# Status Report

**Total Records:** 475

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<th>Top 3 County Records</th>
<th>Top 3 Log Type Records</th>
<th>Top 3 Coal Records</th>
<th>Top 3 Member Records</th>
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## 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**

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<th>Min. Depth</th>
<th>Max. Depth</th>
<th>Avg. Thk</th>
<th>Min. Thk</th>
<th>Max. Thk</th>
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| Net Coal | 27.0 |
Coal Logs

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

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

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

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

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

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


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**Section:** 1  
**Quadrangle:** ARCOLA  
**Surface Elevation (ft.):** 652.0  
**Logged (ft.):** 1145.0  
**Log Type:** Electric Log  
**Well Type:** Oil and Gas Test  
**Geologist:** C TREWORGY  
**Date Collected:**  
**Logged:** 1145.0  
**Confidential:** N  
**Project:** CGT-ECILL  
**Good Log**  

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**Log Type:** Electric Log  
**Well Type:** Oil and Gas Test  
**Geologist:** C TREWORGY  
**Date Collected:**  
**Logged:** 1155.0  
**Confidential:** N  
**Project:** CGT-ECILL  
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### COMMENT: Oil and Gas Test

#### COUNTY: DOUGLAS  TWP/RNG: 14N 7E  SECTION: 12  QUADRANGLE: ARCOLA

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-68.0 | MODESTO | WEST FRANKLIN | LIMESTONE | 9.0 | 727.0 |
-198.0 | CARBONDALE | DANVILLE | COAL | 2.0 | 857.0 |
-305.0 | CARBONDALE | SPRINGFIELD | COAL | - | 964.0 |
-424.0 | CARBONDALE | HOUCHIN CREEK | COAL | - | 1083.0 |
-481.0 | CARBONDALE | COLCHESTER | COAL | - | 1140.0 |

### FAIR LOG

**ELEVATION** | **FORMATION TOP (FT.)** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **UNIT** | **OVERBURDEN** | **COMMENT**
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-170.0 | CARBONDALE | DANVILLE | COAL | - | 850.0 |
-255.0 | CARBONDALE | HERRIN | COAL | 4.5 | 935.0 |
-282.0 | CARBONDALE | SPRINGFIELD | COAL | - | 962.0 |
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### Map ID: 04100307000C  Version: 1  Project: CGT-ECILL

**County:** DOUGLAS  **Twp/Rng:** 14N 8E  **Section:** 7  **Quarters/footages:** NW SE SW  
**Quadrangle:** ARCOLA  **Longitude:** -88.352973  **Confidential:** N  
**Surface Elevation (ft.):** 659.0  **Logged (ft.):** 1165.0  **Source:** GOOD LOG  
**Date Collected:**  **Well Type:** Oil and Gas Test  

**Geologist:** C. Treworgy  **Comment:** 14N 8E  

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### Map ID: 04100518000C  Version: 1  Project: CGT-ECILL

**County:** DOUGLAS  **Twp/Rng:** 14N 8E  **Section:** 8  **Quarters/footages:** SW NE NW  
**Quadrangle:** ARCOLA  **Longitude:** -88.334343  **Confidential:** N  
**Surface Elevation (ft.):** 667.0  **Logged (ft.):** 1099.0  **Source:** SS ON #6, GOOD LOG  
**Date Collected:**  **Well Type:** Oil and Gas Test  

**Geologist:** C. Treworgy  **Comment:** 14N 8E  

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### Section 17

- **MAPID:** 04100176000C
- **Version:** 1
- **PROJECT:** CGT-ECILL
- **COUNTY:** DOUGLAS
- **TWP/RNG:** 14N 8E
- **SECTION:** 17
- **CONFIDENTIAL:** N
- **QUADRANGLE:** ARCOLA
- **LONGITUDE:** -88.332231
- **LATITUDE:** 39.660199
- **SURFACE ELEVATION (FT.):** 658.0
- **LOGGED (FT.):** 1156.0
- **SOURCE:** GOOD LOG
- **LOG TYPE:** Oil and Gas Test
- **WELL TYPE:** Electric Log

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- **Version:** 1
- **PROJECT:** CGT-ECILL
- **COUNTY:** DOUGLAS
- **TWP/RNG:** 14N 8E
- **SECTION:** 18
- **CONFIDENTIAL:** N
- **QUADRANGLE:** ARCOLA
- **LONGITUDE:** -88.341811
- **LATITUDE:** 39.658406
- **SURFACE ELEVATION (FT.):** 659.0
- **LOGGED (FT.):** 1126.0
- **SOURCE:** GOOD LOG
- **LOG TYPE:** Oil and Gas Test
- **WELL TYPE:** Electric Log

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**County:** DOUGLAS  
**Twp/Rng:** 14N 8E  
**Section:** 18  
**Quarters/Footages:** NE NW NE  
**Surface Elevation (ft.):** 656.0  
**Logged (ft.):** 1139.5  
**Comments:** FAIR LOG

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### Map ID: 04121604000C

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**Section:** 3  
**Quarters/Footages:** 325' N line, 380' E line  
**Surface Elevation (ft.):** 638.0  
**Logged (ft.):** 229.0  
**Comments:** DATA FROM 1976 COMPANY MAP

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**Section:** 3  
**Quarters/Footages:** 325' N line, 380' E line  
**Surface Elevation (ft.):** 638.0  
**Logged (ft.):** 448.0  
**Comments:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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360.0 | CARBONDALE | HERRIN | COAL | 3.9 | 297.0 | MAP SAYS "4-" FEET OF COAL

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**SOURCE:** HYDROCARBON SURVEY - PG-20  
**DATE COLLECTED:** 0 / 0 / 1976  
**CONFIDENTIAL:** N  
**PROJECT:** ISGS96  
**COMMENT:** DATA FROM 1976 COMPANY MAP

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**DATE COLLECTED:** 9 / 0 / 1971  
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**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **UNIT** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | --- | ---
- | - | CLAY & GRAVEL | 126.0 | 34.0 | GRY | - | -
- | - | SHALE | 2.0 | 160.0 | - | - | -
- | - | SHALE | 16.0 | 162.0 | GRY | - | -
- | - | SHALE | 2.0 | 178.0 | - | - | -
- | - | SANDY SHALE | 34.0 | 180.0 | - | - | -
- | CARBONDALE | BANKSTON FORK | 6.0 | 214.0 | LIMESTONE | THICKNESS ADJ TO MATCH LOG DEPTHS | -
- | CARBONDALE | ENERGY | 100.0 | 220.0 | SANDY SHALE | UNIT 11 THRU 23 FROM CORE; GRY | -
- | CARBONDALE | ENERGY | 9.9 | 320.0 | SHALE | GRY | -
- | CARBONDALE | ENERGY | 3.4 | 329.9 | SHALE | GRY | -
- | CARBONDALE | ENERGY | 0.1 | 333.2 | SIDERITE | BRN | -
- | CARBONDALE | ENERGY | 0.3 | 333.4 | SHALE | GRY | -
- | CARBONDALE | ENERGY | 0.1 | 333.6 | SHALE | GRY | -
- | CARBONDALE | ENERGY | 0.3 | 333.7 | SHALE | GRY | -
- | CARBONDALE | HERRIN | 3.0 | 334.0 | COAL | - | -
- | CARBONDALE | HERRIN | 0.1 | 337.0 | SHALE | GRY | -
- | CARBONDALE | HERRIN | 0.6 | 337.1 | COAL | - | -
- | CARBONDALE | HERRIN | 0.1 | 337.6 | SHALE | RASHY; GRY | -
- | CARBONDALE | HERRIN | 0.3 | 337.7 | SHALE | GRY/GRN | -
- | CARBONDALE | SHALE | 4.5 | 338.0 | CALCAREOUS SHALE | - | -
- | CARBONDALE | SHALE | 1.5 | 342.5 | SHALE | GRY/GRN | -
### Top and Thickness from Coal Sec. Log Book

**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **UNIT** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | --- | ---
323.0 | CARBONDALE | HERRIN | COAL | 2.0 | 371.0 |

---

**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **UNIT** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | --- | ---
663.0 | UNCONSOLIDATED | | | 102.0 | 0.0 | |
561.0 | ROCK | | | 210.0 | 102.0 | |
351.0 | CARBONDALE | HERRIN | COAL | 3.9 | 312.0 | MAP SAYS "4-" FEET OF COAL |

---

**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **UNIT** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | --- | ---
350.0 | CARBONDALE | HERRIN | COAL | 2.0 | 313.0 | |
### MAPID: 04121607000C  VERSION: 1  PROJECT: ISGS96

**COUNTY:** DOUGLAS  **TWP/RNG:** 14N 11E  **SECTION:** 6  **QUARTERS/FOOTAGES:** 565' N line, 110' W line

**QUADRANGLE:** OAKLAND  **LONGITUDE:** -88.025349  **GEOLOGIST:** C TREWORGY

**CONFIDENTIAL:** N  **DATE COLLECTED:** 0 / 0 / 1976

**SURFACE ELEVATION (FT.):** 658.0  **LOGGED (FT.):** 239.0

**SOURCE:** HYDROCARBON SURVEY  **WELL TYPE:** Coal map

**COMMENT:** DATA FROM 1976 COMPANY MAP

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<th>MEMBER</th>
<th>LITHOLOGY</th>
<th>THICKNESS (FT.)</th>
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### MAPID: 04121607000C  VERSION: 2  PROJECT: CONF

**COUNTY:** DOUGLAS  **TWP/RNG:** 14N 11E  **SECTION:** 6  **QUARTERS/FOOTAGES:** 565' N line, 110' W line

**QUADRANGLE:** OAKLAND  **LONGITUDE:** -88.025349  **GEOLOGIST:** LOG BOOK

**CONFIDENTIAL:** N  **DATE COLLECTED:** 10 / 0 / 1971

**SURFACE ELEVATION (FT.):** 658.0  **LOGGED (FT.):** 447.0

**SOURCE:** HYDROCARBON SURVEY  **WELL TYPE:** Coal Test

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

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### MAPID: 04121608000C  VERSION: 1  PROJECT: ISGS96

**COUNTY:** DOUGLAS  **TWP/RNG:** 14N 14W  **SECTION:** 5  **QUARTERS/FOOTAGES:** 75' N line, 54' E line

**QUADRANGLE:** BROCTON  **LONGITUDE:** -87.985781  **GEOLOGIST:** C TREWORGY

**CONFIDENTIAL:** N  **DATE COLLECTED:** 0 / 0 / 1976

**SURFACE ELEVATION (FT.):** 653.0  **LOGGED (FT.):** 137.1

**SOURCE:** HYDROCARBON SURVEY  **WELL TYPE:** Coal Test

**COMMENT:** DATA FROM 1976 COMPANY MAP

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<th>LITHOLOGY</th>
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### GEOLOGIST:

**LOG BOOK**

**SURFACE ELEVATION (FT.):** 653.0

**SOURCE:** HYDROCARBON SURVEY CO-76-6

**DATE COLLECTED:** 0 / 0 / 1976

**LOGGED (FT.):** 160.0

**CONFIDENTIAL:** N

**PROJECT:** CONF

**TOPS & THICK. FROM COAL SEC. LOG BOOK**

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### GEOLOGIST:

**C TREWORGY**

**SURFACE ELEVATION (FT.):** 643.0

**SOURCE:** AMCO-IL #AM-8906

**DATE COLLECTED:** 6 / 21 / 1989

**LOGGED (FT.):** 165.0

**CONFIDENTIAL:** N

**PROJECT:** ISGS90

**COUNTY:** DOUGLAS

**QUADRANGLE:** BROCTON

**COORDINATES:**

- **LONGITUDE:** -87.985781
- **LATITUDE:** 39.699809

**SOURCE:** HYDROCARBON SURVEY CO-76-6

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

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### GEOLOGIST:

**C TREWORGY**

**SURFACE ELEVATION (FT.):** 643.0

**SOURCE:** AMCO-IL #AM-8906

**DATE COLLECTED:** 6 / 21 / 1989

**LOGGED (FT.):** 165.0

**CONFIDENTIAL:** N

**PROJECT:** ISGS90

**COUNTY:** DOUGLAS

**QUADRANGLE:** BROCTON

**COORDINATES:**

- **LONGITUDE:** -87.985781
- **LATITUDE:** 39.699809

**SOURCE:** HYDROCARBON SURVEY CO-76-6

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

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**Project:** CGT-ECILL  
**County:** DOUGLAS  
**Quadrangle:** ATWOOD  
**MAPID:** 04100497000C  
**Version:** 1  

**Logs:**
- **Surface Elevation (ft.):** 663.0
- **Logged (ft.):** 1087.0
- **Source:** #5,#6 OUT, GOOD LOG
- **Log Type:** Electric Log
- **Well Type:** Oil and Gas Test
- **Confidential:** No
- **Date Collected:**
- **Geologist:** C. Treworgy

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**Logs:**
- **Surface Elevation (ft.):** 670.0
- **Logged (ft.):** 1113.0
- **Source:** GOOD LOG
- **Log Type:** Electric Log
- **Well Type:** Oil and Gas Test
- **Confidential:** No
- **Date Collected:**
- **Geologist:** C. Treworgy

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### LOG: 04100371000C

**Version:** 1  
**Project:** CGT-ECILL

**County:** DOUGLAS  
**Twp/Rng:** 15N 7E  
**Section:** 3  
**Quarters/Footages:** 4290' S line, 1650' E line of NE

**Quadrangle:** ATWOOD  
**Longitude:** -88.401093  
**Latitude:** 39.787918

**Surface Elevation (ft.):** 672.0  
**Logged (ft.):** 1125.0  
**Source:** GOOD LOG  
**Comment:** 15N 7E TWP/RNG: 4854' S line, 330' W line

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<th>Member</th>
<th>Lithology</th>
<th>Thickness (ft.)</th>
<th>Unit</th>
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### LOG: 04100575000C

**Version:** 1  
**Project:** CGT-ECILL

**County:** DOUGLAS  
**Twp/Rng:** 15N 7E  
**Section:** 3  
**Quarters/Footages:** 4854' S line, 330' W line

**Quadrangle:** ATWOOD  
**Longitude:** -88.412486  
**Latitude:** 39.782555

**Surface Elevation (ft.):** 664.0  
**Logged (ft.):** 1136.0  
**Source:** GOOD LOG  
**Comment:** 15N 7E TWP/RNG: 4854' S line, 330' W line

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<th>Member</th>
<th>Lithology</th>
<th>Thickness (ft.)</th>
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**SURFACE ELEVATION (FT.):** 668.0  
**LOGGED (FT.):** 1155.0  
**LOG TYPE:** Electric Log  
**WELL TYPE:** Oil and Gas Test  
**DATE COLLECTED:**  
**GEOLOGIST:** C TREWORGY  
**SOURCE:** GOOD LOG  

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**SOURCE:** GOOD LOG  

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**COUNTY:** DOUGLAS  **TWP/RNG:** 15N 7E  **SECTION:** 10  **QUARTERS/FOOTAGES:** NE NE NE NE

**QUADRANGLE:** ATWOOD  **CONFIDENTIAL:** N  **SURFACE ELEVATION (FT.):** 675.0  **LOGGED (FT.):** 1111.0  **SOURCE:** #6,#5 OUT, FAIR LOG

**GEOLOGIST:** C TREWORGY  **DATE COLLECTED:**  **LOG TYPE:** Electric Log  **WELL TYPE:** Oil and Gas Test

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**GEOLOGIST:** C TREWORGY  **DATE COLLECTED:**  **LOG TYPE:** Electric Log  **WELL TYPE:** Oil and Gas Test

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**GEOLOGIST:** C TREWORGY  **DATE COLLECTED:**  **LOG TYPE:** Electric Log  **WELL TYPE:** Oil and Gas Test

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**Logged (FT.):** 1147.0  
**County:** Douglas  
**Quadrangle:** Atwood  
**Confidential:** N  
**Source:** #6,#5 OUT, FAIR LOG  
**Comment:** 15N 7E

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**Logged (FT.):** 1156.0  
**County:** Douglas  
**Quadrangle:** Atwood  
**Confidential:** N  
**Source:** GOOD LOG  
**Comment:** 15N 7E

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## Data for Map ID 04100385000C

**Map ID:** 04100385000C  
**Version:** 1  
**Project:** CGT-ECILL

### Geo Information
- **County:** DOUGLAS  
- **Twp/Rng:** 15N 7E  
- **Section:** 23  
- **Quarters/Footages:** SW NE NE  
- **Quadrangle:** ARTHUR  
- **Surface Elevation (ft.):** 664.0  
- **Logged (ft.):** 1143.0  
- **Log Type:** Electric Log  
- **Well Type:** Oil and Gas Test  
- **Source:** #6,#5,#4 OUT, GOOD LOG  
- **GEOLOGIST:** C TREWORGY  
- **Latitude:** 39.736656  
- **Longitude:** -88.380103  
- **Confidential:** N

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**Map ID:** 04100444000C  
**Version:** 1  
**Project:** CGT-ECILL

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- **Twp/Rng:** 15N 7E  
- **Section:** 24  
- **Quarters/Footages:** SW NE NW  
- **Quadrangle:** ARCOLA  
- **Surface Elevation (ft.):** 662.0  
- **Logged (ft.):** 1144.0  
- **Log Type:** Electric Log  
- **Well Type:** Oil and Gas Test  
- **Source:** GOOD LOG  
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- **Confidential:** N

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*Note: All data is from the CGT-ECILL project, collected by C. Treworgy.*
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**CONFIDENTIAL:** N  **LATITUDE:** 39.696872  **DATE COLLECTED:**

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

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**PROJECT:** CGT-ECILL  
**QUADRANGLE:** ARCOLA  
**COUNTY:** DOUGLAS  
**LOGGED (FT.):** 1120.0  
**COMMENT:** 15N 8E

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**PROJECT:** CGT-ECILL  
**QUADRANGLE:** ARCOLA  
**COUNTY:** DOUGLAS  
**LOGGED (FT.):** 1095.0  
**COMMENT:** 15N 8E

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### Drillers Log

#### Villagrove Quadrangle

**County:** Douglas  
**Twp/Rng:** 15N 9E  
**Section:** 2  
**Quadrangle:** Villa Grove  
**Longitude:** -88.157717  
**Confidential:** N  
**Surface Elevation (ft.):** 651.0  
**Logged (ft.):** 200.0  
**Source:** IL State Geological Survey  
**Date Collected:** 8/25/1971  
**GEOLOGIST:** C Trewoory  
**Log Type:** Drillers Log  
**Well Type:** Coal Test

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#### ISGS95

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**Section:** 2  
**Quadrangle:** Villa Grove  
**Longitude:** -88.164702  
**Confidential:** N  
**Surface Elevation (ft.):** 655.0  
**Logged (ft.):** 157.0  
**Source:** Zeigler Coal Co.  
**Date Collected:** 8/6/1973  
**GEOLOGIST:** Bargh  
**Log Type:** Drillers Log  
**Well Type:** Coal Test

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**Date Collected:** 10/14/1971  
**Project:** ISGS90  
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**County:** DOUGLAS  
**TWP/RNG:** 15N 9E  
**Section:** 15  
**Quadrangle:** VILLA GROVE  
**Longitude:** -88.195129  
**Geologist:** C TREWORGY  
**Date Collected:** 10 / 26 / 1971  
**Source:** ZEIGLER COAL CO.  
**Logged (FT.):** 101.0  
**Confidential:** N  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  

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### Map ID: 04121850000C  Version: 1  Project: ISGS90

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**Section:** 16  
**Quadrangle:** HINDSBORO  
**Longitude:** -88.20205  
**Geologist:** C TREWORGY  
**Date Collected:** 12 / 20 / 1971  
**Source:** ZEIGLER COAL CO.  
**Logged (FT.):** 91.5  
**Confidential:** N  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  

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### Project: ISGS90

#### County: Douglas

#### Township/Range: 15N 9E

#### Section: 21

#### Township/Range: 15N 9E

#### Quadrangle: Hindsboro

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#### County: Douglas

#### Township/Range: 15N 9E

#### Section: 22

#### Township/Range: 15N 9E

#### Quadrangle: Hindsboro

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**Formation:** Unconsolidated  
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**Overburden:** 11.0

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**Formation:** Sandy Shale  
**Member:** Carbondale Energy  
**Thickness (ft.):** 5.0  
**Overburden:** 155.0

**Elevation:** 475.0  
**Formation:** Silty Shale  
**Member:** Carbondale Energy  
**Thickness (ft.):** 18.0  
**Overburden:** 160.0

**Elevation:** 457.0  
**Formation:** Coal  
**Member:** Carbondale Herrin  
**Thickness (ft.):** 0.6  
**Overburden:** 178.0

**Elevation:** 456.4  
**Formation:** Sandy Shale  
**Member:** Carbondale Energy  
**Thickness (ft.):** 5.9  
**Overburden:** 178.6

**Elevation:** 450.5  
**Formation:** Sandy Limestone  
**Member:** Carbondale Energy  
**Thickness (ft.):** 0.3  
**Overburden:** 184.5

**Elevation:** 450.2  
**Formation:** Sandy Shale  
**Member:** Carbondale Energy  
**Thickness (ft.):** 23.1  
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**Formation:** Limestone with Shale  
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**Thickness (ft.):** 6.7  
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**Elevation:** -  
**Formation:** Rock  
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**Elevation:** -  
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**Quadrangle:** HINDSBORO  **Longitude:** -88.195423  **Geologist:** C TREWORGY  
**Confidential:** N  **Date Collected:** 0 / 0 / 1976  
**Surface Elevation (ft.):** 640.0  **Logged (ft.):** 256.5  **Log Type:** Company map  
**Source:** HYDROCARBON SURVEY PG-12  **Well Type:** Coal Test  
**Comment:** DATA FROM 1976 COMPANY MAP  

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**Source:** HYDROCARBON SURVEY PG-12  **Well Type:** Coal Test  
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### Additional Information

- **Map ID:** 04100029000C
- **Version:** 1
- **Project:** CONF
- **County:** DOUGLAS
- **Twp/Rng:** 15N 10E
- **Section:** 1
- **Quarters/Footages:** 1' N line, 1' E line of SE
- **Quadrangle:** MURDOCK
- **Longitude:** -88.026379
- **Latitude:** 39.780299
- **Surface Elevation (FT.):** 167.6
- **Logged (FT.):** 167.6
- **Source:** BELL & ZOLLER COAL CO.
- **Confidential:** N
- **Date Collected:** 1/0/1945
- **Log Type:** Survey Core Study
- **Well Type:** Coal Test
- **Elevation:** Surface Elevation (FT.)
- **Formation:** CARBONDALE, SHALE, UNDERCLAY
- **Member:** HERRIN
- **Lithology:** UNCONSOLIDATED, SHALE, SANDSTONE/SHALE, SILTSTONE & SHALE, CALCAREOUS SANDSTONE, SANDY SHALE, SILTY SHALE, CARBONACEOUS SHALE, SILTSTONE
- **Thickness (FT.):** 6.9, 3.6, 3.6, 2.8, 0.8, 4.8, 0.4, 5.1, 6.4, 8.0, 4.3, 10.2, 10.1, 19.6, 5.6, 2.8, 7.2
- **Overburden:** 0.5, 0.0, 3.6, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0
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## SOURCE:
ZEIGLER COAL CO.

## DATE COLLECTED:
6 / 28 / 1971

## LOGGED (FT.):
171.5

## CONFIDENTIAL:
N

### PROJECT:
ISGS90

### SECTION:
1

### QUADRANGLE:
MURDOCK

### COUNTY:
DOUGLAS

### LOG BOOK:
Ziegler Coal Co.

### VERSION:
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### MAPID:
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### LONGITUDE:
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### LATITUDE:
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### LOG TYPE:
WELL TYPE:
Coal Test

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630.0 CARBONDALE HERRIN CLAY 31.0 9.0

599.0 CARBONDALE HERRIN 3.0 40.0

596.0 CARBONDALE HERRIN UNCONSOLIDATED 7.0 43.0

589.0 MODESTO SANDY SHALE 9.0 50.0

580.0 MODESTO SHALE 2.0 59.0 MULTI

578.0 MODESTO SILTY SHALE 3.5 61.0

574.5 CARBONDALE DANVILLE COAL 0.3 64.5

574.2 CARBONDALE UNDERCLAY 1.3 64.8

573.0 CARBONDALE SHALE 2.5 66.0 MULTI

570.5 CARBONDALE SHALE 1.7 68.5

568.8 CARBONDALE BANKSTON FORK LIMESTONE 5.3 70.2 GRAY

563.5 CARBONDALE ENERGY SANDSTONE 2.5 75.5

561.0 CARBONDALE ENERGY SANDSTONE/SHALE 80.5 78.0 SILTY SANDY

480.5 CARBONDALE ENERGY SHALE 6.0 158.5

474.5 CARBONDALE HERRIN COAL 7.0 164.5

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LOG BOOK

## SURFACE ELEVATION (FT.):
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## SOURCE:
BELL & ZOLLER COAL CO.

## DATE COLLECTED:
12 / 0 / 1944

## LOGGED (FT.):
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## CONFIDENTIAL:
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### PROJECT:
CONF

### SECTION:
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### QUADRANGLE:
MURDOCK

### COUNTY:
DOUGLAS

### LOG TYPE:
WELL TYPE:
Coal Test

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- CARBONDALE HERRIN COAL 214.8
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- SHALEY UPPER; SANDY & SILTY LOWER 67 FT
- GRAY
- CALCAREOUS
### LOG BOOK

**Surface Elevation (FT.):** 642.0  
**Logged (FT.):** 211.0  
**Date Collected:** 1/0/1945  
**Source:** BELL & ZOLLER COAL CO.  
**Confidential:** N  
**Logged (FT.):** 211.0  
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### SURVEY CORE STUDY

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**Source:** BELL AND ZOLLER COAL CO  
**Well Type:** Coal Test  
**Confidential:** N

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# Coal Test Survey Core Study

**CONFIDENTIAL:** N

**DATE COLLECTED:** 3 / 16 / 1971

**SOURCE:** BELL & ZOLLER COAL CO.

**WELL TYPE:** Coal Test

## Elevation Log

<table>
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<tr>
<th>Elevation (FT.)</th>
<th>Formation</th>
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<th>Thickness (FT.)</th>
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### Table: Lithological Log

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### Survey Core Study

- **MAPID:** 041010866000C  
  **VERSION:** 1  
  **PROJECT:** CONF

- **COUNTY:** DOUGLAS  
  **TWP/RNG:** 15N 10E  
  **SECTION:** 2  
  **QUARTERS/FOOTAGES:** NE NW SE

- **QUADRANGLE:** MURDOCK  
  **LONGITUDE:** -88.051193  
  **CONFIDENTIAL:** N  
  **LATITUDE:** 39.778809  
  **SURFACE ELEVATION (FT.):** 640.9  
  **LOGGED (FT.):** 196.8

- **SOURCE:** BELL & ZOLLER COAL CO. 105

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

### Elevation Log

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<th>ELEVATION (FT.)</th>
<th>FORMATION</th>
<th>MEMBER</th>
<th>LITHOLOGY</th>
<th>THICKNESS (FT.)</th>
<th>UNIT</th>
<th>OVERBURDEN (FT.)</th>
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- **DATE COLLECTED:** 8 / 31 / 1971
- **LOG TYPE:** Survey Core Study
- **WELL TYPE:** Coal Test

### Lithological Table

- **Formation:** CARBONDALE
- **Member:** HERRIN
- **Lithology:** COAL
- **Thickness:** 7.5 ft
- **Overburden:** 177.3 ft

- **Comment:** Thick estimated/removed by CO.
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**DATE COLLECTED:** 7 / 5 / 1973
**CONFIDENTIAL:** N

**COORDINATES FROM COMPANY**

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**GEOLOGIST:** BARGH
**DATE COLLECTED:** 7 / 10 / 1973
**CONFIDENTIAL:** N

**COORDINATES FROM COMPANY**

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### Map 1: ISGS 90

**Map ID:** 04121878000C  
**Version:** 1  
**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 2  
**Quarters/Footages:**  
**Quadrangle:** MURDOCK  
**Longitude:** -88.049352  
**Latitude:** 39.791607  
**Surface Elevation (ft.):** 640.0  
**Logged (ft.):** 198.0  
**Source:** ZEIGLER COAL CO.  
**Date Collected:** 4/21/1971  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  
**Confidential:** N  
**Comment:** Coordinates from company

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### Map 2: CONF

**Map ID:** 04100043000C  
**Version:** 1  
**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 3  
**Quarters/Footages:** 1’ S line, 15’ W line of SW SW NW  
**Quadrangle:** MURDOCK  
**Longitude:** -88.082633  
**Latitude:** 39.780249  
**Surface Elevation (ft.):** 640.0  
**Logged (ft.):** 219.7  
**Source:** BELL & ZOLLER COAL CO.  
**Date Collected:** 11/29/1944  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  
**Confidential:** N  
**Comment:** Tops & thick. from coal sec. log book

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**Map ID:** 04100044000C  
**Version:** 1  
**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 3  
**Quarters/Footages:** 40’ N line, 1’ W line of NW NE  
**Quadrangle:** MURDOCK  
**Longitude:** -88.073322  
**Latitude:** 39.791929  
**Surface Elevation (ft.):** 640.0  
**Logged (ft.):** 194.0  
**Source:** BELL & ZOLLER COAL CO.  
**Date Collected:** 11/29/1944  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  
**Confidential:** N  
**Comment:** Tops & thick. from coal sec. log book

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**SURFACE ELEVATION (FT.):** 638.2  
**DATE COLLECTED:** 6 / 29 / 1971  
**CONFIDENTIAL:** N  
**LOG TYPE:** Drillers Log  
**WELL TYPE:** Coal Test

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

- **638.0** | **CARBONDALE** | **HERRIN** | **COAL** | **-** | **500.0** | **DEPTH EST./NO THICK. GIV**n
- **471.0** | **CARBONDALE** | **HERRIN** | **COAL** | **-** | **200.0** | **DEPTH EST./NO THICK. GIV**n

**MAPID:** 04121795000C  
**PROJECT:** ISGS90  
**COUNTY:** DOUGLAS  
**QUADRANGLE:** MURDOCK  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 638.0  
**LOGGED (FT.):** 213.5  
**SOURCE:** ZEIGLER COAL CO.  
**COMMENT:**

### Elevation, Formation, Member, Lithology, Thickness (FT.), Unit, Overburden, Comment

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

- **638.0** | **CARBONDALE** | **HERRIN** | **COAL** | **-** | **200.0** | **DEPTH EST./NO THICK. GIV**n
- **471.0** | **CARBONDALE** | **HERRIN** | **COAL** | **-** | **200.0** | **DEPTH EST./NO THICK. GIV**n

**MAPID:** 04100045000C  
**PROJECT:** CONF  
**COUNTY:** DOUGLAS  
**QUADRANGLE:** MURDOCK  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 638.0  
**LOGGED (FT.):** 200.0  
**SOURCE:** BELL & ZOLLER COAL CO.  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

### Elevation, Formation, Member, Lithology, Thickness (FT.), Unit, Overburden, Comment

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**COUNTY:** DOUGLAS  
**TWP/RNG:** 15N 10E  
**SECTION:** 4  
**QUADRANGLE:** MURDOCK  
**LONGITUDE:** -88.101205  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 642.0  
**LOGGED (FT.):** 223.0  
**SOURCE:** HYDROCARBON SURVEY PH-25  
**COMMENT:** DATA FROM 1976 COMPANY MAP  
**GEOLOGIST:** C TREWORGY  
**DATE COLLECTED:** 0 / 0 / 1976  
**WELL TYPE:** Coal map  
**LOG TYPE:** Company map

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**SURFACE ELEVATION (FT.):** 642.0  
**LOGGED (FT.):** 447.0  
**SOURCE:** HYDROCARBON SURVEY PH-25  
**COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK  
**GEOLOGIST:** LOG BOOK  
**DATE COLLECTED:** 9 / 0 / 1971  
**WELL TYPE:** Coal Test  
**LOG TYPE:** Electric Log

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**LOGGED (FT.):** 201.0  
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**COMMENT:** NORTH CENTER OF SECTION  
**GEOLOGIST:** BARGH  
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**WELL TYPE:** Coal Test  
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**MAPID:** 04121752000C  **VERSION:** 1  **PROJECT:** ISGS95

**COUNTY:** DOUGLAS  **TWP/RNG:** 15N 10E  **SECTION:** 5  **QUARTERS/FOOTAGES:** 1’ S line, 1’ W line

**QUADRANGLE:** MURDOCK  **LONGITUDE:** -88.120229  **GEOLOGIST:** BARGH

**CONFIDENTIAL:** N  **LATITUDE:** 39.768171  **DATE COLLECTED:**

**SURFACE ELEVATION (FT.):** 643.0  **LOGGED (FT.):** 241.0  **LOG TYPE:** Drillers Log

**SOURCE:** ZEIGLER COAL CO.  **WELL TYPE:** Coal Test

**COMMENT:** LOC.: SW CORNER

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**MAPID:** 04121765000C  **VERSION:** 1  **PROJECT:** ISGS90

**COUNTY:** DOUGLAS  **TWP/RNG:** 15N 10E  **SECTION:** 5  **QUARTERS/FOOTAGES:** 71’ N line, 57’ W line of NW NW

**QUADRANGLE:** MURDOCK  **LONGITUDE:** -88.119965  **GEOLOGIST:** C TREWORGY

**CONFIDENTIAL:** N  **LATITUDE:** 39.791612  **DATE COLLECTED:** 3 / 8 / 1971

**SURFACE ELEVATION (FT.):** 642.0  **LOGGED (FT.):** 216.0  **LOG TYPE:** Drillers Log

**SOURCE:** ZEIGLER COAL CO.  **WELL TYPE:** Coal Test

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**Source:** ZEIGLER COAL CO.

**Logged (FT.):** 233.7

**Confidential:** N

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**Logged (FT.):** 219.8

**Confidential:** N

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**SURFACE ELEVATION (FT.):** 640.0  
**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 8 / 4 / 1971  
**PROJECT:** ISGS90  
**SECTION:** 7  
**QUADRANGLE:** VILLA GROVE  
**CONFIDENTIAL:** N  
**COUNTY:** DOUGLAS  
**LONGITUDE:** -88.137485  
**LATITUDE:** 39.754015  
**LOGGED (FT.):** 244.0  
**LOG TYPE:** WELL TYPE: Coal Test  
**WELL TYPE:** Drillers Log  

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**GEOLOGIST:** C TREWORGY  
**SURFACE ELEVATION (FT.):** 643.0  
**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 2 / 18 / 1972  
**PROJECT:** ISGS90  
**SECTION:** 8  
**QUADRANGLE:** MURDOCK  
**CONFIDENTIAL:** N  
**COUNTY:** DOUGLAS  
**LONGITUDE:** -88.110872  
**LATITUDE:** 39.753886  
**LOGGED (FT.):** 251.0  
**LOG TYPE:** WELL TYPE: Coal Test  

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**MAPID:** 04121379000C  **VERSION:** 1  **PROJECT:** NCRDS99

**COUNTY:** DOUGLAS  **TWP/RNG:** 15N 10E  **SECTION:** 10  **QUARTERS/FOOTAGES:**

**QUADRANGLE:** MURDOCK  **LONGITUDE:** -88.07355  **GEOLOGIST:** J MCBETH

**CONFIDENTIAL:** N  **LATITUDE:** 39.761203  **DATE COLLECTED:**

**SOURCE:** ZIEGLER COAL CO.  230  **LOGGED (FT.):** 228.8  **CONFIDENTIAL:** N

**PROJECT:** FROM AMCO COAL QUALITY DATA  **WELL TYPE:** Coal Test

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**CONFIDENTIAL:** N  **LATITUDE:** 39.761203  **DATE COLLECTED:**

**SOURCE:** ZIEGLER COAL CO.  230  **LOGGED (FT.):** 229.8  **CONFIDENTIAL:** N

**PROJECT:** FROM AMCO COAL QUALITY DATA  **WELL TYPE:** Coal Test

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**Version:** 1  
**Project:** ISGS90

**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 10  
**Quarters/footages:** 1' S line, 614' E line of SW NE

**Quadrangle:** MURDOCK  
**Longitude:** -88.071093  
**Geologist:** C TREWORGY  
**Date collected:** 4 / 5 / 1971

**Surface elevation (ft.):** 639.0  
**Logged (ft.):** 231.3  
**Confidential:** N  
**Log type:** Drillers Log  
**Well type:** Coal Test

**Source:** ZEIGLER COAL CO. 66

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**Map ID:** 04121184000C  
**Version:** 1  
**Project:** CONF

**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 11  
**Quarters/footages:** SW NE

**Quadrangle:** MURDOCK  
**Longitude:** -88.052402  
**Geologist:** LOG BOOK  
**Date collected:** 10 / 16 / 1974

**Surface elevation (ft.):** 630.0  
**Logged (ft.):** 221.0  
**Confidential:** N  
**Log type:** Survey Core Study  
**Well type:** Coal Test

**Source:** ZEIGLER COAL CO. 206

## Elevation Log

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- **TWP/RNG:** 15N 10E
- **SECTION:** 11
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- **CONFIDENTIAL:** N
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- **LOGGED (FT.):** 232.0
- **SOURCE:** HYDROCARBON SURVEY
- **DATE COLLECTED:** 0 / 0 / 1976
- **LOG TYPE:** WELL TYPE: Coal Test

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- **LOGGED (FT.):** 448.0
- **SOURCE:** HYDROCARBON SURVEY
- **DATE COLLECTED:** 10 / 0 / 1971
- **LOG TYPE:** WELL TYPE: Coal Test

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**Map ID:** 041HCSOPG23  
**Version:** 1  
**Project:** CGT-MISC

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**Logged (ft.):** 232.0  
**Source:** HYDROCARBON SURVEY NO.PG-23  
**Comment:** ISGS MAP LIBRARY 4103 i5, 1-27&28

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**Map ID:** 04100033000C  
**Version:** 1  
**Project:** CONF

**County:** DOUGLAS  
**Twp/Rng:** 15N 10E  
**Section:** 12  
**Quarters/Footages:** NE NE NE

**Confidential:** N  
**Latitude:** 39.767735  
**Longitude:** -88.027601  
**Geologist:** LOG BOOK  
**Date Collected:** 1/0/1945  
**Log Type:** Survey Core Study  
**Well Type:** Coal Test

**Source:** BELL & ZOLLER COAL CO.  
**Logged:** 153.6  
**Comment:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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- **Quadrangle:** MURDOCK
- **Source:** BELL AND ZOLLER COAL CO.
- **Geologist:** SROKA
- **Date Collected:** 1/0/1945
- **Logged (ft.):** 153.8
- **Log Type:** Drillers Log
- **WELL TYPE:** Coal Test
- **Project:** ISGS88

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### Table 1: Coal Test Company map

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## Logs

### Log 1

- **Elevation (FT.):** 633.0
- **Formation:** Pleistocene
- **Member:** Unconsolidated
- **Lithology:** Clay, Shale, Sandstone, Sandy Shale, Sandstone, Shale, Varrigated Shale, Limestone, Silty, Sandy Shale, Silty Shale, Coal, Underclay, Shale & Conglomerate
- **Thickness (FT.):** 7.5, 30.5, 5.5, 2.5, 13.0, 4.0, 16.5, 5.0, 33.5, 3.0, 4.5, 38.3, 15.4, 5.5, 1.6, 3.2, 5.4
- **Overburden:** O.C. Gravel, Siderite, W. Sandy Shales, Seams, W/ Sandy Shales, Underclay, Grn Gry W/ Nodules, W/ Sandy Shales, W/ Nodules

### Log 2

- **Elevation (FT.):** -
- **Formation:** Carbondaled
- **Member:** Energy, Herrin
- **Lithology:** Unconsolidated, Rock, Coal, Underclay, Shale
- **Thickness (FT.):** 38.0, 142.0, 3.2, 3.0, 1.6
- **Overburden:** Sediments, Sediments, Coal, Sediments, Coal

---

### Source Information

- **Project:** ISGS 90
- **Geologist:** M Vanko
- **Date Collected:** 10/15/1974
- **Logged (FT.):** 194.8
- **Well Type:** Drillers Log

---

### Geographical Information

- **County:** Douglas
- **Quadrangle:** Murdock
- **Section:** 12
- **Quarters/Footages:** NW SW
- **Source:** Zeigler Coal Co.
- **Date:** 2/0/1974
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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### Geographical Coordinates

- **Map ID:** 04121917000C
- **Version:** 1
- **County:** Douglas
- **Quadrangle:** Murdock
- **Section:** 12
- **Quarters/Footages:** NW SW
- **Surface Elevation (FT.):** 633.0
- **Logged (FT.):** 194.8
- **Source:** Zeigler Coal Co.
- **Date:** 2/0/1974
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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- **Map ID:** 041HCSOPH26Z
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- **Source:** Zeigler Coal Co.
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- **Well Type:** Coal Test
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**COUNTY:** DOUGLAS  **TWP/RNG:** 15N 10E  **SECTION:** 23  **QUARTERS/Footages:**

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**CONFIDENTIAL:** N  **DATE COLLECTED:** 8 / 14 / 1989  **LOG TYPE:** Multiple log types

**SURFACE ELEVATION (FT.):** 643.0  **LOGGED (FT.):** 283.0  **WELL TYPE:** Coal Test

**SOURCE:** AMCO-IL #AM-8926  **COMMENT:** DRILLERS LOG&CORE 1117430.40N-578407.96E

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## Geologic Log

**Geologist:** C. Treworgy  
**Date Collected:** 8/7/1989  
**Log Type:** Multiple log types  
**Confidential:** N  

### Geologic Log Details
- **Project:** ISGS90  
- **Surface Elevation (ft.):** 612.0  
- **Logged (ft.):** 291.2  
- **Source:** AMCO-IL #AM-8917  
- **Quadrangle:** Oakland  
- **County:** Douglas  
- **Map ID:** 04121980000C  
- **Version:** 1

### Elevation | Formation | Member | Lithology | Thickness (ft.) | Unit | Overburden | Comment
--- | --- | --- | --- | --- | --- | --- | ---
612.0 | Clay | | | 2.0 | 0.0 | | Units 1 thru 30 from Driller's Log; BRN TAN
610.0 | Clay | | | 6.0 | 2.0 | | W/CLAY
604.0 | Sand & Gravel | | | 26.0 | 8.0 | | W/CLAY
578.0 | MODESTO | | Limestone | 6.5 | 34.0 | | 
571.5 | MODESTO | | Shale | 1.0 | 40.5 | | 
570.5 | MODESTO | | Shale | 1.5 | 41.5 | | 
569.0 | MODESTO | | Shale | 7.0 | 43.0 | | 
562.0 | MODESTO | | Calcereous Sandstone | 2.0 | 50.0 | | 
560.0 | MODESTO | | Shale | 24.0 | 52.0 | | 
536.0 | MODESTO | | Shale | 3.0 | 76.0 | | 
533.0 | MODESTO | | Shale | 39.0 | 79.0 | | 
494.0 | MODESTO | | West Franklin | Limestone | 3.0 | 118.0 | 
491.0 | MODESTO | | Green Shale | 1.0 | 121.0 | | 
490.0 | MODESTO | | Shale | 2.0 | 122.0 | | RED/YLW
488.0 | MODESTO | | Shale | 10.0 | 124.0 | | RED/YLW
478.0 | MODESTO | | Shale | 8.0 | 134.0 | | 
470.0 | MODESTO | | Shale | 6.0 | 142.0 | | 
464.0 | Calcereous Siltstone | | | 3.0 | 148.0 | | 
461.0 | Shale | | | 6.0 | 151.0 | | RED/YLW
455.0 | CARBONDALE | | Shale | 8.5 | 157.0 | | 
446.5 | CARBONDALE | | Bankston Fork | Limestone | 5.5 | 165.5 | 
441.0 | CARBONDALE | | Energy | Sandstone | 13.0 | 171.0 | 
428.0 | CARBONDALE | | Energy | Shale | 6.0 | 184.0 | 
422.0 | CARBONDALE | | Energy | Shale | 9.0 | 190.0 | | 
413.0 | CARBONDALE | | Herrin | Coal | 0.4 | 199.0 | | UPPER BENCH OF COAL
412.6 | CARBONDALE | | Energy | Shale | 29.6 | 199.4 | | 
383.0 | CARBONDALE | | Energy | Coal | 0.1 | 229.0 | | 
382.9 | CARBONDALE | | Energy | Shale | 5.0 | 229.1 | | THICKNESS ADJ TO MATCH LOG DEPTHS
378.0 | CARBONDALE | | Energy | Sandstone | 8.0 | 234.0 | | 
370.0 | CARBONDALE | | Energy | Shale | 37.0 | 242.0 | | UNIT 3 THRU 42 FROM CORE; GRY ONE SIDERITE NODULE
333.0 | CARBONDALE | | Energy | Shale | 0.6 | 279.0 | | 
332.4 | CARBONDALE | | Energy | Shale | 0.9 | 279.6 | | 
331.5 | CARBONDALE | | Herrin | Coal | 3.0 | 280.5 | | RASHY BANDS
328.5 | CARBONDALE | | Herrin | Bone Coal | 0.2 | 283.5 | | 
328.3 | CARBONDALE | | Herrin | Coal | 0.9 | 283.7 | | PYRITE BANDS
327.4 | CARBONDALE | | Green Shale | 0.2 | 284.6 | | 
327.2 | CARBONDALE | | Calcareous Shale | 0.3 | 284.8 | | LS NODULES
326.9 | CARBONDALE | | Lime Stone | 1.5 | 285.1 | | GRY

### Note
- **Degree (LAT/LON):** 39° 25' 11.38" S / -88° 05' 33.96" W
- **Elevation (ft.):** 612.0
- **Log Type:** Driller's log & core

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**Further Details:**
- **Sections:** 33  
- **Twp/Rng:** 15N 10E  
- **County:** Douglas  
- **Quadrangle:** Oakland  
- **Log ID:** DRILLERS LOG & CORE 1108395.43N-570868.68E

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**Thickenss (ft.)** indicates the thickness of the layer in feet. **Overburden** refers to the layer of material covering the layer of interest. **Comment** provides additional information about the layer or the sampling process.
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MAPID: 04121622000C  VERSION: 1  PROJECT: CONF

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MAPID: 04121622000C  VERSION: 2  PROJECT: ISGS96

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**Log Type:** Survey Core Study  
**Well Type:** Coal Test  
**Project:** CGT-ECILL  
** Quarangale:** NEWMAN  
**County:** DOUGLAS  
**Source:** GOOD LOG  

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### Geologic Data 2

**Log Type:** Drillers Log  
**Well Type:** Coal Test  
**Project:** NCRDS  
** Quarangale:** MURDOCK  
**County:** DOUGLAS  
**Source:** NO LOC GIVEN; EST FROM '72 PLAT MAP  

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### Coal Test

**Company**: Ziegler Coal Co.

**Map ID**: 041HCSO0002Z

**Version**: 1

**County**: Douglas

**Twp/Rng**: 15N 14W 163

**Section**: 5

**Quadrangle**: Newman

**Longitude**: -87.992427

**Latitude**: 39.78819

**Logged**: 170.0 ft

**Surface Elevation**: 639.0 ft

**Date Collected**: 8/14/1973

**Log Type**: Company map

**Well Type**: Coal Test

**Logged**: 128.3 ft

**Source**: Hydrocarbon Survey, No Company Number

**Confidential**: No

**Elevation** | **Formation** | **Member** | **Lithology** | **Thickness (ft.)** | **Overburden** | **Comment**
---|---|---|---|---|---|---
639.0 | | | UNCONSOLIDATED | 9.0 | 0.0 | 
630.0 | | | UNCONSOLIDATED | 60.0 | 9.0 | 
570.0 | CARBONDALE | ENERGY | SANDY SHALE | 43.5 | 69.0 | 
526.5 | CARBONDALE | ENERGY | SILTY SHALE | 7.9 | 112.5 | 
518.6 | CARBONDALE | HERRIN | COAL | 7.1 | 120.4 | 
511.5 | CARBONDALE | | UNDERCLAY | 0.8 | 127.5 | 

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**Map ID**: 04121875000C

**Version**: 1

**County**: Douglas

**Twp/Rng**: 15N 14W 163

**Section**: 6

**Quadrangle**: Murdock

**Longitude**: -88.014016

**Latitude**: 39.773455

**Logged**: 199' S line, 648' W line of SW SE

**Surface Elevation**: 570.0 ft

**Date Collected**: 8/14/1973

**Log Type**: Drillers Log

**Well Type**: Coal Test

**Logged**: 128.3 ft

**Source**: Ziegler Coal Co.

**Confidential**: No

**Elevation** | **Formation** | **Member** | **Lithology** | **Thickness (ft.)** | **Overburden** | **Comment**
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639.0 | | | UNCONSOLIDATED | 9.0 | 0.0 | 
630.0 | | | UNCONSOLIDATED | 60.0 | 9.0 | 
570.0 | CARBONDALE | ENERGY | SANDY SHALE | 43.5 | 69.0 | 
526.5 | CARBONDALE | ENERGY | SILTY SHALE | 7.9 | 112.5 | 
518.6 | CARBONDALE | HERRIN | COAL | 7.1 | 120.4 | 
511.5 | CARBONDALE | | UNDERCLAY | 0.8 | 127.5 |
### Coal Test Drillers Log

**Geologist:** Bargh

**Surface Elevation (ft.):** 639.0

**Source:** Zeigler Coal Co. 164

**Logged (ft.):** 164.1

**Confidential:** No

**Project:** ISGS95

**Section:** 6

**Quadrangle:** Murdock

**County:** Douglas

**Mapid:** 04121876000C

**Version:** 1

**Longitude:** -88.018514

**Latitude:** 39.782036

**Date Collected:** 8 / 20 / 1973

**Log type:** Well type: Coal Test

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**Geologist:** C. Treworgy

**Surface Elevation (ft.):** 655.0

**Source:** Zeigler Coal Co. 161

**Logged (ft.):** 164.1

**Confidential:** No

**Project:** ISGS90

**Section:** 8

**Quadrangle:** Newman

**County:** Douglas

**Mapid:** 04121873000C

**Version:** 1

**Longitude:** -87.996642

**Latitude:** 39.758532

**Date Collected:** 8 / 9 / 1973

**Log type:** Well type: Coal Test

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**PROJECT:** ISGS90  
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**COMMENT:** 15N 14W  
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**MAPID:** 04121888000C  
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### Map 04100470000C

**Project:** CGT-ECILL

- **County:** DOUGLAS
- **Quadrangle:** BROCTON
- **Surface Elevation (ft.):** 658.0
- **Logged (ft.):** 203.0
- **Log Type:** Electric Log
- **Well Type:** Oil and Gas Test

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### Map 04100560000C

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- **Quadrangle:** BROCTON
- **Surface Elevation (ft.):** 655.0
- **Logged (ft.):** 227.0
- **Log Type:** Electric Log
- **Well Type:** Oil and Gas Test

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### Map 04100194000C

**Project:** CGT-ECILL

- **County:** DOUGLAS
- **Quadrangle:** TUSCOLA
- **Surface Elevation (ft.):** 663.0
- **Logged (ft.):** 866.0
- **Log Type:** Electric Log
- **Well Type:** Oil and Gas Test

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**Log Type:** Electric Log  
**WELL TYPE:** Dry Hole

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### Good Log

**Log Type:** Electric Log  
**WELL TYPE:** Oil and Gas Test

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**Map ID:** 04100151000C  
**Version:** 1  
**Project:** CGT-ECILL

**County:** DOUGLAS  
**Township/Range:** 16N 7E  
**Section:** 23  
**Quarters/Footages:** SW SE SE

**Quadrangle:** TUSCOLA  
**Longitude:** -88.371531  
**Confidential:** N  
**Surface Elevation (FT.):** 679.0  
**Logged (FT.):** 996.0  
**Source:** #6,#5 OUT, POOR LOG

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**Map ID:** 04100691000C  
**Version:** 1  
**Project:** CGT-ECILL

**County:** DOUGLAS  
**Township/Range:** 16N 7E  
**Section:** 25  
**Quarters/Footages:** 440' S line, 360' E line of SW NW

**Quadrangle:** TUSCOLA  
**Longitude:** -88.364438  
**Confidential:** N  
**Surface Elevation (FT.):** 663.0  
**Logged (FT.):** 982.0  
**Source:** #5,#6 OUT, GOOD LOG

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**MAPID:** 04100285000C  
**VERSION:** 1  
**PROJECT:** CGT-ECILL

**COUNTY:** DOUGLAS  
**TWP/RNG:** 16N 7E  
**SECTION:** 27  
**QUADRANGLE:** ATWOOD  
**LONGITUDE:** -88.397351  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 667.0  
**LATITUDE:** 39.814274  
**LOGGED (FT.):** 1080.0  
**SOURCE:** GOOD LOG  
**DATE COLLECTED:**  
**GEOLOGIST:** C TREWORGY  
**LOG TYPE:** Electric Log  
**WELL TYPE:** Oil and Gas Test

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**VERSION:** 1  
**PROJECT:** CGT-ECILL

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**SECTION:** 28  
**QUADRANGLE:** ATWOOD  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 669.0  
**LATITUDE:** 39.817967  
**LOGGED (FT.):** 1089.0  
**SOURCE:** GOOD LOG  
**DATE COLLECTED:**  
**GEOLOGIST:** C TREWORGY  
**LOG TYPE:** Electric Log  
**WELL TYPE:** Oil and Gas Test

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**version**: 1  
**project**: CGT-ECILL

**county**: DOUGLAS  
**twp/rng**: 16N 7E  
**section**: 29  
**quarters/footages**:  
**quadrangle**: ATWOOD

**CONFIDENTIAL**: N  
**source**: GOOD LOG

**latitude**: 39.807163  
**longitude**: -88.4254

**surface elevation (ft.)**: 669.0  
**logged (ft.)**: 1129.0

**geologist**: C TREWORGY  
**date collected**:  
**log type**: Electric Log  
**well type**: Oil and Gas Test

**comment**: 16N 7E  
**hureen c/c**: 85100146000C  
**version**: 1

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**version**: 1  
**project**: CGT-ECILL

**county**: DOUGLAS  
**twp/rng**: 16N 7E  
**section**: 29  
**quarters/footages**: SE SE NW

**quadrangle**: ATWOOD

**CONFIDENTIAL**: N  
**source**: GOOD LOG

**latitude**: 39.814474  
**longitude**: -88.435052

**surface elevation (ft.)**: 675.0  
**logged (ft.)**: 1111.0

**geologist**: C TREWORGY  
**date collected**:  
**log type**: Electric Log  
**well type**: Oil and Gas Test

**comment**: 16N 7E  
**hureen c/c**: 85100585000C  
**version**: 1

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**Logged (FT.):** 173.0  
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**Project:** ISGS95  
**Loc.:** SE Corner  
**County:** DOUGLAS  
**Quadrangle:** MURDOCK  
**Longitude:** -88.122606  
**Latitude:** 39.850627  
**Date Collected:**  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  

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**Logged (FT.):** 310.0  
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**Project:** ISGS90  
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**County:** DOUGLAS  
**Quadrangle:** VILLA GROVE  
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**Latitude:** 39.864664  
**Date Collected:** 4 / 19 / 1971  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  

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**County:** DOUGLAS  
**Twp/Rng:** 16N 9E  
**Section:** 19  
**Quadrangle:** VILLA GROVE  
**Longitude:** -88.216985  
**Elevation:** 696.0  
**Logged (ft.):** 385.0  
**Log Type:** Drillers Log  
**Well Type:** Coal Test

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**Logged (ft.):** 233.0  
**Log Type:** Drillers Log  
**Well Type:** Coal Test

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COUNTY: DOUGLAS  TWP/RNG: 16N 10E  SECTION: 2  QUARTERS/FOOTAGES:
QUADRANGLE: MURDOCK  LONGITUDE: -88.049316  GEOLOGIST: M VANKO
SURFACE ELEVATION (FT.): 640.0  LOGGED (FT.): 197.5  SOURCE: ZEIGLER COAL CO.  167
CONFIDENTIAL: N  PROJECT: ISGS 90
LOG TYPE: Drillers Log  WELL TYPE: Coal Test
COMMENT: COORDINATES FROM COMPANY

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MAPID: 041HCSOPC11Z  VERSION: 1  PROJECT: CGT-MISC
COUNTY: DOUGLAS  TWP/RNG: 16N 10E  SECTION: 2  QUARTERS/FOOTAGES: 200' S line, 150' E line
QUADRANGLE: MURDOCK  LONGITUDE: -88.028627  GEOLOGIST: C. TREWORGY
SURFACE ELEVATION (FT.): 640.0  LOGGED (FT.): 0.0  SOURCE: HYDROCARBON SURVEY NO. PC-11
CONFIDENTIAL: N  PROJECT: CGT-MISC
LOG TYPE: Company map  WELL TYPE: Coal Test
COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

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COUNTY: DOUGLAS  TWP/RNG: 16N 10E  SECTION: 3  QUARTERS/FOOTAGES: 200' S line, 200' W line
QUADRANGLE: MURDOCK  LONGITUDE: -88.065197  GEOLOGIST: C. TREWORGY
SURFACE ELEVATION (FT.): Logged (FT.): 0.0  SOURCE: HYDROCARBON SURVEY NO. PC-12
CONFIDENTIAL: N  PROJECT: CGT-MISC
LOG TYPE: Company map  WELL TYPE: Coal Test
COMMENT: ISGS MAP LIBRARY 4103 i5, 1-27&28

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**Location**: Longview Quadrangle, Section 3, County of Douglas, Illinois.

**Log Type**: Coal Test

**Date Collected**: 2/0/1974

**Geologist**: C. Treworory

**Map ID**: ISGS Map Library 4103 i5, 1-27&28

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### Geologic Data 2

**Location**: Murdock Quadrangle, Section 4, County of Douglas, Illinois.

**Log Type**: Drillers Log

**Date Collected**: 3/29/1971

**Geologist**: Bargh

**Map ID**: ISGS95

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### Drillers Log

**MAPID:** 04121779000C  **VERSION:** 1  **PROJECT:** ISGS90

**COUNTY:** DOUGLAS  **QUADRANGLE:** MURDOCK  **CONFIDENTIAL:** N  **SURFACE ELEVATION (FT.):** 652.0  **SOURCE:** ZEIGLER COAL CO. 69

**LONGITUDE:** 39.872856  **LATITUDE:** -88.103318  **DATE COLLECTED:** 4 / 8 / 1971  **DATE COLLECTED:** 4 / 8 / 1971

**LOGGED (FT.):** 233.0  **WELL TYPE:** Drillers Log

**GEOLOGIST:** C TREWORGY  **COMMENT:** 16N 10E

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**MAPID:** 04121780000C  **VERSION:** 1  **PROJECT:** ISGS

**COUNTY:** DOUGLAS  **QUADRANGLE:** MURDOCK  **CONFIDENTIAL:** N  **SURFACE ELEVATION (FT.):** 665.0  **SOURCE:** ZEIGLER COAL CO. 70

**LONGITUDE:** 39.865915  **LATITUDE:** -88.084936  **DATE COLLECTED:** 4 / 15 / 1971

**LOGGED (FT.):** 250.0  **WELL TYPE:** Coal Test

**GEOLOGIST:** C TREWORGY  **COMMENT:** 16N 10E

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<th>THICKNESS (FT.)</th>
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#### Quadrangle: Murdock  Longitude: -88.103885  Latitude: 39.865396
##### Confidential: N  Date collected: 3/31/1971  Logging: 184.0  Source: Zeigler Coal Co.  Coal test

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#### Quadrangle: Murdock  Longitude: -88.103885  Latitude: 39.865396
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### Drillers Log

#### Section: 7

**Quadrangle:** Murdock

**Mapid:** 04121826000C  **Version:** 1  **Project:** ISGS90

**County:** Douglas  **Twp/Rng:** 16N 10E  **Longitude:** -88.103737  **Geologist:** C. Trewoy

**Surface Elevation (ft.):** 668.0  **Logged (ft.):** 194.0  **Date Collected:** 9/30/1971

**Confidential:** N  **Log Type:** Drillers Log  **Well Type:** Coal Test

**Source:** Zeigler Coal Co.

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#### Section: 8

**Quadrangle:** Murdock  **Mapid:** 04121757000C  **Version:** 1  **Project:** ISGS95

**County:** Douglas  **Twp/Rng:** 16N 10E  **Longitude:** -88.098674  **Geologist:** Bargh

**Surface Elevation (ft.):** 663.1  **Logged (ft.):** 188.0  **Date Collected:** 3/16/1971

**Confidential:** N  **Log Type:** Drillers Log  **Well Type:** Coal Test

**Source:** Zeigler Coal Co.

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**MAPID:** 04121864000C  **VERSION:** 1  **PROJECT:** ISGS90

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### Coal Test Drillers Log

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**Map ID:** 04121781000C  
**Version:** 1  
**Project:** ISGS90

**County:** DOUGLAS  
**Twp/Rng:** 16N 10E  
**Section:** 12  
**Quadrangle:** MURDOCK  
**Surface Elevation (ft.):** 708.0  
**Logged (ft.):** 560.0

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**Quadrangle:** MURDOCK
**Section:** 19
**County:** DOUGLAS

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### Driller's Log

**Map ID:** 04121805000C  **Version:** 1  **Project:** ISGS90

**County:** Douglas  **Twp/Rng:** 16N 10E  **Section:** 21  **Quarters/footages:** 27' N line, 45' W line of NW SW

**Quadrangle:** Murdock  **Longitude:** -88.084596  **Geologist:** C Trewoogy

**Confidential:** No  **Date Collected:** 7/28/1971  **Log Type:** Drillers Log

**Source:** Zeigler Coal Co.  **Logged (ft.):** 259.0  **Well Type:** Coal Test

**Surface Elevation (ft.):** 705.0

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**Map ID:** 04121912000C  **Version:** 1  **Project:** ISGS90

**County:** Douglas  **Twp/Rng:** 16N 10E  **Section:** 21  **Quarters/footages:** 1307' S line, 13' E line of SE SW

**Quadrangle:** Murdock  **Longitude:** -88.075431  **Geologist:** C Trewoogy

**Confidential:** No  **Date Collected:** 10/2/1974  **Log Type:** Drillers Log

**Source:** Zeigler Coal Co.  **Logged (ft.):** 264.2  **Well Type:** Coal Test

**Surface Elevation (ft.):** 690.0

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**PROJECT:** NCRDS

**COUNTY:** DOUGLAS  
**QUADRANGLE:** MURDOCK  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 673.9  
**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 10 / 21 / 1974  
**LOGGED (FT.):** 257.0  
**CONFIDENTIAL:** N

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**MAPID:** 04121741000C  **VERSION:** 1  
**PROJECT:** ISGS95

**COUNTY:** DOUGLAS  
**QUADRANGLE:** MURDOCK  
**CONFIDENTIAL:** N  
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**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 10 / 21 / 1974  
**LOGGED (FT.):** 251.0  
**CONFIDENTIAL:** N

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**Project:** ISGS 90

**Geologist:** M VANKO

**Source:** ZEIGLER COAL CO. 207

**Date Collected:** 10 / 21 / 1974

**Logged (FT.):** 256.3

**Confidential:** N

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**Geologist:** C TREWORGY

**Source:** GOOD LOG

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**SURFACE ELEVATION (FT.):** 642.0

**SOURCE:** ZEIGLER COAL CO. 8

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**CONFIDENTIAL:** N

**PROJECT:** ISGS95

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**GEOLOGIST:** BARGH

**SURFACE ELEVATION (FT.):** 720.0

**SOURCE:** ZEIGLER COAL CO. 27

**LOGGED (FT.):** 259.0

**CONFIDENTIAL:** N

**PROJECT:** ISGS95

**LOC.: NW CORNER**

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### CONFIDENTIAL: N
### PROJECT: ISGS95

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**GEOLOGIST:** C TREWORGY  
**SOURCE:** ZEIGLER COAL CO.

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**Map ID:** 04121663000C  **Version:** 1  **Project:** NCRDS

**County:** DOUGLAS  **Twp/Rng:** 16N 10E  **Section:** 26  **Quarters/footages:** 59° S, 2650' E, NW/c

**Quadrangle:** MURDOCK  **Longitude:** -88.037523  **Latitude:** 39.821154

**Surface Elevation (ft.):** 652.8  **Logged (ft.):** 192.8  **Date Collected:** 5/16/1984

**Log Type:** Drillers Log  **Well Type:** Coal Test

**Source:** ZEIGLER COAL CO.  **Confidential:** N

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**Map ID:** 04121843000C  **Version:** 1  **Project:** ISGS90

**County:** DOUGLAS  **Twp/Rng:** 16N 10E  **Section:** 26  **Quarters/footages:** 55° S line, 187' W line of SW NW

**Quadrangle:** MURDOCK  **Longitude:** -88.046245  **Latitude:** 39.81416

**Surface Elevation (ft.):** 650.0  **Logged (ft.):** 198.8  **Date Collected:** 11/18/1971

**Log Type:** Drillers Log  **Well Type:** Coal Test

**Source:** ZEIGLER COAL CO.  **Confidential:** N

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### Map 1
- **County:** DOUGLAS
- **Twp/Rng:** 16N 10E
- **Section:** 28
- **Quadrangle:** MURDOCK
- **Surface Elevation (ft.):** 660.0
- **Log Type:** Survey Core Study
- **Well Type:** Coal Test

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### Map 2
- **County:** DOUGLAS
- **Twp/Rng:** 16N 10E
- **Section:** 28
- **Quadrangle:** MURDOCK
- **Surface Elevation (ft.):** 661.0
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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### Map 3
- **County:** DOUGLAS
- **Twp/Rng:** 16N 10E
- **Section:** 28
- **Quadrangle:** MURDOCK
- **Surface Elevation (ft.):** 644.0
- **Log Type:** Survey Core Study
- **Well Type:** Coal Test

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**Map Details:**
- **County:** DOUGLAS
- **Twp/Rng:** 16N 10E
- **Section:** 28
- **Quadrangle:** MURDOCK
- **Surface Elevation (ft.):**
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  - **661.0**
  - **644.0**
- **Log Type:** Survey Core Study
- **Well Type:** Coal Test
### Map ID: 04101114000C Version: 1 Project: CONF

**County:** DOUGLAS  
**TWP/RNG:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 725' S line, 264' W line of NW  
**Quadrangle:** MURDOCK  
**Longitude:** -88.083762  
**Confidential:** N  
**Surface Elevation (ft.):** 660.0  
**Logged (ft.):** 225.0  
**Source:** ISGS 149  
**Date Collected:** 2/10/1972  
**Log Type:** Survey Core Study  
**Well Type:** Coal Test  
**Comment:** Tops & Thick. From Coal Sec. Log Book  

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**County:** DOUGLAS  
**TWP/RNG:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 725' S line, 264' W line of NW  
**Quadrangle:** MURDOCK  
**Longitude:** -88.083762  
**Confidential:** N  
**Surface Elevation (ft.):** 660.0  
**Logged (ft.):** 225.0  
**Source:** ZIEGLER COAL CO. 149  
**Date Collected:** 2/17/1972  
**Log Type:** Drillers Log  
**Well Type:** Coal Test  
**Comment:** Also see old County#01114 in Conf Drawer  

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### Map ID: 04121180000C Version: 1 Project: CONF

**County:** DOUGLAS  
**TWP/RNG:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 36' N line, 38' E line of NE SE  
**Quadrangle:** MURDOCK  
**Longitude:** -88.06612  
**Confidential:** N  
**Surface Elevation (ft.):** 646.7  
**Logged (ft.):** 250.5  
**Source:** ZIEGLER COAL CO. 195  
**Date Collected:** 8/20/1974  
**Log Type:** Survey Core Study  
**Well Type:** Coal Test  
**Comment:** Tops & Thick. From Coal Sec. Log Book  

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**Map ID:** 04121733000C  
**Version:** 1  
**Project:** ISGS95

**County:** Douglas  
**Twp/Rng:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 1' N line, 1' E line

**Quadrangle:** Murdock  
**Longitude:** -88.066075  
**Confidential:** N  
**Surface Elevation (ft.):** 663.8  
**Logged (ft.):** 244.3  
**Source:** Zeigler Coal Co. 23  
**Comment:** LOC.: NE CORNER

**Log Type:** Well Test  
**Well Type:** Coal Test  
**Geologist:** Bargh

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**Map ID:** 04121734000C  
**Version:** 1  
**Project:** ISGS95

**County:** Douglas  
**Twp/Rng:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 1' N line, 1' W line

**Quadrangle:** Murdock  
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**Confidential:** N  
**Surface Elevation (ft.):** 683.4  
**Logged (ft.):** 251.0  
**Source:** Zeigler Coal Co. 24  
**Comment:** LOC.: NW CORNER

**Log Type:** Well Test  
**Well Type:** Coal Test  
**Geologist:** Bargh

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### Drillers Log - Project ISGS90

**County:** Douglas  
**Twp/Rng:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 45° N line, 59° W line of NW  
**Quadrangle:** Murdock  
**Longitude:** -88.084564  
**Latitude:** 39.82122  
**Surface Elevation (ft.):** 686.0  
**Logged (ft.):** 253.0

**Source:** Zeigler Coal Co.  
**Date Collected:** 7/22/1971  
**Log Type:** Drillers Log  
**WELL TYPE:** Coal Test  
**Map ID:** 04121804000C

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**Map ID:** 04121806000C  
**Version:** 1  
**Project:** ISGS90  
**County:** Douglas  
**Twp/Rng:** 16N 10E  
**Section:** 28  
**Quarters/Footages:** 165° N line, 43° E line of NE NW  
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**Latitude:** 39.816794  
**Surface Elevation (ft.):** 655.0  
**Logged (ft.):** 241.0

**Source:** Zeigler Coal Co.  
**Date Collected:** 7/29/1971  
**Log Type:** Drillers Log  
**WELL TYPE:** Coal Test  
**Map ID:** 04121806000C

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**Twp/Rng:** 16N 10E  
**Section:** 28  
**Quadrangle:** Murdock  
**Map ID:** 04121862000C  
**Version:** 1  
**Project:** ISGS90  
**Geologist:** C. Treworgy  
**Date Collected:** 2/21/1972  
**Source:** Ziegler Coal Co.  

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**Section:** 28  
**Quadrangle:** Murdock  
**Map ID:** 04121891000C  
**Version:** 1  
**Project:** ISGS 90  
**Geologist:** M. Vanko  
**Date Collected:** 6/29/1972  
**Source:** Ziegler Coal Co.  

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#### Version: 1

**Project:** ISGS 90

**County:** DOUGLAS

**Twp/Rng:** 16N 10E

**Section:** 28

**Quadrangle:** VILLA GROVE

**Longitude:** -88.146817

**Confidential:** N

**Surface Elevation (ft.):** 655.0

**Logged (ft.):** 96.0

**Source:** ZEIGLER COAL CO.

**Date Collected:** 9 / 5 / 1973

**Log Type:** Drillers Log

#### Comment: Coordinates from Company

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### Map ID: 04121893000C
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**Project:** ISGS 90

**County:** DOUGLAS

**Twp/Rng:** 16N 10E

**Section:** 28

**Quadrangle:** MURDOCK

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**Confidential:** N

**Surface Elevation (ft.):** 0.0

**Logged (ft.):** 94.0

**Source:** ZEIGLER COAL CO.

**Date Collected:** 9 / 6 / 1973

**Log Type:** Drillers Log

#### Comment: Coordinates from Company

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**COUNTY:** DOUGLAS  **TWP/RNG:** 16N 10E  **SECTION:** 29  **QUARTERS/FOOTAGES:** 500' S line, 561' E line of NE

**QUADRANGLE:** MURDOCK  **LONGITUDE:** -88.086706  **GEOLOGIST:** LOG BOOK

**CONFIDENTIAL:** N  **DATE COLLECTED:** 1 / 26 / 1972  **LOG TYPE:** Survey Core Study

**SOURCE:** ISGS 147  **WELL TYPE:** Coal Test

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### Geologic Logbook Entry 1

**Map ID:** 04101100000C  **Version:** 1  **Project:** CONF

**County:** DOUGLAS  **Township/Range:** 16N 10E  **Section:** 29  **Quarters/footages:** 725' S line, 36' E line of NE

**Quadrangle:** MURDOCK  **Longitude:** 39.815951  **Latitude:** -88.084835

**Surface Elevation (ft.):** 662.0  **Logged (ft.):** 228.7

**Source:** ISGS 146  **Confidential:** N  **Date Collected:** 1/24/1972

**Log Type:** Survey Core Study  **Well Type:** Coal Test

**Comment:** Tops & Thick. from Coal Sec. Log Book

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**Map ID:** 04101100000C  **Version:** 2  **Project:** ISGS90

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**Quadrangle:** MURDOCK  **Longitude:** -88.084835  **Latitude:** 39.815951

**Confidential:** N  **Date Collected:** 1/26/1972

**Log Type:** Drillers Log  **Well Type:** Coal Test

**Comment:** Also see Old County#01110 in Conf Drawer

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**CONFIDENTIAL:** N  
**PROJECT:** ISGS90  
**ALSO SEE OLD COUNTY#21167 IN CONF DRAWER**  
**QUADRANGLE:** MURDOCK  
**COUNTY:** DOUGLAS  
**TWP/RNG:** 16N 10E  
**SECTION:** 29  
**LATITUDE:** 39.80937  
**LONGITUDE:** -88.084822  
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**WELL TYPE:** Coal Test  
**COMMENT:** ALSO SEE OLD COUNTY#21167 IN CONF DRAWER

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**Version**: 1  
**Project**: CONF  
**County**: DOUGLAS  
**Twp/Rng**: 16N 10E  
**Section**: 29  
**Quarters/Footages**: 1' N line, 1' E line of SW SW 

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### Map 04121291000C

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**County**: DOUGLAS  
**Twp/Rng**: 16N 10E  
**Section**: 29  
**Quarters/Footages**: SE SE SW SW 

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### Map 04121291000C

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**Section**: 29  
**Quarters/Footages**: SE SE SW SW 

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**Location:** NW Corner Section 29 Quadrangle Murdock County Douglas<br>
**Log Type:** Well Log<br>
**Date Collected:** 3/17/1971<br>
**Comment:** 16N 10E TWP/RNG: 64121761000C Version 1<br>

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** COUNTY: DOUGLAS  TWP/RNG: 16N 10E  SECTION: 29  QUARTERS/FOOTAGES: 190' N line, 43' W line of SW NW  
** QUADRANGLE: MURDOCK  LONGITUDE: -88.103344  GEOLOGIST: C TREWORGY  
** CONFIDENTIAL: N  LATITUDE: 39.817113  DATE COLLECTED: 7 / 14 / 1971  
** SURFACE ELEVATION (FT.): 681.0  LOGGED (FT.): 209.3  LOG TYPE: Well Test  
** SOURCE: ZEIGLER COAL CO. 89  WELL TYPE: Coal Test  

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** COUNTY: DOUGLAS  TWP/RNG: 16N 10E  SECTION: 29  QUARTERS/FOOTAGES: 188' N line, 336' E line of SE NW  
** QUADRANGLE: MURDOCK  LONGITUDE: -88.095311  GEOLOGIST: C TREWORGY  
** CONFIDENTIAL: N  LATITUDE: 39.817123  DATE COLLECTED: 7 / 15 / 1971  
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## Drilled Log - ISGS95 - Project

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### Table 1: Rock Dust Hole Data

**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | ---
663.1 | CARBONDALE | BANKSTON FORK | UNCONSOLIDATED | 129.3 | 0.0 |  
533.8 | CARBONDALE | ENERGY | LIMESTONE | 1.8 | 129.3 |  
532.1 | CARBONDALE | ENERGY | SANDY SHALE | 14.5 | 131.0 |  
517.6 | CARBONDALE | ENERGY | SHALE | 64.5 | 145.5 | w/ss  
453.1 | CARBONDALE | ENERGY | SHALE | 6.0 | 210.0 |  
447.1 | CARBONDALE | HERRIN | COAL | - | 216.0 | TOP OF COAL  

### Table 2: Coal Test Data

**ELEVATION** | **FORMATION** | **MEMBER** | **LITHOLOGY** | **THICKNESS (FT.)** | **OVERBURDEN** | **COMMENT**
--- | --- | --- | --- | --- | --- | ---
656.0 | PLEISTOCENE | | UNCONSOLIDATED | 5.0 |  
626.0 | PLEISTOCENE | | CLAY & GRAVEL | 30.0 | 5.0 | W/GRavel  
583.0 | PLEISTOCENE | | BOULDER | 43.0 | 35.0 | Bn w/ gravel & sand  
559.0 | SHELBURN | | VARRIGATED SHALE | 3.0 | 102.0 |  
556.0 | SHELBURN | | CLAY & GRAVEL | 7.0 | 105.0 |  
549.0 | SHELBURN | BANKSTON FORK | LIMESTONE | 4.8 | 112.0 | Multi Colored LS Nodules  
544.2 | SHELBURN | BANKSTON FORK | LIMESTONE | 8.8 | 116.8 |  
535.5 | CARBONDALE | ENERGY | SANDY SHALE | 88.7 | 125.5 | gr w/ss seams  
446.8 | CARBONDALE | HERRIN | COAL | 7.2 | 214.2 |  
439.7 | CARBONDALE | | CLAYSTONE & SILTSTONE | 1.0 | 221.3 |  
438.7 | CARBONDALE | | SANDY SHALE | 3.0 | 222.3 |  
435.7 | CARBONDALE | | CALCAREOUS SHALE | 3.0 | 225.3 |  

**Notes:**
- **MAPID:** 04121868000C  **VERSION:** 1  **PROJECT:** ISGS95
- **MAPID:** 04121880000C  **VERSION:** 1  **PROJECT:** ISGS 90
- **COUNTY:** DOUGLAS  **TWP/RNG:** 16N 10E  **SECTION:** 29  **QUARTERS/FOOTAGES:**
- **QUADRANGLE:** MURDOCK  **LONGITUDE:** -88.094079  **LATITUDE:** 39.813945  **GEOLOGIST:** BARGH
- **CONFIDENTIAL:** N  **SURFACE ELEVATION (FT.):** 663.1  **LOGGED (FT.):** 216.0  **SOURCE:** ZEIGLER COAL CO.  **DATE COLLECTED:** 8 / 22 / 1973  **WELL TYPE:** Mine Shaft
- **CONFIDENTIAL:** N  **SURFACE ELEVATION (FT.):** 661.0  **LOGGED (FT.):** 228.3  **SOURCE:** ZEIGLER COAL CO.  **DATE COLLECTED:** 6 / 20 / 1972  **WELL TYPE:** Coal Test
- **COMMENT:** ROCK DUST HOLE  **COMMENT:** COORDINATES FROM COMPANY
**Geological Logs**

### Log 1

- **Map ID:** 04121890000C
- **Version:** 1
- **Project:** ISGS 90
- **County:** Douglas
- **Township/Range:** 16N 10E
- **Section:** 29
- **Quadrangle:** Murdock
- **Surface Elevation (ft.):** 670.0
- **Logged (ft.):** 112.0
- **Source:** Zeigler Coal Co.
- **Date Collected:** 6/28/1972
- **Confidential:** N
- **Log Type:** Drillers Log
- **Well Type:** Coal Test
- **Comment:** Coordinates from company

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### Log 2

- **Map ID:** 04121895000C
- **Version:** 1
- **Project:** ISGS 90
- **County:** Douglas
- **Township/Range:** 16N 10E
- **Section:** 29
- **Quadrangle:** Murdock
- **Surface Elevation (ft.):** 654.0
- **Logged (ft.):** 198.5
- **Source:** Zeigler Coal Co.
- **Date Collected:** 4/25/1974
- **Confidential:** N
- **Log Type:** Drillers Log
- **Well Type:** Coal Test
- **Comment:** Coordinates from company

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**SOURCE:** ZEIGLER COAL CO.

**CONFIDENTIAL:** N

**DATE COLLECTED:** 8 / 8 / 1974

**PROJECT:** ISGS 90

**CONFIDENTIAL:** N

**SOURCE:** ZEIGLER COAL CO.

**CONFIDENTIAL:** N

**DATE COLLECTED:** 5 / 0 / 1974

**PROJECT:** CONF

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**GEOLOGIST:** C TREWORGY

**SURFACE ELEVATION (FT.):** 690.0

**SOURCE:** ZEIGLER COAL CO. 183

**DATE COLLECTED:** 4 / 30 / 1974

**LOGGED (FT.):** 227.8

**CONFIDENTIAL:** N

**PROJECT:** ISGS90

**ALSO SEE OLD COUNTY#21169 IN CONF DRAWER**

**SECTION:** 30

**QUADRANGLE:** MURDOCK

**COUNTY:** DOUGLAS

**LONGITUDE:** -88.108066

**LATTITUDE:** 39.82012

**CONFIDENTIAL:** N

**SOURCE:** ZEIGLER COAL CO. 183

**DATE COLLECTED:** 5 / 14 / 1974

**LOGGED (FT.):** 217.6

**CONFIDENTIAL:** N

**PROJECT:** NCRDS

**LONGITUDE:** -88.108186

**LATTITUDE:** 39.812122

**CONFIDENTIAL:** N

**SOURCE:** ZEIGLER COAL CO. 187

**DATE COLLECTED:** 5 / 14 / 1974

**LOGGED (FT.):** 217.6

**WELL TYPE:** Coal Test

**COMMENT:** ALSO SEE OLD COUNTY#21169 IN CONF DRAWER

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- **Section:** 31
- **Quadrangle:** Murdock
- **Elevation (ft.):** 650.0
- **Logged (ft.):** 204.0
- **Confidential:** No
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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- **Section:** 31
- **Quadrangle:** Murdock
- **Elevation (ft.):** 649.0
- **Logged (ft.):** 202.0
- **Confidential:** No
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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- **Section:** 32
- **Quadrangle:** Murdock
- **Elevation (ft.):** 650.0
- **Logged (ft.):** 206.0
- **Confidential:** No
- **Log Type:** Drillers Log
- **Well Type:** Coal Test

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**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 5 / 9 / 1974  
**CONFIDENTIAL:** N  
**LOGGED (FT.):** 212.2  
**PROJECT:** NCRDS  
**SECTION:** 32  
**QUADRANGLE:** MURDOCK  
**COUNTY:** DOUGLAS  

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## Drillers Log

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**SURFACE ELEVATION (FT.):** 640.9  
**SOURCE:** ZEIGLER COAL CO.  
**DATE COLLECTED:** 5 / 9 / 1974  
**CONFIDENTIAL:** N  
**LOGGED (FT.):** 208.0  
**PROJECT:** ISGS95  
**SECTION:** 32  
**QUADRANGLE:** MURDOCK  
**COUNTY:** DOUGLAS  

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**Logged (ft.):** 212.1  
**Coordination from Company:**

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**Logged (ft.):** 212.1  
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### GeoLogist: C Trewoiry

**Surface Elevation (FT.):** 639.0  
**Source:** Pawnee Oil Corp.  
**Date Collected:** 2/18/1987  
**Logged (FT.):** 425.0  
**Confidential:** N  
**Project:** ISGS90  
**Log Scale:** 1"=20'  
**Section:** 35  
**Quadrangle:** Murdock  
**County:** Douglas  
**Comment:** Log Type: Porosity Log  
**Well Type:** Dry Hole

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### GeoLogist: Bargh

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**Date Collected:** 2/18/1987  
**Logged (FT.):** 196.5  
**Confidential:** N  
**Project:** ISGS95  
**Log Type:** Drillers Log  
**Well Type:** Coal Test

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**MAPID:** 04100023000C  **VERSION:** 1  **PROJECT:** NCRDS87

**COUNTY:** DOUGLAS  **TWP/RNG:** 16N 10E  **SECTION:** 88  **QUARTERS/FOOTAGES:** NE NE SW

**SURFACE ELEVATION (FT.):** 643.0  **LOGGED (FT.):** 355.5  **CONFIDENTIAL:** N  **LOG TYPE:** Survey Core Study  **WELL TYPE:** Coal Test
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### Drillers Log

#### ISGS90

**MAPID:** 04121970000C  |  **VERSION:** 1  |  **PROJECT:** ISGS90

**COUNTY:** DOUGLAS  |  **TWP/RNG:** 16N 11E  |  **SECTION:** 30  |  **QUARTERS/FOOTAGES:**

**QUADRANGLE:** MURDOCK  |  **LONGITUDE:** -88.001494  |  **GEOLOGIST:** C TREWORGY

**CONFIDENTIAL:** N  |  **LATITUDE:** 39.814013  |  **DATE COLLECTED:**

**SURFACE ELEVATION (FT.):** 648.0  |  **LOGGED (FT.):** 198.1  |  **LOG TYPE:** Drillers Log

**SOURCE:** ZEIGLER COAL CO.  |  **WELL TYPE:** Coal Test

**COMMENT:** WEST CENTER OF SECTION

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### Drillers Log

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**MAPID:** 04121970000C  |  **VERSION:** 1  |  **PROJECT:** ISGS95

**COUNTY:** DOUGLAS  |  **TWP/RNG:** 16N 11E  |  **SECTION:** 31  |  **QUARTERS/FOOTAGES:** 2300’ S line, 1780’ E line

**QUADRANGLE:** MURDOCK  |  **LONGITUDE:** -88.00035  |  **GEOLOGIST:** BARGH

**CONFIDENTIAL:** N  |  **LATITUDE:** 39.798521  |  **DATE COLLECTED:**

**SURFACE ELEVATION (FT.):** 649.5  |  **LOGGED (FT.):** 206.7  |  **LOG TYPE:** Drillers Log

**SOURCE:** ZEIGLER COAL CO.  |  **WELL TYPE:** Coal Test

**COMMENT:** LOC. EST. FROM TOPO.

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- **COUNTY:** DOUGLAS  **TWP/RNG:** 16N 14W  **SECTION:** 17  **QUARTERS/FOOTAGES:** 25' N line, 20' W line
- **QUADRANGLE:** NEWMAN  **LONGITUDE:** -87.975158  **GEOLOGIST:** LOG BOOK
- **CONFIDENTIAL:** N  **DATE COLLECTED:** 4 / 0 / 1971  **SOURCE:** HYDROCARBON SURVEY PD-8  **LOG TYPE:** Electric Log  **WELL TYPE:** Coal Test  **COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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- **MAPID:** 04121627000C  **VERSION:** 1  **PROJECT:** CONF

- **COUNTY:** DOUGLAS  **TWP/RNG:** 16N 14W  **SECTION:** 17  **QUARTERS/FOOTAGES:** 48' S line, 38' E line
- **QUADRANGLE:** NEWMAN  **LONGITUDE:** -87.956206  **GEOLOGIST:** LOG BOOK
- **CONFIDENTIAL:** N  **DATE COLLECTED:** 5 / 0 / 1971  **SOURCE:** HYDROCARBON SURVEY PC-13  **LOG TYPE:** Electric Log  **WELL TYPE:** Coal Test  **COMMENT:** TOPS & THICK. FROM COAL SEC. LOG BOOK

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- **MAPID:** 041HCSOPD08Z  **VERSION:** 1  **PROJECT:** CGT-MISC

- **COUNTY:** DOUGLAS  **TWP/RNG:** 16N 14W  **SECTION:** 17  **QUARTERS/FOOTAGES:** 150' N line, 250' W line
- **QUADRANGLE:** NEWMAN  **LONGITUDE:** -87.974331  **GEOLOGIST:** C.TREWORGY  **CONFIDENTIAL:** N  **DATE COLLECTED:** 2 / 0 / 1974  **SOURCE:** HYDROCARBON SURVEY NO.PD-8  **LOG TYPE:** Company map  **WELL TYPE:** Coal Test  **COMMENT:** ISGS MAP LIBRARY 4103 i5, 1=27&28

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**COMMENT:** COAL EXCEEDS 6' IN THICKNESS.
### MAPID: 041HCSOPC13Z  VERSION: 1  PROJECT: CGT-MISC

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### MAPID: 041216280000C  VERSION: 1  PROJECT: CONF

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### Log 1

**MAPID:** 04100040000C  
**VERSION:** 2  
**PROJECT:** CGT-ECILL

**COUNTY:** DOUGLAS  
**TWP/RNG:** 16N 14W  
**SECTION:** 33  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 641.0  
**LOGGED (FT.):** 240.9  
**SOURCE:** Hydrocarbon Survey, No Company Number  
**COMMENT:** GOOD LOG

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### Log 2

**MAPID:** 041HCS00001Z  
**VERSION:** 1  
**PROJECT:** CGT-MISC

**COUNTY:** DOUGLAS  
**TWP/RNG:** 16N 14W  
**SECTION:** 33  
**CONFIDENTIAL:** N  
**SURFACE ELEVATION (FT.):** 641.0  
**LOGGED (FT.):** 240.9  
**SOURCE:** Hydrocarbon Survey, No Company Number  
**COMMENT:** ISGS Map Library 4103 i5, 1-27&28

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