTONE W/ SHALE	19.0	75.0
544.0	CARBONDALE		SHALE	16.0	94.0
528.0	CARBONDALE	ST. DAVID	LIMESTONE	1.0	110.0
527.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	111.0
525.5	CARBONDALE	SPRINGFIELD	COAL	5.8	112.5 .7
519.7	CARBONDALE		UNDERCLAY	0.7	118.3

MAPID: 13720669000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 17 QUARTERS/FOOTAGES: 2640' N line, 50' E line

QUADRANGLE: PRENTICE LONGITUDE: -90.013197 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.836094 DATE COLLECTED: 7 / 29 / 1970

SURFACE ELEVATION (FT.): 638.0 LOGGED (FT.): 123.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON Q117 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
638.0	PLEISTOCENE		UNCONSOLIDATED	74.0	0.0
564.0	CARBONDALE	ANNA	BLACK SHALE	4.0	74.0
560.0	CARBONDALE	HERRIN	COAL	2.0	78.0
558.0	CARBONDALE		SHALE	3.0	80.0
555.0	CARBONDALE		LIMESTONE	5.0	83.0
550.0	CARBONDALE		SHALE	28.5	88.0
521.5	CARBONDALE	TURNER MINE	BLACK SHALE	2.0	116.5
519.5	CARBONDALE	SPRINGFIELD	COAL	4.0	118.5
515.5	CARBONDALE		UNDERCLAY	0.5	122.5

MAPID: 13720670000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 18 QUARTERS/FOOTAGES:

QUADRANGLE: PRENTICE LONGITUDE: -90.041263

GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.83617

DATE COLLECTED: 5 / 0 / 1970

SURFACE ELEVATION (FT.): 632.0 LOGGED (FT.): 108.0

LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON Q180

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
632.0	PLEISTOCENE		UNCONSOLIDATED	83.9	0.0	
548.1	CARBONDALE		LIMESTONE	2.0	83.9	
546.1	CARBONDALE		SHALE	15.1	85.9	
531.0	CARBONDALE	ST. DAVID	LIMESTONE	0.8	101.0	
530.2	CARBONDALE	TURNER MINE	DARK SHALE	1.5	101.8	
528.7	CARBONDALE	SPRINGFIELD	COAL	3.0	103.3	
525.7	CARBONDALE		UNDERCLAY	1.7	106.3	

MAPID: 13720678000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 20 QUARTERS/FOOTAGES: 50' S line, 2358' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.023514

GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.814431

DATE COLLECTED: 5 / 7 / 1970

SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 130.0

LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U412BA

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.0	PLEISTOCENE		UNCONSOLIDATED	66.1	0.0	
543.9	CARBONDALE		SHALE	17.8	66.1	
526.1	CARBONDALE	ST. DAVID	LIMESTONE	0.4	83.9	
525.7	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	84.3	
524.1	CARBONDALE	SPRINGFIELD	COAL	2.8	85.9	
521.3	CARBONDALE		SHALE	5.8	88.7	
515.5	CARBONDALE	EXCELLO	BLACK SHALE	1.6	94.5	
513.9	CARBONDALE	HOUCHIN CREEK	COAL	0.1	96.1	
513.8	CARBONDALE		CLAYSTONE & SHALE	4.1	96.2	
509.7	CARBONDALE		SHALE	6.0	100.3	
503.7	CARBONDALE		SANDSTONE	4.2	106.3	
499.5	CARBONDALE		LIMESTONE	2.4	110.5	
497.1	CARBONDALE		SANDY SHALE	17.1	112.9	

MAPID: 13700194000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: SW SW NW

QUADRANGLE: PRENTICE LONGITUDE: -90.011621 GEOLOGIST: MCCracken

CONFIDENTIAL: N LATITUDE: 39.822714 DATE COLLECTED: 12 / 5 / 1958

SURFACE ELEVATION (FT.): 633.0 LOGGED (FT.): 132.0 LOG TYPE: Drillers Log

SOURCE: DONAN TP-18 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
633.0	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0	
583.0			SHALE	31.5	50.0	
551.5			SHALE	2.2	81.5	DARK GRAY
549.3	CARBONDALE	HERRIN	COAL	2.3	83.7	
547.0	CARBONDALE		CLAYSTONE & SILTSTONE	1.0	86.0	
546.0	CARBONDALE		LIMESTONE	0.4	87.0	
545.6	CARBONDALE		CLAYSTONE & SILTSTONE	1.9	87.4	
543.7	CARBONDALE		LIMESTONE	1.5	89.3	
542.2	CARBONDALE		CLAYSTONE & SILTSTONE	0.8	90.8	
541.3	CARBONDALE		LIMESTONE	2.8	91.7	
538.5	CARBONDALE		CLAYSTONE & SILTSTONE	3.2	94.5	
535.3	CARBONDALE		LIMESTONE	1.7	97.7	
533.7	CARBONDALE		CLAYSTONE & SILTSTONE	0.6	99.3	
533.1	CARBONDALE		BLACK SHALE	0.1	99.9	
533.0	CARBONDALE		CLAYSTONE & SILTSTONE	6.3	100.0	
526.7	CARBONDALE		LIMESTONE	1.3	106.3	
525.4	CARBONDALE		CLAYSTONE & SILTSTONE	1.8	107.6	
523.7	CARBONDALE		SHALY SANDSTONE	10.2	109.3	
513.5	CARBONDALE		CLAYSTONE & SILTSTONE	4.0	119.5	
509.5	CARBONDALE		LIMESTONE	0.3	123.5	
509.2	CARBONDALE		BLACK SHALE	1.0	123.8	
508.2	CARBONDALE		SHALE	0.5	124.8	COALY
507.7	CARBONDALE	SPRINGFIELD	COAL	4.4	125.3	COAL W/ PYRITE
503.4	CARBONDALE		UNDERCLAY	2.4	129.6	

MAPID: 13720671000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: 2640' N line, 50' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.012598 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.821807 DATE COLLECTED: 5 / 13 / 1970

SURFACE ELEVATION (FT.): 635.0 LOGGED (FT.): 135.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U577 WELL TYPE: Coal Test

COMMENT: ORIGINAL LOG VERY FAINT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
635.0	PLEISTOCENE		UNCONSOLIDATED	53.5	0.0
581.5			SHALE	1.5	53.5
580.0			LIMESTONE	0.5	55.0
579.5			SHALE	28.7	55.5
550.8	CARBONDALE	ANNA	BLACK SHALE	1.3	84.2
549.5	CARBONDALE	HERRIN	COAL	2.1	85.5
547.4	CARBONDALE		SHALE	36.6	87.6
510.8	CARBONDALE	ST. DAVID	BLACK LIMESTONE	0.5	124.2
510.3	CARBONDALE	TURNER MINE	BLACK SHALE	1.6	124.7
508.7	CARBONDALE	SPRINGFIELD	COAL	4.4	126.3
504.3	CARBONDALE		SHALE	4.3	130.7

MAPID: 13720672000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: 5' N line, 5' E line

QUADRANGLE: PLEASANT PLAINS LONGITUDE: -89.994305 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.829034 DATE COLLECTED: 4 / 25 / 1970

SURFACE ELEVATION (FT.): 638.0 LOGGED (FT.): 135.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U625 WELL TYPE: Coal Test

COMMENT: ORIGINAL LOG IS FAINT

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
638.0	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0
588.0			SHALE	34.0	50.0
554.0	CARBONDALE	ANNA	BLACK SHALE	1.0	84.0
553.0	CARBONDALE	HERRIN	COAL	2.5	85.0
550.5	CARBONDALE		SHALE	41.0	87.5
509.5	CARBONDALE	ST. DAVID	LIMESTONE	1.0	128.5
508.5	CARBONDALE	SPRINGFIELD	COAL	4.0	129.5
504.5	CARBONDALE		UNDERCLAY	1.5	133.5

MAPID: 13720673000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: 5' N line, 2640' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.003383 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.829056 DATE COLLECTED: 8 / 22 / 1970

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 134.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U621 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
640.0	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0	
565.0	CARBONDALE		SHALE	14.0	75.0	
551.0	CARBONDALE	HERRIN	BLACK SHALE & COAL	2.0	89.0	
549.0	CARBONDALE		SHALE	2.0	91.0	
547.0	CARBONDALE		LIMESTONE	3.5	93.0	
543.5	CARBONDALE		SHALE	30.5	96.5	
513.0	CARBONDALE	ST. DAVID	LIMESTONE	0.5	127.0	
512.5	CARBONDALE	TURNER MINE	BLACK SHALE	0.5	127.5	
512.0	CARBONDALE	SPRINGFIELD	COAL	0.5	128.0	BONE
511.5	CARBONDALE	SPRINGFIELD	COAL	4.5	128.5	
507.0	CARBONDALE		UNDERCLAY	1.0	133.0	

MAPID: 13720674000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: 2310' N line, 1320' E line

QUADRANGLE: PLEASANT PLAINS LONGITUDE: -89.998909 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.822683 DATE COLLECTED: 8 / 3 / 1970

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 138.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U523C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
640.0	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0	
575.0			SHALE	24.0	65.0	
551.0	CARBONDALE	HERRIN	BLACK SHALE & COAL	2.0	89.0	
549.0	CARBONDALE		SHALE	10.0	91.0	
539.0	CARBONDALE		LIMESTONE	3.0	101.0	
536.0	CARBONDALE		SHALE	6.0	104.0	
530.0	CARBONDALE		LIMESTONE	10.0	110.0	
520.0	CARBONDALE		SHALE	11.0	120.0	
509.0	CARBONDALE	TURNER MINE	BLACK SHALE	1.5	131.0	
507.5	CARBONDALE	SPRINGFIELD	COAL	4.5	132.5	
503.0	CARBONDALE		UNDERCLAY	1.0	137.0	

MAPID: 13720675000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 21 QUARTERS/FOOTAGES: 5' N line, 5' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.012816 GEOLOGIST: MCCracken

CONFIDENTIAL: N LATITUDE: 39.829079 DATE COLLECTED: 5 / 6 / 1970

SURFACE ELEVATION (FT.): 638.0 LOGGED (FT.): 130.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U617 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
638.0	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0
584.0			SHALE	20.0	54.0
564.0	CARBONDALE	ANNA	BLACK SHALE	5.9	74.0
558.1	CARBONDALE	HERRIN	COAL	3.3	79.9
554.8	CARBONDALE		SHALE	8.5	83.2
546.3	CARBONDALE		LIMESTONE	1.3	91.7
545.0	CARBONDALE		SHALE	3.7	93.0
541.3	CARBONDALE		LIMESTONE	1.0	96.7
540.3	CARBONDALE		SHALE	23.7	97.7
516.6	CARBONDALE	ST. DAVID	LIMESTONE	0.8	121.4
515.8	CARBONDALE	TURNER MINE	BLACK SHALE	0.3	122.2
515.5	CARBONDALE	SPRINGFIELD	COAL	6.2	122.5
509.3	CARBONDALE		UNDERCLAY	1.3	128.7

MAPID: 13720676000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 28 QUARTERS/FOOTAGES: 2640' N line, 1320' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.008219 GEOLOGIST: MCCracken

CONFIDENTIAL: N LATITUDE: 39.807228 DATE COLLECTED: 7 / 30 / 1970

SURFACE ELEVATION (FT.): 650.0 LOGGED (FT.): 140.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U319 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
650.0	PLEISTOCENE		UNCONSOLIDATED	78.0	0.0
572.0			SHALE	7.0	78.0
565.0	CARBONDALE	HERRIN	COAL	2.0	85.0
563.0	CARBONDALE		SHALE	5.0	87.0
558.0	CARBONDALE		LIMESTONE	7.0	92.0
551.0	CARBONDALE		SHALE	22.0	99.0
529.0	CARBONDALE	ST. DAVID	LIMESTONE	5.0	121.0
524.0	CARBONDALE	SPRINGFIELD	COAL	1.5	126.0
522.5	CARBONDALE		SHALE	12.5	127.5

MAPID: 13720677000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 28 QUARTERS/FOOTAGES: 1320' N line, 2640' E line

QUADRANGLE: PRENTICE LONGITUDE: -90.003456 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.810878 DATE COLLECTED: 7 / 31 / 1970

SURFACE ELEVATION (FT.): 638.0 LOGGED (FT.): 112.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U371 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
638.0	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
603.0			SHALE	32.0	35.0
571.0	CARBONDALE	ANNA	BLACK SHALE	1.0	67.0
570.0	CARBONDALE		SHALE	4.0	68.0
566.0	CARBONDALE		LIMESTONE	6.0	72.0
560.0	CARBONDALE		SHALE	29.0	78.0
531.0	CARBONDALE	SPRINGFIELD	COAL	4.0	107.0
527.0	CARBONDALE		UNDERCLAY	1.0	111.0

MAPID: 13720679000C VERSION: 1

PROJECT: NCRDS96

COUNTY: MORGAN TWP/RNG: 16N 8W SECTION: 28 QUARTERS/FOOTAGES: 5' N line, 1320' W line

QUADRANGLE: PRENTICE LONGITUDE: -90.007996 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.814502 DATE COLLECTED: 7 / 31 / 1970

SURFACE ELEVATION (FT.): 620.0 LOGGED (FT.): 106.0 LOG TYPE: Drillers Log

SOURCE: COMMONWEALTH EDISON U419 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
620.0	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0
560.0	CARBONDALE		SHALE	5.0	60.0
555.0	CARBONDALE		LIMESTONE	11.0	65.0
544.0	CARBONDALE		SHALE	20.0	76.0
524.0	CARBONDALE	ST. DAVID	LIMESTONE	3.5	96.0
520.5	CARBONDALE	TURNER MINE	BLACK SHALE	1.0	99.5
519.5	CARBONDALE	SPRINGFIELD	COAL	4.5	100.5
515.0	CARBONDALE		UNDERCLAY	1.0	105.0

MAPID: 1372068000C **VERSION:** 1 **PROJECT:** NCRDS96
COUNTY: MORGAN **TWP/RNG:** 16N 8W **SECTION:** 31 **QUARTERS/FOOTAGES:** 2640' N line, 1980' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.039363 **GEOLOGIST:** MCCRACKEN
CONFIDENTIAL: N **LATITUDE:** 39.792709 **DATE COLLECTED:** 5 / 0 / 1970
SURFACE ELEVATION (FT.): 641.0 **LOGGED (FT.):** 142.0 **LOG TYPE:** Drillers Log
SOURCE: COMMONWEALTH EDISON U106 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
641.0	PLEISTOCENE		UNCONSOLIDATED	128.0	0.0	
513.0			SHALE	14.0	128.0	

MAPID: 13720881000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 5 **QUARTERS/FOOTAGES:** 34' S line, 59' W line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.144435 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.858805 **DATE COLLECTED:** 8 / 14 / 1981
SURFACE ELEVATION (FT.): 601.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-29 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
393.4	CARBONDALE	COLCHESTER	COAL	0.9	207.6	
392.5	CARBONDALE	COLCHESTER	SHALE	0.5	208.5	PARTING
392.0	CARBONDALE	COLCHESTER	COAL	1.0	209.0	
350.6	SPOON		COAL	1.0	250.4	

MAPID: 13720882000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 10 **QUARTERS/FOOTAGES:** 278' N line, 81' W line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.106235 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.857523 **DATE COLLECTED:** 8 / 14 / 1981
SURFACE ELEVATION (FT.): 617.0 **LOGGED (FT.):** 321.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-31 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
392.9	CARBONDALE	COLCHESTER	COAL	2.2	224.1	
341.9	SPOON		COAL	1.1	275.1	
323.2	SPOON		COAL	0.8	293.8	
322.4	SPOON		SHALE	0.6	294.6	PARTING
321.8	SPOON		COAL	1.9	295.2	

MAPID: 13720859000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 11 **QUARTERS/FOOTAGES:** 50' N line, 425' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.070606 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.858162 **DATE COLLECTED:** 8 / 19 / 1981
SURFACE ELEVATION (FT.): 620.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-44 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
419.5	CARBONDALE	COLCHESTER	COAL	1.3	200.5	
418.2	CARBONDALE	COLCHESTER	SHALE	0.4	201.8	PARTING
417.8	CARBONDALE	COLCHESTER	COAL	1.0	202.2	
361.3	SPOON		COAL	2.2	258.7	

MAPID: 13720860000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 13 **QUARTERS/FOOTAGES:** 880' S line, 1200' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.055009 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.83138 **DATE COLLECTED:** 8 / 18 / 1981
SURFACE ELEVATION (FT.): 619.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-42 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
412.0	CARBONDALE	COLCHESTER	COAL	2.6	207.0	

MAPID: 13720883000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 19 **QUARTERS/FOOTAGES:** 1150' N line, 61' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.144967 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.825987 **DATE COLLECTED:** 8 / 13 / 1981
SURFACE ELEVATION (FT.): 610.0 **LOGGED (FT.):** 331.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-27 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
486.2	CARBONDALE	SPRINGFIELD	COAL	3.2	123.8	
376.2	CARBONDALE	COLCHESTER	COAL	2.3	233.8	
295.3	SPOON		COAL	1.4	314.7	

MAPID: 13720884000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 22 **QUARTERS/FOOTAGES:** 21' N line, 2100' W line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.098826 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.829096 **DATE COLLECTED:** 8 / 15 / 1981
SURFACE ELEVATION (FT.): 621.0 **LOGGED (FT.):** 318.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-32 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
390.8	CARBONDALE	COLCHESTER	COAL	2.4	230.2	
370.7	SPOON		COAL	1.8	250.3	
344.1	SPOON		COAL	2.1	276.9	
337.6	SPOON		COAL	1.4	283.4	

MAPID: 13720885000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 26 **QUARTERS/FOOTAGES:** 230' S line, 840' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.073017 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.800861 **DATE COLLECTED:** 8 / 20 / 1981
SURFACE ELEVATION (FT.): 630.0 **LOGGED (FT.):** 302.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-46 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
416.4	CARBONDALE	COLCHESTER	COAL	0.9	213.6	
415.5	CARBONDALE	COLCHESTER	SHALE	0.4	214.5	PARTING
415.1	CARBONDALE	COLCHESTER	COAL	1.2	214.9	
351.2	SPOON		COAL	2.4	278.8	

MAPID: 13720886000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 28 **QUARTERS/FOOTAGES:** 300' S line, 450' E line
QUADRANGLE: PRENTICE **LONGITUDE:** -90.108499 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.801122 **DATE COLLECTED:** 8 / 20 / 1981
SURFACE ELEVATION (FT.): 621.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-47 **WELL TYPE:** Coal Test
COMMENT: SEE LOG FOR SPRINGFIELD HORIZON INFO

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
539.3	CARBONDALE	HERRIN	COAL	0.8	81.7	
538.5	CARBONDALE	HERRIN	SHALE	0.7	82.5	PARTING
537.8	CARBONDALE	HERRIN	COAL	0.9	83.2	
403.9	CARBONDALE	COLCHESTER	COAL	2.5	217.1	
342.2	SPOON		COAL	1.9	278.8	
336.3	SPOON		COAL	1.9	284.7	

MAPID: 13720887000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 9W **SECTION:** 32 **QUARTERS/FOOTAGES:** 700' N line, 43' W line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.144884 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.798358 **DATE COLLECTED:** 8 / 14 / 1981
SURFACE ELEVATION (FT.): 621.0 **LOGGED (FT.):** 293.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-30 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
423.3	CARBONDALE	COLCHESTER	COAL	2.4	197.7	
376.8	SPOON		COAL	1.8	244.2	

MAPID: 13720861000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 2 **QUARTERS/FOOTAGES:** 1320' S line, 90' W line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.200946 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.862394 **DATE COLLECTED:** 8 / 16 / 1981
SURFACE ELEVATION (FT.): 601.0 **LOGGED (FT.):** 281.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-34 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
414.5	CARBONDALE	COLCHESTER	COAL	2.3	186.5	

MAPID: 13720894000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 4 **QUARTERS/FOOTAGES:** 792' N line, 60' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.220344 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.871126 **DATE COLLECTED:** 8 / 12 / 1981
SURFACE ELEVATION (FT.): 570.0 **LOGGED (FT.):** 227.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-23 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
413.7	CARBONDALE	COLCHESTER	COAL	2.5	156.3	ONLY LOGGED COAL
402.7	SPOON		COAL	1.5	167.3	ONLY LOGGED COAL
383.4	SPOON		COAL	1.6	186.6	ONLY LOGGED COAL
366.1	SPOON		COAL	4.3	203.9	ONLY LOGGED COAL

MAPID: 13720862000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 7 **QUARTERS/FOOTAGES:** 2500' S line, 70' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.257943 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.852135 **DATE COLLECTED:** 8 / 17 / 1981
SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 246.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-36 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
433.1	CARBONDALE	COLCHESTER	COAL	2.5	126.9	
393.6	SPOON		COAL	0.9	166.4	

MAPID: 13720888000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 9 **QUARTERS/FOOTAGES:** 54' N line, 320' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.221301 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.859003 **DATE COLLECTED:** 8 / 13 / 1981
SURFACE ELEVATION (FT.): 602.0 **LOGGED (FT.):** 259.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-25 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
425.0	CARBONDALE	COLCHESTER	COAL	2.5	177.0	ONLY LOGGED COAL
416.1	SPOON		COAL	1.6	185.9	ONLY LOGGED COAL

MAPID: 13720863000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 19 **QUARTERS/FOOTAGES:** 20' N line, 365' W line
QUADRANGLE: CONCORD **LONGITUDE:** -90.276123 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.830755 **DATE COLLECTED:** 8 / 17 / 1981
SURFACE ELEVATION (FT.): 595.0 **LOGGED (FT.):** 250.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-37 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
390.6	CARBONDALE	COLCHESTER	COAL	2.4	204.4	
361.6	SPOON		COAL	1.4	233.4	

MAPID: 13720890000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 21 **QUARTERS/FOOTAGES:** 2600' S line, 500' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.222174 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.822859 **DATE COLLECTED:** 8 / 12 / 1981
SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 232.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-22 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
416.6	CARBONDALE	COLCHESTER	COAL	2.2	113.4	ONLY LOGGED COAL
344.7	SPOON		COAL	0.6	185.3	
344.1	SPOON		SHALE	0.7	185.9	PARTING
343.3	SPOON		COAL	0.6	186.7	

MAPID: 13720891000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 23 **QUARTERS/FOOTAGES:** 400' N line, 1200' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.187111 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.82858 **DATE COLLECTED:** 8 / 13 / 1981
SURFACE ELEVATION (FT.): 593.0 **LOGGED (FT.):** 301.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-26 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
507.0	CARBONDALE	SPRINGFIELD	COAL	4.9	86.0	
385.4	CARBONDALE	COLCHESTER	COAL	2.5	207.6	
327.4	SPOON		COAL	2.3	265.6	
310.6	SPOON		COAL	1.0	282.4	

MAPID: 13720892000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 28 **QUARTERS/FOOTAGES:** 25' N line, 100' E line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.220786 **GEOLOGIST:** C TREWORYG
CONFIDENTIAL: N **LATITUDE:** 39.815611 **DATE COLLECTED:** 8 / 12 / 1981
SURFACE ELEVATION (FT.): 612.0 **LOGGED (FT.):** 240.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-24 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
418.2	CARBONDALE	COLCHESTER	COAL	0.9	193.8	
417.3	CARBONDALE	COLCHESTER	SHALE	0.5	194.7	
416.8	CARBONDALE	COLCHESTER	COAL	1.0	195.2	
408.1	SPOON		COAL	1.5	203.9	
378.2	SPOON		COAL	3.4	233.8	

MAPID: 13720893000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 30 **QUARTERS/FOOTAGES:** 30' S line, 60' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.258995 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.801172 **DATE COLLECTED:** 8 / 2 / 1981
SURFACE ELEVATION (FT.): 602.0 **LOGGED (FT.):** 235.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-7 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	18.0		
584.0			UNKNOWN	0.0	18.0	TOP OF BEDROCK
584.0			SHALE	188.0	18.0	
396.0			COAL	1.6	206.0	POOR
394.4			SHALE	2.2	207.6	
392.2			COAL	0.8	209.8	POOR
391.4			SHALE	12.3	210.6	
379.1			COAL	0.9	222.9	POOR
378.2			BLACK SHALE	11.2	223.8	

MAPID: 13720864000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 10W **SECTION:** 35 **QUARTERS/FOOTAGES:** 600' N line, 1900' W line
QUADRANGLE: LITERBERRY **LONGITUDE:** -90.195086 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.799199 **DATE COLLECTED:** 8 / 19 / 1981
SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 223.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-43 **WELL TYPE:** Coal Test
COMMENT: ONLY LOGGED COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
423.1	CARBONDALE	COLCHESTER	COAL	1.6	176.9	

MAPID: 13720896000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 11W **SECTION:** 7 **QUARTERS/FOOTAGES:** 250' N line, 600' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.374124 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.860944 **DATE COLLECTED:** 8 / 10 / 1981
SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 170.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-16 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
496.9	CARBONDALE	COLCHESTER	COAL	1.2	63.1	ONLY LOGGED COAL

MAPID: 13720897000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 11W **SECTION:** 11 **QUARTERS/FOOTAGES:** 213' N line, 98' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.295641 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.859482 **DATE COLLECTED:** 8 / 2 / 1981
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 222.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-8 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	30.0		
550.0			UNKNOWN	0.0	30.0	TOP OF BEDROCK
550.0			SHALE	173.0	30.0	SLY
377.0			LIMESTONE	19.0	203.0	

MAPID: 13720898000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 11W **SECTION:** 18 **QUARTERS/FOOTAGES:** 250' N line, 300' E line
QUADRANGLE: CONCORD **LONGITUDE:** -90.373376 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.846326 **DATE COLLECTED:** 8 / 8 / 1981
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 184.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-9 **WELL TYPE:** Coal Test
COMMENT: FOUND SEC # FROM PLAT BOOK-BAD LOG COPY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
424.1			COAL	1.1	155.9	ONLY LOGGED COAL

MAPID: 13720899000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 11W **SECTION:** 22 **QUARTERS/FOOTAGES:** 1200' N line, 1500' W line
QUADRANGLE: CONCORD **LONGITUDE:** -90.328985 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.828415 **DATE COLLECTED:** 8 / 2 / 1981
SURFACE ELEVATION (FT.): 570.0 **LOGGED (FT.):** 201.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-6 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	10.0		
560.0			UNKNOWN	0.0	10.0	TOP OF BEDROCK
560.0	CARBONDALE		SHALE	142.0	10.0	
418.0	CARBONDALE		SHALE	27.0	152.0	CBY
391.0	CARBONDALE	COLCHESTER	COAL	2.9	179.0	
388.1	SPOON		BLACK SHALE	19.1	181.9	

MAPID: 13720901000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 16N 11W SECTION: 31 QUARTERS/FOOTAGES: 800' N line, 1000' E line
 QUADRANGLE: CHAPIN LONGITUDE: -90.37696 GEOLOGIST: C TREWORY
 CONFIDENTIAL: N LATITUDE: 39.801065 DATE COLLECTED: 8 / 1 / 1981
 SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 187.0 LOG TYPE: Drillers Log
 SOURCE: PHILLIPS COAL CO. MO-4 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	20.0		
570.0			UNKNOWN	0.0	20.0	TOP OF BEDROCK
570.0	CARBONDALE		SHALE	45.0	20.0	
525.0	CARBONDALE		SANDSTONE	25.0	65.0	
500.0	CARBONDALE		SHALE	18.2	90.0	CBY
481.8	CARBONDALE	COLCHESTER	COAL	2.2	108.2	
479.6	SPOON		SHALE	8.6	110.4	
471.0	SPOON		LIMESTONE	2.0	119.0	
469.0	SPOON		SHALE	14.0	121.0	
455.0	SPOON		COAL	0.6	135.0	
454.4	SPOON		SHALE	24.4	135.6	
430.0	SPOON		LIMESTONE	27.0	160.0	

MAPID: 13720902000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 16N 11W SECTION: 36 QUARTERS/FOOTAGES: 250' N line, 70' W line
 QUADRANGLE: CONCORD LONGITUDE: -90.296665 GEOLOGIST: C TREWORY
 CONFIDENTIAL: N LATITUDE: 39.801133 DATE COLLECTED: 8 / 2 / 1981
 SURFACE ELEVATION (FT.): 601.0 LOGGED (FT.): 218.0 LOG TYPE: Drillers Log
 SOURCE: PHILLIPS COAL CO. MO-5 WELL TYPE: Coal Test
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	15.0		
586.0			UNKNOWN	0.0	15.0	TOP OF BEDROCK
586.0	CARBONDALE		SHALE	79.2	15.0	
506.8	CARBONDALE		COAL	1.4	94.2	POOR
505.4	CARBONDALE		BLACK SHALE	19.4	95.6	
486.0			UNCLASSIFIED	44.8	115.0	NONE GIVEN
441.2	CARBONDALE	COLCHESTER	COAL	0.8	159.8	POOR
440.4	SPOON		SHALE	13.4	160.6	
427.0	SPOON		LIMESTONE	3.3	174.0	
423.7	SPOON		COAL	0.8	177.3	POOR
422.9	SPOON		BLACK SHALE	39.9	178.1	

MAPID: 13720903000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 4 **QUARTERS/FOOTAGES:** 1260' S line, 725' E line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.450611 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.865188 **DATE COLLECTED:** 8 / 9 / 1981
SURFACE ELEVATION (FT.): 500.0 **LOGGED (FT.):** 175.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-14 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-SEC # FOUND FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCLASSIFIED	175.0		NO COAL FOUND

MAPID: 13720904000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 12 **QUARTERS/FOOTAGES:** 224' N line, 46' W line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.409942 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.860902 **DATE COLLECTED:** 8 / 8 / 1981
SURFACE ELEVATION (FT.): 530.0 **LOGGED (FT.):** 105.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-10 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
456.8			COAL	1.1	73.2	ONLY LOGGED COAL
453.0			COAL	0.8	77.0	ONLY LOGGED COAL
448.0			COAL	2.0	82.0	ONLY LOGGED COAL

MAPID: 13720905000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 18 **QUARTERS/FOOTAGES:** 1080' S line, 845' E line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.489571 **GEOLOGIST:** C TREWORGY
CONFIDENTIAL: N **LATITUDE:** 39.835885 **DATE COLLECTED:** 8 / 10 / 1981
SURFACE ELEVATION (FT.): 495.0 **LOGGED (FT.):** 155.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-15 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCLASSIFIED	155.0		NO COAL FOUND

MAPID: 13720906000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 22 **QUARTERS/FOOTAGES:** 1355' N line, 1480' E line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.434273 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.828801 **DATE COLLECTED:** 8 / 9 / 1981
SURFACE ELEVATION (FT.): 580.0 **LOGGED (FT.):** 160.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-13 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	160.0		NO COAL FOUND

MAPID: 13720907000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 25 **QUARTERS/FOOTAGES:** NE NE NE
QUADRANGLE: CHAPIN **LONGITUDE:** -90.39318 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.816767 **DATE COLLECTED:** 8 / 8 / 1981
SURFACE ELEVATION (FT.): 560.0 **LOGGED (FT.):** 105.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-11 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-			UNCLASSIFIED	105.0		NO COAL FOUND

MAPID: 13720908000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 25 **QUARTERS/FOOTAGES:** 252' S line, 15' W line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.410501 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.804385 **DATE COLLECTED:** 8 / 8 / 1981
SURFACE ELEVATION (FT.): 600.0 **LOGGED (FT.):** 135.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-12 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
479.2	CARBONDALE	COLCHESTER	COAL	2.5	120.8	ONLY LOGGED COAL

MAPID: 13720889000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 27 **QUARTERS/FOOTAGES:** 620' S line, 1495' W line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.443326 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.805854 **DATE COLLECTED:** 8 / 11 / 1981
SURFACE ELEVATION (FT.): 603.0 **LOGGED (FT.):** 147.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-19 **WELL TYPE:** Coal Test
COMMENT: BAD LOG COPY-FOUND SEC # FROM PLAT BOOK

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
495.4	CARBONDALE	COLCHESTER	COAL	1.0	107.6	
494.4	CARBONDALE	COLCHESTER	SHALE	0.5	108.6	PARTING
493.9	CARBONDALE	COLCHESTER	COAL	1.1	109.1	

MAPID: 13720900000C **VERSION:** 1 **PROJECT:** NCRDS91
COUNTY: MORGAN **TWP/RNG:** 16N 12W **SECTION:** 28 **QUARTERS/FOOTAGES:** 2500' S line, 500' E line
QUADRANGLE: CHAPIN **LONGITUDE:** -90.450268 **GEOLOGIST:** C TREWORY
CONFIDENTIAL: N **LATITUDE:** 39.811151 **DATE COLLECTED:** 8 / 1 / 1981
SURFACE ELEVATION (FT.): 605.0 **LOGGED (FT.):** 300.0 **LOG TYPE:** Drillers Log
SOURCE: PHILLIPS COAL CO. MO-3 **WELL TYPE:** Coal Test
COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	25.0		
580.0			UNKNOWN	0.0	25.0	TOP OF BEDROCK
580.0	CARBONDALE		SHALE	145.0	25.0	
435.0	CARBONDALE		SHALE	13.2	170.0	CBY
421.8	CARBONDALE	COLCHESTER	COAL	1.0	183.2	
420.8	SPOON		SHALE	8.8	184.2	CBY
412.0	SPOON		COAL	1.0	193.0	
411.0	SPOON		BLACK SHALE	106.0	194.0	

MAPID: 13720895000C VERSION: 1

PROJECT: NCRDS91

COUNTY: MORGAN TWP/RNG: 16N 12W SECTION: 32 QUARTERS/FOOTAGES: 2030' N line, 2015' E line

QUADRANGLE: CHAPIN LONGITUDE: -90.474819 GEOLOGIST: C TREWORGY

CONFIDENTIAL: N LATITUDE: 39.798694 DATE COLLECTED: 7 / 31 / 1981

SURFACE ELEVATION (FT.): 605.0 LOGGED (FT.): 262.0 LOG TYPE: Drillers Log

SOURCE: PHILLIPS COAL CO. MO-2 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			UNCONSOLIDATED	25.0		
580.0			UNKNOWN	0.0	25.0	TOP OF BEDROCK
580.0	CARBONDALE		SHALE	48.0	25.0	
532.0	CARBONDALE		SHALE	23.9	73.0	CBY
508.1	CARBONDALE	COLCHESTER	COAL	2.3	96.9	
505.8	SPOON		SHALE	5.8	99.2	
500.0	SPOON		LIMESTONE	1.0	105.0	
499.0	SPOON		BLACK SHALE	22.0	106.0	
477.0	SPOON		LIMESTONE/SHALE/SANDS TONE	56.0	128.0	
421.0	SPOON		BLACK SHALE	78.0	184.0	