

# Status Report



**Total Records: 631**

Top 3 County Records		Top 3 Log Type Records		Top 3 Coal Records		Top 3 Member Records	
Greene	631	Drillers Log	607	COLCHESTER	371	COLCHESTER COAL	371
		Measured section	20	HERRIN	30	MECCA QUARRY BLACK SHALE	71
		Company map	1	ROODHOUSE	4	HERRIN COAL	30

## Data Summary

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

*Depth and Thickness measurements in feet*

Member	Lithology	Avg. Depth	Min. Depth	Max. Depth	Avg. Thk	Min. Thk	Max. Thk
<b>BANKSTON FORK</b>	LIMESTONE	<b>87.0</b>	87.0	87.0	<b>1.5</b>	1.5	1.5
<b>BRERETON</b>	LIMESTONE	<b>107.5</b>	107.5	107.5	<b>2.0</b>	2.0	2.0
<b>ANNA</b>	SHALE	<b>52.1</b>	29.8	93.5	<b>2.3</b>	1.2	4.6
<b>HERRIN</b>	COAL	<b>77.4</b>	7.3	137.9	<b>3.5</b>	0.5	7.2
<b>ROODHOUSE</b>	COAL	<b>26.6</b>	8.5	43.0	<b>4.1</b>	1.9	9.5
<b>MECCA QUARRY</b>	SHALE	<b>63.1</b>	13.5	118.0	<b>2.2</b>	0.5	8.0
<b>COLCHESTER</b>	COAL	<b>63.1</b>	3.5	135.0	<b>2.3</b>	0.3	4.0
<b>SEAHORNE LS</b>	LIMESTONE	<b>61.6</b>	21.5	120.0	<b>0.5</b>	0.2	1.0
				<b>Net Coal</b>	<b>9.9</b>		

## Coal Logs

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

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

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

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

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

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

MAPID: 06100154000C VERSION: 1 PROJECT: AVAIL  
 COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 15 QUARTERS/FOOTAGES: NE NE NW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.200685 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.319916 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 525.0 LOGGED (FT.): 108.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 35 WELL TYPE: Coal Test  
 COMMENT: GREENFIELD QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
525.0	PLEISTOCENE		SANDY CLAY	90.0	0.0	
435.0	PLEISTOCENE		SAND	13.5	90.0	
421.5	CARBONDALE	COLCHESTER	COAL	3.0	103.5	
418.5	SPOON		UNDERCLAY	1.5	106.5	

MAPID: 06190001000C VERSION: 1 PROJECT: LUMP  
 COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES:  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.157288 GEOLOGIST: J.MCBETH  
 CONFIDENTIAL: N LATITUDE: 39.26908 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Company map  
 SOURCE: NORTHERN ILLINOIS COAL CORP. WELL TYPE: Coal Test  
 COMMENT: LOCS OF HOLES FOR SECTION 36

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.) UNIT	OVERBURDEN	COMMENT
-	CARBONDALE	HERRIN	COAL	-		HOLES ON MAPS IN MAP CASE #6

**MAPID:** 06190005000C    **VERSION:** 1    **PROJECT:** NCRDS98  
**COUNTY:** GREENE    **TWP/RNG:** 10N 10W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 883' N line, 649' E line  
**QUADRANGLE:** GREENFIELD    **LONGITUDE:** -90.150247    **GEOLOGIST:** NORTH  
**CONFIDENTIAL:** N    **LATITUDE:** 39.274185    **DATE COLLECTED:** 10 / 11 / 1955  
**SURFACE ELEVATION (FT.):** 535.8    **LOGGED (FT.):** 64.8    **LOG TYPE:** Drillers Log  
**SOURCE:** NORTHERN ILLINOIS COAL CORP. 303    **WELL TYPE:** Coal Test  
**COMMENT:** ROY CURTIS PROPERTY;NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
535.8	PLEISTOCENE		UNCONSOLIDATED	51.4	0.0	
484.4	CARBONDALE	ANNA	BLACK SHALE	2.8	51.4	CORRELATION UNCERTAIN
481.5	CARBONDALE		CLAYSTONE	3.4	54.3	
478.1	CARBONDALE		SHALE WITH LIMESTONE	5.9	57.7	
472.2	CARBONDALE		GRAY SHALE	1.2	63.6	

**MAPID:** 06190436000C    **VERSION:** 1    **PROJECT:** NCRDS98  
**COUNTY:** GREENE    **TWP/RNG:** 10N 10W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 884' N line, 549' E line  
**QUADRANGLE:** GREENFIELD    **LONGITUDE:** -90.149891    **GEOLOGIST:** NORTH  
**CONFIDENTIAL:** N    **LATITUDE:** 39.274184    **DATE COLLECTED:** 10 / 11 / 1955  
**SURFACE ELEVATION (FT.):** 532.8    **LOGGED (FT.):** 64.8    **LOG TYPE:** Drillers Log  
**SOURCE:** NORTHERN ILLINOIS COAL CORP. 304    **WELL TYPE:** Coal Test  
**COMMENT:** ROY CURTIS PROPERTY;NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
532.8	PLEISTOCENE		UNCONSOLIDATED	48.8	0.0	
484.0	CARBONDALE	ANNA	BLACK SHALE	3.2	48.8	CORRELATION UNCERTAIN
480.9	CARBONDALE		CLAYSTONE	3.7	51.9	
477.2	CARBONDALE		SHALE WITH LIMESTONE	6.3	55.6	
470.9	CARBONDALE		GRAY SHALE	2.8	61.9	

**MAPID:** 06190437000C    **VERSION:** 1    **PROJECT:** NCRDS98  
**COUNTY:** GREENE    **TWP/RNG:** 10N 10W    **SECTION:** 36    **QUARTERS/FOOTAGES:** 1093' N line, 646' E line  
**QUADRANGLE:** GREENFIELD    **LONGITUDE:** -90.150223    **GEOLOGIST:** NORTH  
**CONFIDENTIAL:** N    **LATITUDE:** 39.273605    **DATE COLLECTED:** 10 / 11 / 1955  
**SURFACE ELEVATION (FT.):** 539.9    **LOGGED (FT.):** 63.6    **LOG TYPE:** Drillers Log  
**SOURCE:** NORTHERN ILLINOIS COAL CORP. 305    **WELL TYPE:** Coal Test  
**COMMENT:** ROY CURTIS PROPERTY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
539.9	PLEISTOCENE		UNCONSOLIDATED	56.9	0.0	
483.0	CARBONDALE	ANNA	BLACK SHALE	2.2	56.9	
480.8	CARBONDALE	HERRIN	COAL	2.4	59.1	
478.4	CARBONDALE		UNDERCLAY	2.1	61.5	

MAPID: 06190438000C VERSION: 1

PROJECT: NCRDS98

COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES: 1095' N line, 557' E line

QUADRANGLE: GREENFIELD LONGITUDE: -90.149907 GEOLOGIST: J. MCBETH

CONFIDENTIAL: N LATITUDE: 39.273602 DATE COLLECTED: 10 / 11 / 1955

SURFACE ELEVATION (FT.): 538.8 LOGGED (FT.): 58.8 LOG TYPE: Drillers Log

SOURCE: NORTHERN ILLINOIS COAL CORP. 306 WELL TYPE: Coal Test

COMMENT: ROY CURTIS PROPERTY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
538.8	PLEISTOCENE		UNCONSOLIDATED	50.1	0.0	
488.7	CARBONDALE	HERRIN	COAL	6.9	50.1	TOP ERODED
481.8	CARBONDALE		UNDERCLAY	1.8	57.0	

MAPID: 06190439000C VERSION: 1

PROJECT: NCRDS98

COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES: 715' N line, 351' E line

QUADRANGLE: GREENFIELD LONGITUDE: -90.149196 GEOLOGIST: J.MCBETH

CONFIDENTIAL: N LATITUDE: 39.274652 DATE COLLECTED: 10 / 11 / 1955

SURFACE ELEVATION (FT.): 534.2 LOGGED (FT.): 65.2 LOG TYPE: Drillers Log

SOURCE: NORTHERN ILLINOIS COAL CORP. 307 WELL TYPE: Coal Test

COMMENT: ROY CURTIS PROPERTY;NO COAL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
534.2	PLEISTOCENE		UNCONSOLIDATED	37.2	0.0	
497.0	CARBONDALE		LIMESTONE	3.3	37.2	
493.8	CARBONDALE		CLAYSTONE	4.8	40.4	
488.9	CARBONDALE	ANNA	BLACK SHALE	4.6	45.3	CORRELATION UNCERTAIN
484.4	CARBONDALE		CLAYSTONE	3.8	49.8	
480.5	CARBONDALE		SHALE WITH LIMESTONE	8.8	53.7	
471.8	CARBONDALE		GRAY SHALE	2.8	62.4	

MAPID: 06190440000C VERSION: 1

PROJECT: NCRDS98

COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES: 255' N line, 255' E line

QUADRANGLE: GREENFIELD LONGITUDE: -90.148855 GEOLOGIST: J.MCBETH

CONFIDENTIAL: N LATITUDE: 39.274692 DATE COLLECTED: 10 / 12 / 1955

SURFACE ELEVATION (FT.): 524.8 LOGGED (FT.): 47.6 LOG TYPE: Drillers Log

SOURCE: NORTHERN ILLINOIS COAL CORP. 308 WELL TYPE: Coal Test

COMMENT: ROY CURTIS PROPERTY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
524.8	PLEISTOCENE		UNCONSOLIDATED	38.9	0.0	
485.9	CARBONDALE	ANNA	BLACK SHALE	1.5	38.9	
484.4	CARBONDALE	HERRIN	COAL	4.9	40.4	
479.5	CARBONDALE		UNDERCLAY	2.3	45.3	

MAPID: 06190441000C VERSION: 1

PROJECT: NCRDS98

COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES: 1192' N line, 262' E line

QUADRANGLE: GREENFIELD LONGITUDE: -90.148854 GEOLOGIST: J.MCBETH

CONFIDENTIAL: N LATITUDE: 39.273337 DATE COLLECTED: 10 / 20 / 1955

SURFACE ELEVATION (FT.): 530.7 LOGGED (FT.): 60.8 LOG TYPE: Drillers Log

SOURCE: NORTHERN ILLINOIS COAL CORP. 327 WELL TYPE: Coal Test

COMMENT: ROY CURTIS PROPERTY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
530.7	PLEISTOCENE		UNCONSOLIDATED	51.8	0.0	
478.9	CARBONDALE	ANNA	BLACK SHALE	1.2	51.8	
477.7	CARBONDALE	HERRIN	COAL	5.9	53.0	
471.8	CARBONDALE		UNDERCLAY	1.8	58.9	

MAPID: 06190442000C VERSION: 1

PROJECT: NCRDS98

COUNTY: GREENE TWP/RNG: 10N 10W SECTION: 36 QUARTERS/FOOTAGES: 387' N line, 71' E line

QUADRANGLE: GREENFIELD LONGITUDE: -90.14822 GEOLOGIST: J.MCBETH

CONFIDENTIAL: N LATITUDE: 39.27556 DATE COLLECTED: 10 / 22 / 1955

SURFACE ELEVATION (FT.): 510.4 LOGGED (FT.): 36.6 LOG TYPE: Drillers Log

SOURCE: NORTHERN ILLINOIS COAL CORP. 333 WELL TYPE: Coal Test

COMMENT: ROY CURTIS PROPERTY

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
510.4	PLEISTOCENE		UNCONSOLIDATED	29.8	0.0	
480.6	CARBONDALE	ANNA	BLACK SHALE	1.2	29.8	
479.4	CARBONDALE	HERRIN	COAL	3.8	31.0	
475.6	CARBONDALE		UNDERCLAY	1.8	34.8	

**MAPID:** 06100205000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 10N 11W    **SECTION:** 20    **QUARTERS/FOOTAGES:** SE NE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.336181    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.299959    **DATE COLLECTED:** 6 / 0 / 1928  
**SURFACE ELEVATION (FT.):** 550.0    **LOGGED (FT.):** 69.2    **LOG TYPE:** Drillers Log  
**SOURCE:** THOS. A. HENDRICKS    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		UNCONSOLIDATED	1.0	0.0	
549.0	PLEISTOCENE		GLACIAL DRIFT	15.0	1.0	
534.0	PLEISTOCENE		UNCONSOLIDATED	16.8	16.0	CLAYEY
517.2	PLEISTOCENE		UNCONSOLIDATED	18.5	32.8	CLAYEY; BLUE
498.7	CARBONDALE		SANDSTONE	9.5	51.3	SOFT; BLUE/GRAY
489.2	CARBONDALE		ARGILACEOUS SHALE	3.9	60.8	
485.3	CARBONDALE	COLCHESTER	COAL	2.3	64.7	
483.1	SPOON		UNDERCLAY	2.3	66.9	

**MAPID:** 06120486000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 10N 11W    **SECTION:** 23    **QUARTERS/FOOTAGES:** SE SE SE SE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.278872    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.291487    **DATE COLLECTED:** 6 / 13 / 1978  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 150.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED    #4-L    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	15.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	37.0	15.0	
-			SHALE	51.3	52.0	
-			SHALE	1.8	103.3	
-			SHALE	45.0	105.0	

MAPID: 06120487000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE

TWP/RNG: 10N 11W

SECTION: 26

QUARTERS/FOOTAGES: NE NE NW NW

QUADRANGLE: DAUM

LONGITUDE: -90.292759

GEOLOGIST: C KOROSE

CONFIDENTIAL: N

LATITUDE: 39.290198

DATE COLLECTED: 6 / 13 / 1978

SURFACE ELEVATION (FT.):

LOGGED (FT.): 100.5

LOG TYPE: Drillers Log

SOURCE: FREEMAN UNITED COAL CO. 3L

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
-	PLEISTOCENE		CLAY	7.0	3.0	
-	PLEISTOCENE		UNCONSOLIDATED	24.0	10.0	
-			SANDSTONE	22.5	34.0	SOFT
-			SHALE	44.0	56.5	HARD
-			LIMESTONE	-	100.5	

MAPID: 06120488000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE

TWP/RNG: 10N 11W

SECTION: 27

QUARTERS/FOOTAGES: SW NE NE SW

QUADRANGLE: DAUM

LONGITUDE: -90.307584

GEOLOGIST: C KOROSE

CONFIDENTIAL: N

LATITUDE: 39.282152

DATE COLLECTED: 6 / 7 / 1978

SURFACE ELEVATION (FT.):

LOGGED (FT.): 120.0

LOG TYPE: Drillers Log

SOURCE: FREEMAN UNITED COAL CO. 8-L

WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	5.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	35.0	5.0	
-	PLEISTOCENE		SAND	3.0	40.0	
-	PLEISTOCENE		UNCONSOLIDATED	27.5	43.0	
-	CARBONDALE		SHALE	38.0	70.5	HARD
-	CARBONDALE	COLCHESTER	COAL	3.0	108.5	
-			SHALE	8.5	111.5	

**MAPID:** 06120489000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 10N 11W    **SECTION:** 28    **QUARTERS/FOOTAGES:** SE NE NE NE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.315814    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.289493    **DATE COLLECTED:** 6 / 6 / 1978  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 150.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 2L    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	15.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	6.0	15.0	
-	PLEISTOCENE		CLAY	14.0	21.0	LOG REPORTS "GRAY SHALE"
-	PLEISTOCENE		UNCONSOLIDATED	62.0	35.0	
-			SHALE	38.0	97.0	HARD
-			SHALE & SANDSTONE	15.0	135.0	SOFT SANDSTONE

**MAPID:** 06120490000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 10N 11W    **SECTION:** 29    **QUARTERS/FOOTAGES:** NE NE NE NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.343908    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.290426    **DATE COLLECTED:** 6 / 8 / 1978  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 150.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 1-L    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	15.0	0.0	
-	PLEISTOCENE		UNCONSOLIDATED	22.5	15.0	
-			SHALE	77.0	37.5	
-			SHALE	1.5	114.5	
-			SHALE & SANDSTONE	34.0	116.0	

**MAPID:** 06120491000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 10N 11W    **SECTION:** 33    **QUARTERS/FOOTAGES:** NW NW NW NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.333191    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.275764    **DATE COLLECTED:** 6 / 8 / 1978  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 108.5    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 9-L    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	22.0	0.0	
-	PLEISTOCENE		CLAY	33.0	22.0	
-			SHALE	53.5	55.0	
-			ROCK	-	108.5	



MAPID: 06123588000C VERSION: 1

PROJECT: NCRDS94

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 1 QUARTERS/FOOTAGES: 66' S line, 35' W line

QUADRANGLE: ATHENSVILLE LONGITUDE: -90.170378 GEOLOGIST: HOKE

CONFIDENTIAL: N LATITUDE: 39.419195 DATE COLLECTED: 5 / 5 / 1972

SURFACE ELEVATION (FT.): 645.0 LOGGED (FT.): 123.0 LOG TYPE:

SOURCE: PAUL FARMER 14 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
645.0	PLEISTOCENE		CLAY	5.0	0.0	BLACK
640.0	PLEISTOCENE		CLAY	10.0	5.0	TAN
630.0	PLEISTOCENE		CLAY & GRAVEL	21.0	15.0	GRAY
609.0	PLEISTOCENE		GRAVEL	4.0	36.0	
605.0	PLEISTOCENE		CLAY	8.0	40.0	GRAY
597.0	PLEISTOCENE		CLAY	11.0	48.0	TAN
586.0			SANDSTONE	3.5	59.0	
582.5			LIMESTONE	1.5	62.5	
581.0			SANDSTONE	4.0	64.0	GRAY
577.0			SHALE	15.5	68.0	
561.5			LIMESTONE	2.0	83.5	
559.5			SHALE	0.5	85.5	
559.0			LIMESTONE	2.5	86.0	
556.5			SHALE	3.5	88.5	
553.0			SANDSTONE	3.0	92.0	
550.0			LIMESTONE	0.5	95.0	
549.5			BLACK SHALE	3.0	95.5	
546.5			LIMESTONE	4.5	98.5	7
542.0			SHALE	7.0	103.0	
535.0			LIMESTONE	3.0	110.0	
532.0			SHALY LIMESTONE	2.0	113.0	GRAY
530.0			LIMESTONE	3.7	115.0	
526.3	CARBONDALE	HERRIN	COAL	3.6	118.7	
522.7	CARBONDALE		UNDERCLAY	0.7	122.3	

MAPID: 06100155000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 3 QUARTERS/FOOTAGES: SE SE SW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.194064 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.419226 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 615.0 LOGGED (FT.): 91.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 36 WELL TYPE: Coal Test  
 COMMENT: GREENFIELD QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.0	PLEISTOCENE		CLAY	11.0	0.0	BLUE
604.0	PLEISTOCENE		SANDY CLAY	32.0	11.0	GRAY
572.0	PLEISTOCENE		SAND	3.0	43.0	
569.0	PLEISTOCENE		SANDY CLAY	32.0	46.0	W/BOULDERS; GRAY
537.0			LIMESTONE	10.0	78.0	
527.0			BLACK SHALE	1.0	88.0	
526.0			COAL	1.0	89.0	
525.0			UNDERCLAY	1.0	90.0	

MAPID: 06100156000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 4 QUARTERS/FOOTAGES: SW SW SW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.225621 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.4263 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 118.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 37 WELL TYPE: Coal Test  
 COMMENT: GREENFIELD QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		CLAY	12.0	0.0	BROWN
538.0	PLEISTOCENE		CLAY	13.0	12.0	GRAY
525.0	PLEISTOCENE		SANDY CLAY	51.0	25.0	GRAY
474.0	CARBONDALE		SANDSTONE	31.0	76.0	
443.0	CARBONDALE		SHALE	1.8	107.0	
441.2	CARBONDALE	COLCHESTER	COAL	2.7	108.8	
438.6	SPOON		SHALE	6.6	111.4	

MAPID: 06120493000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 6 QUARTERS/FOOTAGES: SW SE SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.256304 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.426333 DATE COLLECTED: 6 / 20 / 1978  
 SURFACE ELEVATION (FT.): 525.0 LOGGED (FT.): 55.6 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 1-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
525.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0
521.0	PLEISTOCENE		CLAY	3.0	4.0
518.0	PLEISTOCENE		UNCONSOLIDATED	16.0	7.0
502.0	CARBONDALE		SHALE	28.6	23.0
473.4	CARBONDALE		SHALE	1.8	51.6
471.6	CARBONDALE	COLCHESTER	COAL	2.2	53.4
469.4			ROCK	-	55.6

MAPID: 06120494000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 7 QUARTERS/FOOTAGES: SE SE SE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.245423 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.411904 DATE COLLECTED: 6 / 29 / 1978  
 SURFACE ELEVATION (FT.): 582.0 LOGGED (FT.): 123.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 2-RU WELL TYPE: Coal Test  
 COMMENT: POMBRAC

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
582.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
577.0	PLEISTOCENE		CLAY	10.0	5.0
567.0	PLEISTOCENE		SAND & GRAVEL	15.0	15.0
552.0	PLEISTOCENE		UNCONSOLIDATED	15.0	30.0
537.0			SHALE	60.0	45.0
477.0			CALCAREOUS SHALE	18.0	105.0
459.0	MISSISSIPPIAN		LIMESTONE	-	123.0

MAPID: 06120495000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 7 QUARTERS/FOOTAGES: SW SW SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.263364 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.404564 DATE COLLECTED: 6 / 27 / 1978  
 SURFACE ELEVATION (FT.): 558.0 LOGGED (FT.): 140.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 9-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
558.0	PLEISTOCENE		CLAY	15.0	0.0	
543.0	PLEISTOCENE		UNCONSOLIDATED	10.0	15.0	
533.0			SHALE	5.0	25.0	W/GRAVEL
528.0			SHALE	110.0	30.0	
418.0			LIMESTONE	-	140.0	HARD

MAPID: 06190007000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 12 QUARTERS/FOOTAGES: 1' S line, 890' E line of SW NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.159345 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.411912 DATE COLLECTED: 9 / 18 / 1968  
 SURFACE ELEVATION (FT.): 658.6 LOGGED (FT.): 138.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 37 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
658.6	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0	
600.6	CARBONDALE		ROCK	21.0	58.0	
579.6	CARBONDALE	HERRIN	COAL	0.5	79.0	
579.1	CARBONDALE		ROCK	58.5	79.5	

MAPID: 06190447000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 12 QUARTERS/FOOTAGES: 1' S line, 890' E line of SW NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.159345 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.411912 DATE COLLECTED: 9 / 10 / 1968  
 SURFACE ELEVATION (FT.): 658.6 LOGGED (FT.): 138.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 37 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX 43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
658.6	PLEISTOCENE		CLAY	21.0	0.0
637.6	PLEISTOCENE		CLAY	37.0	21.0
600.6			GRAY SHALE	19.0	58.0
581.6			BLACK SHALE	2.0	77.0
579.6			COAL	0.5	79.0
579.1			UNDERCLAY	1.5	79.5
577.6			LIMESTONE & SHALE	57.0	81.0

MAPID: 06190023000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 13 QUARTERS/FOOTAGES: 226' S line, 20' W line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.170123 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.401322 DATE COLLECTED: 12 / 16 / 1978  
 SURFACE ELEVATION (FT.): 645.0 LOGGED (FT.): 157.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-009 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
645.0	PLEISTOCENE		UNCONSOLIDATED	108.5	0.0
536.5	CARBONDALE		ROCK	29.4	108.5
507.1	CARBONDALE	HERRIN	COAL	3.1	137.9
504.0	CARBONDALE		ROCK	16.0	141.0

MAPID: 06123587000C VERSION: 1

PROJECT: NCRDS94

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 14 QUARTERS/FOOTAGES: 30' S line, 2115' W line

QUADRANGLE: ATHENSVILLE LONGITUDE: -90.18118 GEOLOGIST: HOKE

CONFIDENTIAL: N LATITUDE: 39.389819 DATE COLLECTED: 5 / 5 / 1972

SURFACE ELEVATION (FT.): 640.0 LOGGED (FT.): 116.0 LOG TYPE:

SOURCE: PAUL FARMER 13 WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
640.0	PLEISTOCENE		CLAY	2.0	0.0	BLACK
638.0	PLEISTOCENE		CLAY	15.0	2.0	TAN
623.0	PLEISTOCENE		CLAY & GRAVEL	10.0	17.0	GRAY
613.0	PLEISTOCENE		GRAVEL	5.0	27.0	
608.0	PLEISTOCENE		CLAY	27.0	32.0	GRAY
581.0	PLEISTOCENE		SAND & GRAVEL	28.0	59.0	
553.0	CARBONDALE	BANKSTON FORK	LIMESTONE	1.5	87.0	
551.5	CARBONDALE		SHALE	1.5	88.5	
550.0	CARBONDALE		SHALE/COAL	11.0	90.0	
539.0	CARBONDALE		SHALE	6.5	101.0	
532.5	CARBONDALE	BRERETON	LIMESTONE	2.0	107.5	
530.5	CARBONDALE		MOTTLED SHALE	1.5	109.5	
529.0	CARBONDALE	HERRIN	COAL	3.5	111.0	
525.5	CARBONDALE		UNDERCLAY	1.5	114.5	

MAPID: 06190006000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 14 QUARTERS/FOOTAGES: 48' S line, 182' W line of SW SW

QUADRANGLE: ATHENSVILLE LONGITUDE: -90.188057 GEOLOGIST: LAWSON

CONFIDENTIAL: N LATITUDE: 39.389801 DATE COLLECTED: 9 / 16 / 1968

SURFACE ELEVATION (FT.): 633.6 LOGGED (FT.): 117.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE 36 WELL TYPE: Coal Test

COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
633.6	PLEISTOCENE		UNCONSOLIDATED	86.0	0.0	
547.6	CARBONDALE		ROCK	25.0	86.0	
522.6	CARBONDALE	HERRIN	COAL	4.2	111.0	
518.4	PLEISTOCENE		ROCK	1.8	115.2	

MAPID: 06190021000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 14 QUARTERS/FOOTAGES: 30' S line, 498' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.171951 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.389665 DATE COLLECTED: 12 / 15 / 1978  
 SURFACE ELEVATION (FT.): 645.5 LOGGED (FT.): 157.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-008 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
645.5	PLEISTOCENE		UNCONSOLIDATED	137.5	0.0
508.0	CARBONDALE		ROCK	19.5	137.5

MAPID: 06100178000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 15 QUARTERS/FOOTAGES: NE NW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.204004 GEOLOGIST: MCCRACKEN  
 CONFIDENTIAL: N LATITUDE: 39.396036 DATE COLLECTED: 3 / 28 / 1957  
 SURFACE ELEVATION (FT.): 625.0 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN GS-2 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
625.0	PLEISTOCENE		UNCONSOLIDATED	79.0	0.0
546.0	CARBONDALE		LIMESTONE	3.2	79.0
542.8	CARBONDALE		CLAYSTONE & SILTSTONE	4.9	82.2
537.9	CARBONDALE		SHALE	1.6	87.1
536.3	CARBONDALE	COLCHESTER	COAL	2.5	88.7
533.8	SPOON		UNDERCLAY	1.8	91.2

MAPID: 06100178000C VERSION: 2

PROJECT: EIA-DOE

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 15 QUARTERS/FOOTAGES: NE NW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.204004 GEOLOGIST: JACOBSON  
 CONFIDENTIAL: N LATITUDE: 39.396036 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 625.0 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN S-2 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
536.3	CARBONDALE	HERRIN	COAL	2.5	88.7

MAPID: 06190009000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 15 QUARTERS/FOOTAGES: 327' N line, 93' E line of SW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.203195 GEOLOGIST:  
 CONFIDENTIAL: N LATITUDE: 39.399778 DATE COLLECTED: 9 / 17 / 1968  
 SURFACE ELEVATION (FT.): 617.9 LOGGED (FT.): 148.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 39 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
617.9	PLEISTOCENE		UNCONSOLIDATED	99.0	0.0
518.9	CARBONDALE		ROCK	49.0	99.0

MAPID: 06120496000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 19 QUARTERS/FOOTAGES: NE NE NE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.245444 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.389375 DATE COLLECTED: 6 / 15 / 1978  
 SURFACE ELEVATION (FT.): 531.0 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 3-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
526.0	PLEISTOCENE		CLAY	5.0	5.0
521.0	PLEISTOCENE		UNCONSOLIDATED	5.0	10.0
516.0	PLEISTOCENE		SAND & GRAVEL	15.0	15.0
501.0			SHALE	65.0	30.0
436.0			SHALE	2.0	95.0
434.0			SHALE	3.0	97.0
431.0			LIMESTONE	-	100.0

MAPID: 06190012000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 20 QUARTERS/FOOTAGES: 70' S line, 330' E line of NE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.236574 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.378803 DATE COLLECTED: 9 / 18 / 1968  
 SURFACE ELEVATION (FT.): 607.3 LOGGED (FT.): 128.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 42 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
607.3	PLEISTOCENE		UNCONSOLIDATED	84.0	0.0
523.3	CARBONDALE		ROCK	44.0	84.0



MAPID: 06190010000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 21 QUARTERS/FOOTAGES: 30' S line, 80' W line of SE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.211736 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.382352 DATE COLLECTED: 9 / 18 / 1968  
 SURFACE ELEVATION (FT.): 610.9 LOGGED (FT.): 148.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 40 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.9	PLEISTOCENE		UNCONSOLIDATED	88.0	0.0
522.9	CARBONDALE		ROCK	60.0	88.0

MAPID: 06190029000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 21 QUARTERS/FOOTAGES: 8' S line, 76' W line of SE SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.211948 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.374814 DATE COLLECTED: 12 / 19 / 1978  
 SURFACE ELEVATION (FT.): 618.2 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-015 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
618.2	PLEISTOCENE		UNCONSOLIDATED	51.5	0.0
566.7	CARBONDALE		ROCK	19.0	51.5
547.7	CARBONDALE		COAL	0.7	70.5
547.0	CARBONDALE		ROCK	35.8	71.2

MAPID: 06190030000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 22 QUARTERS/FOOTAGES: 14' S line, 7' W line of NW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.207547 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.378576 DATE COLLECTED: 12 / 17 / 1978  
 SURFACE ELEVATION (FT.): 620.0 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-016 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
620.0	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0
563.0	CARBONDALE		ROCK	17.5	57.0
545.5	CARBONDALE		COAL	0.5	74.5
545.0	CARBONDALE		ROCK	25.0	75.0

MAPID: 06190034000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 22 QUARTERS/FOOTAGES: 46' N line, 880' E line of NE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.191952 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.389369 DATE COLLECTED: 12 / 20 / 1978  
 SURFACE ELEVATION (FT.): 633.0 LOGGED (FT.): 127.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-020 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
633.0	PLEISTOCENE		UNCONSOLIDATED	89.8	0.0
543.2	CARBONDALE		ROCK	37.2	89.8

MAPID: 06190002000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 24 QUARTERS/FOOTAGES: 30' S line, 255' W line of SE NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.16424 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.382692 DATE COLLECTED: 8 / 27 / 1968  
 SURFACE ELEVATION (FT.): 635.5 LOGGED (FT.): 168.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 8 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
635.5	PLEISTOCENE		UNCONSOLIDATED	166.0	0.0
469.5	CARBONDALE		ROCK	2.0	166.0

MAPID: 06190015000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 24 QUARTERS/FOOTAGES: 57' S line, 20' W line of SW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.169867 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.375195 DATE COLLECTED: 12 / 13 / 1978  
 SURFACE ELEVATION (FT.): 622.8 LOGGED (FT.): 137.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-001 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
622.8	PLEISTOCENE		UNCONSOLIDATED	137.0	0.0

MAPID: 06190018000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 24 QUARTERS/FOOTAGES: 15' S line, 1000' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.154623 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.375281 DATE COLLECTED: 12 / 14 / 1978  
 SURFACE ELEVATION (FT.): 642.0 LOGGED (FT.): 127.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-004 WELL TYPE: Coal Test  
 COMMENT: XY INCORRECT. BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
642.0	PLEISTOCENE		UNCONSOLIDATED	103.2	0.0	
538.8	CARBONDALE		ROCK	8.4	103.2	
530.4	CARBONDALE	HERRIN	COAL	1.9	111.6	
528.5	CARBONDALE		ROCK	13.5	113.5	

MAPID: 06190020000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 24 QUARTERS/FOOTAGES: 12' N line, 35' W line of NW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.160534 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.382456 DATE COLLECTED: 12 / 14 / 1978  
 SURFACE ELEVATION (FT.): 648.9 LOGGED (FT.): 146.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-006 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
648.9	PLEISTOCENE		UNCONSOLIDATED	121.4	0.0	
527.5	CARBONDALE		ROCK	10.4	121.4	
517.1	CARBONDALE	HERRIN	COAL	3.8	131.8	
513.3	CARBONDALE		ROCK	10.4	135.6	

MAPID: 06123586000C VERSION: 1

PROJECT: NCRDS94

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 25 QUARTERS/FOOTAGES: 1236' N line, 162' W line  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.169121 GEOLOGIST: HOKE  
 CONFIDENTIAL: N LATITUDE: 39.371898 DATE COLLECTED: 5 / 5 / 1972  
 SURFACE ELEVATION (FT.): 605.0 LOGGED (FT.): 143.0 LOG TYPE:  
 SOURCE: PAUL FARMER 12 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
605.0	PLEISTOCENE		CLAY	3.0	0.0	BLACK
602.0	PLEISTOCENE		CLAY	12.0	3.0	TAN
590.0	PLEISTOCENE		CLAY & GRAVEL	106.0	15.0	GRAY
484.0			SHALE/SANDSTONE/LIMES TONE	6.0	121.0	
478.0			SHALY SANDSTONE	16.0	127.0	

MAPID: 06190016000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 25 QUARTERS/FOOTAGES: 121' N line, 18' W line of SW SW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.169646 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.363563 DATE COLLECTED: 12 / 13 / 1978  
 SURFACE ELEVATION (FT.): 626.0 LOGGED (FT.): 160.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-002 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
626.0	PLEISTOCENE		UNCONSOLIDATED	134.8	0.0
491.2	CARBONDALE		ROCK	25.2	134.8

MAPID: 06190017000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 25 QUARTERS/FOOTAGES: 956' S line, 20' W line of SW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.169776 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.370497 DATE COLLECTED: 12 / 0 / 1978  
 SURFACE ELEVATION (FT.): 606.2 LOGGED (FT.): 167.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-003 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.2	PLEISTOCENE		UNCONSOLIDATED	128.3	0.0
477.9	CARBONDALE		ROCK	38.7	128.3

MAPID: 06190036000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 25 QUARTERS/FOOTAGES: 91' N line, 33' E line of SE NE  
 QUADRANGLE: DAUM LONGITUDE: -90.263899 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.371224 DATE COLLECTED: 12 / 20 / 1978  
 SURFACE ELEVATION (FT.): 591.2 LOGGED (FT.): 90.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-022 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
591.2	PLEISTOCENE		UNCONSOLIDATED	49.0	0.0
542.2	CARBONDALE		ROCK	18.8	49.0
523.4	CARBONDALE		COAL	0.9	67.8
522.5	CARBONDALE		ROCK	21.3	68.7

MAPID: 06190024000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 26 QUARTERS/FOOTAGES: 217' N line, 247' W line of SW NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.178061 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.371073 DATE COLLECTED: 12 / 16 / 1978  
 SURFACE ELEVATION (FT.): 626.0 LOGGED (FT.): 150.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-010 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
626.0	PLEISTOCENE		UNCONSOLIDATED	123.5	0.0	
502.5	CARBONDALE		ROCK	26.5	123.5	

MAPID: 06190026000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 26 QUARTERS/FOOTAGES: 303' S line, 55' W line of NW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.17891 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.365031 DATE COLLECTED: 12 / 17 / 1978  
 SURFACE ELEVATION (FT.): 624.5 LOGGED (FT.): 147.5 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-012 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
624.5	PLEISTOCENE		UNCONSOLIDATED	147.5	0.0	

MAPID: 06190031000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 26 QUARTERS/FOOTAGES: 560' N line, 293' W line of NW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.187623 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.373381 DATE COLLECTED: 12 / 19 / 1978  
 SURFACE ELEVATION (FT.): 626.6 LOGGED (FT.): 117.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-017 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
626.6	PLEISTOCENE		UNCONSOLIDATED	117.0	0.0	

MAPID: 06190446000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 26 QUARTERS/FOOTAGES: 123' N line, 35' W line of NW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.188244 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.374727 DATE COLLECTED: 9 / 16 / 1968  
 SURFACE ELEVATION (FT.): 605.8 LOGGED (FT.): 148.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 35 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX 43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
605.8	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
587.8	PLEISTOCENE		CLAY	91.0	18.0
496.8			GRAY SHALE	39.0	109.0

MAPID: 06100013000C VERSION: 1

PROJECT: NCRDS87

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 27 QUARTERS/FOOTAGES: SW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.194924 GEOLOGIST: WEIBEL  
 CONFIDENTIAL: N LATITUDE: 39.362499 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 609.0 LOGGED (FT.): 102.2 LOG TYPE: Drillers Log  
 SOURCE: GREENFIELD MINING CO. WELL TYPE: Mine Shaft  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
609.0			UNCONSOLIDATED	85.0	0.0
524.0	CARBONDALE		UNCLASSIFIED	4.5	85.0
519.5	CARBONDALE		GRAY SHALE	4.0	89.5
515.5	CARBONDALE	ANNA	BLACK SHALE	1.5	93.5
514.0	CARBONDALE	HERRIN	COAL	7.0	95.0
507.0	CARBONDALE	HERRIN	BONE COAL	0.2	102.0

MAPID: 06190003000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 27 QUARTERS/FOOTAGES: 20' N line, 100' W line of NW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.197146 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.367822 DATE COLLECTED: 8 / 27 / 1968  
 SURFACE ELEVATION (FT.): 619.3 LOGGED (FT.): 128.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 9 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
619.3	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0
539.3	CARBONDALE		ROCK	10.0	80.0
529.3	CARBONDALE	HERRIN	COAL	2.3	90.0
527.0	CARBONDALE		ROCK	35.7	92.3

MAPID: 06190019000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 27 QUARTERS/FOOTAGES: 1200' S line, 15' E line of SE SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.188469 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.363846 DATE COLLECTED: 12 / 13 / 1978  
 SURFACE ELEVATION (FT.): 619.0 LOGGED (FT.): 130.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-005 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
619.0	PLEISTOCENE		UNCONSOLIDATED	112.5	0.0
506.5	CARBONDALE		ROCK	17.5	112.5

MAPID: 06190025000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 27 QUARTERS/FOOTAGES: 258' N line, 53' W line of NE SW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.202378 GEOLOGIST:  
 CONFIDENTIAL: N LATITUDE: 39.367165 DATE COLLECTED: 12 / 16 / 1978  
 SURFACE ELEVATION (FT.): 616.8 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-011 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
616.8	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0
569.8	CARBONDALE		ROCK	47.6	47.0
522.2	CARBONDALE	HERRIN	COAL	3.7	94.6
518.5	CARBONDALE		ROCK	11.7	98.3

MAPID: 06190027000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 27 QUARTERS/FOOTAGES: 243' N line, 65' W line of NE SW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.202336 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.367206 DATE COLLECTED: 12 / 17 / 1978  
 SURFACE ELEVATION (FT.): 616.5 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-013 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
616.5	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0
569.5	CARBONDALE		ROCK	49.3	47.0
520.2	CARBONDALE	HERRIN	COAL	3.1	96.3
517.1	CARBONDALE		ROCK	10.6	99.4

MAPID: 061192C0001F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 28 QUARTERS/FOOTAGES: SW NE SE

QUADRANGLE: GREENFIELD LONGITUDE: -90.210353 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.365148 DATE COLLECTED: 0 / 0 / 1927

SURFACE ELEVATION (FT.): LOGGED (FT.): 113.3 LOG TYPE: Measured section

SOURCE: FIELD NOTES WELL TYPE: Mine Shaft

COMMENT: NEW POLI SHAFT, SUNK 1927

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	4.0	0.0	YELLOW
-	PLEISTOCENE		CLAY	12.0	4.0	10-14' THICK; BLUE
-			SANDSTONE	15.0	16.0	MICACEOUS
-			LIMESTONE	4.0	31.0	LIGHT
-			BLACK SHALE	1.0	35.0	
-			COAL	1.0	36.0	
-			UNDERCLAY	10.0	37.0	PURE
-			LIMESTONE	10.0	47.0	BOULDERS IN UNDERCLAY MATRIX
-			LIMESTONE	3.0	57.0	BRECCIATED
-			SHALE	3.0	60.0	
-			SMUT	6.0	63.0	
-			LIMESTONE	3.0	69.0	GRAY
-			COAL	0.3	72.0	VERY IMPURE
-			UNDERCLAY	0.1	72.3	WHITE
-			BLACK SHALE	1.0	72.4	
-			SHALY LIMESTONE	6.0	73.4	
-			CARBONACEOUS SHALE	1.0	79.4	
-			LIMESTONE	10.0	80.4	CLAYEY AT BASE
-			GRAY SHALE	0.8	90.4	
-			BLACK SHALE	8.0	91.3	LIMESTONE CONCRETION AT BASE?
-			COAL	9.0	99.3	
-			UNDERCLAY	3.0	108.3	
-			ARGILLACEOUS LIMESTONE	2.0	111.3	



MAPID: 06190028000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 28 QUARTERS/FOOTAGES: 31' S line, 66' W line of SE NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.211851 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.367684 DATE COLLECTED: 12 / 19 / 1978  
 SURFACE ELEVATION (FT.): 619.4 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-014 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
619.4	PLEISTOCENE		UNCONSOLIDATED	51.0	0.0	
568.4	CARBONDALE		ROCK	31.3	51.0	
537.1	CARBONDALE	HERRIN	COAL	4.5	82.3	
532.6	CARBONDALE		ROCK	10.2	86.8	

MAPID: 06100152000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: SW NW SE NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.239387 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.369926 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 106.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 11 WELL TYPE: Coal Test  
 COMMENT: GREENFIELD QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
600.0	PLEISTOCENE		SANDY CLAY	18.0	0.0	BROWN
582.0	PLEISTOCENE		SANDY CLAY	24.0	18.0	BLUE
558.0	PLEISTOCENE		CALCAREOUS SHALE	14.0	42.0	
544.0	CARBONDALE	HERRIN	COAL	2.2	56.0	
541.8			UNDERCLAY	2.8	58.2	
539.0			LIMESTONE & SHALE	4.0	61.0	
535.0			SHALE	19.0	65.0	
516.0			SHALE & SANDSTONE	22.0	84.0	

MAPID: 06100152000C VERSION: 2

PROJECT: EIA-DOE

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: SW NW SE NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.239387 GEOLOGIST: JACOBSON  
 CONFIDENTIAL: N LATITUDE: 39.369926 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 106.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA J.R.FORD WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
544.0	CARBONDALE	HERRIN	COAL	2.2	56.0	

MAPID: 06100177000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: NW NW NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.234155 GEOLOGIST: MCCRACKEN  
 CONFIDENTIAL: N LATITUDE: 39.374015 DATE COLLECTED: 3 / 27 / 1952  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN GS-1 WELL TYPE: Coal Test  
 COMMENT: ELEV+/-5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.0	PLEISTOCENE		UNCONSOLIDATED	51.0	0.0
549.0	CARBONDALE		LIMESTONE	4.1	51.0
544.9	CARBONDALE		CLAYSTONE & SILTSTONE	4.8	55.1
540.1	CARBONDALE	HERRIN	SHALE/COAL	0.8	59.9
539.2	CARBONDALE	HERRIN	COAL	2.3	60.8
537.0	CARBONDALE		UNDERCLAY	2.0	63.0

MAPID: 06100177000C VERSION: 2

PROJECT: EIA-DOE

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: NW NW NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.234155 GEOLOGIST: JACOBSON  
 CONFIDENTIAL: N LATITUDE: 39.374015 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN GS-1 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.1	CARBONDALE	HERRIN	COAL	0.8	59.9
539.2	CARBONDALE	HERRIN	COAL	2.3	60.8

MAPID: 06120492000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: SE SE SW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.230964 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.360944 DATE COLLECTED: 6 / 15 / 1978  
 SURFACE ELEVATION (FT.): 602.0 LOGGED (FT.): 50.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 6-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
602.0	PLEISTOCENE		CLAY	15.0	0.0
587.0	PLEISTOCENE		UNCONSOLIDATED	10.0	15.0
577.0	PLEISTOCENE		SAND & GRAVEL	25.0	25.0
552.0	MISSISSIPPIAN		LIMESTONE	-	50.0

DRILL  
NOTE:"MISS."

MAPID: 06120497000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: NE NE NW NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.231212 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.374475 DATE COLLECTED: 6 / 29 / 1978  
 SURFACE ELEVATION (FT.): 615.0 LOGGED (FT.): 115.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 4-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.0	PLEISTOCENE		CLAY	15.0	0.0	
600.0	PLEISTOCENE		SAND & GRAVEL	10.0	15.0	
590.0			SHALE	32.0	25.0	
558.0			SANDSTONE	3.0	57.0	SOFT
555.0			SHALE	8.6	60.0	
546.4			SHALE	1.4	68.6	
545.0			COAL	1.0	70.0	TOO DEEP FOR COLCHESTER; MAY BE HERRIN
544.0			SHALE	14.3	71.0	
529.7			COAL	0.7	85.3	
529.0			SHALE	29.0	86.0	
500.0			LIMESTONE	-	115.0	HARD

MAPID: 06190011000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: 15' S line, 50' E line of SW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.230548 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.360535 DATE COLLECTED: 9 / 18 / 1968  
 SURFACE ELEVATION (FT.): 606.2 LOGGED (FT.): 74.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 41 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
606.2	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0	
552.2	CARBONDALE		ROCK	15.5	54.0	
536.7	CARBONDALE	HERRIN	COAL	3.1	69.5	
533.6	CARBONDALE		ROCK	1.4	72.6	

MAPID: 06190032000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: 65' N line, 530' E line of NW SE

QUADRANGLE: GREENFIELD LONGITUDE: -90.232632 GEOLOGIST: LAWSON

CONFIDENTIAL: N LATITUDE: 39.367727 DATE COLLECTED: 12 / 20 / 1978

SURFACE ELEVATION (FT.): 609.6 LOGGED (FT.): 130.0 LOG TYPE: Drillers Log

SOURCE: AMAX 6-018 WELL TYPE: Coal Test

COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
609.6	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0
555.6	CARBONDALE		ROCK	76.0	54.0

MAPID: 06190035000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 29 QUARTERS/FOOTAGES: 46' N line, 99' E line of NW NE

QUADRANGLE: GREENFIELD LONGITUDE: -90.231113 GEOLOGIST: LAWSON

CONFIDENTIAL: N LATITUDE: 39.3749 DATE COLLECTED: 12 / 20 / 1978

SURFACE ELEVATION (FT.): 612.5 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log

SOURCE: AMAX 6-021 WELL TYPE: Coal Test

COMMENT: BARR-GREENFIELD BOX #44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
612.5	PLEISTOCENE		UNCONSOLIDATED	69.0	0.0
543.5	CARBONDALE		ROCK	1.2	69.0
542.3	CARBONDALE		COAL	1.3	70.2
541.0	CARBONDALE		ROCK	15.5	71.5

MAPID: 06100204000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 30 QUARTERS/FOOTAGES: NE NE

QUADRANGLE: GREENFIELD LONGITUDE: -90.247153 GEOLOGIST: C KOROSE

CONFIDENTIAL: N LATITUDE: 39.373063 DATE COLLECTED: 6 / 0 / 1928

SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 48.6 LOG TYPE: Drillers Log

SOURCE: THOS. A. HENDRICKS WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		UNCONSOLIDATED	1.3	0.0	
548.7	PLEISTOCENE		GLACIAL DRIFT	5.3	1.3	
543.4			SHALE	0.7	6.6	DARK
542.7	CARBONDALE	HERRIN	COAL	2.0	7.3	
540.7			UNDERCLAY	3.5	9.3	
537.2			LIMESTONE	1.0	12.8	LOG NOTE "CHAETES?"
536.2			CLAYSTONE & SILTSTONE	11.0	13.8	
525.2			LIMESTONE	0.4	24.8	
524.9			CLAYSTONE & SILTSTONE	10.1	25.1	BLUE
514.7			MUDSTONE	1.3	35.3	
513.5			SANDSTONE	0.3	36.5	
513.2			SHALE	9.7	36.8	HARD (SILTSTONE?)
503.5			SANDSTONE	2.1	46.5	HARD

MAPID: 06120498000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 30 QUARTERS/FOOTAGES: SE SE NW

QUADRANGLE: DAUM LONGITUDE: -90.255415 GEOLOGIST: C KOROSE

CONFIDENTIAL: N LATITUDE: 39.368455 DATE COLLECTED: 6 / 16 / 1978

SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 150.0 LOG TYPE: Drillers Log

SOURCE: FREEMAN UNITED COAL CO. 5-RU WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
600.0	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
597.0	PLEISTOCENE		CLAY	12.0	3.0	
585.0	PLEISTOCENE		UNCONSOLIDATED	8.0	15.0	
577.0	PLEISTOCENE		SAND & GRAVEL	7.0	23.0	
570.0			SHALE	5.0	30.0	
565.0			LIMESTONE	10.0	35.0	
555.0			BLACK SHALE	7.3	45.0	
547.7			LIMESTONE	2.7	52.3	
545.0			SHALE	95.0	55.0	

**MAPID:** 06190013000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 11N 10W    **SECTION:** 30    **QUARTERS/FOOTAGES:** 171' S line, 27' W line of SW NE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.254112    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.368027    **DATE COLLECTED:** 9 / 18 / 1968  
**SURFACE ELEVATION (FT.):** 599.0    **LOGGED (FT.):** 88.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE 43    **WELL TYPE:** Coal Test  
**COMMENT:** WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
599.0	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
565.0	CARBONDALE		ROCK	11.0	34.0
554.0	CARBONDALE		COAL	0.3	45.0
553.7	CARBONDALE		ROCK	42.7	45.3

**MAPID:** 06120499000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 10W    **SECTION:** 31    **QUARTERS/FOOTAGES:** SE SE SE SE  
**QUADRANGLE:** GREENFIELD    **LONGITUDE:** -90.244778    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.3463    **DATE COLLECTED:** 6 / 14 / 1978  
**SURFACE ELEVATION (FT.):** 598.0    **LOGGED (FT.):** 75.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 8-RU    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
598.0	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0
595.0	PLEISTOCENE		CLAY	12.0	3.0
583.0	PLEISTOCENE		UNCONSOLIDATED	22.0	15.0
561.0	CARBONDALE		SANDY SHALE	13.0	37.0
548.0	CARBONDALE		LIMESTONE	3.0	50.0 SOFT
545.0	CARBONDALE		SHALE	9.8	53.0
535.2	CARBONDALE		SHALE	1.3	62.8
533.9	CARBONDALE	HERRIN	COAL	3.8	64.1
530.1	CARBONDALE		SHALE	1.1	67.9
529.0			LIMESTONE	6.0	69.0

**MAPID:** 06100169000C    **VERSION:** 1    **PROJECT:** EIA-DOE  
**COUNTY:** GREENE    **TWP/RNG:** 11N 10W    **SECTION:** 32    **QUARTERS/FOOTAGES:** 466' N line, 130' E line of SW SW  
**QUADRANGLE:** GREENFIELD    **LONGITUDE:** -90.239949    **GEOLOGIST:** JACOBSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.34823    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 599.0    **LOGGED (FT.):** 105.0    **LOG TYPE:** Drillers Log  
**SOURCE:** NORTHERN ILLINOIS COAL CORP. 229    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
529.9	CARBONDALE	HERRIN	COAL	3.8	69.1

MAPID: 06120500000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 32 QUARTERS/FOOTAGES: SE SE SW SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.230558 GEOLOGIST: C. KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.346401 DATE COLLECTED: 6 / 14 / 1978  
 SURFACE ELEVATION (FT.): 575.0 LOGGED (FT.): 150.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 7-RU WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
575.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0
567.0	PLEISTOCENE		UNCONSOLIDATED	37.0	8.0
530.0			SHALE	30.0	45.0
500.0			DARK SHALE	67.3	75.0
432.7			SHALE	1.5	142.3
431.2			BLACK SHALE	1.3	143.8
430.0			SHALE	5.0	145.0

MAPID: 06190014000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 32 QUARTERS/FOOTAGES: 450' S line, 15' W line of SW SW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.244143 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.347094 DATE COLLECTED: 9 / 19 / 1968  
 SURFACE ELEVATION (FT.): 597.1 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 44 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.1	PLEISTOCENE		UNCONSOLIDATED	59.0	0.0
538.1	CARBONDALE		ROCK	7.0	59.0
531.1	CARBONDALE	HERRIN	COAL	3.5	66.0
527.6	CARBONDALE		ROCK	18.5	69.5

MAPID: 06190033000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 32 QUARTERS/FOOTAGES: 25' S line, 55' E line of NW NE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.23073 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.356898 DATE COLLECTED: 12 / 19 / 1978  
 SURFACE ELEVATION (FT.): 603.6 LOGGED (FT.): 130.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-019 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL CORE

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
603.6	PLEISTOCENE		UNCONSOLIDATED	94.0	0.0
509.6	CARBONDALE		ROCK	6.2	94.0
503.4	CARBONDALE		COAL	1.1	100.2
502.3	CARBONDALE		ROCK	28.7	101.3

MAPID: 06190004000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 34 QUARTERS/FOOTAGES: 246' S line, 495' E line of SW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.203428 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.354059 DATE COLLECTED: 9 / 9 / 1968  
 SURFACE ELEVATION (FT.): 577.3 LOGGED (FT.): 128.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 26 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.3	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0
502.3	CARBONDALE		ROCK	53.0	75.0

MAPID: 06190022000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 34 QUARTERS/FOOTAGES: 110' N line, 22' W line of NE SE  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.192835 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.352966 DATE COLLECTED: 12 / 15 / 1978  
 SURFACE ELEVATION (FT.): 606.9 LOGGED (FT.): 150.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX 6-007 WELL TYPE: Coal Test  
 COMMENT: BARR-GREENFIELD BOX #44 EL

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.9	PLEISTOCENE		UNCONSOLIDATED	100.0	0.0
506.9	CARBONDALE		ROCK	50.0	100.0

MAPID: 06190008000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 11N 10W SECTION: 36 QUARTERS/FOOTAGES: 534' N line, 159' W line of NW NW  
 QUADRANGLE: GREENFIELD LONGITUDE: -90.168806 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.359391 DATE COLLECTED: 9 / 17 / 1968  
 SURFACE ELEVATION (FT.): 606.7 LOGGED (FT.): 148.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE 38 WELL TYPE: Coal Test  
 COMMENT: WEST HETTICK BOX43

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.7	PLEISTOCENE		UNCONSOLIDATED	130.0	0.0
476.7	CARBONDALE		ROCK	18.0	130.0



MAPID: 06120508000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 11W SECTION: 14 QUARTERS/FOOTAGES: SE NE SW NW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297104 GEOLOGIST: C KOROSE

CONFIDENTIAL: N LATITUDE: 39.39892 DATE COLLECTED: 6 / 27 / 1978

SURFACE ELEVATION (FT.): 529.0 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log

SOURCE: FREEMAN UNITED COAL CO. 9-W WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
529.0	PLEISTOCENE		CLAY	15.0	0.0	
514.0	PLEISTOCENE		CLAY & GRAVEL	5.0	15.0	
509.0	CARBONDALE		SANDSTONE	10.0	20.0	SOFT
499.0	CARBONDALE		SHALE	18.8	30.0	
480.2	CARBONDALE		SHALE	1.2	48.8	
479.0	CARBONDALE	COLCHESTER	COAL	2.3	50.0	
476.7			SHALE	1.7	52.3	
475.0			LIMESTONE	-	54.0	

MAPID: 06100250000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 11N 11W SECTION: 21 QUARTERS/FOOTAGES: 1320' S line, 1' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.338458 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.378836 DATE COLLECTED: 8 / 22 / 1964

SURFACE ELEVATION (FT.): 535.0 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 208-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
535.0	PLEISTOCENE		CLAY	21.0	0.0	
514.0	PLEISTOCENE		GRAVEL	11.0	21.0	LOG THICKNESS 9.0 CHANGED TO 11.0
503.0	PLEISTOCENE		CLAY	21.5	32.0	
481.5	CARBONDALE		SANDSTONE	3.5	53.5	
478.0	CARBONDALE		SANDY SHALE	13.5	57.0	
464.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	70.5	
463.0	CARBONDALE	COLCHESTER	COAL	2.4	72.0	
460.6	SPOON		UNDERCLAY	2.1	74.4	LOG THICKNESS 1.08 CHANGED TO 2.08
458.5	SPOON	SEAHORNE LS	LIMESTONE	0.5	76.5	

MAPID: 06100137000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 11W SECTION: 22 QUARTERS/FOOTAGES: NE NE SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.315722 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.385321 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 547.0 LOGGED (FT.): 50.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 5 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
547.0	PLEISTOCENE		CLAY	23.0	0.0	BROWN
524.0	PLEISTOCENE		CLAY	21.0	23.0	GRAY
503.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.8	44.0	
501.2	CARBONDALE	COLCHESTER	COAL	2.2	45.8	
499.1			UNDERCLAY	2.1	47.9	

MAPID: 06120509000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 11N 11W SECTION: 23 QUARTERS/FOOTAGES: SW SW NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.300593 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.378769 DATE COLLECTED: 6 / 26 / 1978  
 SURFACE ELEVATION (FT.): 562.0 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: FREEMAN UNITED COAL CO. 10-W WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
562.0	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
552.0	PLEISTOCENE		UNCONSOLIDATED	5.0	10.0	
547.0	CARBONDALE		SANDSTONE	30.0	15.0	SOFT
517.0	CARBONDALE		SHALE	26.0	45.0	
491.0	CARBONDALE		SHALE	1.0	71.0	
490.0	CARBONDALE		SHALE	3.0	72.0	
487.0			SHALE	25.0	75.0	
462.0			LIMESTONE	-	100.0	

**MAPID:** 0612051000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 26    **QUARTERS/FOOTAGES:** NW NW NE NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.295963    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.374182    **DATE COLLECTED:** 6 / 26 / 1978  
**SURFACE ELEVATION (FT.):** 580.0    **LOGGED (FT.):** 60.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 11-W    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
580.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
572.0	PLEISTOCENE		CLAY	7.0	8.0	
565.0	PLEISTOCENE		UNCONSOLIDATED	30.0	15.0	
535.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	8.0	45.0	
527.0	CARBONDALE	COLCHESTER	COAL	2.2	53.0	
524.8			SHALE	4.8	55.2	

**MAPID:** 06120511000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 28    **QUARTERS/FOOTAGES:** SE SE NW NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.334327    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.371826    **DATE COLLECTED:** 6 / 22 / 1978  
**SURFACE ELEVATION (FT.):** 555.0    **LOGGED (FT.):** 60.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 13-W    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
555.0	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
540.0	PLEISTOCENE		UNCONSOLIDATED	15.0	15.0	
525.0	CARBONDALE		SHALE	13.8	30.0	
511.2	CARBONDALE	COLCHESTER	COAL	3.2	43.8	
508.0			SHALE	5.0	47.0	
503.0			LIMESTONE	8.0	52.0	HARD

**MAPID:** 061193A0014F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 29    **QUARTERS/FOOTAGES:** SE NW NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.353614    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.372578    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Outcrop  
**COMMENT:** NO DEPTHS GIVEN

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

**MAPID:** 06100008000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 32    **QUARTERS/FOOTAGES:** SE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.34281    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.349506    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 540.0    **LOGGED (FT.):** 20.5    **LOG TYPE:** Drillers Log  
**SOURCE:** S.K. ALEXANDER    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.0	PLEISTOCENE		UNCONSOLIDATED	17.3	0.0
522.7	CARBONDALE		SHALE	0.7	17.3
522.0	CARBONDALE	COLCHESTER	COAL	2.5	18.0

**MAPID:** 061193D0001F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 32    **QUARTERS/FOOTAGES:** NW NE SE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.341651    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.352198    **DATE COLLECTED:** 0 / 0 / 1927  
**SURFACE ELEVATION (FT.):** 561.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Outcrop  
**COMMENT:** DEPTHS NOT GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	CARBONDALE		SANDSTONE	17.0	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.5	
-	CARBONDALE	COLCHESTER	COAL	2.0	

**MAPID:** 06120512000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 32    **QUARTERS/FOOTAGES:** NE SE SE NW  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.348149    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.354478    **DATE COLLECTED:** 6 / 21 / 1978  
**SURFACE ELEVATION (FT.):** 522.0    **LOGGED (FT.):** 80.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO. 14-W    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
522.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
517.0	PLEISTOCENE		CLAY	10.0	5.0
507.0			SHALE	4.0	15.0
503.0			LIMESTONE	7.0	19.0
496.0			SHALE	34.0	26.0
462.0			CALCAREOUS SHALE	20.0	60.0
442.0			LIMESTONE	-	80.0

**MAPID:** 06100135000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 34    **QUARTERS/FOOTAGES:** NE NW NE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.306912    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.359059    **DATE COLLECTED:** 0 / 0 / 1955  
**SURFACE ELEVATION (FT.):** 560.0    **LOGGED (FT.):** 53.0    **LOG TYPE:** Drillers Log  
**SOURCE:** ALUMINUM CO. OF AMERICA    3    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
560.0	PLEISTOCENE		CLAY	30.0	0.0	
530.0			SHALE	10.0	30.0	
520.0			CARBONACEOUS CLAYSTONE	2.5	40.0	"BLACK CARB CLAY" REPORTED
517.5			SHALE	10.5	42.5	

**MAPID:** 06120513000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 11W    **SECTION:** 34    **QUARTERS/FOOTAGES:** NE NE NW NE  
**QUADRANGLE:** DAUM    **LONGITUDE:** -90.306334    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.359494    **DATE COLLECTED:** 6 / 21 / 1978  
**SURFACE ELEVATION (FT.):** 536.0    **LOGGED (FT.):** 150.0    **LOG TYPE:** Drillers Log  
**SOURCE:** FREEMAN UNITED COAL CO.    12W    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
536.0	PLEISTOCENE		CLAY	15.0	0.0	
521.0	PLEISTOCENE		UNCONSOLIDATED	83.0	15.0	
438.0			SHALE	22.0	98.0	
416.0			CALCAREOUS SHALE	30.0	120.0	

**MAPID:** 061193C0001F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 11N 12W    **SECTION:** 36    **QUARTERS/FOOTAGES:** SW SE SE  
**QUADRANGLE:** CARROLLTON    **LONGITUDE:** -90.379309    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.347082    **DATE COLLECTED:** 0 / 0 / 1927  
**SURFACE ELEVATION (FT.):** 512.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    11    **WELL TYPE:** Outcrop  
**COMMENT:** NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE		DARK SHALE	17.0		FISSILE
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.5		
-	CARBONDALE	COLCHESTER	COAL	2.0		

MAPID: 06190343000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 2 QUARTERS/FOOTAGES: 1' S line, 1' W line of SW NW  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.18947 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.513356 DATE COLLECTED: 2 / 27 / 1962  
 SURFACE ELEVATION (FT.): 586.7 LOGGED (FT.): 117.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D509 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
586.7	PLEISTOCENE		UNCONSOLIDATED	117.0	0.0

MAPID: 06100235000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 1' N line, 2640' E line  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.255158 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.520227 DATE COLLECTED: 8 / 27 / 1964  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 91.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 24-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	PLEISTOCENE		CLAY	20.0	0.0
-	PLEISTOCENE		CLAY & GRAVEL	69.0	20.0
-	PLEISTOCENE		GLACIAL DRIFT	2.0	89.0

MAPID: 06190305000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 240' S line, 1' E line of SE SW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.255233 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.506977 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 594.5 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C405JC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.5	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190308000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.25983 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.520247 DATE COLLECTED: 2 / 5 / 1962  
 SURFACE ELEVATION (FT.): 613.2 LOGGED (FT.): 138.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C603 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
613.2	PLEISTOCENE		UNCONSOLIDATED	88.0	0.0
525.2	CARBONDALE		ROCK	47.0	88.0
478.2	CARBONDALE	COLCHESTER	COAL	1.8	135.0
476.4	CARBONDALE		ROCK	1.2	136.8

MAPID: 06190309000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.25514 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.520228 DATE COLLECTED: 2 / 5 / 1962  
 SURFACE ELEVATION (FT.): 590.6 LOGGED (FT.): 123.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C605 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
590.6	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
554.6	CARBONDALE		ROCK	84.0	36.0
470.6	CARBONDALE	COLCHESTER	COAL	1.5	120.0
469.1	CARBONDALE		ROCK	1.5	121.5

MAPID: 06190503000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 6 QUARTERS/FOOTAGES: 240' S line, 1' E line of SE SW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.255233 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.506977 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 594.5 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C405JC WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.5	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0
588.5	PLEISTOCENE		CLAY	18.0	6.0
570.5	PLEISTOCENE		CLAY	73.0	24.0

MAPID: 06100236000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 720' N line, 2300' W line  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.256562 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.504293 DATE COLLECTED: 8 / 19 / 1964  
 SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 66.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 12-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		CLAY	26.0	0.0	
564.0	PLEISTOCENE		GRAVEL	2.0	26.0	
562.0	PLEISTOCENE		CLAY	2.0	28.0	
560.0	PLEISTOCENE		MUD	17.0	30.0	
543.0	CARBONDALE		SHALE	10.0	47.0	DRK
533.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	57.0	
530.0	CARBONDALE	COLCHESTER	COAL	2.5	60.0	
527.5	SPOON		UNDERCLAY	3.5	62.5	
524.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	66.0	

MAPID: 06100237000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 400' N line, 1' W line  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.26475 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.504972 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 28.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 25-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		CLAY	11.0	0.0	
579.0	PLEISTOCENE		SAND & GRAVEL	17.0	11.0	
562.0	PLEISTOCENE		LIMESTONE	0.5	28.0	



**MAPID:** 06100238000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 7    **QUARTERS/FOOTAGES:** 1020' N line, 2300' W line  
**QUADRANGLE:** MANCHESTER    **LONGITUDE:** -90.256563    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.503465    **DATE COLLECTED:** 8 / 20 / 1964  
**SURFACE ELEVATION (FT.):** 580.0    **LOGGED (FT.):** 46.5    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    14-C    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
580.0	PLEISTOCENE		CLAY	20.0	0.0
560.0	PLEISTOCENE		SAND	10.0	20.0
550.0	PLEISTOCENE		GRAVEL	16.0	30.0
534.0			LIMESTONE	0.5	46.0

**MAPID:** 06190285000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 7    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.255262    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491499    **DATE COLLECTED:** 2 / 7 / 1962  
**SURFACE ELEVATION (FT.):** 524.9    **LOGGED (FT.):** 31.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C205    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.9	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
511.9	CARBONDALE		ROCK	18.0	13.0

**MAPID:** 06190286000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 7    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW SE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.250507    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491529    **DATE COLLECTED:** 2 / 7 / 1962  
**SURFACE ELEVATION (FT.):** 521.6    **LOGGED (FT.):** 35.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C207    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
521.6	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
487.6	CARBONDALE		ROCK	1.0	34.0

MAPID: 06190287000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.245747 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491562 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 569.4 LOGGED (FT.): 86.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C209 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.4	PLEISTOCENE		UNCONSOLIDATED	85.0	0.0
484.4	CARBONDALE		ROCK	1.0	85.0

MAPID: 06190292000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.255256 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.495198 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 581.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C255 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.6	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190293000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.250496 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49525 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 574.8 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C257 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
574.8	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190297000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 660' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.25765 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498865 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 514.4 LOGGED (FT.): 27.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C304 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
514.4	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
499.4	CARBONDALE		ROCK	12.0	15.0

MAPID: 06190298000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.255249 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498902 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 550.8 LOGGED (FT.): 43.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C305 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
550.8	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
526.8	CARBONDALE		ROCK	15.0	24.0
511.8	CARBONDALE	COLCHESTER	COAL	2.1	39.0
509.7	CARBONDALE		ROCK	1.9	41.1

MAPID: 06190299000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.25049 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498977 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 573.3 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C307 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.3	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190300000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.245734 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.499051 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 577.1 LOGGED (FT.): 79.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C309 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.1	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0
510.1	CARBONDALE		ROCK	8.0	67.0
502.1	CARBONDALE	COLCHESTER	COAL	2.2	75.0
499.9	CARBONDALE		ROCK	1.8	77.2

MAPID: 06190302000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 150' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.255774 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.502595 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 558.0 LOGGED (FT.): 62.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C354P WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.0	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
523.0	CARBONDALE		ROCK	23.0	35.0
500.0	CARBONDALE	COLCHESTER	COAL	2.3	58.0
497.7	CARBONDALE		ROCK	1.7	60.3

MAPID: 06190303000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.250483 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.502704 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 585.3 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C357 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
585.3	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190306000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.250477 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.50643 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 587.3 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C407 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
587.3	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0	

MAPID: 06190489000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.255262 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.491499 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 524.9 LOGGED (FT.): 31.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C205 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
524.9	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0	
519.9	PLEISTOCENE		CLAY	8.0	5.0	
511.9	CARBONDALE		MICACEOUS SHALE	4.0	13.0	SOFT
507.9	CARBONDALE		MICACEOUS SHALE	13.0	17.0	HARD
494.9	CARBONDALE		LIMESTONE	1.0	30.0	

MAPID: 06190490000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.250507 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.491529 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 521.6 LOGGED (FT.): 35.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C207 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
521.6	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
515.6	PLEISTOCENE		CLAY	14.0	6.0	
501.6	PLEISTOCENE		CLAY	14.0	20.0	
487.6			LIMESTONE	1.0	34.0	

MAPID: 06190495000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.255256 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.495198 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 581.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C255 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.6	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
570.6	PLEISTOCENE		CLAY	8.0	11.0
562.6	PLEISTOCENE		SAND & GRAVEL	78.0	19.0

MAPID: 06190496000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.250496 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.49525 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 574.8 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C257 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
574.8	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
562.8	PLEISTOCENE		CLAY	26.0	12.0
536.8	PLEISTOCENE		CLAY	59.0	38.0

MAPID: 06190500000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 660' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.25765 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.498865 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 514.4 LOGGED (FT.): 27.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C304 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
514.4	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
499.4	CARBONDALE		MICACEOUS SHALE	12.0	15.0 SOFT

MAPID: 06190501000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.255249 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.498902 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 550.8 LOGGED (FT.): 43.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C305 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.8	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
543.8	PLEISTOCENE		CLAY	6.0	7.0	
537.8	PLEISTOCENE		CLAY	11.0	13.0	
526.8	CARBONDALE		SHALE	13.0	24.0	SOFT
513.8	CARBONDALE		BLACK SHALE	2.0	37.0	
511.8	CARBONDALE	COLCHESTER	COAL	2.1	39.0	GOOD
509.7	CARBONDALE		UNDERCLAY	1.8	41.1	

MAPID: 06190502000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 150' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.255774 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.502595 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 558.0 LOGGED (FT.): 62.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C354P WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
558.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
549.0	PLEISTOCENE		CLAY	12.0	9.0	
537.0	PLEISTOCENE		CLAY	14.0	21.0	
523.0	CARBONDALE		SANDY SHALE	5.0	35.0	
518.0	CARBONDALE		DARK SHALE	16.0	40.0	SOFT
502.0	CARBONDALE		BLACK SHALE	2.0	56.0	
500.0	CARBONDALE	COLCHESTER	COAL	2.3	58.0	GOOD
497.7	CARBONDALE		UNDERCLAY	1.7	60.3	

MAPID: 06190504000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 7 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.250477 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.50643 DATE COLLECTED: 2 / 6 / 1962  
 SURFACE ELEVATION (FT.): 587.3 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C407 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
587.3	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
575.3	PLEISTOCENE		CLAY	24.0	12.0
551.3	PLEISTOCENE		CLAY	71.0	36.0

MAPID: 06190304000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 8 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.231667 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.502806 DATE COLLECTED: 2 / 19 / 1962  
 SURFACE ELEVATION (FT.): 580.5 LOGGED (FT.): 104.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C365 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
580.5	PLEISTOCENE		UNCONSOLIDATED	101.0	0.0
479.5	CARBONDALE		ROCK	0.5	101.0
479.0	CARBONDALE	COLCHESTER	COAL	1.3	101.5
477.7	CARBONDALE		ROCK	1.2	102.8

MAPID: 06190307000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 8 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.231649 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.506585 DATE COLLECTED: 2 / 19 / 1962  
 SURFACE ELEVATION (FT.): 566.8 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C415 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
566.8	PLEISTOCENE		UNCONSOLIDATED	95.0	0.0
471.8	CARBONDALE	COLCHESTER	COAL	1.9	95.0
469.9	CARBONDALE		ROCK	1.1	96.9



**MAPID:** 06161493000C    **VERSION:** 1    **PROJECT:** NCRDS02  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 1' S line, 78' W line of SE SE  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.212759    **GEOLOGIST:** STRAAYER  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491469    **DATE COLLECTED:** 1 / 29 / 1962  
**SURFACE ELEVATION (FT.):** 538.7    **LOGGED (FT.):** 87.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C223Y    **WELL TYPE:** Coal Test  
**COMMENT:** ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
538.7	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0
530.7	PLEISTOCENE		CLAY	13.0	8.0
517.7	PLEISTOCENE		CLAY	44.0	21.0
473.7	PLEISTOCENE		SAND & GRAVEL	22.0	65.0

**MAPID:** 06190290000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 1' S line, 78' W line of SE SE  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.212759    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491469    **DATE COLLECTED:** 1 / 29 / 1962  
**SURFACE ELEVATION (FT.):** 538.7    **LOGGED (FT.):** 87.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C223Y    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
538.7	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0

**MAPID:** 06190294000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 9    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.217664    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.495241    **DATE COLLECTED:** 2 / 29 / 1962  
**SURFACE ELEVATION (FT.):** 571.4    **LOGGED (FT.):** 107.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C271    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
571.4	PLEISTOCENE		UNCONSOLIDATED	94.0	0.0
477.4	CARBONDALE		ROCK	13.0	94.0

MAPID: 06190295000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.212986 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.495247 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 571.8 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C273 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
571.8	PLEISTOCENE		UNCONSOLIDATED	78.0	0.0
493.8	CARBONDALE		ROCK	18.0	78.0
475.8	CARBONDALE	COLCHESTER	COAL	2.3	96.0
473.5	CARBONDALE		ROCK	1.7	98.3

MAPID: 06190296000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.208308 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.495253 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 568.6 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C275 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
568.6	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190301000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.212932 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.499032 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 575.4 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C323 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
575.4	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0
522.4	CARBONDALE		ROCK	53.0	53.0
469.4	CARBONDALE	COLCHESTER	COAL	2.4	106.0
467.0	CARBONDALE		ROCK	1.6	108.4

MAPID: 06190493000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' S line, 78' W line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.212759 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.491469 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 538.7 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C223Y WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
538.7	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
530.7	PLEISTOCENE		CLAY	13.0	8.0	
517.7	PLEISTOCENE		CLAY	44.0	21.0	
473.7	PLEISTOCENE		SAND & GRAVEL	22.0	65.0	

MAPID: 06190497000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.217664 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.495241 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 571.4 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C271 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.4	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
563.4	PLEISTOCENE		CLAY	12.0	8.0	
551.4	PLEISTOCENE		SAND & GRAVEL	74.0	20.0	
477.4	CARBONDALE		LIMESTONE	4.0	94.0	
473.4	CARBONDALE		MICACEOUS SHALE	9.0	98.0	SOFT

MAPID: 06190498000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.212986 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.495247 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 571.8 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C273 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.8	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
560.8	PLEISTOCENE		CLAY	21.0	11.0	
539.8	PLEISTOCENE		CLAY	46.0	32.0	
493.8	CARBONDALE		SHALE	16.0	78.0	SOFT
477.8	CARBONDALE		BLACK SHALE	2.0	94.0	
475.8	CARBONDALE	COLCHESTER	COAL	2.3	96.0	GOOD
473.5	CARBONDALE		UNDERCLAY	1.8	98.3	

MAPID: 06190499000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.208308 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.495253 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 568.6 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C275 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
568.6	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
555.6	PLEISTOCENE		CLAY	24.0	13.0	
531.6	PLEISTOCENE		CLAY	70.0	37.0	

MAPID: 06190332000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 10 QUARTERS/FOOTAGES: 1' S line, 1' W line of SE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.203653 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491497 DATE COLLECTED: 2 / 27 / 1962  
 SURFACE ELEVATION (FT.): 558.4 LOGGED (FT.): 117.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D203 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
558.4	PLEISTOCENE		UNCONSOLIDATED	117.0	0.0	

**MAPID:** 06190333000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.198946    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491517    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 509.0    **LOGGED (FT.):** 67.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D205    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
509.0	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0

**MAPID:** 06190334000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 200' N line, 1' E line of SE SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.198925    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.494708    **DATE COLLECTED:** 2 / 27 / 1962  
**SURFACE ELEVATION (FT.):** 557.4    **LOGGED (FT.):** 117.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D230D    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
557.4	PLEISTOCENE		UNCONSOLIDATED	117.0	0.0

**MAPID:** 06190335000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SE SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.203608    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.495257    **DATE COLLECTED:** 2 / 27 / 1962  
**SURFACE ELEVATION (FT.):** 553.3    **LOGGED (FT.):** 136.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D253    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
553.3	PLEISTOCENE		UNCONSOLIDATED	119.0	0.0
434.3	CARBONDALE		ROCK	17.0	119.0

**MAPID:** 06190336000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.208235    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.499036    **DATE COLLECTED:** 2 / 26 / 1962  
**SURFACE ELEVATION (FT.):** 575.8    **LOGGED (FT.):** 127.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D301    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
575.8	PLEISTOCENE		UNCONSOLIDATED	127.0	0.0

**MAPID:** 06190338000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' S line, 1' W line of NW NW  
**QUADRANGLE:** NORTONVILLE    **LONGITUDE:** -90.20817    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.502823    **DATE COLLECTED:** 1 / 30 / 1962  
**SURFACE ELEVATION (FT.):** 578.9    **LOGGED (FT.):** 117.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D351    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
578.9	PLEISTOCENE		UNCONSOLIDATED	117.0	0.0

**MAPID:** 06190339000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW NW  
**QUADRANGLE:** NORTONVILLE    **LONGITUDE:** -90.208105    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.506597    **DATE COLLECTED:** 1 / 30 / 1962  
**SURFACE ELEVATION (FT.):** 573.4    **LOGGED (FT.):** 97.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D401    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.4	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

**MAPID:** 06190340000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 10    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NW  
**QUADRANGLE:** NORTONVILLE    **LONGITUDE:** -90.198846    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.506504    **DATE COLLECTED:** 1 / 30 / 1962  
**SURFACE ELEVATION (FT.):** 584.9    **LOGGED (FT.):** 110.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    D405    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.9	PLEISTOCENE		UNCONSOLIDATED	110.0	0.0

MAPID: 06190472000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW SE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.203608 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.495257 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 553.3 LOGGED (FT.): 136.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D253 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
553.3	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
545.3	PLEISTOCENE		CLAY	16.0	8.0	
529.3	PLEISTOCENE		CLAY	95.0	24.0	SAND
434.3			SHALE	16.0	119.0	WHITE
418.3			LIMESTONE	1.0	135.0	

MAPID: 06190473000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE NW  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.198846 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.506504 DATE COLLECTED: 1 / 30 / 1962  
 SURFACE ELEVATION (FT.): 584.9 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D405 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
584.9	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
577.9	PLEISTOCENE		CLAY	14.0	7.0	
563.9	PLEISTOCENE		SAND & GRAVEL	89.0	21.0	HARDPAN

MAPID: 06190337000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 11 QUARTERS/FOOTAGES: 350' S line, 1' W line of SE NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.185091 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.499987 DATE COLLECTED: 2 / 27 / 1962  
 SURFACE ELEVATION (FT.): 572.7 LOGGED (FT.): 126.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D311C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
572.7	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0	
492.7	CARBONDALE		ROCK	42.0	80.0	
450.7	CARBONDALE	COLCHESTER	COAL	2.3	122.0	
448.4	CARBONDALE		ROCK	1.7	124.3	

MAPID: 06190341000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NW  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.189569 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.50641 DATE COLLECTED: 2 / 26 / 1962  
 SURFACE ELEVATION (FT.): 582.3 LOGGED (FT.): 127.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D409 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
582.3	PLEISTOCENE		UNCONSOLIDATED	127.0	0.0	

MAPID: 06190342000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: NORTONVILLE LONGITUDE: -90.185119 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.506488 DATE COLLECTED: 2 / 26 / 1962  
 SURFACE ELEVATION (FT.): 524.4 LOGGED (FT.): 89.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D411 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
524.4	PLEISTOCENE		UNCONSOLIDATED	59.0	0.0	
465.4	CARBONDALE		ROCK	26.0	59.0	
439.4	CARBONDALE	COLCHESTER	COAL	2.3	85.0	
437.1	CARBONDALE		ROCK	1.7	87.3	

MAPID: 061192B0001F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 15 QUARTERS/FOOTAGES: SE NW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.20469 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.481602 DATE COLLECTED: 11 / 23 / 1930  
 SURFACE ELEVATION (FT.): 530.0 LOGGED (FT.): 21.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Mine Shaft  
 COMMENT: ABD MINE/OPER 40YR/OTHER ABD MINES NEAR

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
530.0			UNCLASSIFIED	19.0	0.0	SLATE ROOT NOTED
511.0	CARBONDALE	COLCHESTER	COAL	2.0	19.0	AVG. 20-32" WORKED OUT



MAPID: 06190330000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 15 QUARTERS/FOOTAGES: 165' S line, 165' E line of NE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.199413 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.481165 DATE COLLECTED: 1 / 30 / 1962  
 SURFACE ELEVATION (FT.): 512.1 LOGGED (FT.): 41.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D54M WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
512.1	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
486.1	CARBONDALE		ROCK	11.0	26.0
475.1	CARBONDALE	COLCHESTER	COAL	2.2	37.0
472.9	CARBONDALE		ROCK	1.8	39.2

MAPID: 06190331000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 15 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.203559 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484303 DATE COLLECTED: 1 / 30 / 1962  
 SURFACE ELEVATION (FT.): 549.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D103 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
549.6	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190470000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 15 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.203559 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.484303 DATE COLLECTED: 1 / 30 / 1962  
 SURFACE ELEVATION (FT.): 549.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE D103 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
549.6	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0
543.6	PLEISTOCENE		CLAY	17.0	6.0 AND SAND
526.6	PLEISTOCENE		CLAY	74.0	23.0 AND GRAVEL

MAPID: 06190277000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.217619 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48426 DATE COLLECTED: 1 / 5 / 1962  
 SURFACE ELEVATION (FT.): 530.4 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C121 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
530.4	PLEISTOCENE		UNCONSOLIDATED	68.0	0.0
462.4	CARBONDALE		ROCK	29.0	68.0

MAPID: 06190278000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 990' W line of NW SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.214089 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48427 DATE COLLECTED: 1 / 30 / 1962  
 SURFACE ELEVATION (FT.): 529.5 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C122B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
529.5	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0
462.5	CARBONDALE		ROCK	21.0	67.0

MAPID: 06190282000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.212989 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487868 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 554.2 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C173 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.2	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190283000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.208315 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48788 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 547.8 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C175 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.8	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190289000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.222374 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491446 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 566.7 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C219 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
566.7	PLEISTOCENE		UNCONSOLIDATED	84.0	0.0
482.7	CARBONDALE		ROCK	13.0	84.0

MAPID: 06190291000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.208373 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491474 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 560.1 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C225 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.1	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190484000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.217619 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.48426 DATE COLLECTED: 1 / 5 / 1962  
 SURFACE ELEVATION (FT.): 530.4 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C121 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
530.4	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
523.4	PLEISTOCENE		CLAY	22.0	7.0	
501.4	PLEISTOCENE		SAND & GRAVEL	39.0	29.0	
462.4	CARBONDALE		MICACEOUS SHALE	4.0	68.0	SOFT
458.4	CARBONDALE		LIMESTONE	1.0	72.0	
457.4	CARBONDALE		SHALE	14.0	73.0	SOFT
443.4	CARBONDALE		LIMESTONE	8.0	87.0	
435.4	CARBONDALE		MICACEOUS SHALE	2.0	95.0	

MAPID: 06190487000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.208315 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.48788 DATE COLLECTED: 1 / 26 / 1962  
 SURFACE ELEVATION (FT.): 547.8 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C175 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
547.8	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
536.8	PLEISTOCENE		CLAY	20.0	11.0	
516.8	PLEISTOCENE		SAND & GRAVEL	76.0	31.0	

MAPID: 06190492000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.222374 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.491446 DATE COLLECTED: 1 / 29 / 1962  
 SURFACE ELEVATION (FT.): 566.7 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C219 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
566.7	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
557.7	PLEISTOCENE		CLAY	13.0	9.0	
544.7	PLEISTOCENE		CLAY	62.0	22.0	
482.7	CARBONDALE		MICACEOUS SHALE	13.0	84.0	

**MAPID:** 06190494000C    **VERSION:** 1    **PROJECT:** NCRDS02  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 16    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE NE  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.208373    **GEOLOGIST:** STRAAYER  
**CONFIDENTIAL:** N    **LATITUDE:** 39.491474    **DATE COLLECTED:** 1 / 26 / 1962  
**SURFACE ELEVATION (FT.):** 560.1    **LOGGED (FT.):** 107.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C225    **WELL TYPE:** Coal Test  
**COMMENT:** BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.1	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
549.1	PLEISTOCENE		CLAY	28.0	11.0
521.1	PLEISTOCENE		CLAY	68.0	39.0

**MAPID:** 06190270000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 17    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.241142    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.480588    **DATE COLLECTED:** 1 / 5 / 1962  
**SURFACE ELEVATION (FT.):** 555.4    **LOGGED (FT.):** 107.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C61    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
555.4	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

**MAPID:** 06190271000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 17    **QUARTERS/FOOTAGES:** 200' N line, 1' E line of NE SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.236409    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.483685    **DATE COLLECTED:** 1 / 5 / 1962  
**SURFACE ELEVATION (FT.):** 556.3    **LOGGED (FT.):** 97.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C88D    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
556.3	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0
493.3	CARBONDALE		ROCK	34.0	63.0

MAPID: 06190276000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.24112 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484235 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 560.4 LOGGED (FT.): 69.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C111 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.4	PLEISTOCENE		UNCONSOLIDATED	66.0	0.0
494.4	CARBONDALE	COLCHESTER	COAL	2.0	66.0
492.4	CARBONDALE		ROCK	1.0	68.0

MAPID: 06190288000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.241072 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491526 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 578.8 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C211 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
578.8	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
536.8	CARBONDALE		ROCK	31.0	42.0
505.8	CARBONDALE	COLCHESTER	COAL	2.3	73.0
503.5	CARBONDALE		ROCK	1.7	75.3

MAPID: 06190481000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.241142 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.480588 DATE COLLECTED: 1 / 5 / 1962  
 SURFACE ELEVATION (FT.): 555.4 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C61 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
555.4	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
546.4	PLEISTOCENE		CLAY	18.0	9.0
528.4	PLEISTOCENE		CLAY	80.0	27.0

MAPID: 06190482000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 200' N line, 1' E line of NE SW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.236409 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.483685 DATE COLLECTED: 1 / 5 / 1962  
 SURFACE ELEVATION (FT.): 556.3 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C88D WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
556.3	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
550.3	PLEISTOCENE		CLAY	13.0	6.0	
537.3	PLEISTOCENE		CLAY	44.0	19.0	
493.3			LIMESTONE	2.0	63.0	
491.3			SHALE	19.0	65.0	WHITE
472.3			SANDSTONE	13.0	84.0	VERY HARD

MAPID: 06190491000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 17 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.241072 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.491526 DATE COLLECTED: 2 / 7 / 1962  
 SURFACE ELEVATION (FT.): 578.8 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C211 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
578.8	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
572.8	PLEISTOCENE		CLAY	10.0	6.0	
562.8	PLEISTOCENE		CLAY	26.0	16.0	
536.8	CARBONDALE		SANDSTONE	11.0	42.0	HARD
525.8	CARBONDALE		DARK SHALE	18.0	53.0	SOFT
507.8	CARBONDALE		BLACK SHALE	2.0	71.0	HARD
505.8	CARBONDALE	COLCHESTER	COAL	2.3	73.0	
503.5	CARBONDALE		UNDERCLAY	1.7	75.3	

**MAPID:** 06100239000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 18    **QUARTERS/FOOTAGES:** 2640' N line, 660' W line  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.262436    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.484159    **DATE COLLECTED:** 8 / 27 / 1964  
**SURFACE ELEVATION (FT.):** 571.0    **LOGGED (FT.):** 74.5    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    406-B    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.0	PLEISTOCENE		CLAY & GRAVEL	25.0	0.0	
546.0	PLEISTOCENE		CLAY & GRAVEL	49.0	25.0	
497.0			LIMESTONE	0.5	74.0	

**MAPID:** 061193A0001F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 18    **QUARTERS/FOOTAGES:** SE NE NW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.256465    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.488725    **DATE COLLECTED:** 0 / 0 / 1927  
**SURFACE ELEVATION (FT.):** 541.0    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Mine Shaft  
**COMMENT:** "NEW" MINE STARTED 1927(ELEV. TO C NOTED)

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	COLCHESTER	COAL	1.5		30" OF COAL, ELEVATION = 525'

**MAPID:** 06190265000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 18    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.255361    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.476784    **DATE COLLECTED:** 2 / 21 / 1962  
**SURFACE ELEVATION (FT.):** 527.5    **LOGGED (FT.):** 47.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    C5    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
527.5	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0	
502.5	CARBONDALE		ROCK	22.0	25.0	



MAPID: 06190266000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.245909 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476919 DATE COLLECTED: 2 / 21 / 1962  
 SURFACE ELEVATION (FT.): 550.2 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C9 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
550.2	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0
485.2	CARBONDALE		ROCK	6.0	65.0

MAPID: 06190272000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 75' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264523 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484038 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 583.0 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C101Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
583.0	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
551.0	CARBONDALE		ROCK	28.0	32.0
523.0	CARBONDALE	COLCHESTER	COAL	2.1	60.0
520.9	CARBONDALE	COLCHESTER	COAL	0.3	62.1
520.6	CARBONDALE		ROCK	1.6	62.4

MAPID: 06190273000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 660' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.2624 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48406 DATE COLLECTED: 2 / 16 / 1962  
 SURFACE ELEVATION (FT.): 566.2 LOGGED (FT.): 45.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C102 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
566.2	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0
550.2	CARBONDALE		ROCK	26.0	16.0
524.2	CARBONDALE	COLCHESTER	COAL	1.9	42.0
522.3	CARBONDALE		ROCK	1.1	43.9

MAPID: 06190274000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260053 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484086 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 577.0 LOGGED (FT.): 55.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C103 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.0	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0
527.0	CARBONDALE		ROCK	2.0	50.0
525.0	CARBONDALE	COLCHESTER	COAL	1.8	52.0
523.2	CARBONDALE		ROCK	1.2	53.8

MAPID: 06190275000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.24583 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484235 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 560.8 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C109 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.8	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0

MAPID: 06190279000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 660' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260044 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.485952 DATE COLLECTED: 2 / 16 / 1962  
 SURFACE ELEVATION (FT.): 579.4 LOGGED (FT.): 56.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C128 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.4	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0
551.4	CARBONDALE		ROCK	24.0	28.0
527.4	CARBONDALE	COLCHESTER	COAL	2.3	52.0
525.1	CARBONDALE		ROCK	1.7	54.3

MAPID: 06190280000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260035 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487771 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 584.7 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C153 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.7	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
557.7	CARBONDALE		ROCK	28.0	27.0
529.7	CARBONDALE	COLCHESTER	COAL	1.8	55.0
527.9	CARBONDALE		ROCK	1.2	56.8

MAPID: 06190281000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.24579 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487896 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 572.0 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C159 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
572.0	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0

MAPID: 06190284000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260018 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49146 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 554.5 LOGGED (FT.): 32.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C203 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.5	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
536.5	CARBONDALE		ROCK	10.4	18.0
526.1	CARBONDALE	COLCHESTER	COAL	2.0	28.4
524.1	CARBONDALE		ROCK	1.6	30.4

MAPID: 06190320000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 26' S line, 700' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.262313 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476753 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 541.8 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C2Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.8	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
536.8	CARBONDALE		ROCK	24.0	5.0
512.8	CARBONDALE	COLCHESTER	COAL	2.5	29.0
510.3	CARBONDALE		ROCK	6.5	31.5

MAPID: 06190321000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 35' S line, 26' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260173 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476809 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 527.4 LOGGED (FT.): 59.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C3 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.4	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
502.4	CARBONDALE		ROCK	34.0	25.0

MAPID: 06190322000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 660' S line, 10' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264768 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478468 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C26 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
590.0	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0
553.0	CARBONDALE		ROCK	32.0	37.0
521.0	CARBONDALE	COLCHESTER	COAL	2.5	69.0
518.5	CARBONDALE		ROCK	16.5	71.5

MAPID: 06190323000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 660' S line, 701' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.262571 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478499 DATE COLLECTED: 6 / 2 / 1976  
 SURFACE ELEVATION (FT.): 555.0 LOGGED (FT.): 40.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C27 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
555.0	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
534.0	CARBONDALE		ROCK	12.0	21.0
522.0	CARBONDALE	COLCHESTER	COAL	2.5	33.0
519.5	CARBONDALE		ROCK	4.5	35.5

MAPID: 06190324000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 660' S line, 28' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260174 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478534 DATE COLLECTED: 6 / 2 / 1976  
 SURFACE ELEVATION (FT.): 523.3 LOGGED (FT.): 40.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C28 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
523.3	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
509.3	CARBONDALE		ROCK	26.0	14.0

MAPID: 06190325000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 20' N line, 680' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.262487 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480316 DATE COLLECTED: 6 / 3 / 1976  
 SURFACE ELEVATION (FT.): 567.8 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C52 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
567.8	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
548.8	CARBONDALE		ROCK	25.0	19.0
523.8	CARBONDALE	COLCHESTER	COAL	2.6	44.0
521.2	CARBONDALE		ROCK	1.4	46.6

MAPID: 06190326000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 20' N line, 15' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260119 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480345 DATE COLLECTED: 6 / 2 / 1976  
 SURFACE ELEVATION (FT.): 524.8 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C53 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.8	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
515.8	CARBONDALE		ROCK	29.0	9.0

MAPID: 06190327000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 667' N line, 25' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264706 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.482198 DATE COLLECTED: 6 / 2 / 1976  
 SURFACE ELEVATION (FT.): 587.2 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C76 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
587.2	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0
559.2	CARBONDALE		ROCK	34.6	28.0
524.6	CARBONDALE	COLCHESTER	COAL	2.6	62.6
522.0	CARBONDALE		ROCK	12.8	65.2

MAPID: 06190328000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 315' S line, 23' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264713 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.481212 DATE COLLECTED: 6 / 2 / 1976  
 SURFACE ELEVATION (FT.): 585.8 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX C76C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
585.8	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
558.8	CARBONDALE		ROCK	33.5	27.0
525.3	CARBONDALE	COLCHESTER	COAL	2.6	60.5
522.7	CARBONDALE		ROCK	1.4	63.1

MAPID: 06190443000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.24579 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.487901 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 572.0 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C159 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
572.0	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0
566.0	PLEISTOCENE		CLAY	16.0	6.0
550.0	PLEISTOCENE		CLAY	75.0	22.0

MAPID: 06190479000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROADHOUSE EAST LONGITUDE: -90.255361 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.476784 DATE COLLECTED: 2 / 21 / 1962  
 SURFACE ELEVATION (FT.): 527.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C5 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.5	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0
521.5	PLEISTOCENE		SAND & GRAVEL	19.0	6.0
502.5			MICACEOUS SHALE	12.0	25.0 SOFT
490.5			MICACEOUS SHALE	9.0	37.0 VERY HARD
481.5			LIMESTONE	1.0	46.0

MAPID: 06190483000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.24583 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.484235 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 560.8 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C109 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.8	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
549.8	PLEISTOCENE		CLAY	12.0	11.0
537.8	PLEISTOCENE		SAND & GRAVEL	64.0	23.0

MAPID: 06190485000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 660' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260044 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.485952 DATE COLLECTED: 2 / 16 / 1962  
 SURFACE ELEVATION (FT.): 579.4 LOGGED (FT.): 56.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C128 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
579.4	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
560.4	PLEISTOCENE		CLAY	9.0	19.0	
551.4	PLEISTOCENE		CLAY	20.0	28.0	
531.4	CARBONDALE		DARK SHALE	2.0	48.0	SOFT
529.4	CARBONDALE		BLACK SHALE	2.0	50.0	
527.4	CARBONDALE	COLCHESTER	COAL	2.3	52.0	FAIR
525.1	CARBONDALE		UNDERCLAY	1.8	54.3	

MAPID: 06190486000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260035 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.487771 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 584.7 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C153 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
584.7	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
577.7	PLEISTOCENE		CLAY	11.0	7.0	
566.7	PLEISTOCENE		CLAY	9.0	18.0	
557.7	CARBONDALE		SANDSTONE	25.0	27.0	SOFT
532.7	CARBONDALE		DARK SHALE	1.0	52.0	SOFT
531.7	CARBONDALE		BLACK SHALE	2.0	53.0	SOFT
529.7	CARBONDALE	COLCHESTER	COAL	1.8	55.0	SOFT
527.9	CARBONDALE		UNDERCLAY	1.2	56.8	



MAPID: 06190488000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 18 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.260018 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.49146 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 554.5 LOGGED (FT.): 32.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C203 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
554.5	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0	
536.5	CARBONDALE		SANDY SHALE	8.0	18.0	SOFT
528.5	CARBONDALE		BLACK SHALE	2.3	26.0	SOFT
526.2	CARBONDALE	COLCHESTER	COAL	2.0	28.3	FAIR
524.2	CARBONDALE		UNDERCLAY	1.7	30.3	

MAPID: 06190267000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.23642 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476971 DATE COLLECTED: 3 / 19 / 1962  
 SURFACE ELEVATION (FT.): 527.9 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C13 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
527.9	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0	

MAPID: 06190268000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.231676 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476998 DATE COLLECTED: 3 / 19 / 1962  
 SURFACE ELEVATION (FT.): 529.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C15 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
529.3	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0	
469.3	CARBONDALE		ROCK	7.0	60.0	

MAPID: 06190269000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.226889 GEOLOGIST:  
 CONFIDENTIAL: N LATITUDE: 39.465994 DATE COLLECTED: 2 / 21 / 1962  
 SURFACE ELEVATION (FT.): 547.8 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C59 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.8	PLEISTOCENE		UNCONSOLIDATED	51.0	0.0
496.8	CARBONDALE		ROCK	26.0	51.0

MAPID: 06190347000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 20 QUARTERS/FOOTAGES: 90' S line, 1' E line of NW NE  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.231669 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473583 DATE COLLECTED: 3 / 19 / 1962  
 SURFACE ELEVATION (FT.): 494.0 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE F565Z WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
494.0	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
458.0	CARBONDALE		ROCK	11.0	36.0

MAPID: 06190480000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.23642 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.476971 DATE COLLECTED: 3 / 19 / 1962  
 SURFACE ELEVATION (FT.): 527.9 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE C13 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
527.9	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
516.9	PLEISTOCENE		CLAY	16.0	11.0
500.9	PLEISTOCENE		CLAY	48.0	27.0
452.9	PLEISTOCENE		SAND & GRAVEL	22.0	75.0

**MAPID:** 06100001000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 23    **QUARTERS/FOOTAGES:** 1675' N line, 180' W line  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.188923    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.472493    **DATE COLLECTED:**  
**SURFACE ELEVATION (FT.):** 529.0    **LOGGED (FT.):** 45.5    **LOG TYPE:** Drillers Log  
**SOURCE:** T.W. JACKSON    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
529.0	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
516.0	CARBONDALE		ROCK	30.0	13.0	
486.0	CARBONDALE	COLCHESTER	COAL	2.5	43.0	

**MAPID:** 06100180000C    **VERSION:** 1    **PROJECT:** NCRDS99  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 24    **QUARTERS/FOOTAGES:** SE SW SW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.167711    **GEOLOGIST:** MCCRACKEN  
**CONFIDENTIAL:** N    **LATITUDE:** 39.463666    **DATE COLLECTED:** 3 / 30 / 1957  
**SURFACE ELEVATION (FT.):** 615.0    **LOGGED (FT.):** 95.0    **LOG TYPE:** Drillers Log  
**SOURCE:** DONAN    GS-4    **WELL TYPE:** Coal Test  
**COMMENT:** ELEV. +/- 5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
615.0	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0	
580.0	PLEISTOCENE		SAND & GRAVEL	60.0	35.0	

**MAPID:** 06190344000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 28    **QUARTERS/FOOTAGES:** 1' S line, 660' E line of SW NE  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.215393    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.455164    **DATE COLLECTED:** 2 / 19 / 1962  
**SURFACE ELEVATION (FT.):** 556.6    **LOGGED (FT.):** 117.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    F322    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
556.6	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0	
459.6	CARBONDALE		ROCK	20.0	97.0	

MAPID: 06190345000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.226868 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462317 DATE COLLECTED: 2 / 19 / 1962  
 SURFACE ELEVATION (FT.): 543.7 LOGGED (FT.): 105.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE F417 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.7	PLEISTOCENE		UNCONSOLIDATED	104.0	0.0
439.7	CARBONDALE		ROCK	1.0	104.0

MAPID: 06190346000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ATHENSVILLE LONGITUDE: -90.217635 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.46238 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 555.4 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE F421 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
555.4	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06100241000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 10W SECTION: 30 QUARTERS/FOOTAGES: 1' N line, 1' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264454 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.462341 DATE COLLECTED: 8 / 27 / 1964  
 SURFACE ELEVATION (FT.): 528.0 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 214-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
528.0	PLEISTOCENE		CLAY	23.0	0.0
505.0	PLEISTOCENE		GRAVEL	1.0	23.0
504.0	PLEISTOCENE		CLAY	5.0	24.0
499.0	PLEISTOCENE		GRAVEL	17.0	29.0
482.0			LIMESTONE	1.0	46.0

**MAPID:** 06100242000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 30    **QUARTERS/FOOTAGES:** 1320' N line, 1980' E line  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.253016    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.458724    **DATE COLLECTED:** 8 / 19 / 1964  
**SURFACE ELEVATION (FT.):** 518.0    **LOGGED (FT.):** 41.0    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    10-C    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
518.0	PLEISTOCENE		CLAY	16.0	0.0	
502.0	PLEISTOCENE		GRAVEL	6.0	16.0	
496.0	PLEISTOCENE		MUD	10.0	22.0	
486.0	PLEISTOCENE		SILT & SAND	9.0	32.0	

**MAPID:** 06100157000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 32    **QUARTERS/FOOTAGES:** NE NE NW NW  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.241729    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.447088    **DATE COLLECTED:** 0 / 0 / 1955  
**SURFACE ELEVATION (FT.):** 530.0    **LOGGED (FT.):** 123.0    **LOG TYPE:** Drillers Log  
**SOURCE:** ALUMINUM CO. OF AMERICA    38    **WELL TYPE:** Coal Test  
**COMMENT:** GREENFIELD QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
530.0	PLEISTOCENE		CLAY & GRAVEL	40.0	0.0	
490.0			SHALE	40.0	40.0	
450.0			SANDSTONE	38.0	80.0	GRAVELLY
412.0			COAL	2.0	118.0	TOO DEEP FOR COLCHESTER
410.0			UNDERCLAY	3.0	120.0	

**MAPID:** 06100179000C    **VERSION:** 1    **PROJECT:** NCRDS99  
**COUNTY:** GREENE    **TWP/RNG:** 12N 10W    **SECTION:** 35    **QUARTERS/FOOTAGES:** SW SW SE  
**QUADRANGLE:** ATHENSVILLE    **LONGITUDE:** -90.178882    **GEOLOGIST:** MCCRACKEN  
**CONFIDENTIAL:** N    **LATITUDE:** 39.434445    **DATE COLLECTED:** 3 / 29 / 1957  
**SURFACE ELEVATION (FT.):** 620.0    **LOGGED (FT.):** 105.0    **LOG TYPE:** Drillers Log  
**SOURCE:** DONAN    GS-3    **WELL TYPE:** Coal Test  
**COMMENT:** ELEV +/- 5

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
620.0	PLEISTOCENE		UNCONSOLIDATED	105.0	0.0	

**MAPID:** 06100243000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 1500' S line, 1320' E line  
**QUADRANGLE:** MANCHESTER    **LONGITUDE:** -90.269388    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.509687    **DATE COLLECTED:** 8 / 19 / 1964  
**SURFACE ELEVATION (FT.):** 541.0    **LOGGED (FT.):** 38.5    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    11-C    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
541.0	PLEISTOCENE		CLAY	20.0	0.0	
521.0	PLEISTOCENE		SAND & GRAVEL	13.5	20.0	TOP OF COAL ERODED
507.5	CARBONDALE	COLCHESTER	COAL	2.0	33.5	TOP OF COAL ERODED
505.5	SPOON		UNDERCLAY	2.5	35.5	
503.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	38.0	

**MAPID:** 06190262000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SW SE  
**QUADRANGLE:** MANCHESTER    **LONGITUDE:** -90.269337    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.509243    **DATE COLLECTED:** 2 / 5 / 1962  
**SURFACE ELEVATION (FT.):** 527.6    **LOGGED (FT.):** 34.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    B473    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
527.6	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0	
498.6	CARBONDALE		ROCK	2.0	29.0	
496.6	CARBONDALE	COLCHESTER	COAL	1.8	31.0	
494.8	CARBONDALE		ROCK	1.2	32.8	

**MAPID:** 06190263000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 1    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NW SE  
**QUADRANGLE:** MANCHESTER    **LONGITUDE:** -90.269288    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.512936    **DATE COLLECTED:** 2 / 5 / 1962  
**SURFACE ELEVATION (FT.):** 608.0    **LOGGED (FT.):** 123.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    B523    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
608.0	PLEISTOCENE		UNCONSOLIDATED	62.0	0.0	
546.0	CARBONDALE		ROCK	57.0	62.0	
489.0	CARBONDALE	COLCHESTER	COAL	2.3	119.0	
486.7	CARBONDALE		ROCK	1.7	121.3	

MAPID: 06190264000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.292633 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.516889 DATE COLLECTED: 3 / 15 / 1962  
 SURFACE ELEVATION (FT.): 635.8 LOGGED (FT.): 124.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B563 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.8	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0	
608.8	CARBONDALE		ROCK	93.0	27.0	
515.8	CARBONDALE	COLCHESTER	COAL	2.3	120.0	
513.5	CARBONDALE		ROCK	1.7	122.3	

MAPID: 06190448000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 2 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.292633 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.516889 DATE COLLECTED: 3 / 15 / 1962  
 SURFACE ELEVATION (FT.): 635.8 LOGGED (FT.): 124.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B563 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
635.8	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
628.8	PLEISTOCENE		CLAY	9.0	7.0	
619.8	PLEISTOCENE		CLAY	11.0	16.0	
608.8	CARBONDALE		SANDSTONE	14.0	27.0	HARD
594.8	CARBONDALE		SANDY SHALE	71.0	41.0	HARD
523.8	CARBONDALE		SANDSTONE	5.0	112.0	
518.8	CARBONDALE		SHALE	1.0	117.0	SOFT
517.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	118.0	
515.8	CARBONDALE	COLCHESTER	COAL	2.3	120.0	GOOD
513.5	CARBONDALE		UNDERCLAY	1.7	122.3	

MAPID: 06100199000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 3 QUARTERS/FOOTAGES: SW SW

QUADRANGLE: MANCHESTER LONGITUDE: -90.318715 GEOLOGIST: C KOROSE

CONFIDENTIAL: N LATITUDE: 39.507763 DATE COLLECTED:

SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 0.0 LOG TYPE: Measured section

SOURCE: COLLINGWOOD WELL TYPE: Coal Test

COMMENT: WALKER AND TATE MINES

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE		LIMESTONE	2.5		
-	CARBONDALE		SHALE	4.0		
-	CARBONDALE	HERRIN	COAL	4.5		W/BUE BAND
-	CARBONDALE		UNDERCLAY	3.0		
-	CARBONDALE		SHALE	1.5		HARD
-	CARBONDALE		COAL	3.0		"BLOCK COAL"
-	CARBONDALE		SANDY SHALE	6.0		

MAPID: 06100244000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 4 QUARTERS/FOOTAGES: 1320' S line, 1' E line

QUADRANGLE: MANCHESTER LONGITUDE: -90.321098 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.509582 DATE COLLECTED: 8 / 26 / 1964

SURFACE ELEVATION (FT.): 650.0 LOGGED (FT.): 120.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 22-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
650.0	PLEISTOCENE		CLAY	20.0	0.0	
630.0	PLEISTOCENE		CLAY & GRAVEL	18.0	20.0	
612.0	PLEISTOCENE		MUD	20.0	38.0	
592.0	CARBONDALE		GRAY SHALE	40.0	58.0	LOG THICKNESS 30.0 CHANGED TO 40.0
552.0	CARBONDALE		SANDSTONE	16.5	98.0	
535.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	114.5	
533.5	CARBONDALE	COLCHESTER	COAL	2.4	116.5	
531.1	SPOON		UNDERCLAY	1.1	118.9	
530.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	120.0	



MAPID: 06190178000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 4 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.330386 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.509624 DATE COLLECTED: 2 / 13 / 1962  
 SURFACE ELEVATION (FT.): 650.8 LOGGED (FT.): 127.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A471 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
650.8	PLEISTOCENE		UNCONSOLIDATED	44.0	0.0
606.8	CARBONDALE		ROCK	80.0	44.0
526.8	CARBONDALE	COLCHESTER	COAL	2.0	124.0
524.8	CARBONDALE		ROCK	1.0	126.0

MAPID: 06100245000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 9 QUARTERS/FOOTAGES: 1100' N line, 2130' E line  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.328592 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.502896 DATE COLLECTED: 8 / 25 / 1964  
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 62.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 21-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.0	PLEISTOCENE		CLAY	8.0	0.0
602.0	PLEISTOCENE		UNCONSOLIDATED	2.0	8.0
600.0	PLEISTOCENE		CLAY	15.0	10.0
585.0	CARBONDALE		GRAY SHALE	5.0	25.0
580.0	CARBONDALE		SANDY SHALE	28.0	30.0
552.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	58.0
550.0	CARBONDALE	COLCHESTER	COAL	2.5	60.0

MAPID: 06190177000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 9 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.330307 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.505929 DATE COLLECTED: 2 / 13 / 1962  
 SURFACE ELEVATION (FT.): 643.3 LOGGED (FT.): 116.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A421 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
643.3	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0
580.3	CARBONDALE		ROCK	49.0	63.0
531.3	CARBONDALE	COLCHESTER	COAL	2.2	112.0
529.1	CARBONDALE		ROCK	1.8	114.2

MAPID: 06100283000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' E line

QUADRANGLE: MANCHESTER LONGITUDE: -90.302343 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.505831 DATE COLLECTED: 8 / 28 / 1964

SURFACE ELEVATION (FT.): 630.0 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 18-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.0	PLEISTOCENE		CLAY	12.0	0.0	
618.0	PLEISTOCENE		GRAVEL	4.0	12.0	
614.0	PLEISTOCENE		SANDY SHALE	19.0	16.0	
595.0	CARBONDALE		GRAY SHALE	15.0	35.0	
580.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.3	50.0	
577.7	CARBONDALE	COLCHESTER	COAL	2.5	52.3	
575.2	SPOON		UNDERCLAY	2.7	54.8	
572.5	SPOON	SEAHORNE LS	LIMESTONE	0.5	57.5	

MAPID: 06120963000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 2640' S line, 2640' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311758 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.498727 DATE COLLECTED: 8 / 24 / 1964

SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 19-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		CLAY	17.0	0.0	
573.0			UNDERCLAY	2.0	17.0	SMUT SHOWING AT TOP
571.0			SANDY SHALE	4.5	19.0	
566.5			BLACK SHALE	0.5	23.5	
566.0			UNDERCLAY	1.0	24.0	COAL SHOWING AT TOP
565.0			SANDY SHALE	23.0	25.0	LOG TOTAL THICKNESS 58.0 CHANGED TO 48.0

MAPID: 06190241000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311664 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498658 DATE COLLECTED: 2 / 14 / 1962  
 SURFACE ELEVATION (FT.): 587.3 LOGGED (FT.): 70.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B305 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
587.3	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0
571.3	CARBONDALE		ROCK	50.0	16.0
521.3	CARBONDALE	COLCHESTER	COAL	2.4	66.0
518.9	CARBONDALE		ROCK	1.6	68.4

MAPID: 06190242000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.307011 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49863 DATE COLLECTED: 2 / 14 / 1962  
 SURFACE ELEVATION (FT.): 612.1 LOGGED (FT.): 91.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B307 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
612.1	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
601.1	CARBONDALE		ROCK	76.0	11.0
525.1	CARBONDALE	COLCHESTER	COAL	2.3	87.0
522.8	CARBONDALE		ROCK	1.7	89.3

MAPID: 06190243000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320965 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498718 DATE COLLECTED: 2 / 2 / 1962  
 SURFACE ELEVATION (FT.): 632.6 LOGGED (FT.): 112.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B309 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
632.6	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
590.6	CARBONDALE		ROCK	66.0	42.0
524.6	CARBONDALE	COLCHESTER	COAL	2.4	108.0
522.2	CARBONDALE		ROCK	1.6	110.4

MAPID: 06190449000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 10 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.307011 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.49863 DATE COLLECTED: 2 / 14 / 1962

SURFACE ELEVATION (FT.): 612.1 LOGGED (FT.): 91.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B307 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
612.1	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
608.1	PLEISTOCENE		CLAY	7.0	4.0	
601.1	CARBONDALE		SANDY SHALE	8.0	11.0	
593.1	CARBONDALE		SANDY SHALE	66.0	19.0	HARD
527.1	CARBONDALE		LIMESTONE	1.0	85.0	SOFT CAP ROCK
526.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	86.0	
525.1	CARBONDALE	COLCHESTER	COAL	2.3	87.0	GOOD
522.8	CARBONDALE		UNDERCLAY	1.8	89.3	

MAPID: 06100148000C VERSION: 1

PROJECT: AVAIL

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

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.28393 GEOLOGIST: C KOROSE

CONFIDENTIAL: N LATITUDE: 39.499034 DATE COLLECTED: 0 / 0 / 1955

SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 83.0 LOG TYPE: Drillers Log

SOURCE: ALUMINUM CO. OF AMERICA 16 WELL TYPE: Coal Test

COMMENT: ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
600.0	PLEISTOCENE		CLAY	18.0	0.0	
582.0	CARBONDALE		SHALE	22.0	18.0	
560.0	CARBONDALE		SANDSTONE	11.0	40.0	
549.0	CARBONDALE		SANDSTONE/COAL	9.0	51.0	NO COAL THICKNESS
540.0	CARBONDALE		SHALE	11.0	60.0	
529.0	CARBONDALE	COLCHESTER	COAL	2.0	71.0	
527.0	SPOON		SHALE	10.0	73.0	

MAPID: 06190229000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292887 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491366 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 607.2 LOGGED (FT.): 94.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B213 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
607.2	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
583.2	CARBONDALE		ROCK	66.0	24.0
517.2	CARBONDALE	COLCHESTER	COAL	2.4	90.0
514.8	CARBONDALE		ROCK	1.6	92.4

MAPID: 06190230000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288145 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491362 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 605.0 LOGGED (FT.): 81.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B215 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
605.0	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
579.0	CARBONDALE		ROCK	51.0	26.0
528.0	CARBONDALE	COLCHESTER	COAL	2.5	77.0
525.5	CARBONDALE		ROCK	1.5	79.5

MAPID: 06190237000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297616 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.494981 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 628.6 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B261 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
628.6	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
589.6	CARBONDALE		ROCK	67.0	39.0
522.6	CARBONDALE	COLCHESTER	COAL	2.4	106.0
520.2	CARBONDALE		ROCK	1.6	108.4

MAPID: 06190238000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288121 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.494971 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 608.1 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B265 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.1	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
587.1	CARBONDALE		ROCK	59.0	21.0
528.1	CARBONDALE	COLCHESTER	COAL	2.3	80.0
525.8	CARBONDALE		ROCK	1.7	82.3

MAPID: 06190239000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283375 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.494966 DATE COLLECTED: 1 / 8 / 1962  
 SURFACE ELEVATION (FT.): 596.7 LOGGED (FT.): 81.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B267 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
596.7	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
570.7	CARBONDALE		ROCK	51.0	26.0
519.7	CARBONDALE	COLCHESTER	COAL	2.0	77.0
517.7	CARBONDALE		ROCK	2.0	79.0

MAPID: 06190244000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297604 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498594 DATE COLLECTED: 2 / 2 / 1962  
 SURFACE ELEVATION (FT.): 630.9 LOGGED (FT.): 112.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B311 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
630.9	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
596.9	CARBONDALE		ROCK	75.0	34.0
521.9	CARBONDALE	COLCHESTER	COAL	1.8	109.0
520.1	CARBONDALE		ROCK	1.2	110.8

MAPID: 06190245000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.29285 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498591 DATE COLLECTED: 2 / 2 / 1962  
 SURFACE ELEVATION (FT.): 625.3 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B313 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
625.3	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0
596.3	CARBONDALE		ROCK	67.0	29.0
529.3	CARBONDALE	COLCHESTER	COAL	2.2	96.0
527.1	CARBONDALE	COLCHESTER	COAL	0.3	98.2
526.8	CARBONDALE		ROCK	1.5	98.5

MAPID: 06190246000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288097 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498584 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 606.6 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B315 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.6	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
591.6	CARBONDALE		ROCK	61.0	15.0
530.6	CARBONDALE	COLCHESTER	COAL	2.4	76.0
528.2	CARBONDALE		ROCK	1.6	78.4

MAPID: 06190254000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.28807 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.502198 DATE COLLECTED: 3 / 9 / 1962  
 SURFACE ELEVATION (FT.): 611.5 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B365 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
611.5	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0
583.5	CARBONDALE		ROCK	52.0	28.0
531.5	CARBONDALE	COLCHESTER	COAL	2.3	80.0
529.2	CARBONDALE		ROCK	1.7	82.3

MAPID: 06190258000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 50' N line, 1' W line of NE NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.288038 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.505676 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 610.3 LOGGED (FT.): 89.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B390DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.3	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
589.3	CARBONDALE		ROCK	64.0	21.0
525.3	CARBONDALE	COLCHESTER	COAL	2.3	85.0
523.0	CARBONDALE		ROCK	1.7	87.3

MAPID: 06190259000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.297575 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.505824 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 632.9 LOGGED (FT.): 109.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B411 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
632.9	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0
601.9	CARBONDALE		ROCK	74.0	31.0
527.9	CARBONDALE	COLCHESTER	COAL	2.2	105.0
525.7	CARBONDALE		ROCK	1.8	107.2



MAPID: 0619045000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297616 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.494981 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 628.6 LOGGED (FT.): 110.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B261 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
628.6	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
617.6	PLEISTOCENE		CLAY	12.0	11.0	
605.6	PLEISTOCENE		CLAY	16.0	23.0	
589.6	CARBONDALE		SANDY SHALE	16.0	39.0	HARD
573.6	CARBONDALE		SANDY SHALE	49.0	55.0	HARD
524.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	104.0	
522.6	CARBONDALE	COLCHESTER	COAL	2.4	106.0	GOOD
520.2	CARBONDALE		UNDERCLAY	1.6	108.4	

MAPID: 06190451000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288121 GEOLOGIST: STRAAYE  
 CONFIDENTIAL: N LATITUDE: 39.494971 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 608.1 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B265 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
608.1	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
600.1	PLEISTOCENE		CLAY	13.0	8.0	
587.1	CARBONDALE		SANDSTONE	55.0	21.0	SOFT
532.1	CARBONDALE	MECCA QUARRY	DARK SHALE	2.0	76.0	SOFT
530.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	78.0	
528.1	CARBONDALE	COLCHESTER	COAL	2.3	80.0	GOOD
525.8	CARBONDALE		UNDERCLAY	1.8	82.3	

MAPID: 06190452000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.29285 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.498591 DATE COLLECTED: 2 / 2 / 1962

SURFACE ELEVATION (FT.): 625.3 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B313 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
625.3	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
617.3	PLEISTOCENE		CLAY	14.0	8.0	
603.3	PLEISTOCENE		CLAY	7.0	22.0	
596.3	CARBONDALE		SANDSTONE	9.0	29.0	
587.3	CARBONDALE		MICACEOUS SHALE	51.0	38.0	HARD
536.3	CARBONDALE		DARK SHALE	5.0	89.0	SOFT
531.3	CARBONDALE	MECCA QUARRY	DARK SHALE	2.0	94.0	
529.3	CARBONDALE	COLCHESTER	COAL	2.2	96.0	GOOD
527.1	CARBONDALE	COLCHESTER	COAL W/ BLACK SHALE	0.3	98.2	
526.8	CARBONDALE		UNDERCLAY	1.5	98.5	

MAPID: 06190453000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288097 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.498584 DATE COLLECTED: 3 / 8 / 1962

SURFACE ELEVATION (FT.): 606.6 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B315 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
606.6	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
591.6	CARBONDALE		SANDY SHALE	11.0	15.0	SOFT
580.6	CARBONDALE		SANDY SHALE	44.0	26.0	HARD
536.6	CARBONDALE		DARK SHALE	4.0	70.0	SOFT
532.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	74.0	
530.6	CARBONDALE	COLCHESTER	COAL	2.3	76.0	GOOD
528.3	CARBONDALE		UNDERCLAY	1.7	78.3	

MAPID: 06190454000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE

QUADRANGLE: MANCHESTER LONGITUDE: -90.28807 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.502198 DATE COLLECTED: 3 / 9 / 1962

SURFACE ELEVATION (FT.): 611.5 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B365 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
611.5	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
604.5	PLEISTOCENE		CLAY	10.0	7.0	
594.5	PLEISTOCENE		CLAY	11.0	17.0	
583.5	CARBONDALE		SANDY SHALE	9.0	28.0	SOFT
574.5	CARBONDALE		SANDY SHALE	7.0	37.0	
567.5	CARBONDALE		SANDY SHALE	33.0	44.0	VERY HARD
534.5	CARBONDALE		DARK SHALE	1.0	77.0	SOFT
533.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	78.0	
531.5	CARBONDALE	COLCHESTER	COAL	2.3	80.0	
529.2	CARBONDALE		UNDERCLAY	1.7	82.3	

MAPID: 06190455000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 50' N line, 1' W line of NE NE

QUADRANGLE: MANCHESTER LONGITUDE: -90.288038 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.505676 DATE COLLECTED: 3 / 8 / 1962

SURFACE ELEVATION (FT.): 610.3 LOGGED (FT.): 89.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B390DC WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.3	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0	
597.3	CARBONDALE		SANDSTONE	8.0	13.0	
589.3	CARBONDALE		DARK SHALE	6.0	21.0	SOFT
583.3	CARBONDALE		SANDY SHALE	13.0	27.0	SOFT
570.3	CARBONDALE		SANDY SHALE	15.0	40.0	
555.3	CARBONDALE		SANDY SHALE	24.0	55.0	VERY HARD
531.3	CARBONDALE		SHALE	2.0	79.0	SOFT
529.3	CARBONDALE		LIMESTONE	2.0	81.0	CAP ROCK
527.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	83.0	SOFT
525.3	CARBONDALE	COLCHESTER	COAL	2.3	85.0	GOOD
523.0	CARBONDALE		UNDERCLAY	1.8	87.3	

MAPID: 06190456000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 11 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW

QUADRANGLE: MANCHESTER LONGITUDE: -90.297575 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.505824 DATE COLLECTED: 3 / 8 / 1962

SURFACE ELEVATION (FT.): 632.9 LOGGED (FT.): 109.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B411 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
632.9	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
623.9	PLEISTOCENE		CLAY	22.0	9.0	
601.9	CARBONDALE		SANDSTONE	21.0	31.0	HARD
580.9	CARBONDALE		SANDY SHALE	51.0	52.0	HARD
529.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	103.0	
527.9	CARBONDALE	COLCHESTER	COAL	2.2	105.0	GOOD
525.7	CARBONDALE		UNDERCLAY	1.8	107.2	

MAPID: 06100246000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 2440' N line, 1570' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.27036 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.498832 DATE COLLECTED: 8 / 21 / 1964

SURFACE ELEVATION (FT.): 593.0 LOGGED (FT.): 77.8 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 15-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
593.0	PLEISTOCENE		CLAY	21.0	0.0	
572.0	PLEISTOCENE		MUD	20.5	21.0	LOG THICKNESS 10.5 CHANGED TO 20.5
551.5	CARBONDALE		SANDSTONE	27.5	41.5	SOFT
524.0	CARBONDALE		SANDY SHALE	4.0	69.0	
520.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.3	73.0	
517.7	CARBONDALE	COLCHESTER	COAL	2.5	75.3	

MAPID: 06190234000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269444 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491025 DATE COLLECTED: 1 / 3 / 1962  
 SURFACE ELEVATION (FT.): 584.3 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B223 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.3	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
558.3	CARBONDALE		ROCK	31.0	26.0
527.3	CARBONDALE	COLCHESTER	COAL	1.8	57.0
525.5	CARBONDALE		ROCK	1.2	58.8

MAPID: 06190236000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 116' N line, 24' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264865 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49423 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 597.9 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B250DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.9	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0
530.9	CARBONDALE		ROCK	30.0	67.0

MAPID: 06190240000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.26943 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.494653 DATE COLLECTED: 1 / 3 / 1962  
 SURFACE ELEVATION (FT.): 590.4 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B273 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
590.4	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
548.4	CARBONDALE		ROCK	25.0	42.0
523.4	CARBONDALE	COLCHESTER	COAL	2.3	67.0
521.1	CARBONDALE		ROCK	1.7	69.3

MAPID: 06190247000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283337 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498577 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 599.9 LOGGED (FT.): 79.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B317 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
599.9	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0
579.9	CARBONDALE		ROCK	55.0	20.0
524.9	CARBONDALE	COLCHESTER	COAL	2.4	75.0
522.5	CARBONDALE		ROCK	1.6	77.4

MAPID: 06190248000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.2787 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498481 DATE COLLECTED: 3 / 9 / 1962  
 SURFACE ELEVATION (FT.): 599.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B319 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
599.8	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
565.8	CARBONDALE		ROCK	41.0	34.0
524.8	CARBONDALE	COLCHESTER	COAL	1.8	75.0
523.0	CARBONDALE		ROCK	1.2	76.8

MAPID: 06190249000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.274057 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498382 DATE COLLECTED: 1 / 3 / 1962  
 SURFACE ELEVATION (FT.): 593.4 LOGGED (FT.): 83.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B321 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.4	PLEISTOCENE		UNCONSOLIDATED	51.0	0.0
542.4	CARBONDALE		ROCK	28.0	51.0
514.4	CARBONDALE	COLCHESTER	COAL	2.1	79.0
512.3	CARBONDALE	COLCHESTER	COAL	0.3	81.1
512.0	CARBONDALE		ROCK	1.6	81.4

MAPID: 06190250000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269413 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498283 DATE COLLECTED: 1 / 3 / 1962  
 SURFACE ELEVATION (FT.): 596.2 LOGGED (FT.): 79.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B323 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
596.2	PLEISTOCENE		UNCONSOLIDATED	45.0	0.0
551.2	CARBONDALE		ROCK	30.0	45.0
521.2	CARBONDALE	COLCHESTER	COAL	2.2	75.0
519.0	CARBONDALE		ROCK	1.8	77.2

MAPID: 06190251000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264773 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.498184 DATE COLLECTED: 2 / 5 / 1962  
 SURFACE ELEVATION (FT.): 487.2 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B325 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
487.2	PLEISTOCENE		UNCONSOLIDATED	73.0	0.0
414.2	CARBONDALE		ROCK	9.0	73.0

MAPID: 06190252000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 100' N line, 100' E line of SW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.27903 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.501833 DATE COLLECTED: 3 / 9 / 1962  
 SURFACE ELEVATION (FT.): 594.0 LOGGED (FT.): 76.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B343GA WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.0	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
581.0	CARBONDALE		ROCK	59.0	13.0
522.0	CARBONDALE	COLCHESTER	COAL	2.4	72.0
519.6	CARBONDALE		ROCK	1.6	74.4

MAPID: 06190253000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 100' N line, 30' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.274143 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.501736 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 541.0 LOGGED (FT.): 36.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B346DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.0	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
536.0	CARBONDALE		ROCK	27.0	5.0
509.0	CARBONDALE	COLCHESTER	COAL	2.3	32.0
506.7	CARBONDALE		ROCK	1.7	34.3

MAPID: 06190255000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.283306 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.502191 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 610.2 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B367 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.2	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0
567.2	CARBONDALE		ROCK	46.0	43.0
521.2	CARBONDALE	COLCHESTER	COAL	2.1	89.0
519.1	CARBONDALE		ROCK	1.9	91.1

MAPID: 06190256000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.269399 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.501913 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 567.4 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B373 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
567.4	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0
517.4	CARBONDALE		ROCK	4.0	50.0
513.4	CARBONDALE	COLCHESTER	COAL	2.2	54.0
511.2	CARBONDALE	COLCHESTER	COAL	0.5	56.2
510.7	CARBONDALE		ROCK	1.3	56.7



MAPID: 06190257000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.264762 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.501822 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 577.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B375 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.6	PLEISTOCENE		UNCONSOLIDATED	82.0	0.0
495.6	CARBONDALE		ROCK	15.0	82.0

MAPID: 06190260000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 660' E line of NW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.280997 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.505765 DATE COLLECTED: 6 / 8 / 1962  
 SURFACE ELEVATION (FT.): 606.9 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B418 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.9	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
573.9	CARBONDALE		ROCK	60.0	33.0
513.9	CARBONDALE	COLCHESTER	COAL	2.3	93.0
511.6	CARBONDALE		ROCK	1.7	95.3

MAPID: 06190261000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.269385 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.505546 DATE COLLECTED: 2 / 5 / 1962  
 SURFACE ELEVATION (FT.): 524.4 LOGGED (FT.): 24.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B423 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.4	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
511.4	CARBONDALE		ROCK	7.0	13.0
504.4	CARBONDALE	COLCHESTER	COAL	2.0	20.0
502.4	CARBONDALE		ROCK	2.0	22.0

MAPID: 06190457000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.2787 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.498481 DATE COLLECTED: 3 / 9 / 1962

SURFACE ELEVATION (FT.): 599.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B319 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
599.8	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
590.8	PLEISTOCENE		CLAY	12.0	9.0	
578.8	PLEISTOCENE		SAND & GRAVEL	13.0	21.0	HARDPAN
565.8	CARBONDALE		SANDY SHALE	13.0	34.0	
552.8	CARBONDALE		DARK SHALE	26.0	47.0	
526.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	73.0	
524.8	CARBONDALE	COLCHESTER	COAL	1.8	75.0	FAIR
523.0	CARBONDALE		UNDERCLAY	1.2	76.8	

MAPID: 06190458000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.274057 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.498382 DATE COLLECTED: 1 / 3 / 1962

SURFACE ELEVATION (FT.): 593.4 LOGGED (FT.): 83.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B321 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
593.4	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
585.4	PLEISTOCENE		CLAY	8.0	8.0	
577.4	PLEISTOCENE		CLAY	35.0	16.0	
542.4	CARBONDALE		SANDY SHALE	21.0	51.0	HARD
521.4	CARBONDALE	MECCA QUARRY	DARK SHALE	5.0	72.0	SOFT
516.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	77.0	
514.4	CARBONDALE	COLCHESTER	COAL	2.1	79.0	GOOD
512.3	CARBONDALE	COLCHESTER	COAL W/ BLACK SHALE	0.3	81.1	
512.0	CARBONDALE		UNDERCLAY	1.6	81.4	

MAPID: 06190459000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269413 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.498283 DATE COLLECTED: 1 / 3 / 1962

SURFACE ELEVATION (FT.): 596.2 LOGGED (FT.): 79.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B323 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
596.2	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
588.2	PLEISTOCENE		CLAY	11.0	8.0	
577.2	PLEISTOCENE		CLAY	26.0	19.0	
551.2	CARBONDALE		SANDY SHALE	19.0	45.0	HARD
532.2	CARBONDALE		SHALE	5.0	64.0	SOFT
527.2	CARBONDALE		SANDSTONE	4.0	69.0	HARD
523.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	73.0	HARD
521.2	CARBONDALE	COLCHESTER	COAL	2.2	75.0	GOOD
519.0	CARBONDALE		UNDERCLAY	1.8	77.2	

MAPID: 06190460000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 100' N line, 100' E line of SW NW

QUADRANGLE: MANCHESTER LONGITUDE: -90.27903 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.501833 DATE COLLECTED: 3 / 9 / 1962

SURFACE ELEVATION (FT.): 594.0 LOGGED (FT.): 76.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B343GA WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
594.0	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
590.0	PLEISTOCENE		CLAY	6.0	4.0	
584.0	PLEISTOCENE		CLAY	3.0	10.0	
581.0	CARBONDALE		SANDSTONE	11.0	13.0	HARD
570.0	CARBONDALE		SANDY SHALE	46.0	24.0	HARD
524.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	70.0	
522.0	CARBONDALE	COLCHESTER	COAL	2.3	72.0	GOOD
519.7	CARBONDALE		UNDERCLAY	1.7	74.3	

MAPID: 06190461000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 100' N line, 30' E line of SE NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.274143 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.501736 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 541.0 LOGGED (FT.): 36.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B346DC WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
541.0	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
538.0	PLEISTOCENE		CLAY	2.0	3.0	
536.0	CARBONDALE		SANDSTONE	18.0	5.0	HARD
518.0	CARBONDALE		SHALE	7.0	23.0	SOFT
511.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	30.0	
509.0	CARBONDALE	COLCHESTER	COAL	2.3	32.0	GOOD
506.7	CARBONDALE		UNDERCLAY	1.7	34.3	

MAPID: 06190462000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW NW  
 QUADRANGLE: MANCHESTER LONGITUDE: -90.283306 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.502191 DATE COLLECTED: 3 / 8 / 1962  
 SURFACE ELEVATION (FT.): 610.2 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B367 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.2	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
599.2	PLEISTOCENE		CLAY	24.0	11.0	
575.2	PLEISTOCENE		CLAY	8.0	35.0	
567.2	CARBONDALE		SANDSTONE	11.0	43.0	HARD
556.2	CARBONDALE		SANDY SHALE	33.0	54.0	HARD
523.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	87.0	
521.2	CARBONDALE	COLCHESTER	COAL	2.2	89.0	GOOD
519.1	CARBONDALE		UNDERCLAY	1.9	91.1	

MAPID: 06190463000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE

QUADRANGLE: MANCHESTER LONGITUDE: -90.269399 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.501913 DATE COLLECTED: 1 / 4 / 1962

SURFACE ELEVATION (FT.): 567.4 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B373 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
567.4	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0	
563.4	PLEISTOCENE		CLAY	5.0	4.0	
558.4	PLEISTOCENE		CLAY	41.0	9.0	
517.4	CARBONDALE	MECCA QUARRY	DARK SHALE	3.0	50.0	SOFT
514.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	53.0	SOFT
513.4	CARBONDALE	COLCHESTER	COAL	2.2	54.0	
511.2	CARBONDALE	COLCHESTER	UNKNOWN	0.5	56.2	RASH
510.7	CARBONDALE		UNDERCLAY	1.3	56.7	

MAPID: 06190464000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 12 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE

QUADRANGLE: MANCHESTER LONGITUDE: -90.264762 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.501822 DATE COLLECTED: 1 / 4 / 1962

SURFACE ELEVATION (FT.): 577.6 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B375 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
577.6	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
571.6	PLEISTOCENE		CLAY	12.0	6.0	
559.6	PLEISTOCENE		CLAY	64.0	18.0	
495.6	CARBONDALE		SHALE	15.0	82.0	WHITE

MAPID: 06190465000C    VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE    TWP/RNG: 12N 11W    SECTION: 12    QUARTERS/FOOTAGES: 1' N line, 660' E line of NW NW

QUADRANGLE: MANCHESTER    LONGITUDE: -90.280997    GEOLOGIST: STRAAYER

CONFIDENTIAL: N    LATITUDE: 39.505765    DATE COLLECTED: 6 / 8 / 1962

SURFACE ELEVATION (FT.): 606.9    LOGGED (FT.): 97.0    LOG TYPE: Drillers Log

SOURCE: AYRSHIRE    B418    WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
606.9	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0	
595.9	PLEISTOCENE		CLAY	13.0	11.0	
582.9	PLEISTOCENE		CLAY	9.0	24.0	
573.9	CARBONDALE		DARK SHALE	8.0	33.0	SOFT
565.9	CARBONDALE		DARK SHALE	50.0	41.0	HARD
515.9	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	91.0	HARD
513.9	CARBONDALE	COLCHESTER	COAL	2.3	93.0	GOOD
511.6	CARBONDALE		UNDERCLAY	1.8	95.3	

MAPID: 06190466000C    VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE    TWP/RNG: 12N 11W    SECTION: 12    QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE

QUADRANGLE: MANCHESTER    LONGITUDE: -90.269385    GEOLOGIST: STRAAYER

CONFIDENTIAL: N    LATITUDE: 39.505546    DATE COLLECTED: 2 / 5 / 1962

SURFACE ELEVATION (FT.): 524.4    LOGGED (FT.): 24.0    LOG TYPE: Drillers Log

SOURCE: AYRSHIRE    B423    WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
524.4	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0	
521.4	PLEISTOCENE		CLAY	10.0	3.0	
511.4	CARBONDALE		DARK SANDSTONE	5.0	13.0	
506.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	18.0	
504.4	CARBONDALE	COLCHESTER	COAL	2.0	20.0	GOOD
502.4	CARBONDALE		UNDERCLAY	2.0	22.0	

**MAPID:** 06100145000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 13    **QUARTERS/FOOTAGES:** SW SE SE SE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.266538    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.477101    **DATE COLLECTED:** 0 / 0 / 1955  
**SURFACE ELEVATION (FT.):** 570.0    **LOGGED (FT.):** 56.0    **LOG TYPE:** Drillers Log  
**SOURCE:** ALUMINUM CO. OF AMERICA    13    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
570.0	PLEISTOCENE		CLAY	26.0	0.0	
544.0	PLEISTOCENE		SANDY CLAY	20.0	26.0	W/BOULDERS
524.0	CARBONDALE		SANDSTONE	1.5	46.0	
522.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.7	47.5	
518.8	CARBONDALE	COLCHESTER	COAL	2.8	51.2	
516.1	SPOON		UNDERCLAY	2.1	53.9	

**MAPID:** 06100247000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 13    **QUARTERS/FOOTAGES:** 1' S line, 1770' E line  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.271111    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.476685    **DATE COLLECTED:** 8 / 31 / 1964  
**SURFACE ELEVATION (FT.):** 561.0    **LOGGED (FT.):** 33.5    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    220-P    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
561.0	PLEISTOCENE		CLAY	29.0	0.0	
532.0	PLEISTOCENE		GRAVEL	1.5	29.0	
530.5	SPOON		UNDERCLAY	2.5	30.5	
528.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	33.0	

**MAPID:** 06190186000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 13    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SE SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.274049    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.476701    **DATE COLLECTED:** 2 / 12 / 1962  
**SURFACE ELEVATION (FT.):** 578.5    **LOGGED (FT.):** 71.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    B21    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
578.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
559.5	CARBONDALE		ROCK	48.0	19.0	
511.5	CARBONDALE	COLCHESTER	COAL	2.4	67.0	
509.1	CARBONDALE		ROCK	1.6	69.4	

MAPID: 06190187000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269429 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476674 DATE COLLECTED: 2 / 9 / 1962  
 SURFACE ELEVATION (FT.): 588.7 LOGGED (FT.): 90.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B23 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.7	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
549.7	CARBONDALE		ROCK	47.0	39.0
502.7	CARBONDALE	COLCHESTER	COAL	2.3	86.0
500.4	CARBONDALE		ROCK	1.7	88.3

MAPID: 06190188000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264809 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476649 DATE COLLECTED: 2 / 12 / 1962  
 SURFACE ELEVATION (FT.): 588.3 LOGGED (FT.): 72.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B25 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.3	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
555.3	CARBONDALE		ROCK	35.0	33.0
520.3	CARBONDALE	COLCHESTER	COAL	2.3	68.0
518.0	CARBONDALE		ROCK	1.7	70.3

MAPID: 06190196000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 330' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.272885 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480292 DATE COLLECTED: 2 / 12 / 1962  
 SURFACE ELEVATION (FT.): 538.1 LOGGED (FT.): 29.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B71B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
538.1	PLEISTOCENE		UNCONSOLIDATED	2.0	0.0
536.1	CARBONDALE		ROCK	23.0	2.0
513.1	CARBONDALE	COLCHESTER	COAL	2.4	25.0
510.7	CARBONDALE		ROCK	1.6	27.4



MAPID: 06190197000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269433 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480257 DATE COLLECTED: 2 / 12 / 1962  
 SURFACE ELEVATION (FT.): 592.4 LOGGED (FT.): 89.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B73 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.4	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
569.4	CARBONDALE		ROCK	62.0	23.0
507.4	CARBONDALE	COLCHESTER	COAL	2.5	85.0
504.9	CARBONDALE		ROCK	1.5	87.5

MAPID: 06190198000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 40' N line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264808 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480102 DATE COLLECTED: 2 / 12 / 1962  
 SURFACE ELEVATION (FT.): 585.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B75 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
585.3	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
553.3	CARBONDALE		ROCK	31.0	32.0
522.3	CARBONDALE	COLCHESTER	COAL	2.4	63.0
519.9	CARBONDALE		ROCK	1.6	65.4

MAPID: 06190209000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 175' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.282723 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484042 DATE COLLECTED: 3 / 12 / 1962  
 SURFACE ELEVATION (FT.): 596.5 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B117N WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
596.5	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
569.5	CARBONDALE		ROCK	51.0	27.0
518.5	CARBONDALE	COLCHESTER	COAL	2.0	78.0
516.5	CARBONDALE		ROCK	4.0	80.0

MAPID: 0619021000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.278711 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.483983 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 603.6 LOGGED (FT.): 92.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B119 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
603.6	PLEISTOCENE		UNCONSOLIDATED	46.0	0.0
557.6	CARBONDALE		ROCK	42.0	46.0
515.6	CARBONDALE	COLCHESTER	COAL	2.3	88.0
513.3	CARBONDALE		ROCK	1.7	90.3

MAPID: 06190211000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.274075 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.483914 DATE COLLECTED: 2 / 13 / 1962  
 SURFACE ELEVATION (FT.): 579.2 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B121 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.2	PLEISTOCENE		UNCONSOLIDATED	84.0	0.0
495.2	CARBONDALE		ROCK	3.0	84.0

MAPID: 06190212000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 660' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.271785 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48388 DATE COLLECTED: 2 / 16 / 1962  
 SURFACE ELEVATION (FT.): 572.3 LOGGED (FT.): 73.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B122 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
572.3	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
554.3	CARBONDALE		ROCK	51.0	18.0
503.3	CARBONDALE	COLCHESTER	COAL	2.3	69.0
501.0	CARBONDALE		ROCK	1.7	71.3

MAPID: 06190213000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269437 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.483845 DATE COLLECTED: 2 / 9 / 1962  
 SURFACE ELEVATION (FT.): 597.3 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B123 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.3	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
573.3	CARBONDALE		ROCK	54.0	24.0
519.3	CARBONDALE	COLCHESTER	COAL	2.3	78.0
517.0	CARBONDALE		ROCK	1.7	80.3

MAPID: 06190221000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.27873 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48761 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 595.5 LOGGED (FT.): 75.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B169 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
595.5	PLEISTOCENE		UNCONSOLIDATED	49.0	0.0
546.5	CARBONDALE		ROCK	22.0	49.0
524.5	CARBONDALE	COLCHESTER	COAL	2.4	71.0
522.1	CARBONDALE		ROCK	1.6	73.4

MAPID: 06190222000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.274087 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487522 DATE COLLECTED: 1 / 19 / 1962  
 SURFACE ELEVATION (FT.): 569.6 LOGGED (FT.): 52.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B171 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.6	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
552.6	CARBONDALE		ROCK	31.0	17.0
521.6	CARBONDALE	COLCHESTER	COAL	2.3	48.0
519.3	CARBONDALE		ROCK	1.7	50.3

MAPID: 06190223000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.26944 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487431 DATE COLLECTED: 2 / 8 / 1962  
 SURFACE ELEVATION (FT.): 593.7 LOGGED (FT.): 73.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B173 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.7	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
574.7	CARBONDALE		ROCK	50.0	19.0
524.7	CARBONDALE	COLCHESTER	COAL	2.0	69.0
522.7	CARBONDALE		ROCK	2.0	71.0

MAPID: 06190224000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264797 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487343 DATE COLLECTED: 1 / 4 / 1962  
 SURFACE ELEVATION (FT.): 595.5 LOGGED (FT.): 73.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B175 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
595.5	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0
552.5	CARBONDALE		ROCK	26.0	43.0
526.5	CARBONDALE	COLCHESTER	COAL	2.1	69.0
524.4	CARBONDALE	COLCHESTER	COAL	0.2	71.1
524.2	CARBONDALE	COLCHESTER	ROCK	1.7	71.3

MAPID: 06190232000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.278752 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49124 DATE COLLECTED: 1 / 19 / 1962  
 SURFACE ELEVATION (FT.): 602.4 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B219 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
602.4	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0
548.4	CARBONDALE		ROCK	22.0	54.0
526.4	CARBONDALE	COLCHESTER	COAL	2.3	76.0
524.1	CARBONDALE		ROCK	1.7	78.3

MAPID: 06190235000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264793 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.49091 DATE COLLECTED: 1 / 3 / 1962  
 SURFACE ELEVATION (FT.): 593.6 LOGGED (FT.): 70.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B225 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.6	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
560.6	CARBONDALE		ROCK	33.0	33.0
527.6	CARBONDALE	COLCHESTER	COAL	2.2	66.0
525.4	CARBONDALE		ROCK	1.8	68.2

MAPID: 06190310000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 60' S line, 687' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.2716 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.47685 DATE COLLECTED: 5 / 28 / 1976  
 SURFACE ELEVATION (FT.): 531.4 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B22 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.4	PLEISTOCENE		UNCONSOLIDATED	40.0	0.0
491.4	CARBONDALE		ROCK	18.0	40.0

MAPID: 06190311000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 39' S line, 662' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.267069 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476766 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 562.7 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B24 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
562.7	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0
555.7	CARBONDALE		ROCK	44.5	7.0
511.2	CARBONDALE	COLCHESTER	COAL	2.8	51.5
508.4	CARBONDALE		ROCK	3.7	54.3

MAPID: 06190312000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 287' S line, 640' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.267087 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.477451 DATE COLLECTED: 6 / 3 / 1976  
 SURFACE ELEVATION (FT.): 568.3 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B24C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
568.3	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
555.3	CARBONDALE		ROCK	43.0	13.0
512.3	CARBONDALE	COLCHESTER	COAL	2.6	56.0
509.7	CARBONDALE		ROCK	1.4	58.6

MAPID: 06190313000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 530' S line, 7' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269403 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478134 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 563.2 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B24D WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.2	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
554.2	CARBONDALE		ROCK	41.5	9.0
512.7	CARBONDALE	COLCHESTER	COAL	2.6	50.5
510.1	CARBONDALE		ROCK	4.9	53.1

MAPID: 06190314000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 20' S line, 70' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283037 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476805 DATE COLLECTED: 5 / 26 / 1976  
 SURFACE ELEVATION (FT.): 572.5 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B46Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
572.5	PLEISTOCENE		UNCONSOLIDATED	76.0	0.0
496.5	CARBONDALE		ROCK	12.0	76.0

MAPID: 06190315000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 647' S line, 695' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.271579 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.47847 DATE COLLECTED: 5 / 26 / 1976  
 SURFACE ELEVATION (FT.): 563.4 LOGGED (FT.): 63.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B47 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.4	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
530.4	CARBONDALE		ROCK	27.0	33.0
503.4	CARBONDALE	COLCHESTER	COAL	2.7	60.0
500.7	CARBONDALE		ROCK	0.3	62.7

MAPID: 06190316000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 645' N line, 15' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269481 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478479 DATE COLLECTED: 5 / 26 / 1976  
 SURFACE ELEVATION (FT.): 577.0 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B48 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.0	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0
557.0	CARBONDALE		ROCK	60.0	20.0
497.0	CARBONDALE	COLCHESTER	COAL	2.7	80.0
494.3	CARBONDALE		ROCK	5.3	82.7

MAPID: 06190317000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 8' N line, 645' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.271727 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480261 DATE COLLECTED: 5 / 27 / 1976  
 SURFACE ELEVATION (FT.): 553.4 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B72 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
553.4	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
530.4	CARBONDALE		ROCK	31.0	23.0
499.4	CARBONDALE	COLCHESTER	COAL	2.7	54.0
496.7	CARBONDALE		ROCK	11.3	56.7

MAPID: 06190318000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 655' S line, 20' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.273995 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.482115 DATE COLLECTED: 6 / 3 / 1976  
 SURFACE ELEVATION (FT.): 576.8 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B96 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
576.8	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0
523.8	CARBONDALE		ROCK	14.0	53.0
509.8	CARBONDALE	COLCHESTER	COAL	2.6	67.0
507.2	CARBONDALE		ROCK	1.4	69.6

MAPID: 06190319000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 695' N line, 15' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269487 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.481929 DATE COLLECTED: 6 / 1 / 1976  
 SURFACE ELEVATION (FT.): 569.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX B98 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.8	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0
562.8	CARBONDALE		ROCK	58.5	7.0
504.3	CARBONDALE	COLCHESTER	COAL	2.7	65.5
501.6	CARBONDALE		ROCK	9.8	68.2

MAPID: 06190467000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 40' N line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.264808 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.480102 DATE COLLECTED: 2 / 12 / 1962  
 SURFACE ELEVATION (FT.): 585.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B75 WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
585.3	PLEISTOCENE		CLAY	13.0	0.0
572.3	PLEISTOCENE		CLAY	8.0	13.0 AND GRAVEL
564.3	PLEISTOCENE		CLAY	11.0	21.0 AND GRAVEL
553.3	CARBONDALE		SANDSTONE	30.0	32.0 HARD
523.3	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.0	62.0 HARD
522.3	CARBONDALE	COLCHESTER	COAL	2.3	63.0 GOOD
520.0	CARBONDALE		UNDERCLAY	1.7	65.3



MAPID: 06190468000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.278752 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.49124 DATE COLLECTED: 1 / 19 / 1962

SURFACE ELEVATION (FT.): 602.4 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B219 WELL TYPE: Coal Test

COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
602.4	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
594.4	PLEISTOCENE		CLAY	12.0	8.0	
582.4	PLEISTOCENE		CLAY	34.0	20.0	
548.4	CARBONDALE		SANDY SHALE	9.0	54.0	SOFT
539.4	CARBONDALE		SANDY SHALE	4.0	63.0	HARD
535.4	CARBONDALE		SANDY SHALE	4.0	67.0	VERY HARD
531.4	CARBONDALE		SHALE	3.0	71.0	SOFT
528.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	74.0	
526.4	CARBONDALE	COLCHESTER	COAL	2.3	76.0	GOOD
524.1	CARBONDALE		UNDERCLAY	1.8	78.3	

MAPID: 06190471000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 13 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.274091 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.49113 DATE COLLECTED: 1 / 19 / 1962

SURFACE ELEVATION (FT.): 597.5 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE B221 WELL TYPE: Coal Test

COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
597.5	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
589.5	PLEISTOCENE		CLAY	13.0	8.0	
576.5	PLEISTOCENE		CLAY	28.0	21.0	
548.5	CARBONDALE		SANDSTONE	25.0	49.0	HARD
523.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	74.0	HARD
521.5	CARBONDALE	COLCHESTER	COAL	2.0	76.0	GOOD
519.5	CARBONDALE		UNDERCLAY	2.0	78.0	

MAPID: 06100248000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 380' N line, 580' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.300296 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.490322 DATE COLLECTED: 8 / 24 / 1964  
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 18.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 403-B WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.0	PLEISTOCENE		CLAY	8.0	0.0	
602.0	CARBONDALE		SANDSTONE	4.0	8.0	GRY
598.0	CARBONDALE		SANDY SHALE	1.5	12.0	
596.5	CARBONDALE		BLACK SHALE	1.5	13.5	
595.0	CARBONDALE	ROODHOUSE	COAL	2.5	15.0	CORRELATION UNCERTAIN
592.5	CARBONDALE		UNDERCLAY	0.5	17.5	

MAPID: 061193A0003F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: NW SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.296358 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.479536 DATE COLLECTED: 0 / 0 / 1927  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT: NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		LOESS	-		
-	CARBONDALE		CALCAREOUS SHALE	5.5		
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5		
-	CARBONDALE	COLCHESTER	COAL	2.0		

MAPID: 061193A0002F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: SE SW NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.295775 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.480898 DATE COLLECTED: 0 / 0 / 1927  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT: ELEVATION TO COAL NOTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE	SPRINGFIELD	COAL	2.0		AT 580' ELEV.
-	CARBONDALE		SANDY SHALE	-		
-			SANDY SHALE	-		
-	CARBONDALE	COLCHESTER	COAL	-		AT 520' ELEV.

MAPID: 06190183000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297528 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476812 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 588.5 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B11 WELL TYPE: Coal Test  
 COMMENT: 3

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.5	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
574.5	CARBONDALE		ROCK	59.0	14.0
515.5	CARBONDALE	COLCHESTER	COAL	2.3	73.0
513.2	CARBONDALE		ROCK	1.7	75.3

MAPID: 06190184000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292783 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476794 DATE COLLECTED: 3 / 1 / 1962  
 SURFACE ELEVATION (FT.): 609.6 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B13 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
609.6	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
584.6	CARBONDALE		ROCK	71.0	25.0
513.6	CARBONDALE	COLCHESTER	COAL	2.4	96.0
511.2	CARBONDALE		ROCK	1.6	98.4

MAPID: 06190185000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288038 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476774 DATE COLLECTED: 1 / 16 / 1962  
 SURFACE ELEVATION (FT.): 602.2 LOGGED (FT.): 96.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B15 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
602.2	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
577.2	CARBONDALE		ROCK	68.0	25.0
509.2	CARBONDALE	COLCHESTER	COAL	1.4	93.0
507.8	CARBONDALE		ROCK	1.6	94.4

MAPID: 06190192000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302292 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480462 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 605.2 LOGGED (FT.): 92.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B59 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
605.2	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0
541.2	CARBONDALE		ROCK	24.0	64.0
517.2	CARBONDALE	COLCHESTER	COAL	2.3	88.0
514.9	CARBONDALE		ROCK	1.7	90.3

MAPID: 06190193000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297555 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480447 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 598.8 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B61 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
598.8	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
580.8	CARBONDALE		ROCK	62.0	18.0
518.8	CARBONDALE	COLCHESTER	COAL	2.2	80.0
516.6	CARBONDALE		ROCK	1.8	82.2

MAPID: 06190194000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.29281 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48043 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 608.7 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B63 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.7	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0
578.7	CARBONDALE		ROCK	60.0	30.0
518.7	CARBONDALE	COLCHESTER	COAL	1.9	90.0
516.8	CARBONDALE		ROCK	1.1	91.9

MAPID: 06190195000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288065 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480415 DATE COLLECTED: 1 / 17 / 1962  
 SURFACE ELEVATION (FT.): 581.2 LOGGED (FT.): 69.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B65 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.2	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0
577.2	CARBONDALE		ROCK	62.0	4.0
515.2	CARBONDALE	COLCHESTER	COAL	1.9	66.0
513.3	CARBONDALE		ROCK	1.1	67.9

MAPID: 06190203000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 25' N line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302315 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484031 DATE COLLECTED: 3 / 16 / 1962  
 SURFACE ELEVATION (FT.): 582.1 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B109 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
582.1	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
571.1	CARBONDALE		ROCK	53.0	11.0
518.1	CARBONDALE	COLCHESTER	COAL	2.4	64.0
515.7	CARBONDALE		ROCK	0.6	66.4

MAPID: 06190205000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297578 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484085 DATE COLLECTED: 1 / 16 / 1962  
 SURFACE ELEVATION (FT.): 618.0 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B111 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
618.0	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
600.0	CARBONDALE		ROCK	85.0	18.0
515.0	CARBONDALE	COLCHESTER	COAL	2.0	103.0
513.0	CARBONDALE		ROCK	2.0	105.0

MAPID: 06190206000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292836 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484073 DATE COLLECTED: 1 / 16 / 1962  
 SURFACE ELEVATION (FT.): 607.1 LOGGED (FT.): 95.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B113 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
607.1	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
590.1	CARBONDALE		ROCK	74.0	17.0
516.1	CARBONDALE	COLCHESTER	COAL	2.3	91.0
513.8	CARBONDALE		ROCK	1.7	93.3

MAPID: 06190207000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288091 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484061 DATE COLLECTED: 1 / 16 / 1962  
 SURFACE ELEVATION (FT.): 600.3 LOGGED (FT.): 86.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B115 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.3	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
561.3	CARBONDALE		ROCK	43.0	39.0
518.3	CARBONDALE	COLCHESTER	COAL	2.2	82.0
516.1	CARBONDALE		ROCK	1.8	84.2

MAPID: 06190208000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283346 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484052 DATE COLLECTED: 1 / 31 / 1962  
 SURFACE ELEVATION (FT.): 595.6 LOGGED (FT.): 81.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B117 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
595.6	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0
554.6	CARBONDALE		ROCK	37.0	41.0
517.6	CARBONDALE	COLCHESTER	COAL	1.8	78.0
515.8	CARBONDALE		ROCK	1.2	79.8

MAPID: 06190216000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.30234 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487733 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 617.9 LOGGED (FT.): 108.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B159 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
617.9	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0
570.9	CARBONDALE		ROCK	57.0	47.0
513.9	CARBONDALE	COLCHESTER	COAL	2.3	104.0
511.6	CARBONDALE		ROCK	1.7	106.3

MAPID: 06190217000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297605 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487726 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 614.7 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B161 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
614.7	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
591.7	CARBONDALE		ROCK	70.0	23.0
521.7	CARBONDALE	COLCHESTER	COAL	2.1	93.0
519.6	CARBONDALE		ROCK	1.9	95.1

MAPID: 06190218000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292863 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487717 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 606.1 LOGGED (FT.): 89.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B163 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.1	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
573.1	CARBONDALE		ROCK	52.0	33.0
521.1	CARBONDALE	COLCHESTER	COAL	2.2	85.0
518.9	CARBONDALE		ROCK	1.8	87.2

MAPID: 06190219000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 156' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287559 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487709 DATE COLLECTED: 1 / 18 / 1962  
 SURFACE ELEVATION (FT.): 577.5 LOGGED (FT.): 59.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B165N WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.5	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0
574.5	CARBONDALE		ROCK	52.0	3.0
522.5	CARBONDALE	COLCHESTER	COAL	2.3	55.0
520.2	CARBONDALE		ROCK	1.7	57.3

MAPID: 06190220000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283376 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.487701 DATE COLLECTED: 1 / 8 / 1962  
 SURFACE ELEVATION (FT.): 592.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B167 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.8	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
553.8	CARBONDALE		ROCK	35.0	39.0
518.8	CARBONDALE	COLCHESTER	COAL	2.2	74.0
516.6	CARBONDALE		ROCK	1.8	76.2

MAPID: 06190227000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302363 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491368 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 594.9 LOGGED (FT.): 73.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B209 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.9	PLEISTOCENE		UNCONSOLIDATED	56.0	0.0
538.9	CARBONDALE		ROCK	13.0	56.0
525.9	CARBONDALE	COLCHESTER	COAL	2.2	69.0
523.7	CARBONDALE		ROCK	1.8	71.2



MAPID: 06190228000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297628 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491365 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 615.9 LOGGED (FT.): 95.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B211 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
615.9	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
592.9	CARBONDALE		ROCK	68.0	23.0
524.9	CARBONDALE	COLCHESTER	COAL	2.3	91.0
522.6	CARBONDALE		ROCK	1.7	93.3

MAPID: 06190231000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 14 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283403 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491353 DATE COLLECTED: 1 / 8 / 1962  
 SURFACE ELEVATION (FT.): 594.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B217 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.8	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
570.8	CARBONDALE		ROCK	50.0	24.0
520.8	CARBONDALE	COLCHESTER	COAL	2.1	74.0
518.7	CARBONDALE		ROCK	1.9	76.1

**MAPID:** 06190469000C    **VERSION:** 1    **PROJECT:** NCRDS02  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 14    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of SE NE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.283376    **GEOLOGIST:** STRAAYER  
**CONFIDENTIAL:** N    **LATITUDE:** 39.487701    **DATE COLLECTED:** 1 / 8 / 1962  
**SURFACE ELEVATION (FT.):** 592.8    **LOGGED (FT.):** 78.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    B167    **WELL TYPE:** Coal Test  
**COMMENT:** BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
592.8	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0	
583.8	PLEISTOCENE		CLAY	11.0	9.0	
572.8	PLEISTOCENE		CLAY	19.0	20.0	
553.8	CARBONDALE		SANDY SHALE	31.0	39.0	
522.8	CARBONDALE		SHALE	2.0	70.0	SOFT
520.8	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	72.0	
518.8	CARBONDALE	COLCHESTER	COAL	2.2	74.0	GOOD
516.6	CARBONDALE		UNDERCLAY	1.8	76.2	

**MAPID:** 061193A0004F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 15    **QUARTERS/FOOTAGES:** SE SW NE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.308127    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.485071    **DATE COLLECTED:** 0 / 0 / 1928  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 43.5    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Outcrop  
**COMMENT:** ELEVATION TO COAL NOTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0	
-	CARBONDALE		SANDSTONE	15.0	17.0	
-	CARBONDALE		SHALE	0.8	32.0	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	32.8	
-	CARBONDALE	COLCHESTER	COAL	2.7	34.8	APPROXIMATE ELEVATION: 839'
-	SPOON		UNDERCLAY	6.0	37.5	

**MAPID:** 06190179000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 15    **QUARTERS/FOOTAGES:** 1' S line, 1' E line of SW SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.316216    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.477039    **DATE COLLECTED:** 2 / 1 / 1961  
**SURFACE ELEVATION (FT.):** 611.4    **LOGGED (FT.):** 107.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    B3    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
611.4	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0	

MAPID: 0619018000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311567 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.47697 DATE COLLECTED: 2 / 1 / 1961  
 SURFACE ELEVATION (FT.): 605.5 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B5 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
605.5	PLEISTOCENE		UNCONSOLIDATED	95.0	0.0
510.5	CARBONDALE		ROCK	12.0	95.0

MAPID: 06190181000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' S line, 400' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.305493 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476879 DATE COLLECTED: 3 / 1 / 1962  
 SURFACE ELEVATION (FT.): 518.8 LOGGED (FT.): 13.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B7P WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
518.8	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0
508.8	CARBONDALE		ROCK	1.0	10.0
507.8	CARBONDALE	COLCHESTER	COAL	1.0	11.0
506.8	CARBONDALE		ROCK	1.0	12.0

MAPID: 06190182000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302272 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.476832 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 588.8 LOGGED (FT.): 83.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B9 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.8	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
556.8	CARBONDALE		ROCK	47.0	32.0
509.8	CARBONDALE	COLCHESTER	COAL	2.1	79.0
507.7	CARBONDALE		ROCK	1.9	81.1

MAPID: 06190189000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.31623 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480642 DATE COLLECTED: 2 / 1 / 1962  
 SURFACE ELEVATION (FT.): 615.3 LOGGED (FT.): 116.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B53 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
615.3	PLEISTOCENE		UNCONSOLIDATED	103.0	0.0
512.3	CARBONDALE		ROCK	13.0	103.0

MAPID: 06190190000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311587 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480583 DATE COLLECTED: 2 / 1 / 1962  
 SURFACE ELEVATION (FT.): 615.8 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B55 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
615.8	PLEISTOCENE		UNCONSOLIDATED	96.0	0.0
519.8	CARBONDALE		ROCK	11.0	96.0

MAPID: 06190191000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 150' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306404 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480514 DATE COLLECTED: 3 / 1 / 1962  
 SURFACE ELEVATION (FT.): 579.0 LOGGED (FT.): 15.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B57N WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
570.0	CARBONDALE		ROCK	2.0	9.0
568.0	CARBONDALE	COLCHESTER	COAL	2.3	11.0
565.7	CARBONDALE		ROCK	1.7	13.3

MAPID: 0619020000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316246 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48425 DATE COLLECTED: 2 / 15 / 1962  
 SURFACE ELEVATION (FT.): 615.3 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B103 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
615.3	PLEISTOCENE		UNCONSOLIDATED	104.0	0.0
511.3	CARBONDALE		ROCK	3.0	104.0

MAPID: 06190201000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311604 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484199 DATE COLLECTED: 1 / 31 / 1961  
 SURFACE ELEVATION (FT.): 621.4 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B105 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
621.4	PLEISTOCENE		UNCONSOLIDATED	82.0	0.0
539.4	CARBONDALE		ROCK	11.0	82.0
528.4	CARBONDALE	COLCHESTER	COAL	1.8	93.0
526.6	CARBONDALE	COLCHESTER	COAL	0.4	94.8
526.2	CARBONDALE		ROCK	1.8	95.2

MAPID: 06190202000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306965 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484148 DATE COLLECTED: 2 / 28 / 1962  
 SURFACE ELEVATION (FT.): 581.6 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B107 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.6	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0
544.6	CARBONDALE		ROCK	19.0	37.0
525.6	CARBONDALE	COLCHESTER	COAL	2.2	56.0
523.4	CARBONDALE		ROCK	1.8	58.2

MAPID: 06190214000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320892 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4879 DATE COLLECTED: 1 / 31 / 1962  
 SURFACE ELEVATION (FT.): 627.6 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B151 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
627.6	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0
569.6	CARBONDALE		ROCK	36.0	58.0
533.6	CARBONDALE	COLCHESTER	COAL	2.2	94.0
531.4	CARBONDALE		ROCK	1.8	96.2

MAPID: 06190215000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.31626 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.48786 DATE COLLECTED: 1 / 31 / 1962  
 SURFACE ELEVATION (FT.): 620.0 LOGGED (FT.): 111.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B153 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
620.0	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0
513.0	CARBONDALE		ROCK	4.0	107.0

MAPID: 06190225000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320905 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491499 DATE COLLECTED: 1 / 31 / 1962  
 SURFACE ELEVATION (FT.): 631.5 LOGGED (FT.): 108.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B201 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
631.5	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0
571.5	CARBONDALE		ROCK	44.0	60.0
527.5	CARBONDALE	COLCHESTER	COAL	2.2	104.0
525.3	CARBONDALE		ROCK	1.8	106.2

MAPID: 06190226000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 15 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316277 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.491468 DATE COLLECTED: 1 / 31 / 1962  
 SURFACE ELEVATION (FT.): 627.5 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B203 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
627.5	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190172000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 330' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330273 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.478023 DATE COLLECTED: 2 / 16 / 1962  
 SURFACE ELEVATION (FT.): 621.8 LOGGED (FT.): 96.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A21C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
621.8	PLEISTOCENE		UNCONSOLIDATED	79.0	0.0
542.8	CARBONDALE		ROCK	13.0	79.0
529.8	CARBONDALE	COLCHESTER	COAL	2.3	92.0
527.5	CARBONDALE		ROCK	1.7	94.3

MAPID: 06190173000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339727 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480725 DATE COLLECTED: 3 / 5 / 1962  
 SURFACE ELEVATION (FT.): 627.2 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A67 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
627.2	PLEISTOCENE		UNCONSOLIDATED	55.0	0.0
572.2	CARBONDALE		ROCK	22.0	55.0
550.2	CARBONDALE	COLCHESTER	COAL	1.6	77.0
548.6	CARBONDALE		ROCK	1.4	78.6

MAPID: 06190174000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335017 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.480719 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 627.5 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A69 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
627.5	PLEISTOCENE		UNCONSOLIDATED	56.0	0.0
571.5	CARBONDALE		ROCK	11.0	56.0

MAPID: 06190175000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330347 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484319 DATE COLLECTED: 2 / 15 / 1962  
 SURFACE ELEVATION (FT.): 621.1 LOGGED (FT.): 90.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A121 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
621.1	PLEISTOCENE		UNCONSOLIDATED	85.0	0.0
536.1	CARBONDALE		ROCK	1.0	85.0
535.1	CARBONDALE		ROCK	2.4	86.0
532.7	CARBONDALE		ROCK	1.6	88.4

MAPID: 06190176000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325616 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484311 DATE COLLECTED: 2 / 15 / 1962  
 SURFACE ELEVATION (FT.): 625.3 LOGGED (FT.): 95.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE A123 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
625.3	PLEISTOCENE		UNCONSOLIDATED	68.0	0.0
557.3	CARBONDALE		ROCK	24.0	68.0
533.3	CARBONDALE	COLCHESTER	COAL	1.7	92.0
531.6	CARBONDALE		ROCK	1.3	93.7



MAPID: 06190199000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 16 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320889 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.484303 DATE COLLECTED: 2 / 15 / 1962  
 SURFACE ELEVATION (FT.): 619.9 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE B101 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
619.9	PLEISTOCENE		UNCONSOLIDATED	101.0	0.0
518.9	CARBONDALE		ROCK	6.0	101.0

MAPID: 06100200000C VERSION: 1

PROJECT: NCRDS87

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 18 QUARTERS/FOOTAGES: SE NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.371579 GEOLOGIST: WEIBEL  
 CONFIDENTIAL: N LATITUDE: 39.481839 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 639.0 LOGGED (FT.): 115.0 LOG TYPE: Drillers Log  
 SOURCE: ROADHOUSE SHAFT WELL TYPE: Mine Shaft  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
639.0			UNCONSOLIDATED	60.0	0.0
579.0	CARBONDALE		SANDSTONE	25.0	60.0
554.0	CARBONDALE		SHALE	20.0	85.0
534.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	105.0
532.0	CARBONDALE	COLCHESTER	COAL	2.0	107.0
530.0	CARBONDALE		UNDERCLAY	4.0	109.0
526.0	CARBONDALE		LIMESTONE	2.0	113.0

MAPID: 06190138000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 19 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.358463 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473362 DATE COLLECTED: 1 / 11 / 1962  
 SURFACE ELEVATION (FT.): 639.0 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H559 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
639.0	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
605.0	CARBONDALE		ROCK	6.0	34.0
599.0	CARBONDALE	ROODHOUSE	COAL	1.9	40.0
597.1	CARBONDALE		ROCK	41.6	41.9
555.5	CARBONDALE	COLCHESTER	COAL	2.3	83.5
553.2	CARBONDALE		ROCK	1.2	85.8

MAPID: 06100249000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1320' N line, 2640' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349106 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.473397 DATE COLLECTED: 8 / 20 / 1964  
 SURFACE ELEVATION (FT.): 625.0 LOGGED (FT.): 93.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 13-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
625.0	PLEISTOCENE		CLAY & GRAVEL	39.0	0.0	
586.0	CARBONDALE		SHALE	4.0	39.0	SOFT; DRK
582.0	CARBONDALE	ROODHOUSE	COAL	2.4	43.0	SOFT TO SMUTTY AT TOP 0.5
579.6	CARBONDALE		UNDERCLAY	0.3	45.4	
579.3	CARBONDALE		SHALE/COAL	4.0	45.7	
575.3	CARBONDALE		UNDERCLAY	2.8	49.7	
572.5	CARBONDALE		SANDSTONE	10.0	52.5	
562.5	CARBONDALE		SANDY SHALE	21.5	62.5	
541.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	84.0	
539.0	CARBONDALE	COLCHESTER	COAL	2.5	86.0	
536.5	SPOON		UNDERCLAY	4.5	88.5	
532.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	93.0	

MAPID: 06190120000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' S line, 1' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349246 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462539 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 612.9 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H413 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
612.9	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
584.9	CARBONDALE		ROCK	37.0	28.0	
547.9	CARBONDALE	COLCHESTER	COAL	1.8	65.0	
546.1	CARBONDALE		ROCK	1.2	66.8	

MAPID: 06190121000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' S line, 1' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344545 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462528 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 599.6 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H415 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
599.6	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
574.6	CARBONDALE		ROCK	39.0	25.0
535.6	CARBONDALE	COLCHESTER	COAL	1.8	64.0
533.8	CARBONDALE		ROCK	1.2	65.8

MAPID: 06190122000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' S line, 100' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.3402 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462521 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 546.9 LOGGED (FT.): 15.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H416PB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.9	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
541.9	CARBONDALE		ROCK	6.0	5.0
535.9	CARBONDALE	COLCHESTER	COAL	2.4	11.0
533.5	CARBONDALE		ROCK	1.6	13.4

MAPID: 06190127000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.353898 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466157 DATE COLLECTED: 2 / 20 / 1962  
 SURFACE ELEVATION (FT.): 621.9 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H461 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
621.9	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
595.9	CARBONDALE		ROCK	48.0	26.0
547.9	CARBONDALE	COLCHESTER	COAL	1.4	74.0
546.5	CARBONDALE		ROCK	1.6	75.4

MAPID: 06190128000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349197 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466161 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 623.3 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H463 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
623.3	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
599.3	CARBONDALE		ROCK	53.0	24.0
546.3	CARBONDALE	COLCHESTER	COAL	1.9	77.0
544.4	CARBONDALE		ROCK	1.1	78.9

MAPID: 06190129000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 65' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344264 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466161 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 593.0 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H465Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.0	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
574.0	CARBONDALE		ROCK	31.0	19.0
543.0	CARBONDALE	COLCHESTER	COAL	2.3	50.0
540.7	CARBONDALE		ROCK	1.7	52.3

MAPID: 06190130000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339802 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466165 DATE COLLECTED: 2 / 14 / 1962  
 SURFACE ELEVATION (FT.): 608.3 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H467 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.3	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0
545.3	CARBONDALE		ROCK	11.0	63.0
534.3	CARBONDALE	COLCHESTER	COAL	2.3	74.0
532.0	CARBONDALE		ROCK	1.7	76.3

MAPID: 06190132000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.353835 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469779 DATE COLLECTED: 2 / 20 / 1962  
 SURFACE ELEVATION (FT.): 630.6 LOGGED (FT.): 91.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H511 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
630.6	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
606.6	CARBONDALE		ROCK	65.0	24.0
541.6	CARBONDALE	COLCHESTER	COAL	1.0	89.0
540.6	CARBONDALE		ROCK	1.0	90.0

MAPID: 06190133000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349141 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469786 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 621.9 LOGGED (FT.): 81.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H513 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
621.9	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
597.9	CARBONDALE		ROCK	53.0	24.0
544.9	CARBONDALE	COLCHESTER	COAL	2.2	77.0
542.7	CARBONDALE		ROCK	1.8	79.2

MAPID: 06190134000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339757 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469815 DATE COLLECTED: 2 / 14 / 1962  
 SURFACE ELEVATION (FT.): 608.8 LOGGED (FT.): 75.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H517 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.8	PLEISTOCENE		UNCONSOLIDATED	58.0	0.0
550.8	CARBONDALE		ROCK	14.0	58.0
536.8	CARBONDALE	COLCHESTER	COAL	1.7	72.0
535.1	CARBONDALE		ROCK	1.3	73.7

MAPID: 06190137000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 825' S line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339727 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.472092 DATE COLLECTED: 3 / 5 / 1962  
 SURFACE ELEVATION (FT.): 601.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H542J WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
601.3	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0
570.3	CARBONDALE		ROCK	32.0	31.0
538.3	CARBONDALE	COLCHESTER	COAL	2.4	63.0
535.9	CARBONDALE		ROCK	1.6	65.4

MAPID: 06190139000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.353776 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473388 DATE COLLECTED: 1 / 11 / 1962  
 SURFACE ELEVATION (FT.): 637.6 LOGGED (FT.): 90.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H561 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
637.6	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
604.6	CARBONDALE		ROCK	54.0	33.0
550.6	CARBONDALE	COLCHESTER	COAL	2.0	87.0
548.6	CARBONDALE		ROCK	1.0	89.0

MAPID: 06190140000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349085 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473414 DATE COLLECTED: 1 / 11 / 1962  
 SURFACE ELEVATION (FT.): 627.6 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H563 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
627.6	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
585.6	CARBONDALE		ROCK	42.0	42.0
543.6	CARBONDALE	COLCHESTER	COAL	1.9	84.0
541.7	CARBONDALE		ROCK	1.1	85.9

MAPID: 06190141000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344398 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473439 DATE COLLECTED: 3 / 16 / 1962  
 SURFACE ELEVATION (FT.): 622.7 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H565 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
622.7	PLEISTOCENE		UNCONSOLIDATED	49.0	0.0
573.7	CARBONDALE		ROCK	29.0	49.0
544.7	CARBONDALE	COLCHESTER	COAL	2.3	78.0
542.4	CARBONDALE		ROCK	1.7	80.3

MAPID: 06190145000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339662 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.477114 DATE COLLECTED: 2 / 14 / 1962  
 SURFACE ELEVATION (FT.): 604.3 LOGGED (FT.): 61.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H617 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
604.3	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
581.3	CARBONDALE		ROCK	34.0	23.0
547.3	CARBONDALE	COLCHESTER	COAL	2.4	57.0
544.9	CARBONDALE		ROCK	1.6	59.4

MAPID: 06190163000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 20 QUARTERS/FOOTAGES: 150' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344453 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469389 DATE COLLECTED: 2 / 20 / 1962  
 SURFACE ELEVATION (FT.): 610.2 LOGGED (FT.): 73.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H490D WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.2	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
568.2	CARBONDALE		ROCK	27.0	42.0
541.2	CARBONDALE	COLCHESTER	COAL	2.4	69.0
538.8	CARBONDALE		ROCK	1.6	71.4

MAPID: 06100003000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1520' N line, 780' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.336934 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.472918 DATE COLLECTED: 6 / 18 / 1928  
 SURFACE ELEVATION (FT.): 582.0 LOGGED (FT.): 40.8 LOG TYPE: Drillers Log  
 SOURCE: G. H. CADY WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
582.0	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
576.0	CARBONDALE		COAL	1.5	6.0	
574.5	CARBONDALE		UNDERCLAY	1.0	7.5	
573.5	CARBONDALE	ROODHOUSE	COAL	9.5	8.5	
564.0	CARBONDALE		SHALE	16.6	18.0	LOG THICKNESS CHANGED
547.4	CARBONDALE		BLACK SHALE	0.9	34.6	
546.5	CARBONDALE	COLCHESTER	COAL	2.4	35.5	
544.1	SPOON		UNDERCLAY	2.8	37.9	

MAPID: 061193A0005F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: NW NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.33849 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.476203 DATE COLLECTED: 8 / 12 / 1927  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Mine Shaft  
 COMMENT: WHITE HEAD MINE; NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			LIMESTONE	-		
-			SHALE & SANDSTONE	-		
-			DARK SHALE	1.0		
-			COAL	2.0		"UPPER COAL"
-			UNDERCLAY	0.5		
-			COAL	5.5		"BLOCK COAL" (ABOVE NO. 2)



**MAPID:** 061193A0006F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 21    **QUARTERS/FOOTAGES:** SW SW SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.338644    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.463424    **DATE COLLECTED:** 0 / 0 / 1927  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES - ISRAEL'S MINE    **WELL TYPE:** Mine Shaft  
**COMMENT:** NO DEPTHS; OTHER MINES IN THIS SECTION

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	PLEISTOCENE		UNCONSOLIDATED	-	
-			SANDSTONE	-	
-	CARBONDALE		SHALE	15.0	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	
-	CARBONDALE	COLCHESTER	COAL	2.7	

**MAPID:** 06190131000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 21    **QUARTERS/FOOTAGES:** 100' N line, 1' E line of NE SE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.320841    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.469485    **DATE COLLECTED:** 3 / 2 / 1962  
**SURFACE ELEVATION (FT.):** 558.5    **LOGGED (FT.):** 47.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    H500DC    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.5	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0

**MAPID:** 06190135000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 21    **QUARTERS/FOOTAGES:** 1' N line, 1' E line of NE SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.330297    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.469785    **DATE COLLECTED:** 3 / 1 / 1962  
**SURFACE ELEVATION (FT.):** 558.7    **LOGGED (FT.):** 57.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    H521    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.7	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
523.7	CARBONDALE		ROCK	22.0	35.0

MAPID: 06190136000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32557 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469772 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 600.8 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H523 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.8	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0
536.8	CARBONDALE		ROCK	10.0	64.0
526.8	CARBONDALE	COLCHESTER	COAL	2.3	74.0
524.5	CARBONDALE		ROCK	1.7	76.3

MAPID: 06190142000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330279 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473446 DATE COLLECTED: 3 / 1 / 1962  
 SURFACE ELEVATION (FT.): 613.8 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H571 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
613.8	PLEISTOCENE		UNCONSOLIDATED	102.0	0.0
511.8	CARBONDALE		ROCK	5.0	102.0

MAPID: 06190143000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330279 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473446 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 598.8 LOGGED (FT.): 74.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H573 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
598.8	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
571.8	CARBONDALE		ROCK	43.0	27.0
528.8	CARBONDALE	COLCHESTER	COAL	2.2	70.0
526.6	CARBONDALE		ROCK	1.8	72.2

MAPID: 06190144000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320851 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473429 DATE COLLECTED: 3 / 2 / 1962  
 SURFACE ELEVATION (FT.): 603.7 LOGGED (FT.): 80.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H575 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
603.7	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0

MAPID: 06190146000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.33496 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.477112 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 615.8 LOGGED (FT.): 85.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H619 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
615.8	PLEISTOCENE		UNCONSOLIDATED	60.0	0.0
555.8	CARBONDALE		ROCK	21.0	60.0
534.8	CARBONDALE	COLCHESTER	COAL	2.1	81.0
532.7	CARBONDALE		ROCK	1.9	83.1

MAPID: 06190147000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330262 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.477109 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 617.2 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H621 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
617.2	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0
552.2	CARBONDALE		ROCK	31.0	65.0
521.2	CARBONDALE	COLCHESTER	COAL	2.2	96.0
519.0	CARBONDALE		ROCK	1.8	98.2

MAPID: 06190148000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325564 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.477107 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 614.2 LOGGED (FT.): 93.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H623 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
614.2	PLEISTOCENE		UNCONSOLIDATED	55.0	0.0
559.2	CARBONDALE		ROCK	34.0	55.0
525.2	CARBONDALE	COLCHESTER	COAL	2.3	89.0
522.9	CARBONDALE		ROCK	1.7	91.3

MAPID: 06190160000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' S line, 570' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.337085 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.46616 DATE COLLECTED: 5 / 20 / 1976  
 SURFACE ELEVATION (FT.): 595.3 LOGGED (FT.): 108.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H468Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
595.3	PLEISTOCENE		UNCONSOLIDATED	71.0	0.0
524.3	CARBONDALE		ROCK	37.0	71.0

MAPID: 06190161000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335058 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466149 DATE COLLECTED: 5 / 19 / 1976  
 SURFACE ELEVATION (FT.): 592.5 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H469 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.5	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0
525.5	CARBONDALE		ROCK	31.0	67.0

MAPID: 06190162000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325573 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466111 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 593.2 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H473 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.2	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0

MAPID: 06190164000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 660' N line, 30' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339667 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467993 DATE COLLECTED: 5 / 20 / 1976  
 SURFACE ELEVATION (FT.): 604.7 LOGGED (FT.): 78.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H492 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
604.7	PLEISTOCENE		UNCONSOLIDATED	69.0	0.0
535.7	CARBONDALE		ROCK	1.5	69.0
534.2	CARBONDALE	COLCHESTER	COAL	2.2	70.5
532.0	CARBONDALE		ROCK	5.3	72.7

MAPID: 06190165000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 660' S line, 660' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.337388 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467979 DATE COLLECTED: 5 / 19 / 1976  
 SURFACE ELEVATION (FT.): 596.5 LOGGED (FT.): 148.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H493 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
596.5	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0
558.5	CARBONDALE		ROCK	26.0	38.0
532.5	CARBONDALE	COLCHESTER	COAL	2.3	64.0
530.2	CARBONDALE		ROCK	81.7	66.3

MAPID: 06190166000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 610' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330305 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.468104 DATE COLLECTED: 5 / 19 / 1976  
 SURFACE ELEVATION (FT.): 601.3 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H494 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
601.3	PLEISTOCENE		UNCONSOLIDATED	69.0	0.0
532.3	CARBONDALE		ROCK	2.0	69.0
530.3	CARBONDALE	COLCHESTER	COAL	2.0	71.0
528.3	CARBONDALE		ROCK	15.0	73.0

MAPID: 06190167000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 660' N line, 660' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.33269 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467974 DATE COLLECTED: 5 / 19 / 1976  
 SURFACE ELEVATION (FT.): 606.0 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H495 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.0	PLEISTOCENE		UNCONSOLIDATED	63.0	0.0
543.0	CARBONDALE		ROCK	15.0	63.0
528.0	CARBONDALE	COLCHESTER	COAL	2.2	78.0
525.8	CARBONDALE		ROCK	7.8	80.2

MAPID: 06190168000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 660' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330307 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467966 DATE COLLECTED: 5 / 18 / 1976  
 SURFACE ELEVATION (FT.): 592.0 LOGGED (FT.): 108.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H496 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.0	PLEISTOCENE		UNCONSOLIDATED	78.0	0.0
514.0	CARBONDALE		ROCK	30.0	78.0

MAPID: 06190169000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 10' N line, 660' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.337402 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469782 DATE COLLECTED: 5 / 18 / 1976  
 SURFACE ELEVATION (FT.): 609.8 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H518 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
609.8	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0
552.8	CARBONDALE		ROCK	33.0	57.0
519.8	CARBONDALE	COLCHESTER	COAL	2.2	90.0
517.6	CARBONDALE		ROCK	5.8	92.2

MAPID: 06190170000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330297 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469785 DATE COLLECTED: 5 / 18 / 1976  
 SURFACE ELEVATION (FT.): 612.6 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H519 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
612.6	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0
545.6	CARBONDALE		ROCK	26.0	67.0
519.6	CARBONDALE	COLCHESTER	COAL	2.3	93.0
517.3	CARBONDALE		ROCK	2.7	95.3

MAPID: 06190171000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 660' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.332672 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469793 DATE COLLECTED: 5 / 18 / 1976  
 SURFACE ELEVATION (FT.): 610.5 LOGGED (FT.): 98.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H520 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
610.5	PLEISTOCENE		UNCONSOLIDATED	54.0	0.0
556.5	CARBONDALE		ROCK	30.0	54.0
526.5	CARBONDALE	COLCHESTER	COAL	2.2	84.0
524.3	CARBONDALE		ROCK	11.8	86.2

MAPID: 06190477000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of SE NE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320851 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.473429 DATE COLLECTED: 3 / 2 / 1962

SURFACE ELEVATION (FT.): 603.7 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE H575 WELL TYPE: Coal Test

COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
603.7	PLEISTOCENE		UNCONSOLIDATED	10.0	0.0	
593.7	PLEISTOCENE		CLAY	17.0	10.0	
576.7	PLEISTOCENE		SAND & GRAVEL	80.0	27.0	

MAPID: 06190478000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 21 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330262 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.477109 DATE COLLECTED: 1 / 13 / 1962

SURFACE ELEVATION (FT.): 617.2 LOGGED (FT.): 100.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE H621 WELL TYPE: Coal Test

COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
617.2	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
610.2	PLEISTOCENE		CLAY	12.0	7.0	
598.2	PLEISTOCENE		CLAY	46.0	19.0	
552.2	CARBONDALE		SHALE	29.0	65.0	SOFT
523.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	94.0	
521.2	CARBONDALE	COLCHESTER	COAL	2.2	96.0	GOOD
519.0	CARBONDALE		UNDERCLAY	1.8	98.2	



**MAPID:** 06100142000C    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 22    **QUARTERS/FOOTAGES:** NE NE SE SE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.302777    **GEOLOGIST:** C KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.465538    **DATE COLLECTED:** 0 / 0 / 1955  
**SURFACE ELEVATION (FT.):** 598.0    **LOGGED (FT.):** 84.0    **LOG TYPE:** Drillers Log  
**SOURCE:** ALUMINUM CO. OF AMERICA    10    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
598.0	PLEISTOCENE		CLAY	31.0	0.0	
567.0	CARBONDALE		ARGILACEOUS SHALE	25.0	31.0	W/GRAVEL
542.0	CARBONDALE		SANDSTONE	22.8	56.0	
519.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.1	78.8	
517.1	CARBONDALE	COLCHESTER	COAL	2.3	80.9	
514.8	SPOON		UNDERCLAY	0.8	83.2	

**MAPID:** 061193A0007F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 22    **QUARTERS/FOOTAGES:** NE NW NW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.31737    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.476137    **DATE COLLECTED:** 0 / 0 / 1927  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Outcrop  
**COMMENT:** NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			SANDSTONE	33.0		
-			LIMESTONE	6.0		
-			CLAYSTONE & SILTSTONE	5.0		
-			SANDSTONE	35.0		
-			LIMESTONE	0.5		
-			SHALE	1.5		
-	CARBONDALE	COLCHESTER	COAL	2.5		

**MAPID:** 06190417000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 22    **QUARTERS/FOOTAGES:** 1' N line, 1' W line of SW SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.320822    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.466087    **DATE COLLECTED:** 3 / 5 / 1962  
**SURFACE ELEVATION (FT.):** 602.0    **LOGGED (FT.):** 97.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    G451    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
602.0	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0	

MAPID: 06190418000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 22 QUARTERS/FOOTAGES: 30' S line, 1' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316165 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.466147 DATE COLLECTED: 3 / 2 / 1962  
 SURFACE ELEVATION (FT.): 595.9 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G453 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
595.9	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190428000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 22 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316188 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469719 DATE COLLECTED: 3 / 2 / 1962  
 SURFACE ELEVATION (FT.): 600.0 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G503 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.0	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0

MAPID: 06190430000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 22 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.31155 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473326 DATE COLLECTED: 2 / 1 / 1962  
 SURFACE ELEVATION (FT.): 606.2 LOGGED (FT.): 117.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G555 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
606.2	PLEISTOCENE		UNCONSOLIDATED	96.0	0.0
510.2	CARBONDALE		ROCK	21.0	96.0

MAPID: 06100252000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1980' N line, 1320' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287984 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.471306 DATE COLLECTED: 8 / 12 / 1964

SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 91.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 2-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		CLAY	21.0	0.0	
569.0	CARBONDALE		SANDSTONE	5.0	21.0	BRN
564.0	CARBONDALE		SANDSTONE	52.0	26.0	GRY
512.0	CARBONDALE		GRAY SHALE	5.0	78.0	
507.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	83.0	
503.0	CARBONDALE	COLCHESTER	COAL	2.4	87.0	
500.6	SPOON		UNDERCLAY	2.1	89.4	
498.5	SPOON	SEAHORNE LS	LIMESTONE	0.0	91.5	

MAPID: 06100253000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1980' S line, 1320' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287977 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.467811 DATE COLLECTED: 8 / 12 / 1964

SURFACE ELEVATION (FT.): 581.0 LOGGED (FT.): 53.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 1-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
581.0	PLEISTOCENE		CLAY	2.0	0.0	
579.0	CARBONDALE		SANDSTONE	5.0	2.0	
574.0	CARBONDALE		GRAY SHALE	4.0	7.0	
570.0	CARBONDALE		SANDSTONE	6.0	11.0	
564.0	CARBONDALE		GRAY SHALE	29.0	17.0	
535.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	46.0	
531.5	CARBONDALE	COLCHESTER	COAL	2.5	49.5	
529.0	SPOON		UNDERCLAY	1.5	52.0	
527.5	SPOON	SEAHORNE LS	LIMESTONE	0.0	53.5	

**MAPID:** 06100254000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 23    **QUARTERS/FOOTAGES:** 2640' N line, 1980' W line  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.295169    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.469512    **DATE COLLECTED:** 8 / 17 / 1964  
**SURFACE ELEVATION (FT.):** 541.0    **LOGGED (FT.):** 46.5    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    5-C    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.0	PLEISTOCENE		CLAY	21.0	0.0
520.0	CARBONDALE		GRAY SHALE	9.0	21.0
511.0	CARBONDALE		SANDSTONE	5.0	30.0
506.0	CARBONDALE		SANDY SHALE	2.0	35.0
504.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	37.0
502.0	CARBONDALE	COLCHESTER	COAL	2.5	39.0
499.5	SPOON		UNDERCLAY	4.5	41.5
495.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	46.0

**MAPID:** 061193A0008F    **VERSION:** 1    **PROJECT:** AVAIL  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 23    **QUARTERS/FOOTAGES:** SW NE SW SE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.289775    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.464605    **DATE COLLECTED:** 0 / 0 / 1930  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 0.0    **LOG TYPE:** Measured section  
**SOURCE:** FIELD NOTES    **WELL TYPE:** Outcrop  
**COMMENT:** NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.8	
-	CARBONDALE	COLCHESTER	COAL	2.9	

**MAPID:** 06190403000C    **VERSION:** 1    **PROJECT:** AMAX DATA  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 23    **QUARTERS/FOOTAGES:** 1' S line, 1' W line of SW SW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.302168    **GEOLOGIST:** LAWSON  
**CONFIDENTIAL:** N    **LATITUDE:** 39.462373    **DATE COLLECTED:** 1 / 25 / 1962  
**SURFACE ELEVATION (FT.):** 594.0    **LOGGED (FT.):** 81.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    G409    **WELL TYPE:** Coal Test  
**COMMENT:** ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.0	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
558.0	CARBONDALE		ROCK	41.0	36.0
517.0	CARBONDALE	COLCHESTER	COAL	2.3	77.0
514.7	CARBONDALE	COLCHESTER	COAL	0.3	79.3
514.4	CARBONDALE		ROCK	1.4	79.6

MAPID: 06190404000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299796 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.46237 DATE COLLECTED: 9 / 10 / 1962  
 SURFACE ELEVATION (FT.): 573.7 LOGGED (FT.): 62.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G410 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.7	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
561.7	CARBONDALE		ROCK	46.0	12.0
515.7	CARBONDALE	COLCHESTER	COAL	2.5	58.0
513.2	CARBONDALE		ROCK	1.5	60.5

MAPID: 06190405000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297449 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462367 DATE COLLECTED: 1 / 25 / 1962  
 SURFACE ELEVATION (FT.): 567.6 LOGGED (FT.): 56.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G411 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
567.6	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
548.6	CARBONDALE		ROCK	33.0	19.0
515.6	CARBONDALE	COLCHESTER	COAL	1.9	52.0
513.7	CARBONDALE	COLCHESTER	COAL	0.3	53.9
513.4	CARBONDALE		ROCK	1.8	54.2

MAPID: 06190406000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 660' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.29507 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462361 DATE COLLECTED: 9 / 10 / 1962  
 SURFACE ELEVATION (FT.): 579.6 LOGGED (FT.): 69.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G412 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.6	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0
541.6	CARBONDALE		ROCK	27.0	38.0
514.6	CARBONDALE	COLCHESTER	COAL	2.3	65.0
512.3	CARBONDALE		ROCK	1.7	67.3

MAPID: 06190407000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292723 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462357 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 584.9 LOGGED (FT.): 76.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G413 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.9	PLEISTOCENE		UNCONSOLIDATED	45.0	0.0
539.9	CARBONDALE		ROCK	28.0	45.0
511.9	CARBONDALE	COLCHESTER	COAL	1.9	73.0
510.0	CARBONDALE		ROCK	1.1	74.9

MAPID: 06190408000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 540' S line, 500' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.290945 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.463841 DATE COLLECTED: 9 / 13 / 1962  
 SURFACE ELEVATION (FT.): 576.3 LOGGED (FT.): 66.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G413G WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
576.3	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0
554.3	CARBONDALE		ROCK	40.0	22.0
514.3	CARBONDALE	COLCHESTER	COAL	2.5	62.0
511.8	CARBONDALE		ROCK	1.5	64.5

MAPID: 06190409000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287997 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462348 DATE COLLECTED: 2 / 26 / 1962  
 SURFACE ELEVATION (FT.): 581.9 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G415 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.9	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0
550.9	CARBONDALE		ROCK	42.0	31.0
508.9	CARBONDALE	COLCHESTER	COAL	2.3	73.0
506.6	CARBONDALE		ROCK	1.7	75.3

MAPID: 06190410000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283272 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462341 DATE COLLECTED: 2 / 26 / 1962  
 SURFACE ELEVATION (FT.): 507.4 LOGGED (FT.): 17.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G417 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
507.4	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
493.4	CARBONDALE		ROCK	3.0	14.0

MAPID: 06190412000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 660' S line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302182 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.464192 DATE COLLECTED: 9 / 7 / 1962  
 SURFACE ELEVATION (FT.): 592.2 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G434 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.2	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0
563.2	CARBONDALE		ROCK	54.0	29.0
509.2	CARBONDALE	COLCHESTER	COAL	2.4	83.0
506.8	CARBONDALE		ROCK	1.6	85.4

MAPID: 06190413000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 660' S line, 660' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299835 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.464189 DATE COLLECTED: 9 / 12 / 1962  
 SURFACE ELEVATION (FT.): 586.6 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G435 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
586.6	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
559.6	CARBONDALE		ROCK	57.0	27.0
502.6	CARBONDALE	COLCHESTER	COAL	2.4	84.0
500.2	CARBONDALE		ROCK	1.6	86.4

MAPID: 06190414000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 660' S line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297459 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.464186 DATE COLLECTED: 9 / 12 / 1962  
 SURFACE ELEVATION (FT.): 586.9 LOGGED (FT.): 75.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G436 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
586.9	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
572.9	CARBONDALE		ROCK	57.0	14.0
515.9	CARBONDALE	COLCHESTER	COAL	2.4	71.0
513.5	CARBONDALE		ROCK	1.6	73.4

MAPID: 06190415000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 640' S line, 660' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.295079 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.464125 DATE COLLECTED: 9 / 13 / 1962  
 SURFACE ELEVATION (FT.): 586.5 LOGGED (FT.): 75.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G437 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
586.5	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
565.5	CARBONDALE		ROCK	51.0	21.0
514.5	CARBONDALE	COLCHESTER	COAL	1.5	72.0
513.0	CARBONDALE		ROCK	1.5	73.5

MAPID: 06190416000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 680' N line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292732 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.464085 DATE COLLECTED: 9 / 13 / 1962  
 SURFACE ELEVATION (FT.): 592.8 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G438 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.8	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0
539.8	CARBONDALE		ROCK	25.0	53.0
514.8	CARBONDALE	COLCHESTER	COAL	2.3	78.0
512.5	CARBONDALE		ROCK	1.7	80.3



MAPID: 06190419000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302195 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465989 DATE COLLECTED: 1 / 25 / 1962  
 SURFACE ELEVATION (FT.): 600.1 LOGGED (FT.): 84.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G459 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.1	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0
562.1	CARBONDALE		ROCK	42.0	38.0
520.1	CARBONDALE	COLCHESTER	COAL	2.3	80.0
517.8	CARBONDALE		ROCK	1.7	82.3

MAPID: 06190420000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 660' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299848 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465983 DATE COLLECTED: 9 / 12 / 1962  
 SURFACE ELEVATION (FT.): 597.7 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G460 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.7	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
572.7	CARBONDALE		ROCK	59.0	25.0
513.7	CARBONDALE	COLCHESTER	COAL	2.4	84.0
511.3	CARBONDALE		ROCK	1.6	86.4

MAPID: 06190421000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297469 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465977 DATE COLLECTED: 1 / 25 / 1962  
 SURFACE ELEVATION (FT.): 592.2 LOGGED (FT.): 81.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G461 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.2	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
556.2	CARBONDALE		ROCK	41.0	36.0
515.2	CARBONDALE	COLCHESTER	COAL	2.3	77.0
512.9	CARBONDALE		ROCK	1.7	79.3

MAPID: 06190422000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 660' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.295115 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465971 DATE COLLECTED: 9 / 13 / 1962  
 SURFACE ELEVATION (FT.): 593.4 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G462 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.4	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
560.4	CARBONDALE		ROCK	45.0	33.0
515.4	CARBONDALE	COLCHESTER	COAL	2.3	78.0
513.1	CARBONDALE		ROCK	1.7	80.3

MAPID: 06190423000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292739 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465965 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 590.4 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G463 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
590.4	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
558.4	CARBONDALE		ROCK	41.0	32.0
517.4	CARBONDALE	COLCHESTER	MINE OPENING	4.0	73.0

MAPID: 06190424000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288009 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.465956 DATE COLLECTED: 2 / 26 / 1962  
 SURFACE ELEVATION (FT.): 523.0 LOGGED (FT.): 15.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G465 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
523.0	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0
517.0	CARBONDALE		ROCK	5.0	6.0
512.0	CARBONDALE	COLCHESTER	COAL	2.4	11.0
509.6	CARBONDALE		ROCK	1.6	13.4

MAPID: 06190425000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 660' S line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297479 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467796 DATE COLLECTED: 9 / 7 / 1962  
 SURFACE ELEVATION (FT.): 602.0 LOGGED (FT.): 86.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G484 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
602.0	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
585.0	CARBONDALE		ROCK	65.0	17.0
520.0	CARBONDALE	COLCHESTER	COAL	2.3	82.0
517.7	CARBONDALE		ROCK	1.7	84.3

MAPID: 06190426000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 560' S line, 660' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299858 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467526 DATE COLLECTED: 9 / 12 / 1962  
 SURFACE ELEVATION (FT.): 601.0 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G485 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
601.0	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
580.0	CARBONDALE		ROCK	63.0	21.0
517.0	CARBONDALE	COLCHESTER	COAL	2.3	84.0
514.7	CARBONDALE		ROCK	1.7	86.3

MAPID: 06190427000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 660' S line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297479 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.467796 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 597.5 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G486 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.5	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
576.5	CARBONDALE		ROCK	63.0	21.0
513.5	CARBONDALE	COLCHESTER	COAL	2.1	84.0
511.4	CARBONDALE		ROCK	1.9	86.1

MAPID: 06190429000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302218 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.469597 DATE COLLECTED: 1 / 25 / 1962  
 SURFACE ELEVATION (FT.): 601.6 LOGGED (FT.): 86.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G509 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
601.6	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
569.6	CARBONDALE		ROCK	50.0	32.0
519.6	CARBONDALE	COLCHESTER	COAL	2.3	82.0
517.3	CARBONDALE		ROCK	1.7	84.3

MAPID: 06190431000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302242 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.473216 DATE COLLECTED: 1 / 25 / 1962  
 SURFACE ELEVATION (FT.): 605.6 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G559 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
605.6	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0
568.6	CARBONDALE		ROCK	47.0	37.0
521.6	CARBONDALE	COLCHESTER	COAL	2.3	84.0
519.3	CARBONDALE		ROCK	1.7	86.3

MAPID: 06190432000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 1' S line, 660' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.285619 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462344 DATE COLLECTED: 5 / 25 / 1976  
 SURFACE ELEVATION (FT.): 577.7 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX G466 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.7	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
562.7	CARBONDALE		ROCK	52.0	15.0
510.7	CARBONDALE	COLCHESTER	COAL	2.5	67.0
508.2	CARBONDALE		ROCK	18.5	69.5

MAPID: 06190433000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 23 QUARTERS/FOOTAGES: 20' S line, 10' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287959 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4624 DATE COLLECTED: 5 / 25 / 1976  
 SURFACE ELEVATION (FT.): 567.2 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX G467 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
567.2	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0	
553.2	CARBONDALE		ROCK	44.0	14.0	
509.2	CARBONDALE	COLCHESTER	COAL	2.9	58.0	
506.3	CARBONDALE		ROCK	4.1	60.9	

MAPID: 06100141000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: SW SE SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.275634 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.462789 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 540.0 LOGGED (FT.): 51.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 9 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
540.0	PLEISTOCENE		CLAY	22.0	0.0	BROWN
518.0	PLEISTOCENE		CLAY	18.0	22.0	W/GRAVEL; GRAY
500.0			SHALE	11.0	40.0	W/COAL, LIME, GRAVEL

MAPID: 06100143000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.271596 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.467721 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMINUM CO. OF AMERICA 11 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		SANDY CLAY	45.5	0.0	THICKNESS 48.5 CORRECTED
504.5	CARBONDALE	COLCHESTER	COAL	1.5	45.5	
503.0	SPOON		UNDERCLAY	1.0	47.0	

MAPID: 06100255000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: 660' N line, 300' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.282219 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.474925 DATE COLLECTED: 8 / 26 / 1964

SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 90.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 23-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		CLAY	16.0	0.0	
574.0	PLEISTOCENE		CLAY & GRAVEL	12.0	16.0	
562.0	CARBONDALE		GRAY SHALE	3.0	28.0	
559.0	CARBONDALE		SANDSTONE	30.0	31.0	SOFT
529.0	CARBONDALE		SANDY SHALE	20.0	61.0	
509.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	81.0	
507.0	CARBONDALE	COLCHESTER	COAL	2.6	83.0	
504.4	SPOON		UNDERCLAY	3.4	85.6	
501.0	SPOON	SEAHORNE LS	LIMESTONE	1.0	89.0	

MAPID: 06100256000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: 2640' N line, 1' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283276 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.469466 DATE COLLECTED: 8 / 12 / 1964

SURFACE ELEVATION (FT.): 571.0 LOGGED (FT.): 81.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 200-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.0	PLEISTOCENE		CLAY	17.0	0.0	
554.0	PLEISTOCENE		CLAY & GRAVEL	8.0	17.0	
546.0	CARBONDALE		SANDY SHALE	4.5	25.0	
541.5	CARBONDALE		SANDSTONE	34.5	29.5	SOFT
507.0	CARBONDALE		GRAY SHALE	8.5	64.0	
498.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.8	72.5	
495.7	CARBONDALE	COLCHESTER	COAL	2.5	75.3	
493.2	SPOON		UNDERCLAY	3.3	77.8	
490.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	81.0	

MAPID: 06100257000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: 2640' N line, 1320' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.278578 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.469439 DATE COLLECTED: 8 / 12 / 1964  
 SURFACE ELEVATION (FT.): 573.0 LOGGED (FT.): 66.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 201-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.0	PLEISTOCENE		CLAY	38.5	0.0
534.5	CARBONDALE		SANDY SHALE	19.5	38.5
515.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.8	58.0
512.2	CARBONDALE	COLCHESTER	COAL	2.5	60.8
509.7	SPOON		UNDERCLAY	2.3	63.3
507.5	SPOON	SEAHORNE LS	LIMESTONE	0.5	65.5

MAPID: 061193A0009F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 24 QUARTERS/FOOTAGES: NE SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.275071 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.465034 DATE COLLECTED: 0 / 0 / 1922  
 SURFACE ELEVATION (FT.): 554.0 LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT: ELEV. TO COAL NOTED

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	CARBONDALE		SANDSTONE	3.0	
-	CARBONDALE		GRAY SHALE	0.3	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	
-	CARBONDALE	COLCHESTER	COAL	2.7	533' ELEV.
-	SPOON		UNDERCLAY	3.5	
-	SPOON		LIMESTONE	2.0	

MAPID: 06100258000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 1' S line, 1' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.28302 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.447753 DATE COLLECTED: 8 / 18 / 1964  
 SURFACE ELEVATION (FT.): 502.0 LOGGED (FT.): 33.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 7-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
502.0	PLEISTOCENE		CLAY	21.0	0.0
481.0	PLEISTOCENE		GRAVEL	12.0	21.0
469.0			LIMESTONE	0.5	33.0

MAPID: 06100259000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 660' N line, 1320' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.27854 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.460517 DATE COLLECTED: 8 / 18 / 1964  
 SURFACE ELEVATION (FT.): 522.0 LOGGED (FT.): 30.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 6-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
522.0	PLEISTOCENE		CLAY	18.0	0.0
504.0	CARBONDALE		SANDSTONE	7.0	18.0
497.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	25.0
495.5	CARBONDALE	COLCHESTER	COAL	2.5	26.5
493.0	SPOON		UNDERCLAY	1.0	29.0

MAPID: 06100260000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 1320' N line, 675' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.280806 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.458694 DATE COLLECTED: 8 / 17 / 1964  
 SURFACE ELEVATION (FT.): 541.0 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 4-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.0	PLEISTOCENE		CLAY	16.5	0.0
524.5	CARBONDALE		SANDSTONE	11.5	16.5
513.0	CARBONDALE		SANDY SHALE	10.0	28.0
503.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.0	38.0
500.0	CARBONDALE	COLCHESTER	COAL	2.6	41.0
497.4	SPOON		UNDERCLAY	3.4	43.6
494.0	SPOON	SEAHORNE LS	LIMESTONE	0.0	47.0



MAPID: 06100261000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 1' N line, 1320' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.269162 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.46234 DATE COLLECTED: 8 / 19 / 1964  
 SURFACE ELEVATION (FT.): 536.0 LOGGED (FT.): 37.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 9-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
536.0	PLEISTOCENE		CLAY	24.0	0.0
512.0	PLEISTOCENE		MUD	12.0	24.0
500.0			GRAVEL	1.0	36.0
499.0			LIMESTONE	0.5	37.0

MAPID: 06100262000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 1320' N line, 1' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283206 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.458692 DATE COLLECTED: 8 / 17 / 1964  
 SURFACE ELEVATION (FT.): 551.0 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 3-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
551.0	PLEISTOCENE		CLAY	17.0	0.0
534.0	CARBONDALE		SANDSTONE	23.0	17.0
511.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	4.0	40.0
507.0	CARBONDALE	COLCHESTER	COAL	2.5	44.0
504.5	SPOON		UNDERCLAY	1.5	46.5

MAPID: 06100286000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 2640' N line, 660' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.280798 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.45505 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 512.0 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 211-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
512.0	PLEISTOCENE		CLAY	18.0	0.0	
494.0			SMUT	1.5	18.0	DRILL NOTE: FREE COAL & SMUT
492.5			GRAVEL	8.5	19.5	
484.0			LIMESTONE	4.0	28.0	
480.0			GRAY SHALE	20.3	32.0	
459.7			SANDSTONE	0.8	52.3	HARD
459.0			SANDY SHALE	14.0	53.0	

MAPID: 061193A0010F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: NE SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.279667 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.457777 DATE COLLECTED: 0 / 0 / 1927  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT: DEPTHS NOT GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			SANDSTONE	-		
-			SHALE/COAL	-		
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5		
-	CARBONDALE	COLCHESTER	COAL	2.5		
-			UNDERCLAY	1.0		

MAPID: 06190411000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 25 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.278571 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462336 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 500.0 LOGGED (FT.): 7.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G419 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
500.0	PLEISTOCENE		UNCONSOLIDATED	3.5	0.0	
496.5	CARBONDALE	COLCHESTER	COAL	1.8	3.5	
494.7	CARBONDALE		ROCK	1.7	5.3	

MAPID: 06100140000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: NE NE NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.283734 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.454592 DATE COLLECTED: 0 / 0 / 1955  
 SURFACE ELEVATION (FT.): 530.0 LOGGED (FT.): 32.0 LOG TYPE: Drillers Log  
 SOURCE: ALUMUNIM CO. OF AMERICA 8 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE QUAD

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
530.0	PLEISTOCENE		SANDY CLAY	22.0	0.0	
508.0	CARBONDALE	COLCHESTER	SHALE/COAL	4.0	22.0	SHALE WITH "A LITTLE" COAL REPORTED
504.0			LIMESTONE	6.0	26.0	

MAPID: 06100181000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: SW SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.291462 GEOLOGIST: MCCRACKEN  
 CONFIDENTIAL: N LATITUDE: 39.456003 DATE COLLECTED: 3 / 27 / 1957  
 SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN WH-1 WELL TYPE: Coal Test  
 COMMENT: MAP FILE LOC. DIFFERS FORM CO.ELEV+/-10

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0	
509.0			SANDSTONE	9.8	41.0	
499.2			SHALE	3.5	50.8	
495.7			SANDSTONE	3.2	54.3	
492.5			SANDSTONE	2.5	57.5	COAL STREAKS
490.0			SANDSTONE	5.8	60.0	
484.2			SANDSTONE	1.2	65.8	COAL STREAKS
483.0			SANDSTONE	11.0	67.0	
472.0			SANDSTONE	2.2	78.0	COAL STREAKS
469.8			SANDSTONE	1.8	80.2	

MAPID: 06100263000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 500' S line, 1900' E line of SE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.289816 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.449206 DATE COLLECTED: 8 / 20 / 1964

SURFACE ELEVATION (FT.): 531.0 LOGGED (FT.): 42.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 205-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
531.0	PLEISTOCENE		CLAY	21.5	0.0	
509.5	CARBONDALE		SANDY SHALE	8.0	21.5	
501.5	CARBONDALE		SANDSTONE	3.5	29.5	
498.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	3.5	33.0	LOG THICKNESS 2.5 CHANGED TO 3.5; BLK
494.5	CARBONDALE	COLCHESTER	COAL	2.5	36.5	
492.0	SPOON		UNDERCLAY	3.3	39.0	
488.7	SPOON	SEAHORNE LS	LIMESTONE	0.2	42.3	

MAPID: 06100264000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' N line, 2640' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292673 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.462352 DATE COLLECTED: 8 / 24 / 1964

SURFACE ELEVATION (FT.): 584.0 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 209-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
584.0	PLEISTOCENE		CLAY	29.5	0.0	
554.5	PLEISTOCENE		CLAY	16.5	29.5	GRY
538.0	CARBONDALE		SANDY SHALE	5.0	46.0	
533.0	CARBONDALE		SANDSTONE	16.5	51.0	SOFT
516.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	67.5	
514.5	CARBONDALE	COLCHESTER	COAL	2.4	69.5	
512.1	SPOON		UNDERCLAY	5.1	71.9	

MAPID: 06100265000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 2640' N line, 1980' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.295073 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.455073 DATE COLLECTED: 8 / 24 / 1964

SURFACE ELEVATION (FT.): 522.0 LOGGED (FT.): 21.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 210-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
522.0	PLEISTOCENE		UNCONSOLIDATED	13.5	0.0
508.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	13.5
506.5	CARBONDALE	COLCHESTER	COAL	2.4	15.5
504.1	SPOON		UNDERCLAY	3.6	17.9
500.5	SPOON	SEAHORNE LS	LIMESTONE	0.0	21.5

MAPID: 06100266000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1320' N line, 2020' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.294954 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.458715 DATE COLLECTED: 8 / 31 / 1964

SURFACE ELEVATION (FT.): 574.0 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 219-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
574.0	PLEISTOCENE		CLAY	53.5	0.0
520.5	PLEISTOCENE		SANDSTONE	7.5	53.5
513.0	CARBONDALE		GRAY SHALE	1.0	61.0
512.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	62.0
510.5	CARBONDALE	COLCHESTER	COAL	2.4	63.5
508.1	SPOON		UNDERCLAY	1.1	65.9

MAPID: 06100267000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 230' N line, 1430' W line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297075 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.461729 DATE COLLECTED: 8 / 28 / 1964  
 SURFACE ELEVATION (FT.): 561.0 LOGGED (FT.): 48.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 407-B WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
561.0	PLEISTOCENE		CLAY	26.0	0.0	
535.0	CARBONDALE		SANDSTONE	4.0	26.0	BRN
531.0	CARBONDALE		SANDSTONE	10.0	30.0	GRY
521.0	CARBONDALE	MECCA QUARRY	SHALE	2.0	40.0	
519.0	CARBONDALE	COLCHESTER	COAL	2.4	42.0	
516.6	SPOON		UNDERCLAY	3.6	44.4	
513.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	48.0	

MAPID: 06190364000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297314 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447908 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 563.5 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G211 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
563.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0	
544.5	CARBONDALE		ROCK	41.0	19.0	
503.5	CARBONDALE	COLCHESTER	COAL	2.3	60.0	
501.2	CARBONDALE		ROCK	1.7	62.3	

MAPID: 06190365000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292553 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447857 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 547.1 LOGGED (FT.): 51.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G213 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
547.1	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
535.1	CARBONDALE		ROCK	35.0	12.0	
500.1	CARBONDALE	COLCHESTER	COAL	2.3	47.0	
497.8	CARBONDALE		ROCK	1.7	49.3	

MAPID: 06190366000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.290139 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447832 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 531.6 LOGGED (FT.): 41.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G214 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.6	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0
502.6	CARBONDALE		ROCK	8.0	29.0
494.6	CARBONDALE	COLCHESTER	COAL	2.5	37.0
492.1	CARBONDALE		ROCK	1.5	39.5

MAPID: 06190367000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 560' S line, 660' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.290216 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449375 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 531.5 LOGGED (FT.): 39.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G214DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.5	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0
524.5	CARBONDALE		ROCK	28.0	7.0
496.5	CARBONDALE	COLCHESTER	COAL	2.5	35.0
494.0	CARBONDALE		ROCK	1.5	37.5

MAPID: 06190368000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 610' S line, 100' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.288167 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449491 DATE COLLECTED: 9 / 11 / 1962  
 SURFACE ELEVATION (FT.): 506.4 LOGGED (FT.): 22.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G214GP WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
506.4	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
485.4	CARBONDALE		ROCK	1.0	21.0

MAPID: 06190369000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287792 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447807 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 518.0 LOGGED (FT.): 42.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G215 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
518.0	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
484.0	CARBONDALE		ROCK	8.0	34.0

MAPID: 06190370000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302081 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449777 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 561.5 LOGGED (FT.): 56.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G234 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
561.5	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
544.5	CARBONDALE		ROCK	35.0	17.0
509.5	CARBONDALE	COLCHESTER	COAL	2.3	52.0
507.2	CARBONDALE		ROCK	1.7	54.3

MAPID: 06190371000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299678 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449752 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 554.1 LOGGED (FT.): 51.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G235 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.1	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
542.1	CARBONDALE		ROCK	35.0	12.0
507.1	CARBONDALE	COLCHESTER	COAL	2.3	47.0
504.8	CARBONDALE		ROCK	1.7	49.3



MAPID: 06190372000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297331 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449727 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 559.2 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G236 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
559.2	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
544.2	CARBONDALE		ROCK	39.0	15.0
505.2	CARBONDALE	COLCHESTER	COAL	2.4	54.0
502.8	CARBONDALE		ROCK	1.6	56.4

MAPID: 06190373000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.29492 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449702 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 569.5 LOGGED (FT.): 72.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G237 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
550.5	CARBONDALE		ROCK	49.0	19.0
501.5	CARBONDALE	COLCHESTER	COAL	2.5	68.0
499.0	CARBONDALE		ROCK	1.5	70.5

MAPID: 06190374000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292573 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449676 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 556.3 LOGGED (FT.): 59.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G238 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
556.3	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
531.3	CARBONDALE		ROCK	30.0	25.0
501.3	CARBONDALE	COLCHESTER	COAL	2.3	55.0
499.0	CARBONDALE		ROCK	1.7	57.3

MAPID: 06190375000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' N line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302094 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451558 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 567.7 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G259 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
567.7	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
550.7	CARBONDALE		ROCK	39.0	17.0
511.7	CARBONDALE	COLCHESTER	COAL	2.3	56.0
509.4	CARBONDALE		ROCK	1.7	58.3

MAPID: 06190376000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 30' N line, 660' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299747 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451458 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 554.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G260 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.5	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0
524.5	CARBONDALE		ROCK	13.0	30.0
511.5	CARBONDALE	COLCHESTER	COAL	2.3	43.0
509.2	CARBONDALE		ROCK	1.7	45.3

MAPID: 06190377000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' N line, 80' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297629 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451519 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 540.4 LOGGED (FT.): 39.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G260PB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.4	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
515.4	CARBONDALE		ROCK	10.0	25.0
505.4	CARBONDALE	COLCHESTER	COAL	2.1	35.0
503.3	CARBONDALE		ROCK	1.9	37.1

MAPID: 06190378000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292597 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451482 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 536.7 LOGGED (FT.): 40.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G263 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
536.7	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0
508.7	CARBONDALE		ROCK	8.0	28.0
500.7	CARBONDALE	COLCHESTER	COAL	2.2	36.0
498.5	CARBONDALE	COLCHESTER	COAL	0.3	38.2
498.2	CARBONDALE		ROCK	1.5	38.5

MAPID: 06190379000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 80' S line, 660' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.290246 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.45168 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 517.2 LOGGED (FT.): 20.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G264Z WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
517.2	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
512.2	CARBONDALE		ROCK	11.0	5.0
501.2	CARBONDALE	COLCHESTER	COAL	2.5	16.0
498.7	CARBONDALE		ROCK	1.5	18.5

MAPID: 06190380000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287843 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451442 DATE COLLECTED: 9 / 10 / 1962  
 SURFACE ELEVATION (FT.): 506.0 LOGGED (FT.): 37.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G265 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
506.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
473.0	CARBONDALE		ROCK	4.0	33.0

MAPID: 06190381000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 1' W line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302108 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453382 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 579.0 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G284 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.0	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
556.0	CARBONDALE		ROCK	44.0	23.0
512.0	CARBONDALE	COLCHESTER	COAL	2.5	67.0
509.5	CARBONDALE		ROCK	1.5	69.5

MAPID: 06190382000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299711 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453363 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 564.5 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G285 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
564.5	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
547.5	CARBONDALE		ROCK	40.0	17.0
507.5	CARBONDALE	COLCHESTER	COAL	2.0	57.0
505.5	CARBONDALE		ROCK	1.0	59.0

MAPID: 06190383000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 630' S line, 1' E line of NW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297364 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.45326 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 50.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G286 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
550.0	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
533.0	CARBONDALE		ROCK	29.0	17.0
504.0	CARBONDALE	COLCHESTER	COAL	2.4	46.0
501.6	CARBONDALE		ROCK	1.6	48.4

MAPID: 06190384000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.294964 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453321 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 545.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G287 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
545.5	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
513.5	CARBONDALE		ROCK	11.0	32.0
502.5	CARBONDALE	COLCHESTER	COAL	2.4	43.0
500.1	CARBONDALE		ROCK	1.6	45.4

MAPID: 06190385000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 200' N line, 660' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.294979 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.454568 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 538.2 LOGGED (FT.): 36.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G287D WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
538.2	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
529.2	CARBONDALE		ROCK	23.0	9.0
506.2	CARBONDALE	COLCHESTER	COAL	2.4	32.0
503.8	CARBONDALE		ROCK	1.6	34.4

MAPID: 06190386000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292618 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453301 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 534.1 LOGGED (FT.): 40.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G288 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
534.1	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
498.1	CARBONDALE	COLCHESTER	COAL	1.0	36.0
497.1	CARBONDALE		ROCK	3.0	37.0

MAPID: 06190387000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.290264 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453281 DATE COLLECTED: 9 / 10 / 1962  
 SURFACE ELEVATION (FT.): 519.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G289 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
519.5	PLEISTOCENE		UNCONSOLIDATED	29.0	0.0
490.5	CARBONDALE		ROCK	18.0	29.0

MAPID: 06190392000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' W line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302118 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455166 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 579.5 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G309 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.5	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
565.5	CARBONDALE		ROCK	53.0	14.0
512.5	CARBONDALE	COLCHESTER	COAL	2.2	67.0
510.3	CARBONDALE		ROCK	1.8	69.2

MAPID: 06190393000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299728 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455152 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 570.8 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G310 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
570.8	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0
554.8	CARBONDALE		ROCK	44.0	16.0
510.8	CARBONDALE	COLCHESTER	COAL	2.5	60.0
508.3	CARBONDALE		ROCK	1.5	62.5

MAPID: 06190394000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.297381 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455137 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 563.2 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G311 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.2	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
531.2	CARBONDALE		ROCK	20.0	32.0
511.2	CARBONDALE	COLCHESTER	COAL	2.4	52.0
508.8	CARBONDALE		ROCK	2.6	54.4

MAPID: 06190395000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.292638 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455109 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 541.9 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G313 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.9	PLEISTOCENE		UNCONSOLIDATED	49.0	0.0
492.9	CARBONDALE		ROCK	8.0	49.0

MAPID: 06190396000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.287895 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455077 DATE COLLECTED: 1 / 24 / 1962  
 SURFACE ELEVATION (FT.): 539.7 LOGGED (FT.): 45.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G315 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
539.7	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
500.7	CARBONDALE		ROCK	6.0	39.0

MAPID: 06190475000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 26 QUARTERS/FOOTAGES: 660' S line, 660' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.299678 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.449752 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 554.1 LOGGED (FT.): 51.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G235 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
554.1	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0	
542.1	CARBONDALE		SANDSTONE	7.0	12.0	SOFT
535.1	CARBONDALE		SANDSTONE	14.0	19.0	
521.1	CARBONDALE		SHALE	3.0	33.0	SOFT
518.1	CARBONDALE		SANDY SHALE	8.0	36.0	
510.1	CARBONDALE		SHALE	2.0	44.0	SOFT
508.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.7	46.0	HARD
507.4	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.3	46.7	
507.1	CARBONDALE	COLCHESTER	COAL	2.3	47.0	GOOD
504.8	CARBONDALE		UNDERCLAY	1.7	49.3	

MAPID: 06190126000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316157 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462404 DATE COLLECTED: 2 / 23 / 1962  
 SURFACE ELEVATION (FT.): 588.7 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H425 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
588.7	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0	

MAPID: 06190388000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' S line, 1' W line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32089 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455116 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 574.8 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G301 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
574.8	PLEISTOCENE		UNCONSOLIDATED	97.0	0.0	



MAPID: 06190389000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 20' S line, 75' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316468 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455183 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 537.2 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G302PB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.2	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0

MAPID: 06190390000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' S line, 660' W line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.31385 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455137 DATE COLLECTED: 9 / 4 / 1962  
 SURFACE ELEVATION (FT.): 568.4 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G304 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
568.4	PLEISTOCENE		UNCONSOLIDATED	59.0	0.0
509.4	CARBONDALE		ROCK	8.0	59.0

MAPID: 06190391000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311511 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455142 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 554.8 LOGGED (FT.): 42.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G305 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.8	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
542.8	CARBONDALE		ROCK	26.0	12.0
516.8	CARBONDALE	COLCHESTER	COAL	2.3	38.0
514.5	CARBONDALE		ROCK	1.7	40.3

MAPID: 06190397000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 660' S line, 660' E line of SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.313854 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.456956 DATE COLLECTED: 9 / 4 / 1962  
 SURFACE ELEVATION (FT.): 584.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G329 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.3	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0

MAPID: 06190398000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320851 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458768 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 563.4 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G351 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.4	PLEISTOCENE		UNCONSOLIDATED	55.0	0.0
508.4	CARBONDALE		ROCK	42.0	55.0

MAPID: 06190399000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316182 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458771 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 576.7 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G353 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
576.7	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0

MAPID: 0619040000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316157 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462404 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 580.1 LOGGED (FT.): 97.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G403 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
580.1	PLEISTOCENE		UNCONSOLIDATED	95.0	0.0
485.1	CARBONDALE		ROCK	2.0	95.0

MAPID: 06190401000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311499 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462392 DATE COLLECTED: 2 / 3 / 1962  
 SURFACE ELEVATION (FT.): 584.2 LOGGED (FT.): 63.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G405 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
584.2	PLEISTOCENE		UNCONSOLIDATED	55.0	0.0
529.2	CARBONDALE		ROCK	4.0	55.0
525.2	CARBONDALE	COLCHESTER	COAL	2.3	59.0
522.9	CARBONDALE		ROCK	1.7	61.3

MAPID: 06190402000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 27 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306837 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.46238 DATE COLLECTED: 2 / 23 / 1962  
 SURFACE ELEVATION (FT.): 597.5 LOGGED (FT.): 82.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G407 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.5	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
561.5	CARBONDALE		ROCK	42.0	36.0
519.5	CARBONDALE	COLCHESTER	COAL	2.4	78.0
517.1	CARBONDALE		ROCK	1.6	80.4

**MAPID:** 06190445000C    **VERSION:** 1    **PROJECT:** NCRDS02  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 27    **QUARTERS/FOOTAGES:** 1' N line, 1' W line of NW NW  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.320811    **GEOLOGIST:** STRAAYER  
**CONFIDENTIAL:** N    **LATITUDE:** 39.462413    **DATE COLLECTED:** 2 / 23 / 1962  
**SURFACE ELEVATION (FT.):** 588.7    **LOGGED (FT.):** 97.0    **LOG TYPE:** Drillers Log  
**SOURCE:** AYRSHIRE    H425    **WELL TYPE:** Coal Test  
**COMMENT:** BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.7	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
579.7	PLEISTOCENE		CLAY	28.0	9.0
551.7	PLEISTOCENE		CLAY	60.0	37.0

**MAPID:** 06100182000C    **VERSION:** 1    **PROJECT:** NCRDS99  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 28    **QUARTERS/FOOTAGES:** NE NW NE  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.326766    **GEOLOGIST:** MCCRACKEN  
**CONFIDENTIAL:** N    **LATITUDE:** 39.461537    **DATE COLLECTED:** 3 / 28 / 1957  
**SURFACE ELEVATION (FT.):** 590.0    **LOGGED (FT.):** 80.0    **LOG TYPE:** Drillers Log  
**SOURCE:** DONAN    WH-2    **WELL TYPE:** Coal Test  
**COMMENT:** ELEV. +/- 5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
590.0	PLEISTOCENE		UNCONSOLIDATED	80.0	0.0

**MAPID:** 06100268000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 11W    **SECTION:** 28    **QUARTERS/FOOTAGES:** 440' N line, 2640' E line  
**QUADRANGLE:** ROODHOUSE EAST    **LONGITUDE:** -90.330224    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.461253    **DATE COLLECTED:** 8 / 19 / 1964  
**SURFACE ELEVATION (FT.):** 600.0    **LOGGED (FT.):** 96.0    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    203-P    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
600.0	PLEISTOCENE		CLAY	24.5	0.0
575.5	PLEISTOCENE		SANDY CLAY	71.5	24.5

MAPID: 061193A0012F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: NW NW SW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.338578 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.454328 DATE COLLECTED: 0 / 0 / 1927

SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section

SOURCE: FIELD NOTES WELL TYPE: Misc. Borings Less Than 100 Ft.

COMMENT: NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-			SANDSTONE	-	
-			SHALE	-	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	
-	CARBONDALE	COLCHESTER	COAL	2.5	
-			UNDERCLAY	-	
-			LIMESTONE	-	

MAPID: 061193A0011F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: NE SW NW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.336246 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.45795 DATE COLLECTED: 0 / 0 / 1927

SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section

SOURCE: FIELD NOTES WELL TYPE: Outcrop

COMMENT: NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
-	PLEISTOCENE		GLACIAL DRIFT	-	
-			SANDSTONE	-	
-			ARGILACEOUS SHALE	-	
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.3	
-	CARBONDALE	COLCHESTER	COAL	2.3	

MAPID: 06190073000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SW

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335013 GEOLOGIST: LAWSON

CONFIDENTIAL: N LATITUDE: 39.447935 DATE COLLECTED: 2 / 21 / 1962

SURFACE ELEVATION (FT.): 573.8 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE H219 WELL TYPE: Coal Test

COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.8	PLEISTOCENE		UNCONSOLIDATED	44.0	0.0
529.8	CARBONDALE		ROCK	6.0	44.0
523.8	CARBONDALE	COLCHESTER	COAL	2.4	50.0
521.4	CARBONDALE		ROCK	1.6	52.4

MAPID: 06190074000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330334 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447897 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 568.6 LOGGED (FT.): 52.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H221 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
568.6	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
533.6	CARBONDALE		ROCK	13.0	35.0
520.6	CARBONDALE	COLCHESTER	COAL	2.1	48.0
518.5	CARBONDALE		ROCK	1.9	50.1

MAPID: 06190076000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' S line, 330' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.326823 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.448775 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 549.6 LOGGED (FT.): 39.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H222A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
549.6	PLEISTOCENE		UNCONSOLIDATED	3.0	0.0
546.6	CARBONDALE		ROCK	32.0	3.0
514.6	CARBONDALE	COLCHESTER	COAL	2.2	35.0
512.4	CARBONDALE		ROCK	1.8	37.2

MAPID: 06190077000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325655 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447855 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 557.1 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H223 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
557.1	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
539.1	CARBONDALE		ROCK	24.0	18.0
515.1	CARBONDALE	COLCHESTER	COAL	2.2	42.0
512.9	CARBONDALE		ROCK	1.8	44.2

MAPID: 06190078000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' S line, 330' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.324472 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.448753 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 537.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H223A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.5	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
505.5	CARBONDALE		ROCK	15.0	32.0

MAPID: 06190080000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' N line, 1' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325633 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.450588 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 546.3 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H223C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.3	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
514.3	CARBONDALE		ROCK	2.0	32.0
512.3	CARBONDALE	COLCHESTER	COAL	2.2	34.0
510.1	CARBONDALE		ROCK	1.8	36.2

MAPID: 06190082000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 270' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.321934 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447823 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 550.1 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H224BB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
550.1	PLEISTOCENE		UNCONSOLIDATED	62.0	0.0
488.1	CARBONDALE		ROCK	5.0	62.0

MAPID: 06190083000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 1' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330327 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449713 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 565.2 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H246 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
565.2	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
546.2	CARBONDALE		ROCK	24.5	19.0
521.7	CARBONDALE	COLCHESTER	COAL	2.4	43.5
519.3	CARBONDALE		ROCK	1.1	45.9

MAPID: 06190084000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' N line, 330' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.329155 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.450616 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 563.0 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H246A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.0	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
530.0	CARBONDALE		ROCK	12.0	33.0
518.0	CARBONDALE	COLCHESTER	COAL	1.8	45.0
516.2	CARBONDALE		ROCK	1.2	46.8

MAPID: 06190085000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' N line, 595' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.328212 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449698 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 560.4 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H247 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
560.4	PLEISTOCENE		UNCONSOLIDATED	23.0	0.0
537.4	CARBONDALE		ROCK	19.0	23.0
518.4	CARBONDALE	COLCHESTER	COAL	2.2	42.0
516.2	CARBONDALE		ROCK	1.8	44.2



MAPID: 06190086000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 340' S line, 350' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.326894 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.448802 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 555.3 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H247A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
555.3	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
513.3	CARBONDALE		ROCK	5.0	42.0

MAPID: 06190087000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' N line, 990' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.326805 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449689 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 565.0 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H247B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
565.0	PLEISTOCENE		UNCONSOLIDATED	39.0	0.0
526.0	CARBONDALE		ROCK	26.0	39.0

MAPID: 06190088000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' N line, 660' W line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32798 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.450608 DATE COLLECTED: 8 / 31 / 1962  
 SURFACE ELEVATION (FT.): 569.3 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H247C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.3	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
542.3	CARBONDALE		ROCK	40.0	27.0

MAPID: 06190089000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325644 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449675 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 543.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H248 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.5	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0
512.5	CARBONDALE		ROCK	16.0	31.0

MAPID: 06190090000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' N line, 330' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.324462 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.45058 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 563.0 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H248A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.0	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
521.0	CARBONDALE		ROCK	25.0	42.0

MAPID: 06190091000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 330' N line, 1' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325633 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.450588 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 564.8 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H248C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
564.8	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0
507.8	CARBONDALE		ROCK	10.0	57.0

MAPID: 06190092000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 660' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.323294 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449655 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 554.8 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H249 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.8	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0
513.8	CARBONDALE		ROCK	16.0	41.0

MAPID: 06190096000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330327 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451538 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 570.8 LOGGED (FT.): 55.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H271 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
570.8	PLEISTOCENE		UNCONSOLIDATED	38.0	0.0
532.8	CARBONDALE		ROCK	13.0	38.0
519.8	CARBONDALE	COLCHESTER	COAL	2.5	51.0
517.3	CARBONDALE		ROCK	1.5	53.5

MAPID: 06190097000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 300' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.329262 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451532 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 562.9 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H271B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
562.9	PLEISTOCENE		UNCONSOLIDATED	44.0	0.0
518.9	CARBONDALE	COLCHESTER	COAL	2.2	44.0
516.7	CARBONDALE		ROCK	1.8	46.2

MAPID: 06190098000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 660' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32798 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451521 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 573.7 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H272 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.7	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
548.7	CARBONDALE		ROCK	30.0	25.0
518.7	CARBONDALE	COLCHESTER	COAL	2.0	55.0
516.7	CARBONDALE		ROCK	1.0	57.0

MAPID: 06190099000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 330' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.326805 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.45151 DATE COLLECTED: 8 / 31 / 1962  
 SURFACE ELEVATION (FT.): 569.2 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H272B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
569.2	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
554.2	CARBONDALE		ROCK	35.0	15.0
519.2	CARBONDALE	COLCHESTER	COAL	2.5	50.0
516.7	CARBONDALE		ROCK	1.5	52.5

MAPID: 06190100000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325637 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451502 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 568.2 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H273 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
568.2	PLEISTOCENE		UNCONSOLIDATED	48.0	0.0
520.2	CARBONDALE		ROCK	2.0	48.0
518.2	CARBONDALE	COLCHESTER	COAL	2.2	50.0
516.0	CARBONDALE		ROCK	1.8	52.2

MAPID: 06190101000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 330' W line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.324458 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451494 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 558.6 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H273B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.6	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0

MAPID: 06190102000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 1' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330327 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453357 DATE COLLECTED: 9 / 4 / 1962  
 SURFACE ELEVATION (FT.): 579.3 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H296 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.3	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
552.3	CARBONDALE		ROCK	33.0	27.0
519.3	CARBONDALE	COLCHESTER	COAL	2.5	60.0
516.8	CARBONDALE		ROCK	1.5	62.5

MAPID: 06190103000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 660' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32798 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453341 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 575.2 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H297 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
575.2	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
550.2	CARBONDALE		ROCK	36.0	25.0
514.2	CARBONDALE	COLCHESTER	COAL	2.5	61.0
511.7	CARBONDALE		ROCK	1.5	63.5

MAPID: 06190104000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325626 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453321 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 567.9 LOGGED (FT.): 55.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H298 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
567.9	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0
537.9	CARBONDALE		ROCK	22.0	30.0
515.9	CARBONDALE	COLCHESTER	COAL	1.8	52.0
514.1	CARBONDALE		ROCK	1.2	53.8

MAPID: 06190108000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335046 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455209 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 591.2 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H319 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
591.2	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
574.2	CARBONDALE		ROCK	44.0	17.0
530.2	CARBONDALE	COLCHESTER	COAL	2.2	61.0
528.0	CARBONDALE		ROCK	1.8	63.2

MAPID: 06190109000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330334 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455176 DATE COLLECTED: 8 / 31 / 1962  
 SURFACE ELEVATION (FT.): 582.6 LOGGED (FT.): 66.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H321 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
582.6	PLEISTOCENE		UNCONSOLIDATED	24.0	0.0
558.6	CARBONDALE		ROCK	38.0	24.0
520.6	CARBONDALE	COLCHESTER	COAL	2.3	62.0
518.3	CARBONDALE		ROCK	1.7	64.3

MAPID: 06190110000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.327963 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455166 DATE COLLECTED: 9 / 3 / 1962  
 SURFACE ELEVATION (FT.): 583.4 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H322 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
583.4	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
562.4	CARBONDALE		ROCK	43.0	21.0
519.4	CARBONDALE	COLCHESTER	COAL	2.4	64.0
517.0	CARBONDALE		ROCK	1.6	66.4

MAPID: 06190111000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325616 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455149 DATE COLLECTED: 2 / 21 / 1962  
 SURFACE ELEVATION (FT.): 579.2 LOGGED (FT.): 66.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H323 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.2	PLEISTOCENE		UNCONSOLIDATED	50.0	0.0
529.2	CARBONDALE		ROCK	12.0	50.0
517.2	CARBONDALE	COLCHESTER	COAL	2.3	62.0
514.9	CARBONDALE		ROCK	1.7	64.3

MAPID: 06190112000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 660' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.323262 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455132 DATE COLLECTED: 9 / 4 / 1962  
 SURFACE ELEVATION (FT.): 576.2 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H324 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
576.2	PLEISTOCENE		UNCONSOLIDATED	77.0	0.0

MAPID: 06190113000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 660' S line, 1' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325598 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.456968 DATE COLLECTED: 9 / 5 / 1962  
 SURFACE ELEVATION (FT.): 582.1 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H348 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
582.1	PLEISTOCENE		UNCONSOLIDATED	49.0	0.0
533.1	CARBONDALE		ROCK	12.0	49.0
521.1	CARBONDALE	COLCHESTER	COAL	2.0	61.0
519.1	CARBONDALE		ROCK	1.0	63.0

MAPID: 06190117000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 100' S line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335074 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.459129 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 534.2 LOGGED (FT.): 17.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H369Z WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
534.2	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
521.2	CARBONDALE		ROCK	4.0	13.0

MAPID: 06190118000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330327 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458826 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 593.2 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H371 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.2	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0
518.2	CARBONDALE		ROCK	12.0	75.0



MAPID: 06190119000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325587 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458799 DATE COLLECTED: 2 / 20 / 1962  
 SURFACE ELEVATION (FT.): 588.9 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H373 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
588.9	PLEISTOCENE		UNCONSOLIDATED	81.0	0.0
507.9	CARBONDALE		ROCK	6.0	81.0

MAPID: 06190123000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' W line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.335086 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462488 DATE COLLECTED: 3 / 6 / 1962  
 SURFACE ELEVATION (FT.): 592.7 LOGGED (FT.): 77.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H419 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
592.7	PLEISTOCENE		UNCONSOLIDATED	65.0	0.0
527.7	CARBONDALE		ROCK	12.0	65.0

MAPID: 06190124000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330335 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.462464 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 593.9 LOGGED (FT.): 87.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H421 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
593.9	PLEISTOCENE		UNCONSOLIDATED	87.0	0.0

MAPID: 06190125000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325577 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.46244 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 596.1 LOGGED (FT.): 107.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H423 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
596.1	PLEISTOCENE		UNCONSOLIDATED	107.0	0.0	

MAPID: 06190476000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 28 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330334 GEOLOGIST: STRAAYER  
 CONFIDENTIAL: N LATITUDE: 39.447897 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 568.6 LOGGED (FT.): 52.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H221 WELL TYPE: Coal Test  
 COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
568.6	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0	
561.6	PLEISTOCENE		CLAY	11.0	7.0	
550.6	PLEISTOCENE		CLAY	17.0	18.0	
533.6	CARBONDALE		SANDY SHALE	11.0	35.0	
522.6	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	46.0	
520.6	CARBONDALE	COLCHESTER	COAL	2.1	48.0	GOOD
518.5	CARBONDALE		UNDERCLAY	1.9	50.1	

MAPID: 06100004000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: SW SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.357462 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.45611 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 590.0 LOGGED (FT.): 35.5 LOG TYPE: Drillers Log  
 SOURCE: A.E. AXLEY WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
590.0	PLEISTOCENE		UNCONSOLIDATED	2.0	0.0	
588.0	CARBONDALE		SANDSTONE	15.0	2.0	
573.0	CARBONDALE		SHALE	13.0	17.0	
560.0	CARBONDALE	COLCHESTER	COAL	2.5	30.0	
557.5	SPOON		UNDERCLAY	3.0	32.5	

MAPID: 06100269000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 1320' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344527 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.460704 DATE COLLECTED: 8 / 29 / 1964

SURFACE ELEVATION (FT.): 604.0 LOGGED (FT.): 77.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 218-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
604.0	PLEISTOCENE		CLAY	20.0	0.0	
584.0	CARBONDALE		SANDSTONE	34.0	20.0	SOFT
550.0	CARBONDALE		SANDY SHALE	2.0	54.0	
548.0	CARBONDALE		SANDSTONE	3.0	56.0	BLK
545.0	CARBONDALE		SANDY SHALE	5.0	59.0	
540.0	CARBONDALE		SHALE	9.0	64.0	DRK
531.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	73.0	
529.5	CARBONDALE	COLCHESTER	COAL	2.5	74.5	
527.0	SPOON		UNDERCLAY	0.5	77.0	

MAPID: 06100284000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 200' N line, 150' E line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.340375 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.461965 DATE COLLECTED: 8 / 22 / 1964

SURFACE ELEVATION (FT.): 580.0 LOGGED (FT.): 68.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 17-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
580.0	PLEISTOCENE		CLAY	25.0	0.0	
555.0	CARBONDALE		SHALE	1.5	25.0	
553.5	CARBONDALE		SANDSTONE	13.5	26.5	
540.0	CARBONDALE		SHALE	19.0	40.0	DRK
521.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	59.0	
519.0	CARBONDALE	COLCHESTER	COAL	2.5	61.0	
516.5	SPOON		UNDERCLAY	4.5	63.5	
512.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	68.0	

MAPID: 06100285000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' N line, 2640' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349246 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.462533 DATE COLLECTED: 8 / 22 / 1964  
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 71.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 16-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.0	PLEISTOCENE		CLAY	23.0	0.0	
587.0	PLEISTOCENE		CLAY & GRAVEL	4.0	23.0	
583.0	CARBONDALE		SANDSTONE	35.5	27.0	SOFT LOG THICKNESS 25.5 CHANGED TO 35.5
547.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.5	62.5	
545.0	CARBONDALE	COLCHESTER	COAL	2.4	65.0	
542.6	SPOON		UNDERCLAY	3.6	67.4	
539.0	SPOON	SEAHORNE LS	LIMESTONE	0.5	71.0	

MAPID: 061193A0013F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: NW NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.348018 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.454307 DATE COLLECTED: 0 / 0 / 1927  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT: NO DEPTHS GIVEN

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-			SANDSTONE	-		
-	CARBONDALE		SHALE	13.0		
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.2		
-	CARBONDALE	COLCHESTER	COAL	2.5		

MAPID: 06190070000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' W line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.358618 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447826 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 570.0 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H209 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
570.0	PLEISTOCENE		UNCONSOLIDATED	37.0	0.0	
533.0	CARBONDALE		ROCK	1.0	37.0	

MAPID: 06190071000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349158 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4479 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 540.0 LOGGED (FT.): 40.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H213 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.0	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
515.0	CARBONDALE		ROCK	15.0	25.0

MAPID: 06190072000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339688 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447977 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 525.3 LOGGED (FT.): 25.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H217 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
525.3	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
508.3	CARBONDALE	COLCHESTER	COAL	1.0	17.0
507.3	CARBONDALE		ROCK	7.0	18.0

MAPID: 06190093000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' N line, 1' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344449 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451581 DATE COLLECTED: 2 / 20 / 1962  
 SURFACE ELEVATION (FT.): 579.2 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H265 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
579.2	PLEISTOCENE		UNCONSOLIDATED	11.0	0.0
568.2	CARBONDALE		ROCK	43.0	11.0
525.2	CARBONDALE	COLCHESTER	COAL	2.2	54.0
523.0	CARBONDALE		ROCK	1.8	56.2

MAPID: 06190094000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 585' S line, 105' W line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344091 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453201 DATE COLLECTED: 3 / 15 / 1962  
 SURFACE ELEVATION (FT.): 594.5 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H265D WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
594.5	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0
572.5	CARBONDALE		ROCK	46.0	22.0
526.5	CARBONDALE	COLCHESTER	COAL	2.5	68.0
524.0	CARBONDALE		ROCK	0.5	70.5

MAPID: 06190095000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339728 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.451612 DATE COLLECTED: 3 / 14 / 1962  
 SURFACE ELEVATION (FT.): 576.2 LOGGED (FT.): 49.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H267 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
576.2	PLEISTOCENE		UNCONSOLIDATED	32.0	0.0
544.2	CARBONDALE		ROCK	17.0	32.0

MAPID: 06190105000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' N line, 1' W line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.353918 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4552 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 542.6 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H311 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
542.6	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
527.6	CARBONDALE		ROCK	32.0	15.0

MAPID: 06190106000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 250' S line, 1' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349205 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455905 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 599.5 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H313JC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
599.5	PLEISTOCENE		UNCONSOLIDATED	44.0	0.0
555.5	CARBONDALE		ROCK	18.0	44.0
537.5	CARBONDALE	COLCHESTER	COAL	2.0	62.0
535.5	CARBONDALE		ROCK	1.0	64.0

MAPID: 06190107000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344489 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455233 DATE COLLECTED: 1 / 13 / 1962  
 SURFACE ELEVATION (FT.): 602.7 LOGGED (FT.): 74.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H315 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
602.7	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
581.7	CARBONDALE		ROCK	49.0	21.0
532.7	CARBONDALE	COLCHESTER	COAL	2.1	70.0
530.6	CARBONDALE		ROCK	1.9	72.1

MAPID: 06190114000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.349223 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458878 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 608.1 LOGGED (FT.): 71.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H363 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
608.1	PLEISTOCENE		UNCONSOLIDATED	61.0	0.0
547.1	CARBONDALE		ROCK	6.5	61.0
540.6	CARBONDALE	COLCHESTER	COAL	1.8	67.5
538.8	CARBONDALE		ROCK	1.7	69.3

MAPID: 06190115000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344512 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458882 DATE COLLECTED: 1 / 12 / 1962  
 SURFACE ELEVATION (FT.): 591.6 LOGGED (FT.): 61.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H365 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
591.6	PLEISTOCENE		UNCONSOLIDATED	4.0	0.0
587.6	CARBONDALE		ROCK	53.0	4.0
534.6	CARBONDALE	COLCHESTER	COAL	2.2	57.0
532.4	CARBONDALE		ROCK	1.8	59.2

MAPID: 06190116000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339808 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458883 DATE COLLECTED: 3 / 7 / 1962  
 SURFACE ELEVATION (FT.): 597.4 LOGGED (FT.): 64.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H367 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
597.4	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
578.4	CARBONDALE		ROCK	41.0	19.0
537.4	CARBONDALE	COLCHESTER	COAL	2.3	60.0
535.1	CARBONDALE		ROCK	1.7	62.3

MAPID: 06190149000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 15' S line, 20' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344349 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447976 DATE COLLECTED: 5 / 20 / 1976  
 SURFACE ELEVATION (FT.): 520.6 LOGGED (FT.): 88.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H215 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
520.6	PLEISTOCENE		UNCONSOLIDATED	19.5	0.0
501.1	CARBONDALE		ROCK	68.5	19.5



MAPID: 0619015000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 15' S line, 660' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.34207 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447995 DATE COLLECTED: 5 / 20 / 1976  
 SURFACE ELEVATION (FT.): 519.7 LOGGED (FT.): 18.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H216 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
519.7	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
506.7	CARBONDALE		ROCK	5.0	13.0

MAPID: 06190151000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 1' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344434 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449762 DATE COLLECTED: 5 / 21 / 1976  
 SURFACE ELEVATION (FT.): 556.6 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H240 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
556.6	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
530.6	CARBONDALE		ROCK	5.0	26.0
525.6	CARBONDALE	COLCHESTER	COAL	1.9	31.0
523.7	CARBONDALE		ROCK	5.1	32.9

MAPID: 06190152000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 660' W line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.342088 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449773 DATE COLLECTED: 5 / 25 / 1976  
 SURFACE ELEVATION (FT.): 563.9 LOGGED (FT.): 44.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H241 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.9	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
542.9	CARBONDALE		ROCK	16.0	21.0
526.9	CARBONDALE	COLCHESTER	COAL	2.4	37.0
524.5	CARBONDALE		ROCK	4.6	39.4

MAPID: 06190153000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 330' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.340881 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449782 DATE COLLECTED: 5 / 24 / 1976  
 SURFACE ELEVATION (FT.): 573.2 LOGGED (FT.): 48.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H241B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
573.2	PLEISTOCENE		UNCONSOLIDATED	7.0	0.0
566.2	CARBONDALE		ROCK	32.0	7.0
534.2	CARBONDALE	COLCHESTER	COAL	2.6	39.0
531.6	CARBONDALE		ROCK	6.4	41.6

MAPID: 06190154000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 590' S line, 30' E line of SE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.339811 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.449599 DATE COLLECTED: 5 / 20 / 1976  
 SURFACE ELEVATION (FT.): 561.4 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H242 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
561.4	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
549.4	CARBONDALE		ROCK	34.0	12.0

MAPID: 06190155000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' S line, 580' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.341789 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4516 DATE COLLECTED: 5 / 24 / 1976  
 SURFACE ELEVATION (FT.): 587.6 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H266 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
587.6	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
573.6	CARBONDALE		ROCK	43.0	14.0
530.6	CARBONDALE	COLCHESTER	COAL	2.3	57.0
528.3	CARBONDALE		ROCK	8.7	59.3

MAPID: 06190156000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 660' W line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.342117 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453417 DATE COLLECTED: 5 / 25 / 1976  
 SURFACE ELEVATION (FT.): 577.5 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H291 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
577.5	PLEISTOCENE		UNCONSOLIDATED	5.0	0.0
572.5	CARBONDALE		ROCK	41.0	5.0
531.5	CARBONDALE	COLCHESTER	COAL	2.5	46.0
529.0	CARBONDALE		ROCK	5.5	48.5

MAPID: 06190157000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 660' N line, 130' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.340209 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.453422 DATE COLLECTED: 5 / 24 / 1976  
 SURFACE ELEVATION (FT.): 581.6 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H292 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
581.6	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
569.6	CARBONDALE		ROCK	42.0	12.0
527.6	CARBONDALE	COLCHESTER	COAL	2.3	54.0
525.3	CARBONDALE		ROCK	11.7	56.3

MAPID: 06190158000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' N line, 660' W line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.342136 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.455236 DATE COLLECTED: 5 / 24 / 1976  
 SURFACE ELEVATION (FT.): 582.0 LOGGED (FT.): 58.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H316 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
582.0	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0
574.0	CARBONDALE		ROCK	43.5	8.0
530.5	CARBONDALE	COLCHESTER	COAL	2.4	51.5
528.1	CARBONDALE		ROCK	4.1	53.9

MAPID: 06190159000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 29 QUARTERS/FOOTAGES: 1' N line, 410' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.343055 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.458876 DATE COLLECTED: 5 / 24 / 1976  
 SURFACE ELEVATION (FT.): 607.2 LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: AMAX H365BB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
607.2	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
601.2	CARBONDALE		ROCK	51.5	6.0	
549.7	CARBONDALE	COLCHESTER	COAL	2.3	57.5	
547.4	CARBONDALE		ROCK	8.2	59.8	

MAPID: 06100005000C VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 30 QUARTERS/FOOTAGES: SE SE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.369216 GEOLOGIST: C KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.456073 DATE COLLECTED:  
 SURFACE ELEVATION (FT.): 571.0 LOGGED (FT.): 39.8 LOG TYPE: Drillers Log  
 SOURCE: J. GRIFFITHS WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
571.0	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
565.0	CARBONDALE		SHALE	12.0	6.0	LIGHT
553.0	CARBONDALE		SHALE	4.0	18.0	BLUE
549.0	CARBONDALE		SHALE	1.2	22.0	HARD
547.8	CARBONDALE	COLCHESTER	COAL	2.7	23.2	
545.2	SPOON		UNDERCLAY	14.0	25.8	
531.2			LIMESTONE	-	39.8	

MAPID: 06100270000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 30 QUARTERS/FOOTAGES: 1' S line, 660' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.360971 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.447842 DATE COLLECTED: 8 / 24 / 1964  
 SURFACE ELEVATION (FT.): 576.0 LOGGED (FT.): 63.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY B-402 WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
576.0	PLEISTOCENE		UNCLASSIFIED	63.0	0.0	
513.0			LIMESTONE	0.5	63.0	

MAPID: 06100271000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 30 QUARTERS/FOOTAGES: 1980' S line, 2640' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.368036 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.45336 DATE COLLECTED: 8 / 21 / 1964  
 SURFACE ELEVATION (FT.): 610.0 LOGGED (FT.): 63.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 400-B WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
610.0	PLEISTOCENE		CLAY	47.5	0.0	
562.5	CARBONDALE	MECCA QUARRY	BLACK SHALE	0.5	47.5	DRILL NOTE: "ROTTEN"
562.0	CARBONDALE	COLCHESTER	COAL	2.5	48.0	
559.5	SPOON		UNDERCLAY	12.0	50.5	
547.5	SPOON		LIMESTONE	0.5	62.5	

MAPID: 06100272000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 31 QUARTERS/FOOTAGES: 1320' S line, 500' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.3605 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.437231 DATE COLLECTED: 8 / 18 / 1964  
 SURFACE ELEVATION (FT.): 551.0 LOGGED (FT.): 90.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 8-C WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
551.0	PLEISTOCENE		CLAY	22.5	0.0	
528.5	PLEISTOCENE		MUD	67.5	22.5	BLUE
461.0			LIMESTONE	0.5	90.0	

MAPID: 06100183000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 32 QUARTERS/FOOTAGES: SE NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.340862 GEOLOGIST: MCCracken  
 CONFIDENTIAL: N LATITUDE: 39.438019 DATE COLLECTED: 3 / 29 / 1957  
 SURFACE ELEVATION (FT.): 560.0 LOGGED (FT.): 60.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN WH-3 WELL TYPE: Coal Test  
 COMMENT: ELEV. +/- 10'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
560.0	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0	
532.0	CARBONDALE		SANDSTONE	5.6	28.0	
526.4	CARBONDALE		CLAYSTONE & SILTSTONE	21.1	33.6	
505.3	CARBONDALE	MECCA QUARRY	SHALE	1.4	54.7	BLACK
503.9	CARBONDALE		PYRITE	0.0	56.1	
503.9	CARBONDALE	COLCHESTER	COAL	2.4	56.1	
501.5	SPOON		UNDERCLAY	1.5	58.5	

MAPID: 06190038000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 32 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344436 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.437118 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 559.7 LOGGED (FT.): 41.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H65 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
559.7	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0
543.7	CARBONDALE		ROCK	22.0	16.0
521.7	CARBONDALE	COLCHESTER	COAL	2.0	38.0
519.7	CARBONDALE		ROCK	1.0	40.0

MAPID: 06190056000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 32 QUARTERS/FOOTAGES: 1' S line, 1' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.344419 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444332 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 572.1 LOGGED (FT.): 59.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H165 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
572.1	PLEISTOCENE		UNCONSOLIDATED	25.0	0.0
547.1	CARBONDALE		ROCK	30.0	25.0
517.1	CARBONDALE	COLCHESTER	COAL	2.2	55.0
514.9	CARBONDALE		ROCK	1.8	57.2

MAPID: 06100273000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325588 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.436982 DATE COLLECTED: 8 / 28 / 1964  
 SURFACE ELEVATION (FT.): 531.0 LOGGED (FT.): 34.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 217-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.0	PLEISTOCENE		CLAY	24.0	0.0
507.0	PLEISTOCENE		CLAY	7.7	24.0 GRY
499.3	CARBONDALE	COLCHESTER	COAL	0.3	31.7 TOP OF COAL ERODED
499.0	SPOON		UNDERCLAY	1.5	32.0
497.5	SPOON	SEAHORNE LS	LIMESTONE	0.5	33.5

MAPID: 06190037000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32557 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.433363 DATE COLLECTED: 3 / 20 / 1962  
 SURFACE ELEVATION (FT.): 517.3 LOGGED (FT.): 36.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H23 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
517.3	PLEISTOCENE		UNCONSOLIDATED	31.0	0.0
486.3	CARBONDALE		ROCK	5.0	31.0

MAPID: 06190039000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.33498 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.437067 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 547.8 LOGGED (FT.): 34.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H69 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.8	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0
517.8	CARBONDALE		ROCK	1.0	30.0
516.8	CARBONDALE	COLCHESTER	COAL	2.0	31.0
514.8	CARBONDALE		ROCK	1.0	33.0

MAPID: 06190040000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 1' E line of SW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325591 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.436979 DATE COLLECTED: 3 / 20 / 1962  
 SURFACE ELEVATION (FT.): 533.0 LOGGED (FT.): 27.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H73 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
533.0	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
516.0	CARBONDALE		ROCK	5.0	17.0
511.0	CARBONDALE	COLCHESTER	COAL	1.4	22.0
509.6	CARBONDALE		ROCK	3.6	23.4

MAPID: 06190041000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 100' S line, 1' E line of SW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.334991 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440968 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 559.4 LOGGED (FT.): 45.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H119Z WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
559.4	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
540.4	CARBONDALE		ROCK	23.0	19.0
517.4	CARBONDALE	COLCHESTER	COAL	1.9	42.0
515.5	CARBONDALE		ROCK	1.1	43.9

MAPID: 06190042000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330302 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440645 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 542.5 LOGGED (FT.): 26.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H121 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
542.5	PLEISTOCENE		UNCONSOLIDATED	20.0	0.0
522.5	CARBONDALE		ROCK	2.0	20.0
520.5	CARBONDALE	COLCHESTER	COAL	2.1	22.0
518.4	CARBONDALE		ROCK	1.9	24.1

MAPID: 06190043000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.327959 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440631 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 540.4 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H122 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.4	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
513.4	CARBONDALE		ROCK	20.0	27.0



MAPID: 06190044000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325612 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440609 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 543.9 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H123 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.9	PLEISTOCENE		UNCONSOLIDATED	22.0	0.0
521.9	CARBONDALE		ROCK	9.0	22.0
512.9	CARBONDALE	COLCHESTER	COAL	2.0	31.0
510.9	CARBONDALE		ROCK	24.0	33.0

MAPID: 06190045000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' S line, 330' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.329127 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.441548 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 544.6 LOGGED (FT.): 34.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H123A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
544.6	PLEISTOCENE		UNCONSOLIDATED	17.0	0.0
527.6	CARBONDALE		ROCK	13.0	17.0
514.6	CARBONDALE	COLCHESTER	COAL	2.4	30.0
512.2	CARBONDALE		ROCK	1.6	32.4

MAPID: 06190046000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 330' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.329123 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440642 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 537.8 LOGGED (FT.): 22.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H123B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
537.8	PLEISTOCENE		UNCONSOLIDATED	12.0	0.0
525.8	CARBONDALE		ROCK	6.0	12.0
519.8	CARBONDALE	COLCHESTER	COAL	2.3	18.0
517.5	CARBONDALE		ROCK	1.7	20.3

MAPID: 06190047000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' S line, 1' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330298 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.441559 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 543.0 LOGGED (FT.): 30.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H123C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.0	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
534.0	CARBONDALE		ROCK	17.0	9.0
517.0	CARBONDALE	COLCHESTER	COAL	2.5	26.0
514.5	CARBONDALE		ROCK	1.5	28.5

MAPID: 06190048000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 660' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.327959 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440631 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 531.9 LOGGED (FT.): 27.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H124 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
531.9	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
513.9	CARBONDALE	COLCHESTER	COAL	2.7	18.0
511.2	CARBONDALE		ROCK	6.3	20.7

MAPID: 06190049000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' S line, 675' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.327898 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.441537 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 529.6 LOGGED (FT.): 37.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H124C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
529.6	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
511.6	CARBONDALE		ROCK	19.0	18.0

MAPID: 06190050000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' E line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325612 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440609 DATE COLLECTED: 1 / 15 / 1962  
 SURFACE ELEVATION (FT.): 530.6 LOGGED (FT.): 29.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H125 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
530.6	PLEISTOCENE		UNCONSOLIDATED	26.0	0.0
504.6	CARBONDALE		ROCK	3.0	26.0

MAPID: 06190051000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' N line, 1' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330301 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442448 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 547.3 LOGGED (FT.): 41.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H146 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.3	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
512.3	CARBONDALE		ROCK	6.0	35.0

MAPID: 06190052000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' S line, 330' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.324445 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442417 DATE COLLECTED: 8 / 30 / 1962  
 SURFACE ELEVATION (FT.): 539.5 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H148B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
539.5	PLEISTOCENE		UNCONSOLIDATED	35.0	0.0
504.5	CARBONDALE		ROCK	12.0	35.0

MAPID: 06190053000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' S line, 100' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325263 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442425 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 543.8 LOGGED (FT.): 53.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H148Y WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.8	PLEISTOCENE		UNCONSOLIDATED	36.0	0.0
507.8	CARBONDALE		ROCK	17.0	36.0

MAPID: 06190054000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' S line, 660' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32327 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442406 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 543.2 LOGGED (FT.): 37.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H149 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.2	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0
509.2	CARBONDALE	COLCHESTER	COAL	2.2	34.0
507.0	CARBONDALE		ROCK	0.8	36.2

MAPID: 06190055000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' S line, 1' E line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320937 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442384 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 542.8 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H150 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
542.8	PLEISTOCENE		UNCONSOLIDATED	13.0	0.0
529.8	CARBONDALE		ROCK	34.0	13.0

MAPID: 06190057000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330309 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444272 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 553.5 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H171 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
553.5	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0

MAPID: 06190058000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 595' S line, 1' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.330317 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.445912 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 563.1 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H171DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
563.1	PLEISTOCENE		UNCONSOLIDATED	67.0	0.0

MAPID: 06190059000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 595' S line, 660' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.327989 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.445893 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 556.5 LOGGED (FT.): 43.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H172DC WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
556.5	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
529.5	CARBONDALE		ROCK	10.0	27.0
519.5	CARBONDALE	COLCHESTER	COAL	1.5	37.0
518.0	CARBONDALE	COLCHESTER	COAL	2.5	38.5
515.5	CARBONDALE		ROCK	2.0	41.0

MAPID: 06190060000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325634 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444231 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 546.5 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H173 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.5	PLEISTOCENE		UNCONSOLIDATED	56.0	0.0
490.5	CARBONDALE		ROCK	1.0	56.0

MAPID: 06190061000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' S line, 70' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325388 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.445138 DATE COLLECTED: 8 / 22 / 1962  
 SURFACE ELEVATION (FT.): 547.4 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H173CB WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.4	PLEISTOCENE		UNCONSOLIDATED	42.0	0.0
505.4	CARBONDALE		ROCK	15.0	42.0

MAPID: 06190062000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.320951 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444192 DATE COLLECTED: 1 / 22 / 1962  
 SURFACE ELEVATION (FT.): 543.3 LOGGED (FT.): 65.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H175 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
543.3	PLEISTOCENE		UNCONSOLIDATED	64.0	0.0
479.3	CARBONDALE		ROCK	1.0	64.0

MAPID: 06190063000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 595' S line, 330' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.329146 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.445904 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 561.0 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H196B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
561.0	PLEISTOCENE		UNCONSOLIDATED	41.0	0.0
520.0	CARBONDALE		ROCK	2.0	41.0
518.0	CARBONDALE	COLCHESTER	COAL	2.0	43.0
516.0	CARBONDALE		ROCK	1.0	45.0

MAPID: 06190064000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 660' S line, 60' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.325427 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.446049 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 552.1 LOGGED (FT.): 41.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H198 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
552.1	PLEISTOCENE		UNCONSOLIDATED	33.0	0.0
519.1	CARBONDALE		ROCK	4.0	33.0
515.1	CARBONDALE	COLCHESTER	COAL	2.3	37.0
512.8	CARBONDALE		ROCK	1.7	39.3

MAPID: 06190065000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' N line, 990' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.322122 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.446911 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 546.2 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199A WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.2	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0
499.2	CARBONDALE		ROCK	10.0	47.0

MAPID: 06190066000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' N line, 660' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.323297 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.446922 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 562.7 LOGGED (FT.): 54.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199C WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
562.7	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
543.7	CARBONDALE		ROCK	31.0	19.0
512.7	CARBONDALE	COLCHESTER	COAL	2.4	50.0
510.3	CARBONDALE		ROCK	1.6	52.4

MAPID: 06190067000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 550' N line, 660' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.323294 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.446315 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 558.8 LOGGED (FT.): 50.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199J WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
558.8	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
540.8	CARBONDALE		ROCK	28.5	18.0
512.3	CARBONDALE	COLCHESTER	COAL	2.4	46.5
509.9	CARBONDALE		ROCK	1.1	48.9

MAPID: 06190068000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 760' S line, 1038' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.321948 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.446294 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 548.2 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199M WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
548.2	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0



MAPID: 06190069000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 560' N line, 825' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.322706 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.44628 DATE COLLECTED: 8 / 29 / 1962  
 SURFACE ELEVATION (FT.): 557.2 LOGGED (FT.): 51.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199N WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
557.2	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
530.2	CARBONDALE		ROCK	20.0	27.0
510.2	CARBONDALE	COLCHESTER	COAL	2.3	47.0
507.9	CARBONDALE		ROCK	1.7	49.3

MAPID: 06190075000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 660' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.32798 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447869 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 566.6 LOGGED (FT.): 52.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H222 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
566.6	PLEISTOCENE		UNCONSOLIDATED	27.0	0.0
539.6	CARBONDALE		ROCK	21.5	27.0
518.1	CARBONDALE	COLCHESTER	COAL	2.3	48.5
515.8	CARBONDALE		ROCK	1.2	50.8

MAPID: 06190079000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 330' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.324476 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447839 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 546.3 LOGGED (FT.): 38.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H223B WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.3	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
531.3	CARBONDALE		ROCK	19.0	15.0
512.3	CARBONDALE	COLCHESTER	COAL	2.3	34.0
510.0	CARBONDALE		ROCK	1.7	36.3

MAPID: 06190081000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 1' N line, 660' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.323301 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.44783 DATE COLLECTED: 8 / 27 / 1962  
 SURFACE ELEVATION (FT.): 547.3 LOGGED (FT.): 39.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H224 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
547.3	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
533.3	CARBONDALE		ROCK	21.0	14.0
512.3	CARBONDALE	COLCHESTER	COAL	2.2	35.0
510.1	CARBONDALE		ROCK	1.8	37.2

MAPID: 06190444000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 33 QUARTERS/FOOTAGES: 330' N line, 990' W line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.322122 GEOLOGIST: PHILLIPS  
 CONFIDENTIAL: N LATITUDE: 39.446911 DATE COLLECTED: 8 / 28 / 1962  
 SURFACE ELEVATION (FT.): 546.2 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE H199A WELL TYPE: Coal Test  
 COMMENT: BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
546.2	PLEISTOCENE		UNCONSOLIDATED	9.0	0.0
537.2	PLEISTOCENE		CLAY	8.0	9.0
529.2	PLEISTOCENE		CLAY	30.0	17.0
499.2			SHALE	10.0	47.0

MAPID: 06100274000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306874 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.436764 DATE COLLECTED: 8 / 21 / 1964  
 SURFACE ELEVATION (FT.): 541.0 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 207-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.0	PLEISTOCENE		CLAY	19.5	0.0
521.5			SANDY SHALE	21.3	19.5
500.2	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	40.8
498.2	CARBONDALE	COLCHESTER	COAL	2.5	42.8
495.7			UNDERCLAY	0.8	45.3

MAPID: 06100275000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 600' S line, 1500' E line  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.307559 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.434714 DATE COLLECTED: 8 / 21 / 1964  
 SURFACE ELEVATION (FT.): 512.0 LOGGED (FT.): 29.5 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY 206-P WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
512.0	PLEISTOCENE		CLAY	21.5	0.0	
490.5	CARBONDALE		SANDY SHALE	3.5	21.5	
487.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	25.0	
485.5	CARBONDALE	COLCHESTER	COAL	2.5	26.5	
483.0	SPOON		UNDERCLAY	0.5	29.0	

MAPID: 06190348000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306878 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.436767 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 540.9 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G57 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
540.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0	
525.9	CARBONDALE		ROCK	27.0	15.0	
498.9	CARBONDALE	COLCHESTER	COAL	2.3	42.0	
496.6	CARBONDALE		ROCK	1.7	44.3	

MAPID: 06190349000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302203 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.436708 DATE COLLECTED: 9 / 6 / 1962  
 SURFACE ELEVATION (FT.): 525.2 LOGGED (FT.): 29.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G59 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
525.2	PLEISTOCENE		UNCONSOLIDATED	6.0	0.0	
519.2	CARBONDALE		ROCK	20.0	6.0	
499.2	CARBONDALE	COLCHESTER	COAL	2.0	26.0	
497.2	CARBONDALE		ROCK	1.0	28.0	

MAPID: 06190350000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311534 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440509 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 524.3 LOGGED (FT.): 45.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G105 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.3	PLEISTOCENE		UNCONSOLIDATED	43.0	0.0
481.3	CARBONDALE		ROCK	2.0	43.0

MAPID: 06190351000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 660' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.309195 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440494 DATE COLLECTED: 9 / 11 / 1962  
 SURFACE ELEVATION (FT.): 540.6 LOGGED (FT.): 35.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G106 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
540.6	PLEISTOCENE		UNCONSOLIDATED	16.0	0.0
524.6	CARBONDALE		ROCK	16.0	16.0
508.6	CARBONDALE	COLCHESTER	COAL	1.7	32.0
506.9	CARBONDALE		ROCK	1.3	33.7

MAPID: 06190352000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306853 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.44048 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 550.9 LOGGED (FT.): 46.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G107 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
550.9	PLEISTOCENE		UNCONSOLIDATED	18.0	0.0
532.9	CARBONDALE		ROCK	25.0	18.0
507.9	CARBONDALE	COLCHESTER	COAL	2.0	43.0
505.9	CARBONDALE		ROCK	1.0	45.0

MAPID: 06190353000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE SE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.30216 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.440454 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 554.1 LOGGED (FT.): 53.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G109 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
554.1	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
533.1	CARBONDALE		ROCK	28.0	21.0
505.1	CARBONDALE	COLCHESTER	COAL	2.3	49.0
502.8	CARBONDALE		ROCK	1.7	51.3

MAPID: 06190354000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 660' S line, 660' W line of SW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.309184 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442319 DATE COLLECTED: 9 / 11 / 1962  
 SURFACE ELEVATION (FT.): 524.8 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G131 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
524.8	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0

MAPID: 06190355000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 660' S line, 1' W line of SE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306831 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.442305 DATE COLLECTED: 9 / 11 / 1962  
 SURFACE ELEVATION (FT.): 541.9 LOGGED (FT.): 35.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G132 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
541.9	PLEISTOCENE		UNCONSOLIDATED	15.0	0.0
526.9	CARBONDALE		ROCK	16.0	15.0
510.9	CARBONDALE	COLCHESTER	COAL	2.4	31.0
508.5	CARBONDALE		ROCK	1.6	33.4

MAPID: 06190356000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.316245 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444194 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 533.1 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G153 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
533.1	PLEISTOCENE		UNCONSOLIDATED	57.0	0.0

MAPID: 06190357000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NW  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.311534 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.4442 DATE COLLECTED: 3 / 20 / 1962  
 SURFACE ELEVATION (FT.): 518.0 LOGGED (FT.): 47.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G155 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
518.0	PLEISTOCENE		UNCONSOLIDATED	47.0	0.0

MAPID: 06190358000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 660' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.309181 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444202 DATE COLLECTED: 9 / 11 / 1962  
 SURFACE ELEVATION (FT.): 542.4 LOGGED (FT.): 57.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G156 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
542.4	PLEISTOCENE		UNCONSOLIDATED	53.0	0.0
489.4	CARBONDALE		ROCK	4.0	53.0

MAPID: 06190359000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306828 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444204 DATE COLLECTED: 1 / 23 / 1962  
 SURFACE ELEVATION (FT.): 549.0 LOGGED (FT.): 45.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G157 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
549.0	PLEISTOCENE		UNCONSOLIDATED	21.0	0.0
528.0	CARBONDALE		ROCK	20.0	21.0
508.0	CARBONDALE	COLCHESTER	COAL	2.3	41.0
505.7	CARBONDALE		ROCK	1.7	43.3

MAPID: 06190360000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' S line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302117 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.444209 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 551.6 LOGGED (FT.): 50.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G159 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
551.6	PLEISTOCENE		UNCONSOLIDATED	28.0	0.0
523.6	CARBONDALE		ROCK	18.0	28.0
505.6	CARBONDALE	COLCHESTER	COAL	2.3	46.0
503.3	CARBONDALE		ROCK	1.7	48.3

MAPID: 06190361000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' W line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.31152 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447882 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 551.0 LOGGED (FT.): 67.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G205 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
551.0	PLEISTOCENE		UNCONSOLIDATED	66.0	0.0
485.0	CARBONDALE		ROCK	1.0	66.0

MAPID: 06190362000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' E line of NW NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.306803 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447917 DATE COLLECTED: 2 / 22 / 1962  
 SURFACE ELEVATION (FT.): 548.4 LOGGED (FT.): 27.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G207 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
548.4	PLEISTOCENE		UNCONSOLIDATED	14.0	0.0
534.4	CARBONDALE		ROCK	7.0	14.0
527.4	CARBONDALE	COLCHESTER	COAL	1.0	21.0
526.4	CARBONDALE		ROCK	5.0	22.0

MAPID: 06190363000C VERSION: 1

PROJECT: AMAX DATA

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE  
 QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302078 GEOLOGIST: LAWSON  
 CONFIDENTIAL: N LATITUDE: 39.447955 DATE COLLECTED: 3 / 14 / 1962  
 SURFACE ELEVATION (FT.): 565.5 LOGGED (FT.): 59.0 LOG TYPE: Drillers Log  
 SOURCE: AYRSHIRE G209 WELL TYPE: Coal Test  
 COMMENT: ROODHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
565.5	PLEISTOCENE		UNCONSOLIDATED	19.0	0.0
546.5	CARBONDALE		ROCK	37.5	19.0
509.0	CARBONDALE	COLCHESTER	COAL	2.2	56.5
506.8	CARBONDALE		ROCK	0.3	58.7



MAPID: 06190474000C VERSION: 1

PROJECT: NCRDS02

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 34 QUARTERS/FOOTAGES: 1' N line, 1' E line of NE NE SE

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.30216 GEOLOGIST: STRAAYER

CONFIDENTIAL: N LATITUDE: 39.440454 DATE COLLECTED: 2 / 22 / 1962

SURFACE ELEVATION (FT.): 554.1 LOGGED (FT.): 53.0 LOG TYPE: Drillers Log

SOURCE: AYRSHIRE G109 WELL TYPE: Coal Test

COMMENT: ROADHOUSE BOX 44

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
554.1	PLEISTOCENE		UNCONSOLIDATED	8.0	0.0	
546.1	PLEISTOCENE		CLAY	13.0	8.0	
533.1	CARBONDALE		SANDSTONE	15.0	21.0	SOFT
518.1	CARBONDALE		SANDY SHALE	10.0	36.0	
508.1	CARBONDALE	MECCA QUARRY	DARK SHALE	1.0	46.0	SOFT
507.1	CARBONDALE	MECCA QUARRY	BLACK SHALE	2.0	47.0	
505.1	CARBONDALE	COLCHESTER	COAL	2.3	49.0	GOOD
502.8	CARBONDALE		UNDERCLAY	1.7	51.3	

MAPID: 06100276000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 35 QUARTERS/FOOTAGES: 2000' N line, 1' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302129 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.442437 DATE COLLECTED: 8 / 19 / 1964

SURFACE ELEVATION (FT.): 550.0 LOGGED (FT.): 51.7 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 202-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
550.0	PLEISTOCENE		CLAY	18.5	0.0	
531.5	CARBONDALE		SANDSTONE	10.5	18.5	SOFT
521.0	CARBONDALE		SANDY SHALE	15.0	29.0	
506.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	44.0	
504.5	CARBONDALE	COLCHESTER	COAL	2.6	45.5	
501.9	SPOON		UNDERCLAY	3.6	48.1	
498.3	SPOON	SEAHORNE LS	LIMESTONE	0.0	51.7	

MAPID: 06100277000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 11W SECTION: 35 QUARTERS/FOOTAGES: 1' N line, 1' W line

QUADRANGLE: ROODHOUSE EAST LONGITUDE: -90.302071 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.447953 DATE COLLECTED: 8 / 28 / 1964

SURFACE ELEVATION (FT.): 570.0 LOGGED (FT.): 61.5 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 216-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
570.0	PLEISTOCENE		CLAY	24.5	0.0	
545.5	CARBONDALE		SANDY SHALE	10.5	24.5	
535.0	CARBONDALE		SANDSTONE	19.0	35.0	SOFT
516.0	CARBONDALE	MECCA QUARRY	BLACK SHALE	1.5	54.0	
514.5	CARBONDALE	COLCHESTER	COAL	2.5	55.5	
512.0	SPOON		UNDERCLAY	3.5	58.0	
508.5	SPOON	SEAHORNE LS	LIMESTONE	0.0	61.5	

MAPID: 06100278000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 3 QUARTERS/FOOTAGES: 2100' S line, 1320' E line

QUADRANGLE: ALSEY LONGITUDE: -90.416317 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.51275 DATE COLLECTED: 8 / 25 / 1964

SURFACE ELEVATION (FT.): LOGGED (FT.): 39.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 20-C WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	8.0	0.0	
-	PLEISTOCENE		GRAVEL	4.0	8.0	
-	PLEISTOCENE		CLAY	26.0	12.0	
-			LIMESTONE	1.0	38.0	

MAPID: 06100279000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 9 QUARTERS/FOOTAGES: 2640' N line, 1' W line

QUADRANGLE: ROODHOUSE WEST LONGITUDE: -90.449317 GEOLOGIST: KOROSE

CONFIDENTIAL: N LATITUDE: 39.499663 DATE COLLECTED: 8 / 26 / 1964

SURFACE ELEVATION (FT.): LOGGED (FT.): 147.0 LOG TYPE: Drillers Log

SOURCE: PITTSBURG & MIDWAY 212-P WELL TYPE: Coal Test

COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	17.0	0.0	
-	PLEISTOCENE		CLAY	130.0	17.0	GLACIAL WASH NOTED; GRY

**MAPID:** 06100186000C    **VERSION:** 1    **PROJECT:** NCRDS99  
**COUNTY:** GREENE    **TWP/RNG:** 12N 12W    **SECTION:** 16    **QUARTERS/FOOTAGES:** NW SW NW  
**QUADRANGLE:** ROODHOUSE WEST    **LONGITUDE:** -90.44854    **GEOLOGIST:** MCCRACKEN  
**CONFIDENTIAL:** N    **LATITUDE:** 39.487802    **DATE COLLECTED:** 4 / 2 / 1957  
**SURFACE ELEVATION (FT.):** 630.0    **LOGGED (FT.):** 85.0    **LOG TYPE:** Drillers Log  
**SOURCE:** DONAN    WH-6    **WELL TYPE:** Coal Test  
**COMMENT:** ELEV. +/- 5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
630.0	PLEISTOCENE		UNCONSOLIDATED	75.0	0.0	
555.0	PLEISTOCENE		GRAVEL	10.0	75.0	

**MAPID:** 06100280000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 12W    **SECTION:** 16    **QUARTERS/FOOTAGES:** 500' S line, 1' W line  
**QUADRANGLE:** ROODHOUSE WEST    **LONGITUDE:** -90.449684    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.479121    **DATE COLLECTED:** 8 / 26 / 1964  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 97.0    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    405-P    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		SAND & GRAVEL	96.5	0.0	W/ SEA MUD
-			LIMESTONE	0.5	96.5	

**MAPID:** 06100281000C    **VERSION:** 1    **PROJECT:** NCRDS95  
**COUNTY:** GREENE    **TWP/RNG:** 12N 12W    **SECTION:** 17    **QUARTERS/FOOTAGES:** 1320' N line, 1' E line  
**QUADRANGLE:** ROODHOUSE WEST    **LONGITUDE:** -90.449718    **GEOLOGIST:** KOROSE  
**CONFIDENTIAL:** N    **LATITUDE:** 39.488731    **DATE COLLECTED:** 8 / 26 / 1964  
**SURFACE ELEVATION (FT.):**    **LOGGED (FT.):** 70.0    **LOG TYPE:** Drillers Log  
**SOURCE:** PITTSBURG & MIDWAY    404-B    **WELL TYPE:** Coal Test  
**COMMENT:**

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	36.0	0.0	W/ SAND, GRAVEL
-	PLEISTOCENE		CLAY & GRAVEL	34.0	36.0	
-			LIMESTONE	0.0	70.0	NOTE: LG. CRK. LOST WATER, BELIEVE LIME

MAPID: 06100282000C VERSION: 1

PROJECT: NCRDS95

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 19 QUARTERS/FOOTAGES: 1320' S line, 1320' W line of SW  
 QUADRANGLE: ROODHOUSE WEST LONGITUDE: -90.482857 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.467279 DATE COLLECTED: 8 / 27 / 1964  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 68.0 LOG TYPE: Drillers Log  
 SOURCE: PITTSBURG & MIDWAY WELL TYPE: Coal Test  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	PLEISTOCENE		CLAY	26.0	0.0	
-	PLEISTOCENE		GRAVEL	3.5	26.0	
-	PLEISTOCENE		CLAY	33.5	29.5	GRY
-			ROCK	3.5	63.0	DRILLER'S NOTE: BROKEN ROCK GLACIER
-			BOULDER	1.5	66.5	

MAPID: 061193B0001F VERSION: 1

PROJECT: AVAIL

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 23 QUARTERS/FOOTAGES: SW NW SE  
 QUADRANGLE: ROODHOUSE WEST LONGITUDE: -90.401974 GEOLOGIST: KOROSE  
 CONFIDENTIAL: N LATITUDE: 39.467547 DATE COLLECTED: 0 / 0 / 1927  
 SURFACE ELEVATION (FT.): LOGGED (FT.): 0.0 LOG TYPE: Measured section  
 SOURCE: FIELD NOTES WELL TYPE: Outcrop  
 COMMENT:

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
-	CARBONDALE		SHALE	5.0		
-	CARBONDALE		SHALE	20.0		
-	CARBONDALE	MECCA QUARRY	BLACK SHALE	-		
-	CARBONDALE	COLCHESTER	COAL	-		ELEV. 566'

MAPID: 06100185000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 27 QUARTERS/FOOTAGES: NW SW NW  
 QUADRANGLE: ROODHOUSE WEST LONGITUDE: -90.430032 GEOLOGIST: MCCracken  
 CONFIDENTIAL: N LATITUDE: 39.458663 DATE COLLECTED: 4 / 2 / 1957  
 SURFACE ELEVATION (FT.): 620.0 LOGGED (FT.): 83.0 LOG TYPE: Drillers Log  
 SOURCE: DONAN WH-5 WELL TYPE: Coal Test  
 COMMENT: ELEV +/- 5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)		COMMENT
				UNIT	OVERBURDEN	
620.0	PLEISTOCENE		UNCONSOLIDATED	34.0	0.0	
586.0	PLEISTOCENE		CLAY	49.0	34.0	

MAPID: 06100184000C VERSION: 1

PROJECT: NCRDS99

COUNTY: GREENE TWP/RNG: 12N 12W SECTION: 36 QUARTERS/FOOTAGES: NE NE NE

QUADRANGLE: ROODHOUSE WEST LONGITUDE: -90.376108 GEOLOGIST: MCCRACKEN

CONFIDENTIAL: N LATITUDE: 39.44707 DATE COLLECTED: 3 / 30 / 1957

SURFACE ELEVATION (FT.): 585.0 LOGGED (FT.): 85.0 LOG TYPE: Drillers Log

SOURCE: DONAN WH-4 WELL TYPE: Coal Test

COMMENT: ELEV +/- 5'

ELEVATION TOP (FT.)	FORMATION	MEMBER	LITHOLOGY	THICKNESS (FT.)	
				UNIT	OVERBURDEN COMMENT
585.0	PLEISTOCENE		UNCONSOLIDATED	30.0	0.0
555.0	PLEISTOCENE		CLAY	44.7	30.0
510.3			SHALE	10.3	74.7

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