

Coal Mines in Illinois Ava Quadrangle Jackson & Perry Counties, Illinois

Herrin Coal

This map accompanies the Coal Mines Directory for the Ava Quadrangle and maps of mines in the Springfield & Mt. Rorah Coals and Murphysboro Coal, Ava Quadrangle. Consult the directory for a complete explanation of the information shown on this map.

Mining Method

- Room & Pillar (RP)
- Room & Pillar Basic (RPB)
- Modified Room & Pillar (MRP)
- Room & Pillar Panel (RPP)
- Blind Room & Pillar (BRP)
- Checkerboard Room & Pillar (CRP)
- High Extraction Retreat (HER)
- Longwall (LW)
- Underground, Method Unknown
- Strip Mine
- Auger Mine
- General Area of Mining

Other Areas Depicted

- Non-Coal Mines

Source of Mine Outline

- Final Mine Map
- Not Final Mine Map
- Undated Mine Map
- Incomplete Mine Map
- Secondary Source Map

Tipple, Shaft, Slope, Drift Locations

- Strip Mine Tipple - Active
- Strip Mine Tipple - Abandoned
- Mine Shaft - Active
- Mine Shaft - Abandoned
- Mine Slope - Active
- Mine Slope - Abandoned
- Mine Drift - Active
- Mine Drift - Abandoned
- Air Shaft
- Uncertain Location
- Uncertain Type of Opening

Other Points Depicted

- Non-Coal Mines

Location



Mine Annotation (space permitting)

Company
Mine Name
ISGS Index No., Years of Operation

Disclaimer

Please check the Coal Section at the Illinois State Geological Survey's web site at <https://www.isgs.illinois.edu> for the most up-to-date version of these products.

Note that each quadrangle scale mined-out area map requires the use of the associated text directory for full explanation of map features and mine attributes. Also note that some quadrangles have multiple seams of mining and therefore more than one map may be available for a particular quadrangle. Please take care to check for multiple maps, as extensive mining may exist in the other seams.

The maps and digital files used for these studies were compiled from data obtained from a variety of public and private sources and have varying degrees of completeness and accuracy. This compilation map presents reasonable interpretation of the geology of the area and is based on available data. Locations of some mine features may be offset by 500 feet or more due to errors in the original source maps, the compilation process, digitizing, or a combination of these factors. These data are not intended for use in site-specific screening or decision-making. Use of these documents does not eliminate the need for detailed studies to fully understand the geology of a specific site. The Illinois State Geological Survey, Prairie Research Institute, or the University of Illinois make no guarantee, expressed or implied, regarding the correctness of the interpretations presented in this data set and accept no liability for the consequences of decisions made by others on the basis of the information presented here.

These maps were designed for use at 1:24,000. Enlarging the map may reduce accuracy, as the original scale of the source maps used to compile the outlines shown varies from 1:400 to 1:150,000, and some mine locations are known only from text descriptions. See the accompanying mine directory for the original scale of the source map used for a specific mine to check accuracy of a given portion of the map. Areas with no mines shown may still be undermined; see the undated mines list at the back of each mine directory.

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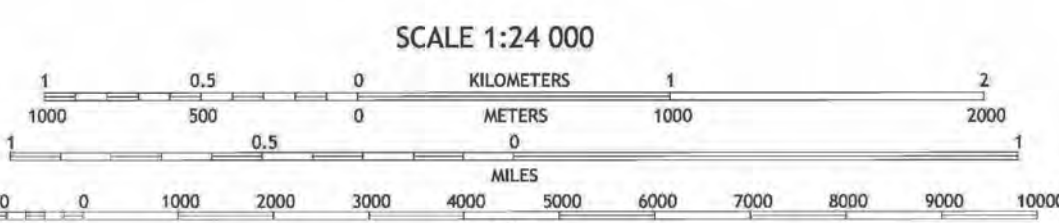
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Jennifer M. Obrad

June 29, 2009

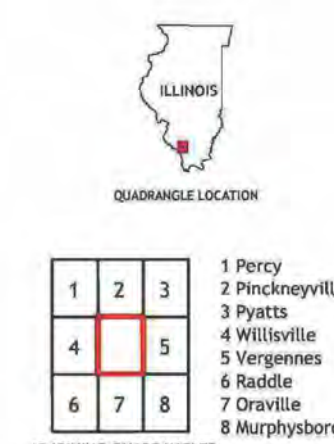
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Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2016
Hydrography.....National Hydrography Dataset, 2002 - 2015
Contours.....National Elevation Dataset, 1999 - 2012
Boundaries.....Multiple sources; see metadata file 2014 - 2016
Public Land Survey System.....BLM, 2017
Wetlands.....FWS National Wetlands Inventory 1981 - 1982



CONTOUR INTERVAL 10 FEET
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Coal Mines in Illinois Ava Quadrangle Jackson & Perry Counties, Illinois

Springfield & Mt. Rorah Coals

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Mine Annotation (space permitting)

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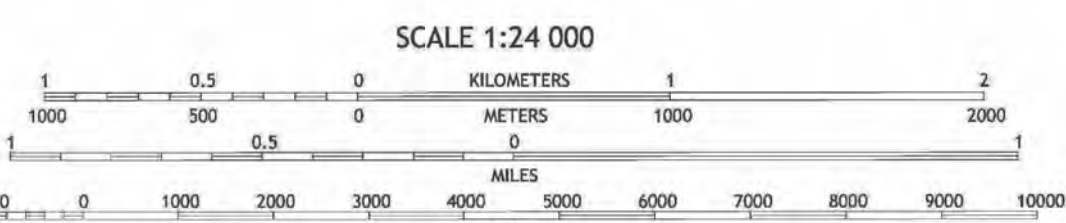
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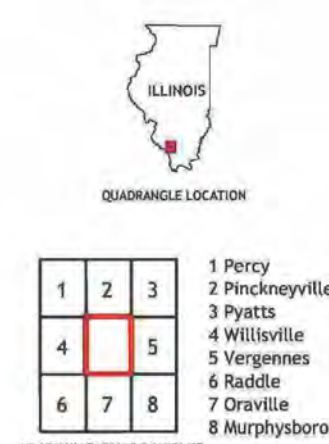
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June 29, 2009

Revised:
2017
Alan R. Myers 02-09-2024

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Murphysboro Coal

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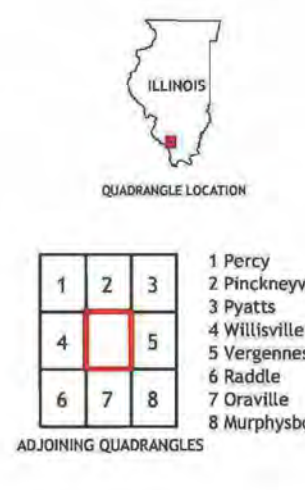
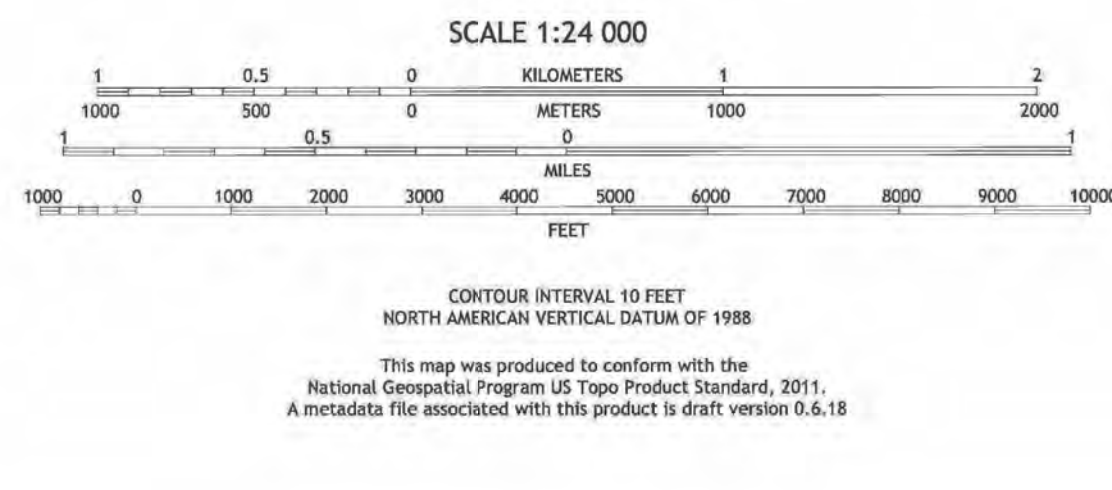
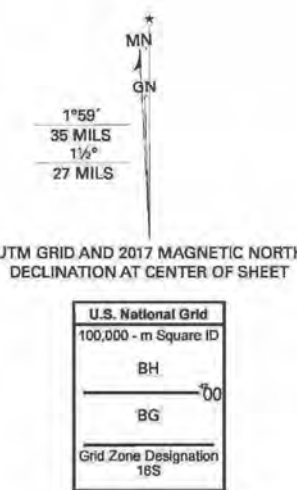
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AVA, IL
2018

DIRECTORY OF COAL MINES IN ILLINOIS

7.5-MINUTE QUADRANGLE SERIES

AVA QUADRANGLE

JACKSON & PERRY COUNTIES

Jennifer M. Obrad & C. Chenoweth



2009, updated 2024

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Cover photo Track-mounted duckbill loading machine at a Peabody Coal Company mine, ca. 1915.

DISCLAIMER: The accuracy and completeness of mine maps and directories vary with the availability of reliable information. Maps and other information used to compile this mine map and directory were obtained from a variety of sources and the accuracy of some of the original information cannot be verified. Consequently, the Illinois State Geological Survey (ISGS) cannot guarantee the mine maps are free of errors and disclaims any responsibility for damages that may result from actions or decisions based on them.

The ISGS updates the maps and directories periodically, and welcomes any new information or corrections. Please contact the Coal Section of the ISGS at the address shown on the title page of this directory, or telephone (217) 244-4610.

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INTRODUCTION

Coal has been mined in 76 counties of Illinois. More than 7,400 coal mines have operated since commercial mining began in Illinois about 1810; fewer than 30 are currently active. To detail the extent and location of coal mining in Illinois, the Illinois State Geological Survey (ISGS) has compiled maps and directories of known coal mines. The ISGS offers maps at a scale of 1:100,000 and accompanying directories for each county in which coal mining is known to have occurred. Maps at a scale of 1:24,000 and accompanying directories, such as this, are available for selected quadrangles. Contact the ISGS for a list of these quadrangles.

These larger scale maps show the approximate positions of mines in relation to surface features such as roads and water bodies, and indicate the mining method used and the accuracy of the mine boundaries. The maps are useful for locating mine boundaries relative to specific properties and for assessing the potential for subsidence in an area. Mine boundaries compiled from final mine surveys are generally shown within 200 feet of their true position. As a result of poor cartographic quality and inaccuracies in the original mine surveys, boundaries of some older mines may be mislocated on the map by 500 feet or more. Original mine maps should be consulted in situations that require precise delineation of mine boundaries or internal workings of mined areas.

This directory serves as a key to the accompanying mine map and provides basic information on the coal mines in the quadrangle. The directory is composed of two parts. Part I explains the symbols and patterns used on the accompanying map and the summary data presented for each mine. Part II numerically lists the mines in the quadrangle and summarizes the geology and production history of each mine. Total production for the mine, not the portion in the quadrangle, is given.

MINING IN THE AVA QUADRANGLE

The mining in the Ava Quadrangle is characterized by large, multi-seam surface mines in the northern part (Perry County) and small mines in the Murphysboro Coal in the southern portion. The surface mines worked in the Herrin and Springfield Coals, with production in the millions of tons. The mines in the Murphysboro Coal, even when operated over 20 years, generally produced less than 1 million tons. In the southernmost part of the quadrangle, the Murphysboro Coal was split into two beds with as much as 10 feet of shale between. The mines in the Murphysboro Coal are likely concentrated in a small area because geologic conditions were unfavorable in other areas.

PART I EXPLANATION OF MAP AND MINE SUMMARY SHEET

INTERPRETING THE MAP

The map accompanying this directory shows the location of coal mines known to be present in the quadrangle. The map, corresponding to a U.S. Geological Survey (USGS) 7.5-minute quadrangle, covers an area bounded by lines of latitude and longitude 7.5-minutes apart. In Illinois, a quadrangle is approximately 6.5 miles east to west and 8.5 miles north to south, an area of about 56 square miles. The USGS generally offers one map of mines per quadrangle. In some areas where extensive mining occurred in two or more overlapping seams, separate maps are compiled for mines in each seam to maintain readability of the map.

Mine Type and Mining Method

The mine type is indicated on the map by pattern color: green represents surface mines; red and yellow represent underground mines. The red patterns are used for areas of underground mining that are documented by a primary or secondary source map. A yellow pattern is used for cases where no map of the mine workings is available, but a general area of mining can be inferred from property maps or production figures. The patterns indicate the main mining methods used in underground mines. The methods are (1) room and pillar and (2) high extraction. The method used gives some indication of the amount and pattern of coal extraction within each mined area, and has some influence on the timing and type of subsidence that can occur over a mine.

The following discussion and illustrations of mining methods are based on Guither et al. (1984).

In room-and-pillar mines, coal is removed from haulage-ways (entries) and selected areas called rooms. Pillars of unmined coal are left between the rooms to support the roof. Depending on the size of rooms and pillars, the amount of coal removed from the production areas will range from 40% to 70%.

Room and Pillar - mining is divided into six categories:

- room-and-pillar basic (RPB, fig. 1A), an early method that did not follow a preset mining plan and therefore resulted in very irregular designs;
- modified room and pillar (MRP, fig. 1B);
- room-and-pillar panel (RPP, fig. 1C);
- blind room and pillar (BRP, fig. 1D);
- checkerboard room and pillar (CRP, fig. 1E);
- room and pillar (RP), a classification used when the specific type of room-and-pillar mining is unknown.

Blind and checkerboard are the most common types of room-and-pillar mining used in Illinois today. The knowledge of room-and-pillar mining methods gives a trained engineer information on the nature of subsidence that may occur. A more extensive discussion of subsidence can be found in Bauer et al. (1993).

High-extraction These mining methods are subdivided into high-extraction retreat (HER, Fig 1F) and longwall (LW, Fig 1G, 1H). In these methods, much of the coal is removed within well defined areas of the mine. Subsidence of the surface above these areas occurs within weeks. Once the subsidence activity ceases, the potential for further movement over these areas is low; however, subsidence may continue for several years after mining.

High-extraction retreat mining is a form of room-and-pillar mining that extracts most of the coal. Rooms and pillars are developed in the panels, and the pillars are then systematically removed (fig. 1F).

In early (pre-1960) longwall mines, mining advanced in multiple directions from a central shaft (fig. 1G). Large pillars of coal were left around the shaft, but all coal was removed beyond these pillars. Miners placed rock and wooden props and cribs in the mined-out areas to support the mine roof. The overlying rock gradually settled onto these supports, thus producing subsidence at the surface. In post-1959 longwall mines, room-and-pillar methods have been used to develop the main entries of the mine and panel areas. Modern longwall methods extract 100 percent of the coal in the panel areas (fig. 1H).

SOURCE MAPS

Mine outlines depicted on the map are, whenever possible, based on maps made from original mine surveys. The process of compiling and digitizing the quadrangle map may produce errors of less than 200 feet in the location of mine boundaries. Larger errors of 500 feet or more are possible for mines that have incomplete or inaccurate source maps.

Because of the extreme complexity of some mine maps, detailed features of mined areas have been omitted. The digitized mine boundary includes the exterior boundary of all rooms or entries that were at least 80 feet wide or protruded 500 feet from the main mining area. Unmined areas between mines are shown if they are at least 80 feet wide; unmined blocks of coal within mines are shown if they are at least 400 feet on each side. Original source maps should be consulted when precise information on mine boundaries or interior features is needed.

The mine summary sheet lists the source maps used to determine each mine outline. The completeness of map sources is indicated on the map by a line symbol at the mine boundary. Source maps are organized in five categories.

Final mine map The mine outline was digitized from an original map made from mine surveys conducted within a few months after production ceased. The date of the map and the last reported production are listed on the summary sheet.

Not a final map The mine is currently active or the mine outline was made from a map based on mine surveys conducted more than a few months before production ceased. This implies the actual mined-out area is probably larger than the outline on the map. The mine summary sheet indicated the dates of source maps and the last reported production, as well as the approximate tonnage mined between these two dates (if the mine is abandoned). The summary sheet also lists the approximate acreage mined since the date of the map and, in some cases, indicates the area where additional mining may have taken place. This latter information is determined by locating on the map the active faces relative to probable boundaries of the mine property.

Undated map The source map was undated, so it may or may not be based on a final mine survey. When sufficient data are available, the probable acreage of the mined area is estimated from reported production, average seam thickness and a recovery rate comparable to other mines in the area. This information is listed in the summary sheet for the mine.

Incomplete map The source map did not show the entire mine. The summary sheet indicates the missing part of the mine map and the acreage of the unmapped area, which is estimated from the amount of coal known to have been produced from the mine.

Secondary source map The original mine map was not found so the outline shown was determined from secondary sources (e.g., outlines from small-scale regional maps published in other reports). The summary sheet describes the secondary sources.

POINTS AND LABELS

The locations of all known mine openings (shafts, slopes, and drifts) and surface mine tipples are plotted on the map. Tipples are areas where coal was cleaned, stockpiled, and loaded for shipping.

Only openings or tipples are plotted for mines without source maps. If the precise locations of these features are unknown, a special symbol is used to indicate the approximate location of the mine.

Each mine on the map is labeled with the names of the mine and operating company, ISGS mine index number, and years of operation (if known) if space permits. A seam designation is given on maps where more than one seam was mined. For a mine that operated under more than one name, only the most recent name is generally given. When a mine changed names or ownership shortly before closing, an earlier name is listed. All company and mine names are listed on the mine summary sheet in the directory, under the production history segment.

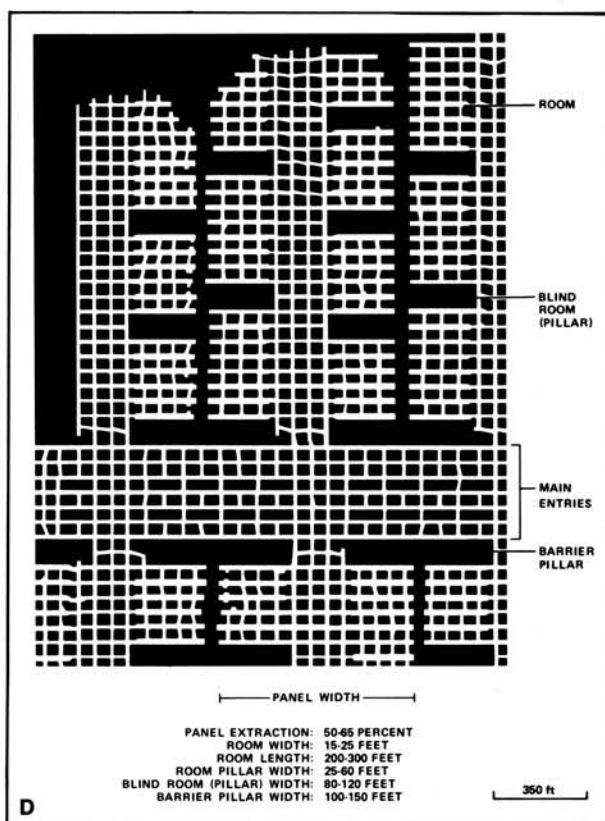
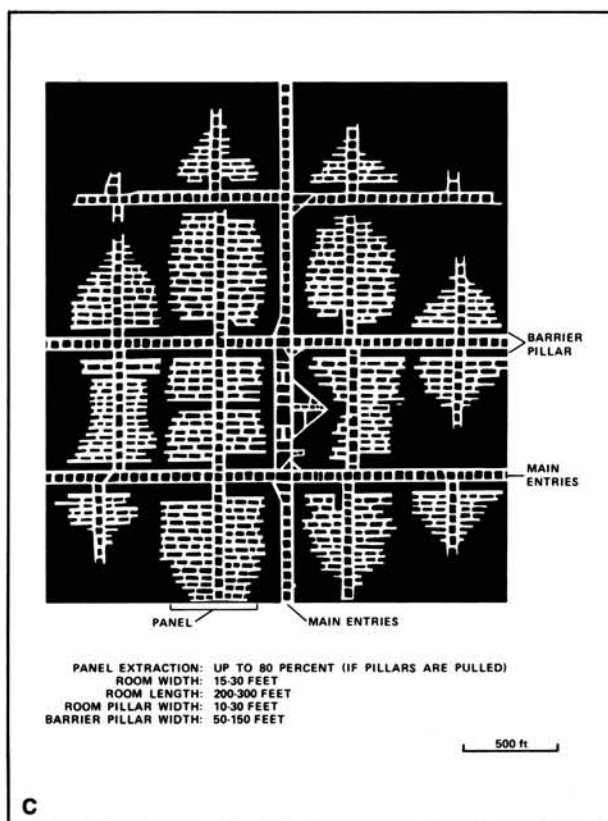
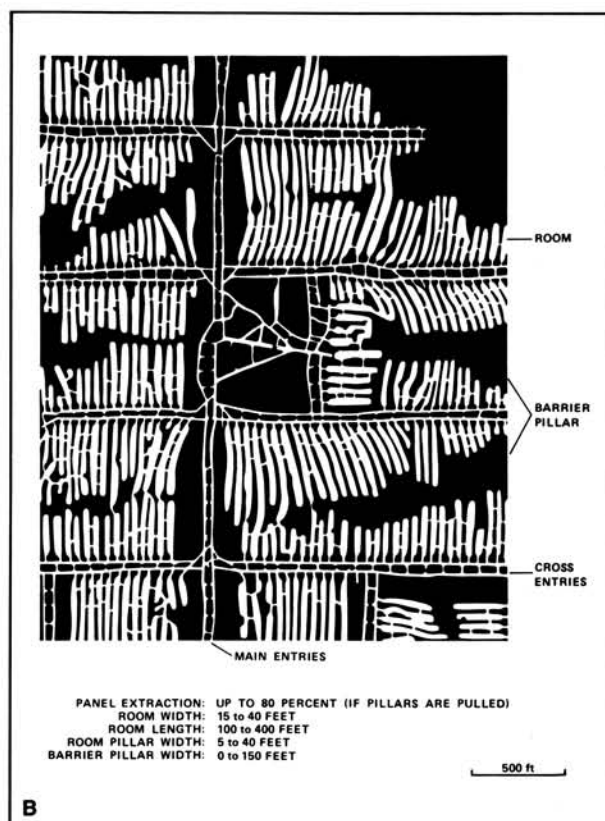
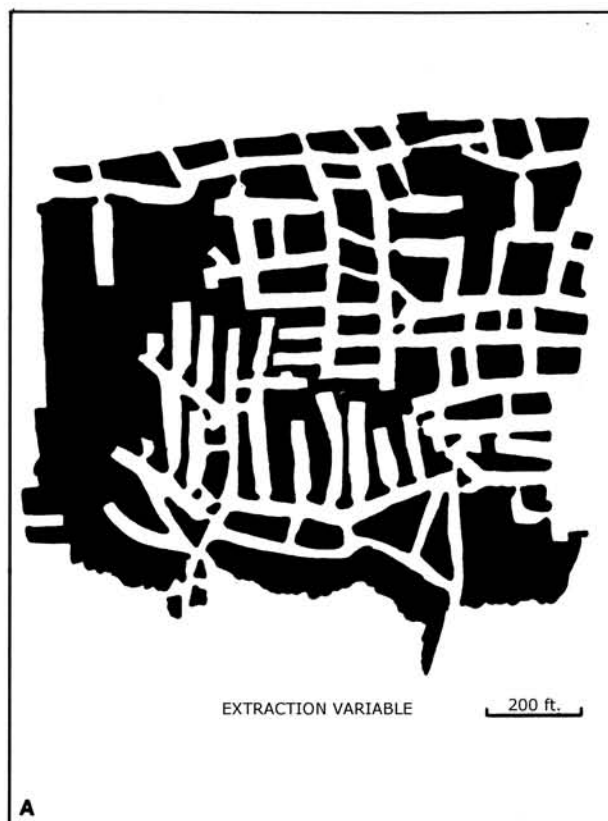


Figure 1 Mining methods: (A) room-and-pillar basic (RPB), (B) modified room and pillar (MRP), (C) room-and-pillar panel (RPP), (D) blind room and pillar (BRP).

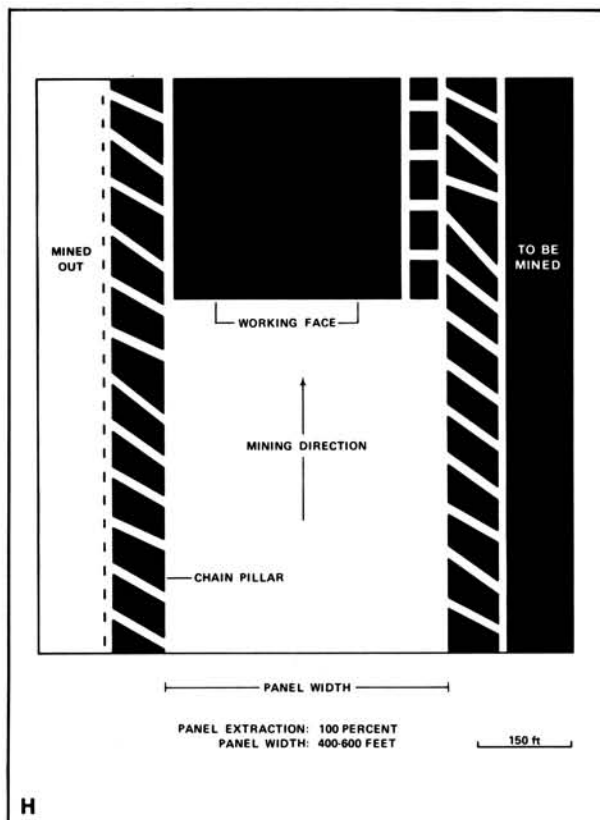
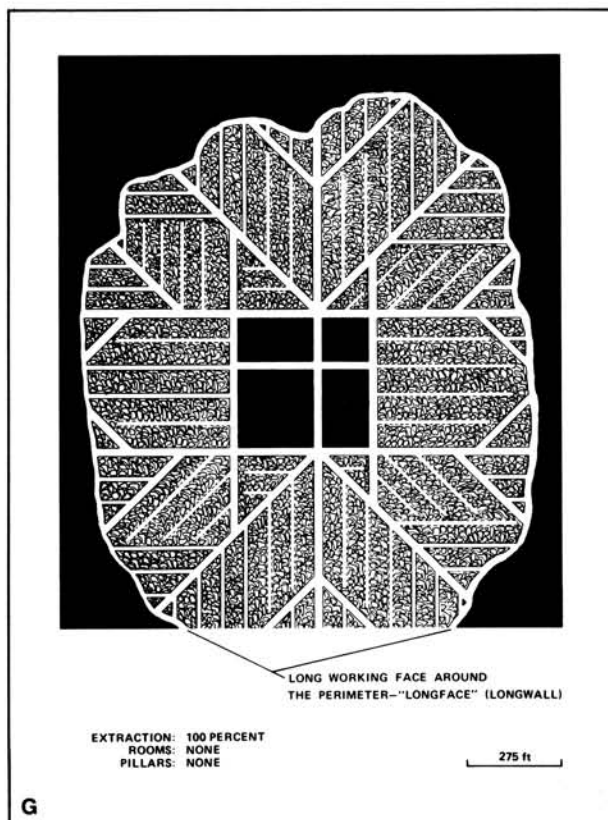
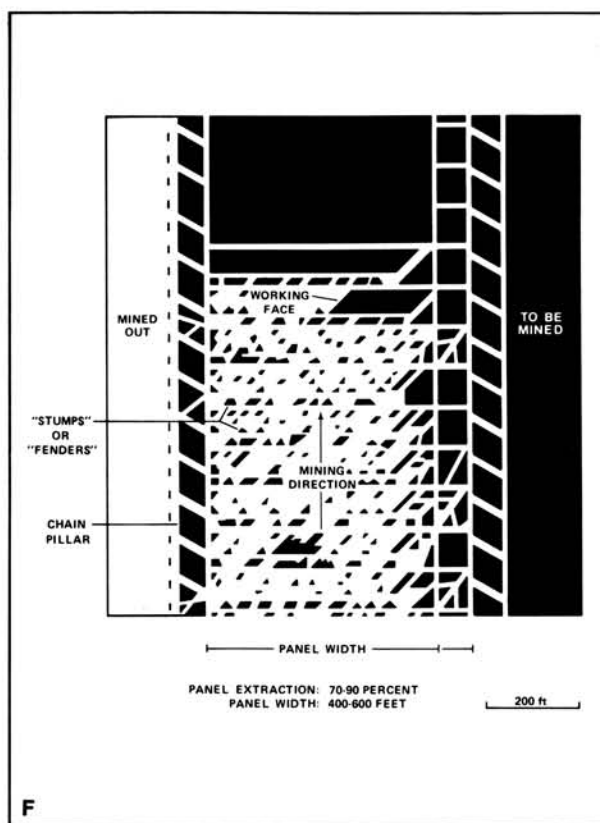
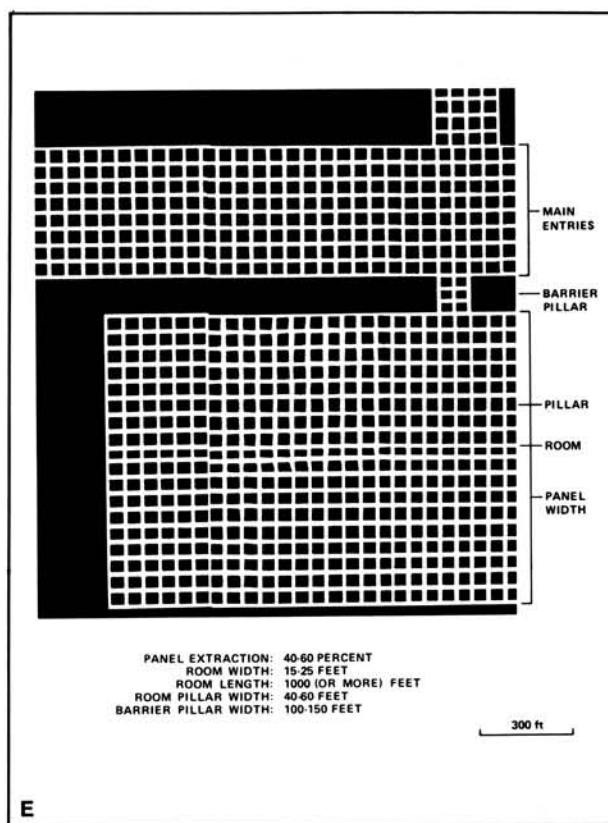


Figure 1 (cont.) Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall

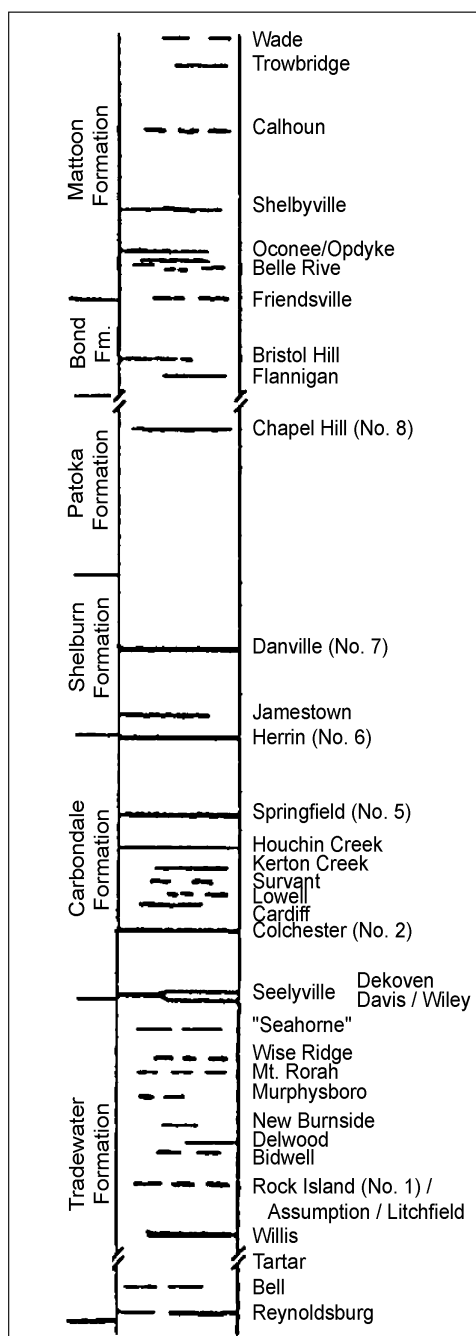


Figure 2 Generalized stratigraphic section, showing approximate vertical relations of coals in Illinois.

INTERPRETING A MINE SUMMARY SHEET

The mine summary sheet is arranged numerically by mine index number. Index numbers are shown on the map and in the mine listing. The mine summary sheet provides the following information (if available).

Company and mine name The last company or owner of the mine is used, unless no production was recorded for the last owner. In that case, the penultimate owner is listed. Mines often have no specific name; in these cases, the company name is also used as the mine name.

Type *Underground* denotes a subsurface mine in which the coal was reached through a shaft, slope, or a drift entry. *Surface* denotes a surface, open pit or strip mine.

Total mined-out acreage shown The total acreage of the mined area mapped, including any acreage mined on adjacent quadrangles, is calculated from the digitized outline of the mine. The acreage of large barrier pillars depicted on the map is excluded from the mined-out acreage. Small pillars not digitized are included in the acreage calculation. If the mine outline is not based on a final mine map, the acreage is followed by an estimate of additional acres that may have been mined. The estimate is determined from reported mine production, approximate thickness of the coal, and recovery rates calculated from nearby mines that used similar mining methods.

SHAFT, SLOPE, DRIFT OR TIPPLE LOCATIONS

Shaft, slope, drift, or tippie locations Locations of all known former entry points to underground mines or the location of coal cleaning, tippie, and shipping equipment used by the mine's facility are listed. The location is described in terms of county, township and range (Twp-Rge), section, and location within the section by quarters. NE SW NW, for instance, would describe the location in the northeast quarter of the southwest quarter of the northwest quarter. When sections are irregular in size, the quarters remain the same size and are oriented (or "registered") from the southeast corner of the section. Approximate footage from the section lines (FEL = from east line, FNL = from north line, for example) is given when that information is known; this indicates a surveyed location and is not derived from maps. Entry points are also plotted on the map and coded for the type of entry or tippie. A mine opening may have had many purposes during the life of the mine. Old hoist shafts are often later used for air and escape shafts; this information is included in the directory when known. The tippie for underground mines was generally located near the main shaft or slope. At surface mines, coal was sometimes hauled to a central tippie several miles from the mine pit.

GEOLOGY

Seam(s) mined The name of the coal seam(s) mined is listed, if known. If multiple seams were mined, they are all listed, although the mined-out area for each seam may be shown on separate maps. Figure 2 shows the stratigraphic section of the coal-bearing interval in Illinois, and the vertical relations among the coals.

Depth The depth to the top of the seam in the vicinity of the shaft is listed, if known. The depth is determined from notes made by geologists who visited the mine during its operation or from drill hole data in ISGS files. Depth generally varies little over the extent of a mine; however, reported depths for an individual mine may vary. Depth for surface-mined coals varies, and is usually represented as a range.

Thickness The approximate thickness of the mined seam is shown, if known. Thickness also comes from notes of geologists who visited the mine during its operation or from borehole data in ISGS files. Minimum, maximum, and average thicknesses are given when this information is available.

Mining method The principal mining method used at the mine (figs. 1A-H) is listed. See the mining methods section at the beginning of this directory for a discussion of this parameter.

Geologic problems reported Any known geologic problems, such as faults, water seepage, floor heaving, and unstable roof, encountered in the mine are reported. This information is from notes made by ISGS geologists who visited the mine, or from reports by mine inspectors published by the Illinois Department of Mines and Minerals, or from the source map(s). Geologic problems are not reported for active mines.

PRODUCTION HISTORY

Production history Tons of coal produced from the mine by each mine owner are totaled. When the source map used for the mine outline is not a final mine map, the tonnage produced since the date of the map is identified. For mines that extend into adjacent quadrangles, the tonnage reported includes areas mined in adjacent quadrangles.

SOURCE OF DATA

Source map This section lists information about the map(s) used to compile the mine outline and the locations of tipples and mine openings. In some cases more than one source map was used. For example, a map drawn before the mine closed may provide better information on original areas of the mine than a later map. When more than one map was used, the bibliography section explains what information was taken from each source.

Date The date of the most recent mine survey listed on the source map is reported.

Original scale The original scale of the source map is listed. Many maps are photo-reductions and are no longer at their original scale. The original scale gives some indication of the level of detail of the mine outline and the accuracy of the mine boundary relative to surface features. Generally, the larger the scale, the greater the accuracy and detail of the mine map. Mine outlines taken from source maps at scales smaller than 1:24,000 may be highly generalized and may well be inaccurately located with respect to surface features.

Digitized scale The scale of the digitized map is reported. The scale may be different from that of the original source map. In many cases the digitized map was made from a photo-reduction of the original source map, or the source map was not in a condition suitable for digitizing and the mine boundaries were transferred to another base map.

Map type Source maps are classified into five categories to indicate the probable completeness of the map. See discussion of source maps in the previous section.

Annotated bibliography Sources that provide information about the mine are listed, with the data taken from each source. Some commonly used sources are described below. Full bibliographic references are given for all other sources. Unless otherwise noted, all sources are available for public inspection at the ISGS.

Coal Reports Published since 1881, these reports contain tabular data on mine ownership, production, employment, and accidents. Some volumes include short descriptions made by mine inspectors of physical features and conditions in selected mines.

Directory of Illinois Coal Mines This source is a compilation of basic data about Illinois coal mines, originally gathered by ISGS staff in the early 1950s. Sources used for this directory are undocumented, but they are primarily Illinois Department of Mines and Minerals annual reports, ISGS mine notes, and coal company officials.

ENR Document 85/01, Guither, H. D., J. K. Hines, and R. A. Bauer, 1985 The Economic Effect of Underground Mining Upon Land Used for Illinois Agriculture: Illinois Department of Energy and Natural Resources Document 85/01, 185 p.

Microfilm map The U.S. Bureau of Mines maintains a microfilm archive of mine maps. A microfilm file for Illinois is available for public viewing at the ISGS.

Mine notes ISGS geologists have visited mines or contacted mine officials throughout the state since the early 1900s. Notes made during these visits range from brief descriptions of the mine location to long narratives (including sketches) of mining conditions and geology.

Federal Land Bank of St. Louis, Preliminary Reports on Subsidence Investigations Mining engineers working for the Federal Land Bank of St. Louis mapped areas of subsidence due to coal mining in the early 1930s. These reports often include county maps of mine properties with mined-out areas including shaft locations, as well as subsidence areas.

REFERENCES

Bauer, R. A., B. A. Trent, and P. B. Dumontelle, 1993, Mine Subsidence in Illinois: Facts for the Homeowner Considering Insurance, Illinois State Geological Survey, Environmental Geology Note 144, 16p.

Guither, H. D., J. K. Hines, and R. A. Bauer, 1985, The Economic Effects of Underground Mining Upon Land Used for Illinois Agriculture, Illinois Department of Energy and Natural Resources Document 85/01, 185p.

PART II DIRECTORY OF MINES IN THE AVA QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Ava Quadrangle is provided. These summary sheets are arranged numerically by mine index number. Consult Part I for a complete explanation of the data listed in the summary sheet.

Mine Index 708

Clifford Morgan Coal Company, Morgan Mine

Type: Surface Total mined-out acreage shown: 2 The area shown on the accompanying map is larger than expected for the reported production. The area shown probably represents area that includes disturbed but un-mined land around the pit.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tipple	Jackson	7S 3W	22	NE NE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	6-10			6.0	Surface

Geologic Problems Reported: Some pyrite lenses up to 0.1 inches thick were reported. Calcite and pyrite were present on vertical fracture facings.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Jesse R. Morgan & Son	Morgan	1951-1957 *	3,307
Morgan Brothers Coal Company	Morgan	1958-1960 **	642
Clifford Morgan Coal Company	Morgan	1961-1965	1,004
			4,953

* Idle 1956 & 1957

** Idle 1959 & 1960

Last reported production: 1965

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
USGS digital orthophoto quadrangle	2005	1:24000	1:24000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, seam, depth, thickness, geologic problems.

USGS digital orthophoto map, Ava Quadrangle, 2005 - Mine outline.

Mine Index 873
Arch of Illinois, Inc., Captain Mine

Type: Surface Total mined-out acreage shown: 10,241

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Tipple	Perry	6S 4W	15	E ½ SE SW
Auger	Perry	6S 4W	8	NE
Pit	Perry	6S 4W	20,21,28,29	

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Danville	45-75		4.0	1.5-2.5	Surface
Herrin	35-77			5.7-6.25	Surface
Springfield	70-107			4.0-4.9	Surface

Geologic Problems Reported: The Brereton Limestone and Anna Shale were irregular in thickness. When one was thin or absent, the other was thick. Usually, the Anna Shale was 1 to 5 feet thick. Energy Shale was sometimes present, in pods up to 30 feet across. In some places, the glacial till eroded all rock above the coal, and sometimes the Herrin Coal was eroded completely. Generally, the overburden above the Herrin Coal was 25 feet of glacial deposits and 25 feet of bedrock. Slickensided fault planes were evident in the Herrin Coal in one pit. A dike was observed in the Springfield Coal. The interval between the Herrin and Springfield Coals was as low as 22 feet in one pit. Pyrite nodules were found in the Anna Shale and in the underclay of the Herrin Coal.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Southwestern Illinois Coal Corporation	Captain	1964-1983	78,243,440
Arch of Illinois, Inc.	Captain	1984-1998	54,460,579
			132,704,019

Last reported production: 1998

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Coal Section files, dxf files	1-1999	1:6000	1:6000	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Perry County) - Mine type, mine location, seam, geologic problems.
 Coal Section files, dxf format from company - Mine outline.
 IDNR website, Permit Viewer - Mine outline (verify pit identification).
 Company map, ISGS map library, 4103.P42 i5.1-71, sheets 1-4 - Verify pit identification.

Mine Index 928
Pipestone Creek Mining, Denmark Mine

Type: Surface Total mined-out acreage shown: 4,279

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Tipple	Perry	6S 4W	33	NE SW NE
Pit	Perry	6S 4W	20-29, 33-35	

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin	33-46			5.5-5.75	Surface
Springfield	57-79			4.0-4.67	Surface

Geologic Problems Reported: A variety of structural features were noted. An asymmetrical syncline, with a steep east flank and a very gentle west flank, was noted in one pit. A bedding plane fault was observed in the Herrin Coal, as well as other shear planes and slickensided surfaces. The Springfield Coal had a zone of reverse faults, with up to 2 feet of displacement. A dark gray shale overlay the Herrin Coal. The Herrin Coal had shale layers up to 1 inch thick, and kaolinite, pyrite and calcite on cleat facings. The Herrin Coal also had local pyrite veins up to ½ inch thick. The black shale above the Springfield Coal ranged up to 5 feet in places, but varied substantially. Two clay dikes were seen in the Springfield Coal. The Springfield Coal had abundant calcite and pyrite on cleat faces. At least 11 small mines were stripped out in SW 22-T6S-R4W (seven mines) and 26-T6S-R4W, including Carter Mine (mine index 4422), Main Mine (mine index 4423), Glass Mine (mine index 4426) and Quillman Mine (mine index 7269).

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Ayrshire Coal Company, Div. of Amax	Leahy	1971-1971	199,427
Amax Coal Company	Leahy	1971-1985	36,093,500
Pipestone Creek Mining	Denmark	1986-1991	<u>7,064,453</u> 43,357,380

Last reported production: 1991

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
IDNR web site, permit viewer	Unknown	Unknown	Unknown	Secondary source
USGS digital orthophoto map	2004	1:24000	1:24000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Perry County) - Mine type, mine location, seam, geologic problems.
 IDNR web site, Permit Viewer - Mine outlines, pit locations.
 USGS topographic maps, digital orthophoto and aerial photographs - Mine outlines.
 Company map, Coal Section files, 6-405 a-f - Verify pit identification.
 Company map, Coal Section files, 6-405 c - Tipple location (identified, and added from digital orthophoto map).

Mine Index 956**Southern Illinois Minerals, Oraville No. 2 Mine**

Type: Surface Total mined-out acreage shown: 42 Production indicates approximately 30 acres were mined. The area may have been mined previously by other operators (see the back of this report).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit	Jackson	7S 3W	22	SE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	45			5.0-6.0	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Three States Trucking, Inc.	Oraville No. 2	1975-1976	222,869
Southern Illinois Minerals	Oraville No. 2	1977-1977	52,434
			275,303

Last reported production: September 1977

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Coal Section files, strip mine updates	1976	1:7920	1:7920	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, thickness.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, pit locations, seam, depth.

Coal Section files, strip mine updates - Mine outline, mining method.

Mine Index 959
Southern Illinois Minerals, Sato No. 5 Mine

Type: Surface Total mined-out acreage shown: 14 The mine outline is completely incorporated into the Creek Paum Mine (mine index 1023) surface mine. The boundaries could not be distinguished. Not shown on the accompanying map.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tipple	Jackson	7S 3W	14	SW SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	30-40			2.5	Surface

Geologic Problems Reported: The seam was split into three benches. Surficial materials and 10.5 feet of rock overlay 1.4 to 1.9 feet of the upper split of coal, which pinched out southward and was not mined. Under the upper split was 9 feet of soft shale, 1.1 to 2.0 feet of coal (that ranged up to 4 feet locally). This middle split pinched out southward as well. The lower split was overlain by 10 feet of claystone and shale, then the 2.5 feet thick coal that was mined. This coal had abundant thin pyritic fusain partings. This lowest bench varied in thickness and may have split also. The dragline operator reported that the lowest bench had abundant clay dikes. All of these coals were fairly low quality coal, although it lacked major bedded impurities and nodules. The marine rock sequence over the coal implied high sulfur content.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Southern Illinois Minerals	Sato No. 5	1977-1977	<u>50,146</u> 50,146

Last reported production: November 1977

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
USGS digital orthophoto quadrangle	2005	1:24000	1:24000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, thickness.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, pit location, seam, depth, thickness, geologic problems.
 USGS digital orthophoto map, Ava Quadrangle, 2005 - Mine outline.

Mine Index 982
Arrowhead Coal Company, Arrowhead No. 2 Mine

Type: Surface Total mined-out acreage shown: 3

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tippie	Jackson	7S 3W	26	NW SW SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	25-32			3.0-4.0	Surface

Geologic Problems Reported: Some abandoned underground workings were encountered, although the coal was near the outcrop and almost all of the overburden was glacial debris. The seam was divided into two benches. The upper bench was about 3 feet thick, and the lower bench was about 4 feet thick. The partings were separated by 2 feet of fire clay. In some places, the upper bench was absent or eroded.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Arrowhead Coal Company	Arrowhead No. 2	1978-1979	<u>20,101</u> 20,101

Last reported production: December 1979

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
NAIP digital ortho-photo quadrangle	2015	1:6000	1:6000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, mine location and general shape, seam, geologic problems.
 National Agriculture Imagery Program map, digital ortho-photo quadrangle map - Mine outline.

Mine Index 1023**Knight Hawk Coal, LLC, Creek Paum Mine**

Type: Surface Total mined-out acreage shown: 945 in the Mt. Rorah Coal, and 2,019 in the Murphysboro Coal

SHAFT, SLOPE, DRIFT or TITTLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Tittle	Jackson	7S 3W	10	NW NW SE
Pit	Jackson	7S 3W	10, 11	
Pit	Jackson	7S 3W	13-15	

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin or Mt. Rorah	70-90			6.0	Surface
Springfield or Wise Ridge	80-100			4.0	Surface
Murphysboro	100-120	3.5	5.0	4.0-4.5	Surface

Geologic Problems Reported: Geologic problems are not reported for active mines.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Knight Hawk Coal, LLC	Creek Paum	1998- *	14,084,670 *
			14,084,670

* The production shown is through 2022, the latest available Coal Report.

Last reported production:

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, digital outline	2014	1:24000	1:24000	Not final
NAIP digital ortho-photo quadrangle	2019	1:6000	1:6000	Secondary source
Company, 6-350c	8-2006	1:4800	1:4800	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, pit & tittle locations, seams, depth, thickness.

Company, digital outline supplied to Illinois Department of Mines & Minerals - Mine outline.

National Agriculture Imagery Program map, digital ortho-photo quadrangle map - Mine outline.

Company map, Coal Section files, 6-350c - Tittle location.

Mine Index 1922

T. A. Nesbit, Nesbit Mine

Type: Underground Total mined-out acreage shown: 6 The area shown on the accompanying map is a general area of mining. Production indicates approximately 3 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main drift	Jackson	7S 3W	22	NE SE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	10-60	4.2	6.7	5.4	RP

Geologic Problems Reported: Some parts of the mine had sandstone roof, and in other parts of the mine, the roof was shale, 3 feet thick or less, with the sandstone above the shale. It was more usual to have 2 to 6 inches of soft yellowish clay on top of the coal. In part of the mine, the top 1 to 4 feet of coal was rotten, and left in the mine as waste.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Robert Edwards	Edwards	1904-1905	680
Nesbit & Edwards	Nesbit & Edwards	1905-1906	1,200
T. A. Nesbit	Nesbit	1906-1908	4,090
Nesbit & Wilson	Nesbit & Wilson	1908-1912	3,861
T. A. Nesbit	Nesbit	1912-1921	7,653
			17,484

Last reported production: 1921

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, mining method.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, drift location, thickness, mining method, geologic problems.

ISGS map library, 4103.J31 i5.1-37, sheet 4, field map for Federal Land Bank Report - Drift location, mine outline.

Mine Index 2448
Morgan Coal Company, Morgan Mine

Type: Surface Total mined-out acreage shown: None; production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tipple	Jackson	7S 3W	22	SW NW SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	35			5.67-6.0	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Morgan Coal Company	Morgan	1929-1929 *	<u>450</u> 450

* Mines producing less than 1,000 tons per year were not reported from 1930 to 1933. Morgan Mine may have operated longer and produced more than shown.

Last reported production: 1929

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS field note (H. R. Wanless)	9-11-1931	(text only)	1:24000 **	Secondary source

** The mine location was plotted on a 1:24000 USGS topographic map from the mine location description and digitized.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine location, depth, thickness.
 ISGS field notes (Jackson County) - Mine location, mining method.

Mine Index 2453**Julius Edwards, Edwards Mine**

Type: Underground Total mined-out acreage shown: 5 The area shown on the accompanying map is a general area of mining, and a portion of that general area of mining was later surface-mined by Creek Paum Mine (mine index 1023). Production indicates approximately 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Shaft or slope	Jackson	7S 3W	15	SE NE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	23-28			6.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
J. B. Schimpf	Schimpf No. 2	1915-1916	400
Julius Edwards	Edwards	1916-1917	<u>266</u> 666

Last reported production: 1917

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, depth, thickness, mining method.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Shaft location, mine outline.

Mine Index 2454
William Campbell, Campbell Mine

Type: Underground Total mined-out acreage shown: 3 Production indicates approximately 2 acres were mined after the map date. This mine is not shown on the accompanying map because of later surface mining by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	2	SW SW SE
Air shaft	Jackson	7S 3W	2	SE SW SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	12	3.0	3.75	3.5	RPB

Geologic Problems Reported: The seam was a uniform, high-grade coal, with little or no visible pyrite.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
William Campbell	Campbell	1885-1898 *	3,714
John Campbell	Campbell	1898-1903	1,980
William Campbell	Campbell	1903-1927 **	11,041
			16,735

* Idle 1887 and 1896-1898

** Produced less than 10,000 tons in 1922 and was not reported; idle 1924

Last reported production: 1927

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352489	Undated	1:1200	1:1324	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

ENR Document 85/01 - Mining method.

Mine notes (Jackson County) - Mine type, slope location, depth, thickness, geologic problems.

Microfilm map, document 352489, reel 03139, frame 180 - Slope & shaft locations, mine outline, mining method.

Mine Index 2456**W. F. Johnson, Johnson Mine**

Type: Underground Total mined-out acreage shown: 2 Not shown on the accompanying map because of later surface mining by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Jackson	7S 3W	11	NW SE SW
Air shaft	Jackson	7S 3W	11	NW SE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	26-34			4.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
W. F. Johnson	Johnson	1909-1916	<u>5,615</u> 5,615

Last reported production: 1916

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 4103.J31 i5.1-7	10-21-1916	1:1200	1:1200	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, thickness.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, shaft location, depth.

Murphysboro-Herrin Folio, 1912 - Depth.

Company map, ISGS map library, 4103.J31 i5.1-7 - Shaft locations, mine outline, mining method.

Mine Index 2457**Spirit of Egypt Mining Company, Spirit of Egypt Mine**

Type: Underground Total mined-out acreage shown: 23 The area shown on the accompanying map is a general area of mining. Production indicates approximately 17 acres were mined. Portions of the general area of mining were later surface-mined by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Jackson	7S 3W	11	SE NE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	50			4.0-4.25	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
E. Doerr	Doerr	1917-1920	10,720
Murphysboro Mining Company	Murphysboro	1920-1927	42,033 *
Spirit of Egypt Mining Company	Spirit of Egypt	1928-1929	8,400
			61,153

* Production was not reported in 1922 for mines producing less than 10,000 tons.

Last reported production: 1929

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth, thickness, mining method.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine location.

ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Shaft location, mine outline.

Mine Index 2458**William F. Johnson, Johnson Mine**

Type: Underground Total mined-out acreage shown: None; production indicates less than 1 acre was mined. This mine is not shown on the accompanying map because of later surface mining by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	11	SE SE NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	4-26			3.5	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
William F. Johnson	Johnson	1903-1905	<u>1,840</u> 1,840

Last reported production: 1905

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Coal Section mine database	Undated	(text only)	1:24000 *	Secondary source

* The mine location was plotted on a 1:24000 USGS topographic map from the mine location description and digitized.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, seam, depth, thickness, mining method.
Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine Index 2459
O. R. Moss, Moss Mine

Type: Underground Total mined-out acreage shown: A general area of mining is shown on the accompanying map. Production indicates less than 1 acre was mined. The general area of mining was later partially surface-mined by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	11	SW SW NE
Shaft	Jackson	7S 3W	11	NE SE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	51			4.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
H. Moss	Moss	1898-1902	1,580
O. R. Moss	Moss	1902-1903	691
			<u>2,271</u>

Last reported production: 1905

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Coal Section files, 2-3-29h	7-16-1954	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine location, seam depth, thickness.
 Coal Section files, 2-3-29h, Stonehouse & Ostrum work map - Mine location, general area of mining.

Mine Index 2461
O. R. Moss, Moss Mine

Type: Underground Total mined-out acreage shown: 6 Production indicates less than 1 acre was mined after the map date. Production indicates approximately 10 acres were mined and the area shown on the accompanying map is smaller than expected for the reported production. This underground mine was partially stripped by Creek Paum Mine (mine index 1023).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	12	SW NW NW
Slope	Jackson	7S 3W	11	SW NW NE
Slope / drift	Jackson	7S 3W	11	NE NE NE
Slope / drift	Jackson	7S 3W	11	SE NE NE
Air shaft	Jackson	7S 3W	11	SW NW NE
Air shaft	Jackson	7S 3W	11	SW NW NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	24-75	3.5	5.33	3.7-4.0	RP

Geologic Problems Reported: The coal rose rapidly west of the slope bottom, and sprags were required to keep loaded cars from rolling. The dip leveled off westward. Some pyrite nodules were present in the seam. No shale partings were noted.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Jake B. Schimpf	Schimpf No. 1	1903-1916	18,984
O. R. Moss	Moss	1916-1918	1,254
J. B. Schimpf	Schimpf No. 1	1918-1920	2,539
D. F. McCarthy	McCarthy	1920-1925 *	9,340
O. S. Moss Coal Company	Moss	1926-1927 **	440
Schimpf Coal Company	Schimpf	1928-1928	200
B. A. Schimpf	Schimpf	1929-1929	80
O. R. Moss	Moss	1929-1939	2,245
O. R. Moss	Moss	1939-1942	703 ***
			35,785

* Production not reported in 1922 for mines producing less than 10,000 tons. Idle 1924

** Idle 1927

*** Production after map date

Last reported production: 1942

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352487	3-18-1939	1:1200	1:1200	Not final
Microfilm, document 352480	3-1917	1:1200	1:1076	Not final
ISGS map library, 4107 d5.1-195	1931	1:62500	1:62500	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, depth.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, slope location, seam, thickness.

ISGS field notes (Jackson County) - Depth, thickness, geologic problems.

Microfilm map, document 352487, reel 03139, frame 178 - Slope & shaft locations, mine outline, mining method.

Microfilm map, document 352480, reel 03139, frame 171 - Air shaft location.

ISGS map library, 4107 d5.1-195, sheet 48, work map of H. R. Wanless - Mine location.

Mine Index 2462
Willard Morgan, Morgan Mine

Type: Underground Total mined-out acreage shown: 4 Production indicates approximately 1 acre was mined. The area shown on the accompanying map is a general area of mining.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Drift	Jackson	7S 3W	21	NE NE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro					Underground

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Willard Morgan	Morgan	1926-1929	<u>4,028</u> 4,028

Last reported production: 1929

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 ISGS map library, 4103.J31 i5.1-37, work map for Federal Land Bank Report - Slope location, mine outline.

Mine Index 2463**Murphysboro-Big Muddy Coal Company, Murphysboro-Big Muddy No. 1 Mine**

Type: Underground Total mined-out acreage shown: 41 This outline includes Bryden No. 5 (mine index 2464). Production for Murphysboro-Big Muddy No. 1 Mine indicates approximately 87 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft *	Jackson	7S 3W	21	SE NE NE

* The mine was known to have an old slope (1885-1893) and probably an air shaft. No company maps of this mine has been found, and the location of these features is not known.

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	25	3.5	5.33	4.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Bryden Coal & Coke Company	Bryden No. 1	1884-1893	335,068
Murphysboro-Big Muddy Coal Company	Murphysboro-Big Muddy No. 1	1893-1900	94,640
			449,708

Last reported production: 1900

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mining method.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, shaft location, seam, depth, thickness.

ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Shaft location, mine outline.

Mine Index 2464**Bryden Coal & Coke Company, Bryden No. 5 Mine**

Type: Underground Total mined-out acreage shown: 48 This mine will be included in the outline for Bryden No. 1 Mine (mine index 243) and Murphysboro-Big Muddy No. 1 Mine (mine index 2463).

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main drift	Jackson	7S 3W	21	NE SE NE
Air shaft *	Jackson	7S 3W	21	SW SE NE
Drift	Jackson	7S 3W	21	NW SE NE
Drift	Jackson	7S 3W	22	NW SW NW
Drift	Jackson	7S 3W	22	SE SW NW

* An ISGS field note indicates a Nesbit shaft in this vicinity. An unlocated mine in the back of this report operated 1924-1926, while the field note was dated 1922-1924 (uncertain date of field work). This Nesbit shaft has not been given an index number, because it seems possible but unlikely that re-mining of the Bryden mines (last operated 1893) could have taken place. The location is vague enough to be offset by up to 300 feet in any direction, or possibly more.

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	25-46			5.5-6.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Bryden Coal & Coke Company	Bryden No. 2	1889-1891 **	16,056
Bryden Coal & Coke Company	Bryden No. 3	1890-1892 **	26,508
Bryden Coal Company	Bryden No. 5	1891-1892 **	6,500
Bryden Coal & Coke Company	Bryden No. 5	1892-1893 **	<u>24,783</u>
			73,847

** Usually mines that have overlapping years of production are given separate index numbers. However, in this case, production was simultaneous from (apparently) one underground mine with many openings.

Last reported production: 1893

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, depth, thickness, mining method.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 ISGS map library, 4103.J31 i5.1-37, work map for Federal Land Bank Report - Drift & shaft locations, mine outline.
 ISGS field notes (H. E. Culver, 1922-1924) - Shaft location (Nesbit).

Mine Index 2465
Beveridge & Kloth, Ava Mine

Type: Surface Total mined-out acreage shown: None; production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tipple	Jackson	7S 3W	22	SW SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	35			2.0-5.67	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Morgan Company	Ava	1948-1949	3,061
Gorham Construction Company	Ava	1949-1949	1,721
Beveridge & Kloth	Ava	1950-1950	<u>1,262</u>
			6,044

Last reported production: 1950

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS mined-out area map	1950	1:62500	1:62500	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, seam, depth, thickness.
 ISGS mined out area map - Mine locations.

Mine Index 2466**Tom Kilhorn & John Trucano, Old Sato Mine**

Type: Underground Total mined-out acreage shown: 2 Production indicates approximately 44 acres were mined. Those 44 acres are probably included within the mine shown on the accompanying map as Syndicate Mine (mine index 4607).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Slope (Old Sato) *	Jackson	7S 3W	22	SE SW SW

* The older mine, Sato, operating 1889-1899, utilized a shaft for their production. The location of that shaft is unknown, but may be included in the outline for Syndicate Coal Mining Company (mine index 4607), for which no production is known.

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	25-35			5.5-6.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Sato Coal & Mining Company	Sato	1889-1899	244,591
Tom Kilhorn & John Trucano	Old Sato	1940-1941	1,237
			<u>225,828</u>

Last reported production: 1941

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 4103.J31 i5.1-10	11-5-1941	1:2400	1:2400	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness, mining method.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, shaft location.
 Company map, ISGS map library 4103.J31 i5.1-10 - Slope location, mine outline, mining method.

Mine Index 2468**E. H. Birkner, Birkner Mine**

Type: Underground Total mined-out acreage shown: 19 Production indicates approximately 2 acres were mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Jackson	7S 3W	26	NW NW NW
Air shaft	Jackson	7S 3W	26	NW NW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	49-65			7.0-8.0	MRP

Geologic Problems Reported: The source map showed a fault in the northwestern part of the mine.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
E. H. Birkner	Birkner	1915-1941 *	100,590
E. H. Birkner	Birkner	1941-1942	8,334 **
			108,924

* Idle 1937

** Production after map date

Last reported production: 1942

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352476	7-1-1941	1:1200	1:1324	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, shaft location, seam, depth, thickness.

ISGS field notes (Jackson County) - Depth, thickness.

Microfilm map, document 352476, reel 03139, frame 166 - Shaft locations, mine outline, mining method, geologic problems.

Mine Index 2469**V. L. Church, Cairo Ice & Coal Mine**

Type: Underground Total mined-out acreage shown: 11 The area shown on the accompanying map is a general area of mining. Production indicates approximately 2 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main drift	Jackson	7S 3W	27	SE NE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	24-65			4.0-5.5	RP

Geologic Problems Reported: A fault was reported on the northwestern side of the mine. The fault trended NNE-SW, with the northwest side upthrown 6 feet. Horsebacks were common. A few pyrite spars were present in the seam, but no regular bands were seen.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
V. L. Church *	Simpson	1905-1912 **	10,297
Church & Bone	Church & Bone	1912-1913	900
V. L. Church	Cairo Ice & Coal	1913-1914	80
			11,277

* Mine notes indicate Church operated the mine, which was owned by Cairo Ice & Coal Company.

** Idle 1907

Last reported production: 1914

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness, mining method.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine name, shaft location, seam, depth, thickness, geologic problems.

ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Drift location, mine outline.

Murphysboro-Herrin Folio, E. W. Shaw & T. E. Savage, 1912 - Mine name.

Mine Index 2470**E. H. Birkner, Birkner No. 1 Mine**

Type: Underground Total mined-out acreage shown: 1 Production indicates 1 acre was mined after the map date.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	27	NE SW NW
Air shaft	Jackson	7S 3W	27	NE SW NW
Proposed air shaft	Jackson	7S 3W	27	NE SW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	42-48			6.0-8.0	RP

Geologic Problems Reported: The roof was a dark gray, clay-rich shale overlain by a well bedded, soft, sandy clay. The bottom 6 inches of coal was bony.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
W. K. W. Coal Company	W. K. W.	1934-1936	3,395
W. K. W. Coal Company	W. K. W.	1936-1936	30 *
E. H. Birkner	Birkner No. 1	1937-1937	<u>5,692</u> *
			9,117

* Production after map date

Last reported production: 1937

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352510	3-1936	1:1200	1:993	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, shaft location, seam, depth, thickness.

ISGS field notes (Jackson County) - Mine type, depth, thickness, geologic problems.

Microfilm map, document 352510, reel 03139, frame 215 - Slope & shaft locations, mine outline, mining method.

Mine Index 2471**Willis Coal & Mining Company, Willis No. 2 Mine**

Type: Underground Total mined-out acreage shown: 24 Production indicates approximately 35 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	27	NW NE NW
Slope	Jackson	7S 3W	27	NE NE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	48			6.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Willis Coal & Mining Company	Willis No. 2, Big Six	1900-1904	<u>186,181</u> 186,181

Last reported production: 1904

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, mine type, seam, depth, thickness.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Slope locations, mine outline.

Mine Index 2472**Jesse Morgan Coal Company, Morgan Mine**

Type: Underground Total mined-out acreage shown: 3 Production indicates approximately 1 acre was mined after the map date. The mine is larger than expected for the reported production. Production before the map date indicates approximately 1 acre was mined. The mine may have had other operators before Jesse Morgan. See the unlocated mines at the back of this report.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	21	SE SE SE
Air shaft	Jackson	7S 3W	21	SE SE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	21			6.0	MRP

Geologic Problems Reported: The roof was up to 1 foot of gray shale overlain by sandstone, or sandstone resting directly on the coal. The shale was thicker in places where slips cut out the coal. Rolls in the coal reportedly trended north-south.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Jesse Morgan Coal Company	Morgan	1929-1939	6,792
Jesse Morgan Coal Company	Morgan	1940-1943 *	<u>5,047</u> **
			11,839

* Mine producing less than 1,000 tons per year were not reported from 1930 to 1933.

** Production after map date

Last reported production: 1943

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352488	1-2-1940	1:1200	1:1200	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine type, shaft location, seam, depth, thickness.

ISGS field notes (Jackson County) - Geologic problems.

Microfilm map, document 352488, reel 03139, frame 179 - Slope & shaft locations, mine outline, mining method.

Mine Index 2473**Sand Hill Coal Company, Sand Hill Mine**

Type: Surface Total mined-out acreage shown: None; production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tipple	Jackson	7S 3W	35	SW NW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	25			5.0	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Sand Hill Coal Company	Sand Hill	1957-1957	<u>2,900</u> 2,900

Last reported production: 1957

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Mine notes	Undated	(text only)	1:24000 *	Secondary source

* The mine location was plotted on a 1:24000 USGS topographic map from the mine location description and digitized.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Mine notes (Jackson County) - Mine location.

Mine Index 2506
Schmidgall Coal Company, Schmidgall Mine

Type: Underground Total mined-out acreage shown: None

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 4W	36	SE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	18			3.0-4.0	

Geologic Problems Reported: The mine was full of water when visited in 1936. According to G. H. Cady, the mine failed because the ash content was very high where the coal thickened from 3 feet to 4 feet.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Schmidgall Coal Company	Schmidgall	before 1936	Unknown

Last reported production:

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS field notes (G. H. Cady)	9-5-1936	(text only)	1:24000 *	Secondary source

* The mine location was plotted on a 1:24000 USGS topographic map from the mine location description and digitized.

Annotated Bibliography (data source, brief description of information)

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 ISGS field notes (Jackson County) - Mine type, slope location, depth, thickness, geologic problems.

Mine Index 3176**Pyramid Coal Corporation, Coal Stripping Mine**

Type: Surface Total mined-out acreage shown: 188

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit or tippie	Perry	6S 3W	14	NW NE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin				5.0-5.63	Surface

Geologic Problems Reported:**PRODUCTION HISTORY**

Company	Mine Name	Years	Production (tons)
Coal Stripping Company	Coal Stripping	1931-1934	1,072,188
Pyramid Coal Corporation	Coal Stripping	1935-1935	292,047
			1,364,235

Last reported production: December 1935

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
USGS topographic map, Ava	1968	1:24000	1:24000	Secondary source
USGS topographic map, Pinckneyville	1974, PR 1982	1:24000	1:24000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, thickness, mining method.
 Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Perry County) - Mine location.
 USGS 7.5-minute topographic map, Ava Quadrangle, 1968 - Mine outline.
 USGS 7.5-minute topographic map, Pinckneyville Quadrangle, 1974, photorevised 1982 - Mine outline.
 WPA, T6S-R3W - Verification of mine location.

Mine Index 3177**Higgerson Coal Company, Higgerson Mine**

Type: Underground Total mined-out acreage shown: Less than 1 Production indicates approximately 4 acres were mined after the map date. This mine was later stripped out by the Captain Mine (mine index 873).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Perry	6S 3W	18	SW SW SE
Air shaft	Perry	6S 3W	18	SE SE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin					RPB

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Higgerson Coal Company	Higgerson	1934-1936	3,414
Higgerson Coal Company	Higgerson	1936-1942	<u>21,317</u> *
			24,731

* Production after map date

Last reported production: 1942

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352087	2-29-1936	1:1200	1:1572	Not final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Perry County) - Mine names, mine index, ownership, years of operation.

Mine notes (Perry County) - Mine type, shaft location, seam.

Microfilm map, document 352087, reel 03138, frame 68 - Shaft locations, mine outline, mining method.

Mine Index 4626**K. W. S. Coal Company, K. W. S. Mine**

Type: Underground Total mined-out acreage shown: 2 Production indicates less than 1 acre was mined. Other operators may have previously worked this mine (see the unlocated mines at the back of this report).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	17	SE SE SE
Slope (old)	Jackson	7S 3W	17	SE SE SE
Air shaft	Jackson	7S 3W	17	NE SE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro					MRP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
K. W. S. Coal Company	K. W. S.	1937-1939	<u>2,159</u> 2,159

Last reported production: 1939

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352482	3-20-1939	1:1200	1:1200	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.

Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.

Microfilm map, document 352482, reel 03139, frame 173 - Slope & shaft locations, mine outline, mining method.

Mine Index 4630
Rigdon & Miller, Rigdon & Miller Mine

Type: Underground Total mined-out acreage shown: 1

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	22	SW SW SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro					RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Rigdon & Ditzler	Rigdon & Ditzler	1934-1934	376
Rigdon & Miller	Rigdon & Miller	1935-1935	106
			482

Last reported production: 1935

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352504	3-5-1940	1:1200	1:1986	Final

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, slope location, seam.
 Microfilm map, document 352504, reel 03139, frame 206 - Slope location, mine outline, mining method.

Mine Index 7287
Michael Schaeffer, Big Four Mine

Type: Underground Total mined-out acreage shown: 24 The area shown on the accompanying map is a general area of mining. Production indicates approximately 8 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	21	SW NE SE
Air shaft	Jackson	7S 3W	21	NE SE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	12			3.5-6.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Wining Coal Mining Company	Wining	1895-1896	not reported
Mason & Company	Mason	1896-1898	17,764
Wining Coal & Mining Company	Big Four	1898-1902	15,640
Michael Schaeffer	Big Four	1905-1906 *	200
			33,604

* The source map showed a "Schaefer" label near the mine outline that was also labeled "Big Four". Schaeffer apparently re-opened the abandoned mine. Other operators may have worked this mine between 1902 and 1905. See the unlocated mines at the back of this report.

Last reported production: 1902

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS map library, 4103.J31 i5.1-37	circa 1934	1:31680	1:31680	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness, mining method.
 Directory of Illinois Coal Mines (Franklin County) - Mine names, mine index, ownership, years of operation.
 ISGS map library, 4103.J31 i5.1-37, sheet 4, work map for Federal Land Bank Report - Slope & shaft locations, mine outline.

Mine Index 7289
Logan Coal Company, Logan Mine

Type: Underground Total mined-out acreage shown: None; production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Jackson	7S 3W	27	SE NE SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	17-25			6.0	Underground

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
William Logan & Sons	Logan	1936-1936	2,057
Logan Coal Company	Logan	1937-1937	952
			3,009

Last reported production: 1937

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
ISGS field notes (G. H. Cady)	circa 1934-1940	(text only)	1:24000 *	Secondary source

* The mine location was plotted on a 1:24000 USGS topographic map from the mine location description and digitized.

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation.
 Directory of Illinois Coal Mines (Jackson County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Jackson County) - Mine type, seam, depth, thickness.
 ISGS field notes (Jackson County) - Mine location.

OTHER MINES SHOWN ON AVA QUADRANGLE

Mine Index 4605, Chesney Mine SE SW SW 15-T7S-R3W, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 4607, Syndicate Coal Mining Company NE SW SW & NW NE SW 22-T7S-R3W, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7290 SW NE NW 36-T7S-R4W, Murphysboro Coal, 18 feet deep, 4.0 feet thick source: Coal Section files, 2-3-29h (Stonehouse & Ostrum field map, 7-16-1954)

Mine Index 7291 NE NW SW 22-T7S-R3W, surface, Murphysboro Coal source: ISGS map library 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934); ISGS field note (H. E. Culver, 1922-1924)

Mine Index 7292 SE NW NW 27-T7S-R3W, drift, Murphysboro Coal, 13 feet deep, 6.0 feet thick source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7293 NW NW SW 26-T7S-R3W, shaft, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7294 * SW NW SW 26-T7S-R3W, drift, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7295 NW NE NW 35-T7S-R3W, drift, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7296 NE NW NW 35-T7S-R3W, drift, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7297 NE SW NW 35-T7S-R3W, drift, Murphysboro Coal source: ISGS map library, 4103.J31 i5.1-37, sheet 4 (work map for Federal Land Bank Report, circa 1934)

Mine Index 7298 * E ½ SE SE 25-T6S-R4W, Herrin Coal source: ISGS field notes (G. H. Cady, circa 1930)

Mine Index 7299 SE SE NW 27-T7S-R3W, Murphysboro Coal, 48 feet deep, 8.0 feet thick source: Coal Section files, 2-3-39h (Stonehouse & Ostrum work map, 7-16-1954)

Mine Index 7300 NW NW NW 27-T7S-R3W, Murphysboro Coal, 21 feet deep, 6.0 feet thick source: Coal Section files, 2-3-29h (Stonehouse & Ostrum work map, 7-16-1954)

Mine Index 7301, New Gallatin Coal Company SW SW SW 22-T7S-R2W & NE NE 28-T7S-R3W, surface, Murphysboro Coal source: Coal Section strip mine updates, 1969-1971

* Not shown on accompanying map because of later surface mining

MINES WHOSE LOCATIONS ARE NOT KNOWN, AVA QUADRANGLE

The locations of the following mines are unknown, but the production tonnage, operating names, and nearest town were reported in the Annual Coal Reports. The operators listed below mined in or near the Ava Quadrangle. The information shown is similar to that presented on the summary sheets in the previous pages of this directory. The first item is the name the mine operated under as listed in the Coal Report, then the years the mine reported. If no physical data are available, the next item listed is the total tons produced by the mine. If physical data are available, the order of presentation is as follows: type of opening for the mine (drift, slope or shaft), depth of coal in feet, and thickness of coal in feet.

The total tons mined by these unlocated mines is 114,505 (113,902 underground and 603 mined by uncertain method), which would represent approximately 20 to 48 acres, depending on the recovery factor, mining method, and numerous other factors. (Note: 1 square mile = 640 acres)

AVA, Jackson County

Cheatham Mine, 1879-1880, "tunnel", —, 30, 6.0	882 tons
Nesbit (T. A.), 1924-1926	603 tons
Walker (J. M.) & Sons, 1928-1928, underground	173 tons
Creek Pond Coal Company, 1940-1940, underground	291 tons
Nisbet, Nisbet & Dittler, 1941-1941	<u>900</u> tons
	1,191 tons

GRUBB (PERRYS), Jackson County

Crane (Ashby), 1885-1892, shaft, Colchester, 50, 4.0-5.0, RP	1,498 tons
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ORAVILLE, Jackson County

Jubert (George), 1896-1897, drift, Murphysboro, 12-30, 3.5, RP	150 tons
Juber (John), 1898-1902	<u>2,000</u> tons
	2,150 tons

Herman (John), 1901-1903, slope, Murphysboro, 26-40, 3.5-4.0, RP	900 tons
Rames & Herman, 1903-1904	800 tons
Herman (John), 1904-1908	<u>2,000</u> tons
	3,700 tons

Young (John A.), 1905-1906, shaft, —, 19-50, 3.5-4.0, RP	4,562 tons
Kelley (F. M.), 1906-1907	<u>7,090</u> tons
	11,652 tons

Birkner & Will, 1910-1911, slope, Herrin, —, 4.0, RP	500 tons
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SATO, Jackson County

Delzeler (Henry), 1886-1889	5,628 tons
Ditzler & Macke, 1889-1891	3,140 tons
Ditzler (Henry), 1891-1893	2,860 tons
Schaffer, Jones & Company, 1893-1896	71,901 tons
Jones (C. S.), 1896-1901	<u>2,693</u> tons
drift or slope, Murphysboro, 10-30, 5.5-6.0, RP	86,222 tons

Argus & Barton, 1895-1898, slope, Murphysboro, 10-44, 6.0, RP	1,345 tons
Argus (S.), 1898-1901	<u>1,287</u> tons
	2,632 tons

James & Henson, 1895-1896, slope, —, 10, 6.0, RP	300 tons
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VERGENNES, Jackson County

Owen (Marion), 1898-1901, slope, Murphysboro, 24-26, 3.3-3.5, RP	1,420 tons
Williams (F.), 1901-1903	<u>490</u> tons
	1,910 tons

Wisley (H. C.), 1913-1914, shaft, Murphysboro, 43, 8.0, RP	1,092 tons
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