

Coal Mines in Illinois
Willisville Quadrangle
Jackson, Perry & Randolph Counties,
Illinois

Herrin Coal

This map accompanies the Coal Mines Directory for the Willisville Quadrangle and the maps of mines in the Springfield Coal and the Murphysboro & Seashore Coals, Willisville 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

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 <http://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 unlocated mines list at the back of each mine directory.

The image of the U.S.G.S. topographic base map was projected from the original UTM to Lambert Conformal Conic.

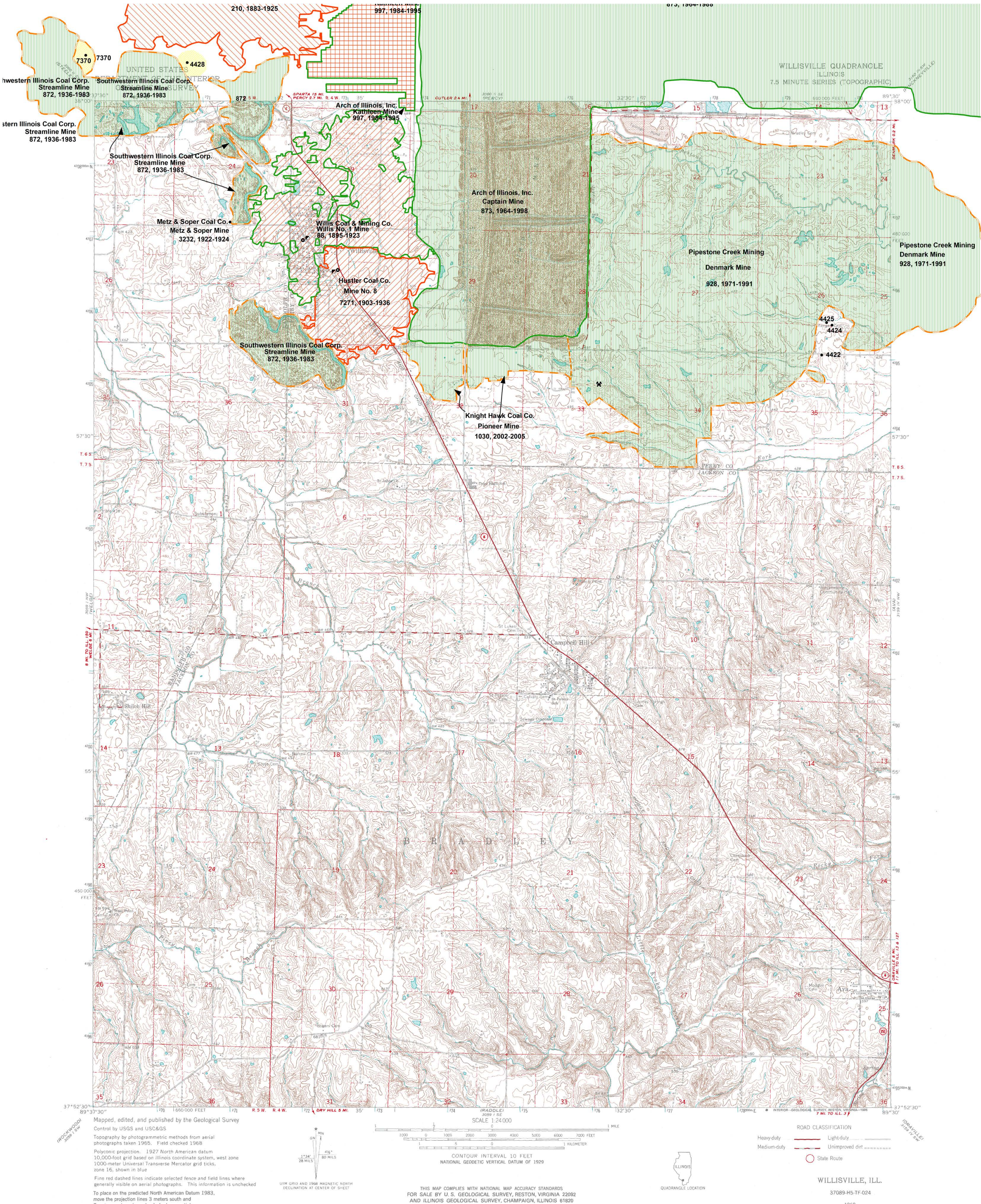


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Mine Outlines Compiled by
Alan R. Myers

June 2009, Revised June 2016 & 2017

Location



Coal Mines in Illinois
Willisville Quadrangle
Jackson, Perry & Randolph Counties,
Illinois

Springfield Coal

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

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Secondary Source Map

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Mine Annotation
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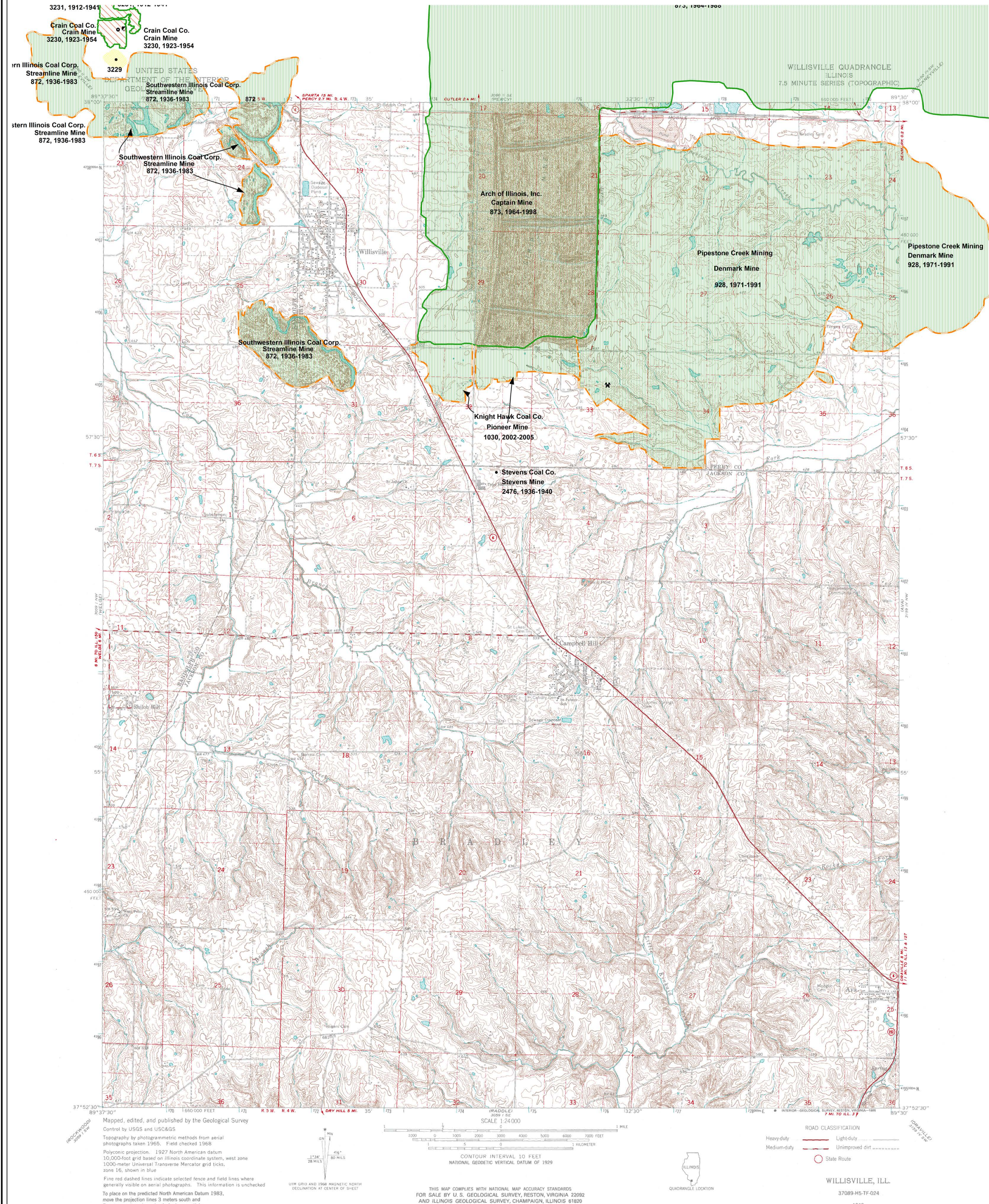
The image of the U.S.G.S. topographic base map was projected from the original UTM to Lambert Conformal Conic.

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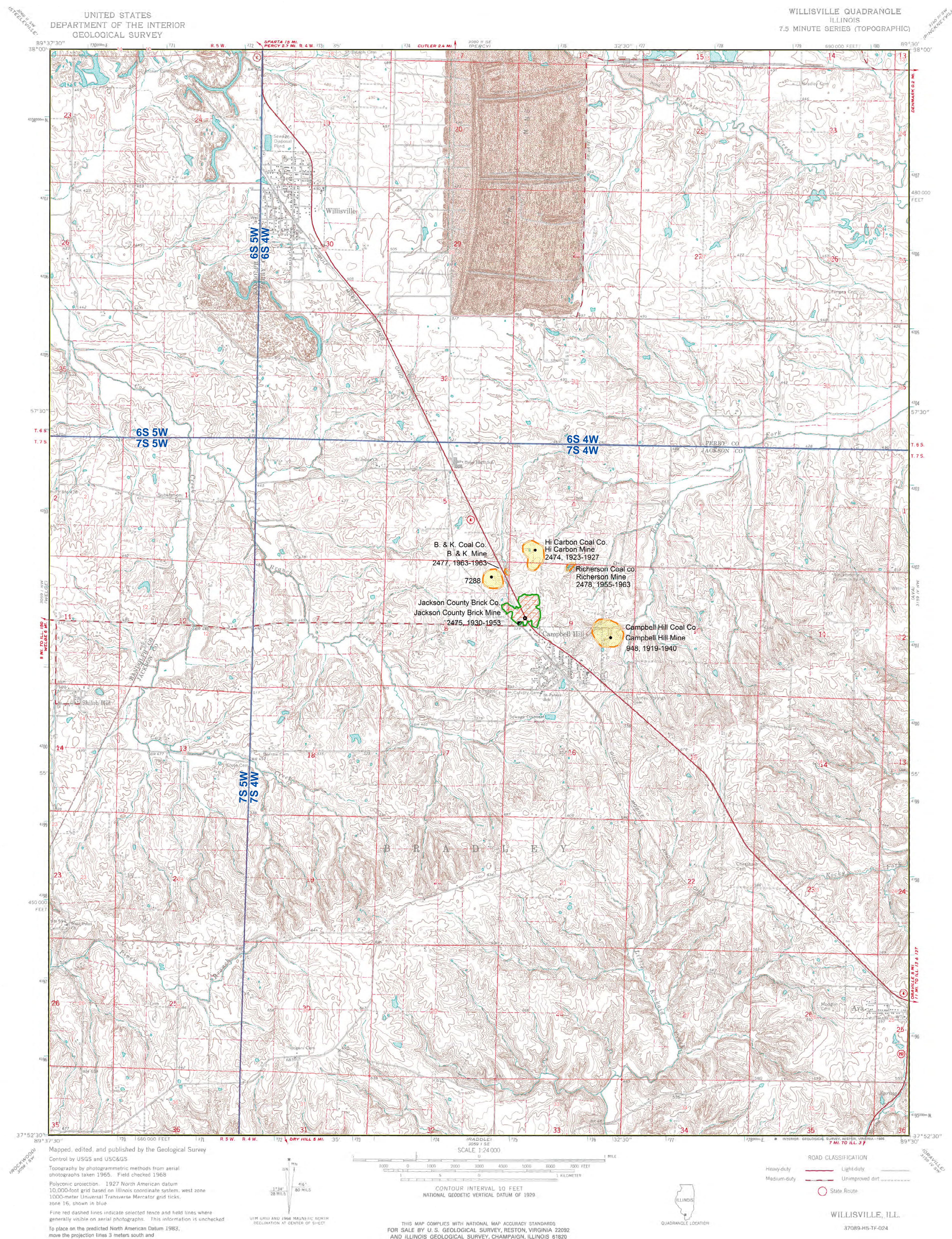
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June 2009, Revised June 2016 & 2017



**Mine Outlines Compiled by
Alan R. Myers
June 17, 2009 Revised June 2016**



DIRECTORY OF COAL MINES IN ILLINOIS

7.5-MINUTE QUADRANGLE SERIES

WILLISVILLE QUADRANGLE

JACKSON, PERRY & RANDOLPH COUNTIES

Alan R. Myers & C. Chenoweth



2009

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This material is based upon work supported by the Illinois Department of Transportation. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the Illinois Department of Transportation.

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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CONTENTS

INTRODUCTION	1
MINING IN THE WILLISVILLE QUADRANGLE	1
PART I EXPLANATION OF MAP AND MINE SUMMARY SHEET	2
INTERPRETING THE MAP	2
Mine Type and Mining Method	2
Source Maps	3
Points and Labels	3
INTERPRETING A MINE SUMMARY SHEET	6
REFERENCES	8
PART II DIRECTORY OF MINES IN THE WILLISVILLE QUADRANGLE	9
MINE SUMMARY SHEETS	9
Mine Index 88	
Willis Coal & Mining Company, Willis No. 1 Mine	9
Mine Index 872	
Southwestern Illinois Coal Corporation, Streamline Mine	10
Mine Index 873	
Arch of Illinois, Inc., Captain Mine	11
Mine Index 928	
Pipestone Creek Mining, Denmark Mine	12
Mine Index 948	
Campbell Hill Coal Company, Campbell Hill Mine	13
Mine Index 997	
Arch of Illinois, Inc., Kathleen Mine	14
Mine Index 1030	
Knight Hawk Coal Company, Pioneer Mine	15
Mine Index 2474	
Hi Carbon Coal Company, Hi Carbon Mine	16
Mine Index 2475	
Jackson County Brick Company, Jackson County Brick Mine	17
Mine Index 2476	
Stevens Coal Company, Stevens Mine	18
Mine Index 2477	
B. & K. Coal Company, B. & K. Mine	19
Mine Index 2478	
Richerson Coal Company, Richerson Mine	20
Mine Index 3232	
Metz & Soper Coal Company, Metz & Soper Mine	21
Mine Index 4426	
George Glass, Glass Mine	22
Mine Index 7271	
Hustler Coal Company, Hustler No. 8 Mine	23
OTHER MINES SHOWN ON WILLISVILLE QUADRANGLE	24
Mine Index 4422, Carter Mine	24
Mine Index 4423, Main Mine	24
Mine Index 4424, Tangen Mine	24
Mine Index 4425, Luthy Mine	24
Mine Index 7269, Quillman Mine	24
Mine Index 7270, Jarrett Mine	24
Mine Index 7288	24
MINES WHOSE LOCATIONS ARE NOT KNOWN, WILLISVILLE QUADRANGLE	24
INDEX OF MINES IN THE WILLISVILLE QUADRANGLE	26

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 WILLISVILLE QUADRANGLE

Three large surface mines operated within the boundaries of the Willisville Quadrangle: Streamline Mine (mine index 872), Captain Mine (mine index 873), and Denmark Mine (formerly Leahy Mine, mine index 928). These surface mines had large stripping shovels and often mined both the Herrin and Springfield Coals. The Murphysboro Coal was mined near the center of the quadrangle, north of the town of Campbell Hill. These mines had lower production, although two operated for over 20 years: Jackson County Brick Mine (mine index 2475) and Campbell Hill Mine (mine index 948).

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.

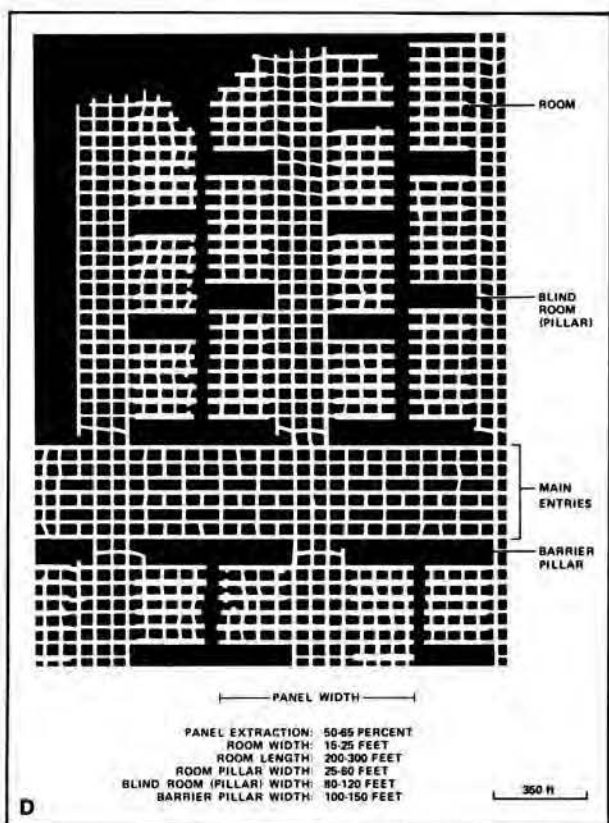
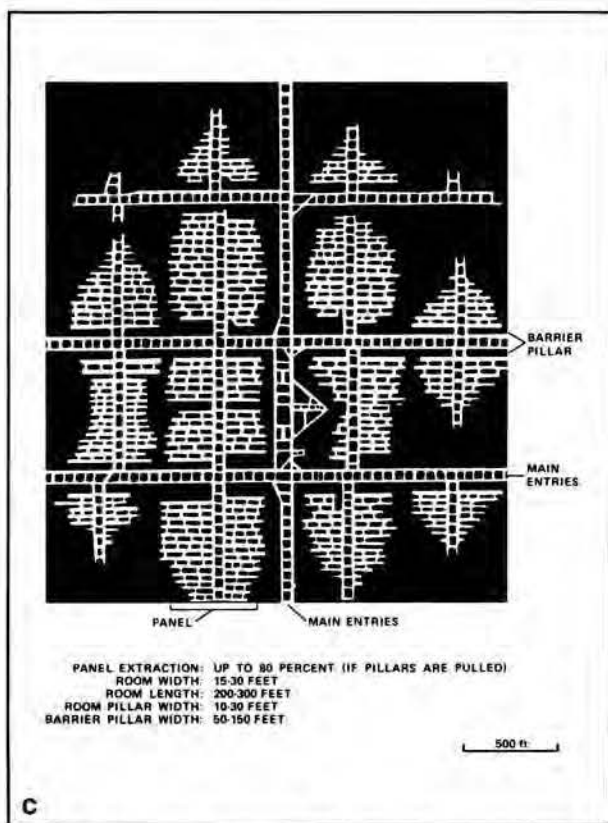
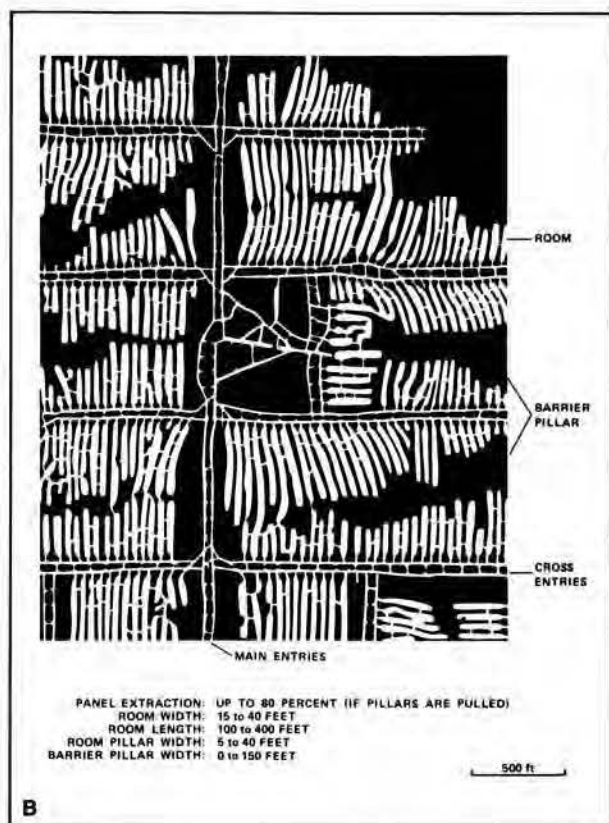
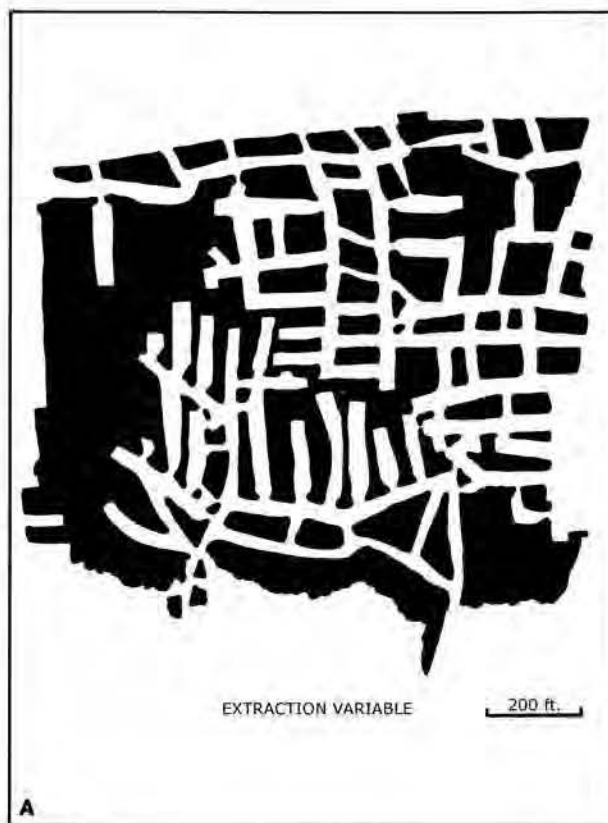


Figure 1 Mining methods: (A) room-and-pillar basic (RPB), (B) modified room and pillar (MRP), (C) room-and-pillar panel (RPP), (D) blind room and pillar (BRP).

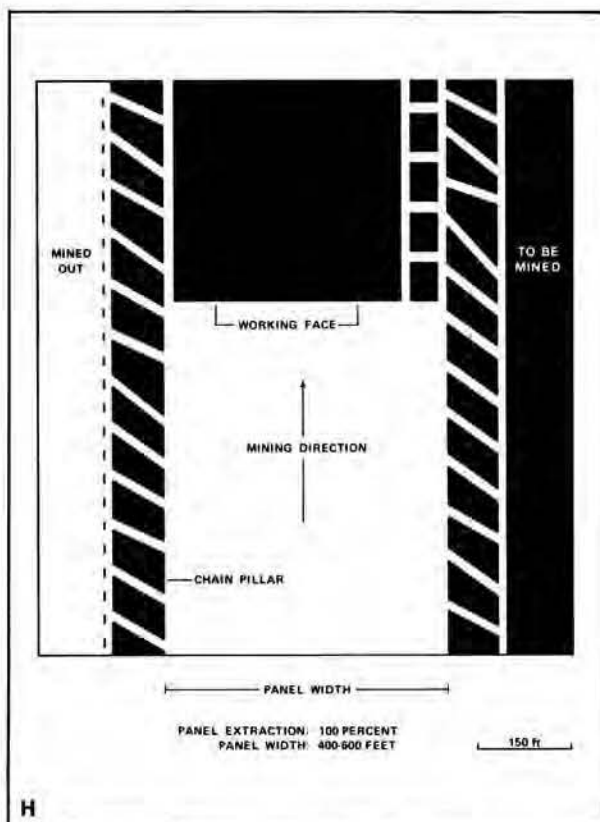
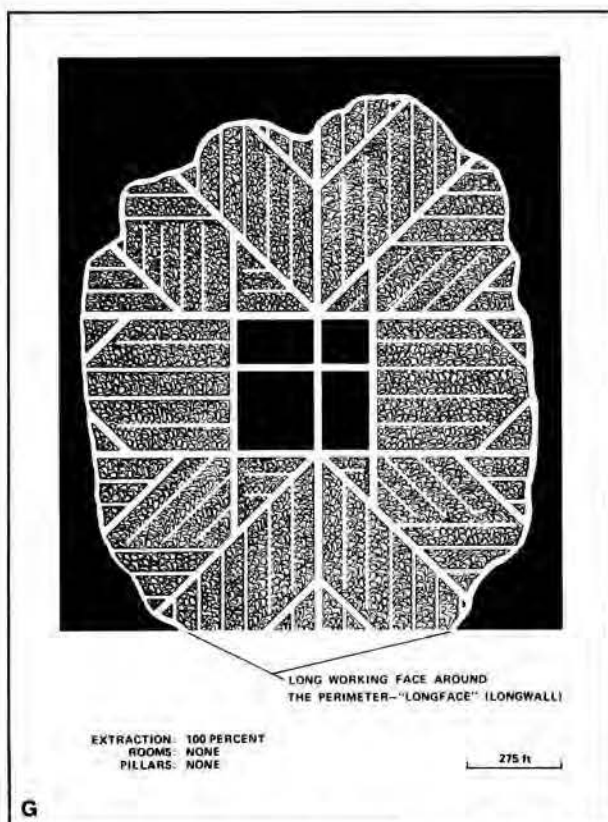
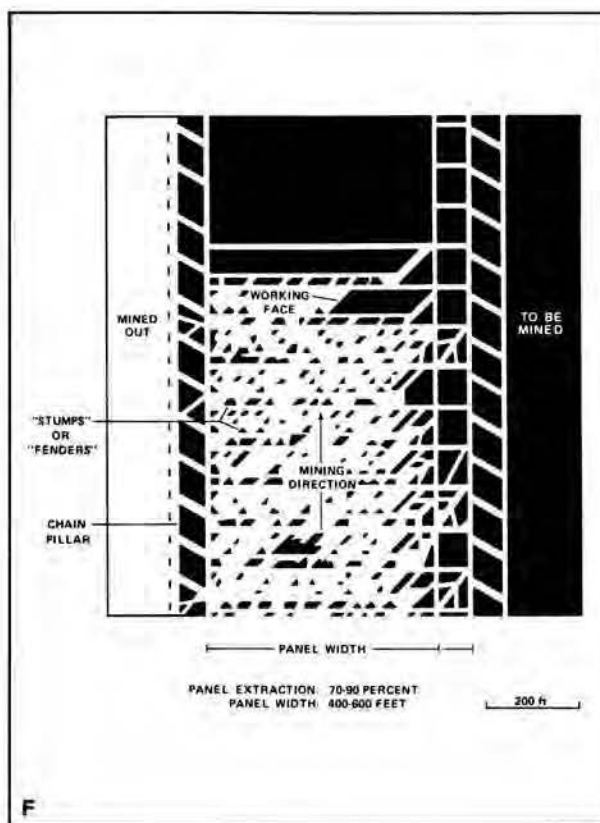
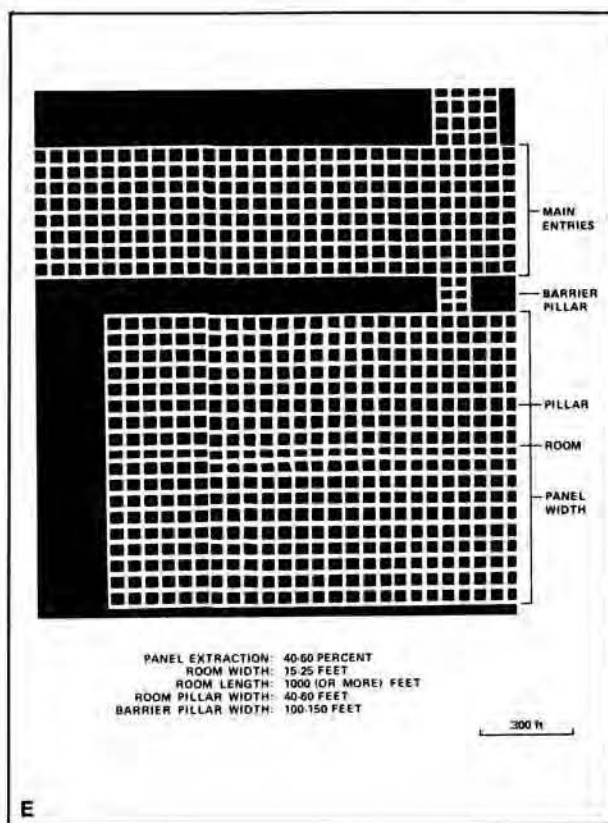


Figure 1 (cont.) Mining methods: (E) checkerboard room and pillar (CRP), (F) high extraction retreat (HER), (G) early (pre-1960) longwall, (H) post-1959 longwall



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 WILLISVILLE QUADRANGLE

MINE SUMMARY SHEETS

A summary sheet on the geology and production history of each mine in the Willisville 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 88

Willis Coal & Mining Company, Willis No. 1 Mine

Type: Underground Total mined-out acreage shown: 836 The boundary between Willis No. 1 Mine and Willis No. 8 Mine (mine index 7271) could not be determined. The area mined by both is 1,273 acres. The easternmost portions of the mine were later stripped by the Captain Mine (mine index 873).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Perry	6S 4W	30	NE NW NW
Air shaft	Perry	6S 4W	30	NW NW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin	59-67	5.5	8.0	6.0	RPP *

* Hatching on the source map probably indicates pulled pillars and high extraction retreat mining.

Geologic Problems Reported: The roof was composed of white top lenses up to 6 feet thick, with black shale above, topped by up to 5 feet of limestone. The white top commonly had rolls cutting into the coal for some distance. The coal had sulfur lenses, and charcoal and clay bands.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Willis Coal & Mining Company	Willis No. 1	1895-1923	<u>4,786,196</u> 4,786,196

Last reported production: February 1923

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352131	4-1934	1:2400	1:4468	Final
Microfilm, document 352103	1-1924	1:2400	1:3972	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, depth, thickness, geologic problems.

Microfilm map, document 352131, reel 03138, frames 139, 140 - Shaft locations, mine outline, mining method.

Microfilm map, document 352103, reel 03138, frames 88-91 - Shaft locations, mine outline, mining method.

Mine Index 872
Southwestern Illinois Coal Corporation, Streamline Mine

Type: Surface Total mined-out acreage shown: 6,367

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit	Randolph	6S 5W	23, 24	
Pit	Randolph	6S 5W	25, 36	
Pit	Randolph	6S 5W	15	

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin	38-83			5.5-6.0	Surface
Springfield	87-135			3.0-5.0	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Southwestern Illinois Coal Corporation	Streamline	1936-1983	<u>53,450,027</u> 53,450,027

Last reported production: May 1983

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
USGS digital orthophoto map	2004	1:6000	1:6000	Secondary source

Annotated Bibliography (data source, brief description of information)

Coal Reports - Production, ownership, years of operation, seam, depth, thickness.
 Directory of Illinois Coal Mines (Randolph County) - Mine names, mine index, ownership, years of operation.
 Mine notes (Randolph County) - Mine type, mine location, seam, depth, thickness.
 USGS digital orthophoto map, Willisville Quadrangle, 2004 - Mine outline.
 Company map, Coal Section files, 1-32-25 - Verify pit identification.
 Company map, Coal Section files, 6-252 L - Verify pit identification.
 Company map, ISGS map library, 4103.P42 i5.1-62 - Verify pit identification.

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 maps, 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 948**Campbell Hill Coal Company, Campbell Hill Mine**

Type: Underground Total mined-out acreage shown: 27 acres as a general area of mining; production indicates approximately 6 acres were mined.

SHAFT, SLOPE, DRIFT or TIPPLe LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Jackson	7S 4W	9	NW NE SE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	33-53			4.0	MRP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Campbell Hill Coal Company	Campbell Hill	1919-1924 *	8,504
Campbell Hill Brick Company	Campbell Hill	1924-1927	1,944
Shaffel & Gilas	Campbell Hill	1928-1928 **	171
Schott, Jay & Higgeson	Campbell Hill	1929-1929	1,880
Ed Higgleson	Campbell Hill	1930-1931	2,890
Campbell Hill Coal Company	Campbell Hill	1932-1940	<u>6,833</u>
			22,222

* Idle 1921 & 1922

** Idle 1928

Last reported production: 1940

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Federal Land Bank Report	1-3-1934	1:158400	1:158400	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.

ENR Document 85/01 - Mining method.

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

ISGS field notes (Jackson County) - Depth.

Federal Land Bank Report (Jackson County) - Mine outline, shaft location.

Microfilm map, document 352502, reel 03139, frame 204 - Not used (no works shown, no points to georegister map to the USGS topographic map).

Mine Index 997
Arch of Illinois, Inc., Kathleen Mine

Type: Underground Total mined-out acreage shown: 1,397

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Drift *	Perry	6S 4W	8	SW SW NW
Air drift *	Perry	6S 4W	8	SW SW NW
Escape drift *	Perry	6S 4W	8	NE NE

* The drifts are off the highwall of the Captain Mine (mine index 873).

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin	120			6.0	CRP with HER

Geologic Problems Reported: The roof was medium gray to black shale about 1 foot thick. Above the shale was limestone that averaged 3.5 feet thick. In some places the limestone pinched out, or became as thick as 5 feet. The roof was generally good, except in the East Main, where Energy Shale made the roof, and a 4-foot fall was observed. Energy Shale generally occurred in lenses, and sometimes had coal riders on one or more sides. The coal was flat-lying.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Carter Coal Corporation	Kathleen	1984-1988 **	858,175
Cutler Mining Company	Kathleen	1989-1992	4,051,004
Arch of Illinois, Inc.	Kathleen	1993-1995	<u>2,962,427</u>
			7,871,606

** Idle 1987 & 1988

Last reported production: 1995

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Company, 4103.P42 i5.1-81	2-1996	1:6000	1:6000	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, drift location, seam, depth, thickness, geologic problems.
 Company map, ISGS map library, 4103.P42 i5.1-81, sheets 1 & 2 - Drift locations, mine outline, mining method.

Mine Index 1030
Knight Hawk Coal Company, Pioneer Mine

Type: Surface Total mined-out acreage shown: 289

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit or tippie	Perry	6S 4W	32	NW & N ½ NE
Pit	Perry	6S 4W	33	N ½ NW

GEOLOGY

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

Geologic Problems Reported: This surface mine was between the coal outcrop (southern boundary) and the Captain Mine (northern boundary, mine index 873). The mine is located on the northern flank of the Campbell Hill Anticline. Above the Herrin Coal was up to 5 feet of Brereton Limestone, with 3 to 4 feet of Anna Shale between the limestone and coal. Most of the coal in the NW 32-T6S-R4W was mined by the Red Hawk Mine (mine index 1025). Pioneer's production was probably reported under that mine.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Knight Hawk Coal Company	Pioneer	2003-ca 2005 *	Unknown *

* The Pioneer Mine was never listed in the Coal Reports. Production may have been reported under Red Hawk Mine (mine index 1025).

Last reported production:

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
IDNR web site, permit viewer	Unknown	Unknown	Unknown	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, mine location, seam, geologic problems.
 IDNR web site, permit viewer - Mine outline.
 Company map, Coal Section files, 6-290 - Permit area for mine (no mining shown).

Mine Index 2474**Hi Carbon Coal Company, Hi Carbon Mine**

Type: Underground Total mined-out acreage shown: 18, a general area of mining. Production indicates less than 1 acre was mined.

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Jackson	7S 4W	4	SE SW SW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Seahorne	50			4.0-5.0	Underground

Geologic Problems Reported: A thrust fault with little throw was seen in the mine. A roll was noted in the coal. The mine had water problems. When visited in 1923, the water ranged from ankle- to knee-deep.

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Hi Carbon Coal Company	Hi Carbon	1923-1927 *	2,944 2,944

* Idle 1926

Last reported production: 1927

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Federal Land Bank Report	1-3-1934	1:158400	1:158400	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) - Depth, thickness.

ISGS field notes (Jackson County) - Mine type, shaft location, geologic problems.

Federal Land Bank Report (Jackson County) - Shaft location, mine outline.

Mine Index 2475**Jackson County Brick Company, Jackson County Brick Mine**

Type: Underground Total mined-out acreage shown: 30 The area shown on the accompanying map is larger than expected for the reported production. Production indicates approximately 15 acres were mined. Other operators may have worked the same 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 shaft	Jackson	7S 4W	9	SW SW NW
Air shaft	Jackson	7S 4W	9	SE SW NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	52-53			3.5-5.0	RP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Campbell Hill Brick Company	Campbell Hill Brick	1930-1934 *	375 *
Jackson County Brick Company	Jackson County Brick	1935-1953	<u>55,662</u>
			56,037

* Production was not listed in the Coal Reports for mines producing less than 1,000 tons per year from 1930 to 1933. The initial survey date on a source map indicated the mine was operating in 1930, and production is higher than shown.

Last reported production: 1953

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352485	11-27-1953	1:1200	1:1406	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.

Microfilm map, document 352485, reel 03139, frame 176 - Shaft locations, mine outline, mining method.

Microfilm map, document 352486, reel 03139, frame 177 - Years of operation.

Mine Index 2476
Stevens Coal Company, Stevens 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
Slope	Jackson	7S 4W	5	NE NW NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Springfield	14			4.0	Underground

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Cimo Coal Company	Cimo	1936-1938 *	250
Stephens & Myers	Stephens & Myers	1939-1939	75
Stevens Coal Company	Stevens	1940-1940	<u>52</u>
			377

* Idle 1937 & 1938

Last reported production: 1940

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

Mine Index 2477**B. & K. Coal Company, B. & K. Mine**

Type: Surface Total mined-out acreage shown: 1 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 4W	8	NE NE NE

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Murphysboro	12			3.33	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
B. & K. Coal Company	B. & K.	1963-1963	<u>56</u> 56

Last reported production: 1963

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Mine notes	Undated	1:62500	1:62500	Secondary source
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.

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

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

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

Mine Index 2478
Richerson Coal Company, Richerson Mine

Type: Surface Total mined-out acreage shown: 2

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Pit / tippie	Jackson	7S 4W	9	E ½ NE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Seahorne	10			3.5-3.67	Surface

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Ed Blumenstock Coal Company	Blumenstock	1955-1959	5,756
Egbert Coal Company	Egbert	1960-1962 *	536
Richerson Coal Company	Richerson	1963-1963	<u>1,500</u>
			7,792

* Idle 1962

Last reported production: June 1963

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
USGS topographic map, Willisville	1963	1:24000	1:24000	Secondary source
Coal Section files, 7a-01-11	1963	1:7870	1:7870	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, location, thickness.
 USGS topographic map, Willisville Quadrangle, 1963 - Mine outline.
 Coal Section files, 7a-01-11, 1959 aerial photograph, DMM surface mine updates - Mine outline.

Mine Index 3232**Metz & Soper Coal Company, Metz & Soper 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 shaft	Randolph	6S 5W	24	SE SE SW

GEOLOGY

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

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Metz & Soper Coal Company	Metz & Soper	1922-1924	<u>4,492</u> 4,492

Last reported production: 1924

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Coal Section mines 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.

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

Mine Index 4426
George Glass, Glass 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 Denmark Mine (mine index 928).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main slope	Perry	6S 4W	22	SW NE SE

GEOLOGY

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

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
George Glass	Glass	1923-1925	<u>250</u> 250

Last reported production: 1925

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
WPA, T6S-R4W	1-23-1939	1:12000	1:12000	Secondary source

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.
 ISGS field notes (Perry County) - Mine type, slope location, seam.
 WPA map, T6S-R4W - Slope location, mine name, mine type.

Mine Index 7271**Hustler Coal Company, Hustler No. 8 Mine**

Type: Underground Total mined-out acreage shown: 437 Production indicates approximately 1 acre was mined after the map date. A portion of the southwestern part of the mine was later surface mined by the Streamline Mine (mine index 872).

SHAFT, SLOPE, DRIFT or TIPPLE LOCATIONS

Type	County	Township-Range	Section	Quarters-Footage
Main shaft	Perry	6S 4W	30	NW SE NW
Air shaft	Perry	6S 4W	30	NE SE NW

GEOLOGY

Seam(s) Mined	Depth (ft)	Thickness (ft)			Mining Method
		Min	Max	Avg	
Herrin	65-85			6.0	RPP

Geologic Problems Reported:

PRODUCTION HISTORY

Company	Mine Name	Years	Production (tons)
Missouri & Illinois Coal Company	Missouri & Illinois No. 4	1903-1914	1,327,183
Willis Coal Mining Company	Willis No. 8	1917-1932 *	1,019,535
Home Coal Company	Home No. 8	1933-1935	17,839 **
Hustler Coal Company	Hustler No. 8	1935-1936	5,051 **
			2,369,608

* Re-opened the abandoned Missouri & Illinois Mine. Idle 1928-1932

** Production after map date

Last reported production: April 1936

SOURCES OF DATA

Source Map	Date	Original Scale	Digitized Scale	Map Type
Microfilm, document 352131	4-1934	1:2400	1:4468	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, depth, thickness.

Microfilm map, document 352131, reel 03138, frames 139 & 140 - Shaft locations, mine outline, mining method.

OTHER MINES SHOWN ON WILLISVILLE QUADRANGLE

Mine Index 4422, Carter Mine NW NW NE 35-T6S-R4W, Herrin Coal source: WPA, T6S-R4W
 Mine Index 4423, Main Mine * NE SE SE 26-T6S-R4W, underground mine, Herrin Coal source: ISGS mined-out area map, Area 29 (1950)
 Mine Index 4424, Tangen Mine SE NW SE 26-T6S-R4W, slope, Herrin Coal source: WPA, T6S-R4W
 Mine Index 4425, Luthy Mine SW NW SE 26-T6S-R4W, Herrin Coal source: WPA, T6S-R4W
 Mine Index 7269, Quillman Mine * NE SE SE 26-T6S-R4W, slope, Herrin Coal source: WPA, T6S-R4W
 Mine Index 7270, Jarrett Mine * SW NE SE 22-T6S-R4W, slope, Herrin Coal source: WPA, T6S-R4W
 Mine Index 7288 NE NE 8-T7S-R4W, Murpysboro Coal source: Federal Land Bank Report

* Not shown on the accompanying map because of later surface mining

MINES WHOSE LOCATIONS ARE NOT KNOWN, WILLISVILLE 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 Willisville 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 42,095 (40,492 underground and 1,603 mined by uncertain method), which would represent approximately 7 to 18 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 tons</u>
	1,191 tons

CAMPBELL HILL, Jackson County

Campbell Hill Coal Company, 1936-1936, underground	95 tons	mine index 948
Dawson (Daniel), 1889-1892, drift, —, —, 3.17, RP	969 tons	
Koen (Aaron), 1889-1890	25 tons	
Jeffrey Brothers, 1890-1891, slope, —, —, 4.25, RP	46 tons	
King (Henry), 1895-1896, drift, —, 15-20, 3.0, RP	not reported	
Langworth (Henry), 1896-1899	2,272 tons	
King (H. R.), 1899-1903	<u>1,269 tons</u>	
	3,541 tons	
Murrill (Richard), 1899-1900, slope, —, 20, 3.0, RP	480 tons	
Costion (Willard), 1900-1901	405 tons	
Dowell (A.), 1901-1902	800 tons	
Campbell (W. R.), 1902-1903	<u>400 tons</u>	

	2,085 tons
Dawson (Daniel), 1899-1909, slope, —, 20, 3.0-4.0, RP	9,120 tons
Austin & Petty, 1904-1905, slope, —, 37, —	200 tons
Luchis (G. H.), 1907-1910, drift, Murphysboro, 8-20, 4.0, RP	944 tons
Kirby (Mike), 1909-1914, slope, Murphysboro, 6-15, 3.5-6.5, RP	1,732 tons
Jackson & Dannen, 1910-1911, slope, Herrin, 30, 4.0, RP	430 tons
Wahlman (George), 1912-1917, shaft, —, 50, 4.25-4.33, RP	6,435 tons
Falkner & Bagwell, 1918-1919	95 tons
Cook (L. E.), 1924-1925	880 tons

CUTLER, Perry County

Rosendorf (Fred), 1895-1898, shaft, Herrin, 40, 5.5, RP	1,390 tons
Cunningham (C. A.), 1898-1899	400 tons
Cunningham (R. G.), 1899-1900	<u>450 tons</u>
	2,240 tons
Snooks (M. F.), 1919-1920, underground	150 tons
Carter Coal Company, 1920-1927	4,059 tons
Bingham & Son, 1928-1928	990 tons
Carter Coal Company, 1929-1931	930 tons
Alexander (Hunter), 1932-1932	<u>1,394 tons</u>
	7,523 tons

DENMARK, Perry County

Home (Frank), 1891-1892, shaft, Herrin, —, 6.0, RP	725 tons
Glass (Peter), 1895-1898, shaft, Herrin, 20, 5.5-6.0, RP	300 tons
Carter (Thomas), 1898-1902	576 tons
Glass (R. F.), 1902-1903	<u>200 tons</u>
	1,076 tons
Henson (John E.), 1898-1901, shaft, Herrin, 25, 5.5-6.0, RP	545 tons
Carpenter (G. C.), 1901-1902	<u>240 tons</u>
	785 tons

INDEX OF MINES IN THE WILLISVILLE QUADRANGLE

Alexander (Hunter)	25
Amax Coal Company	12
Arch of Illinois, Inc., Captain Mine	11
Arch of Illinois, Inc., Kathleen Mine	14
Austin & Petty	25
Ayrshire Coal Company	12
B. & K. Coal Company	19
Bagwell (Falkner & Bagwell)	25
Bingham & Son	25
Blumenstock (Ed) Coal Company	20
Campbell (W. R.)	24
Campbell Hill Brick Company	13, 17
Campbell Hill Coal Company	13, 24
Captain Mine	11
Carpenter (G. C.)	25
Carter (Thomas)	25
Carter Coal Company	25
Carter Coal Corporation	14
Carter Mine	24
Cheatham Mine	24
Cimo Coal Company	18
Cook (L. E.)	25
Costion (Willard)	24
Creek Pond Coal Company	24
Cunningham (C. A.)	25
Cunningham (R. G.)	25
Cutler Mining Company, Kathleen Mine	14
Dannen (Jackson & Dannen)	25
Dawson (Daniel)	24, 25
Denmark Mine	12
Dittler (Nisbet, Nisbet & Dittler)	24
Dowell (A.)	24
Egbert Coal Company	20
Falkner & Bagwell	25
Gilas (Shaffel & Gilas)	13
Glass (Peter)	25
Glass (R. F.)	25
Henson (John E.)	25
Hi Carbon Coal Company	16
Higgerson (Schott, Jay & Higgerson)	13
Higgleson (Ed)	13
Home (Frank)	25
Home Coal Company, No. 8 Mine	23
Hustler Coal Company	23
Illinois (Missouri & Illinois Coal Company)	23
Jackson & Dannen	25
Jackson County Brick Company	17
Jarrett Mine	24
Jay (Schott, Jay & Higgerson)	13
Jeffrey Brothers	24
Kathleen Mine	14
King (H. R.)	24
King (Henry)	24
Kirby (Mike)	25
Knight Hawk Coal Company, Pioneer Mine	15
Koen (Aaron)	24
Langworth (Henry)	24
Leahy Mine	12
Luchis (G. H.)	25
Luthy Mine	24
Main Mine	24
Metz & Soper Coal Company	21
Missouri & Illinois Coal Company	23

Murrill (Richard)	24
Myers (Stephens & Myers)	18
Nesbit (T. A.)	24
Nisbet, Nisbet & Dittler	24
Petty (Austin & Petty)	25
Pioneer Mine	15
Pipestone Creek Mining	12
Quillman Mine	24
Richerson Coal Company	20
Rosendorf (Fred)	25
Schott, Jay & Higgerson	13
Shaffel & Gilas	13
Snooks (M. F.)	25
Soper (Metz & Soper Coal Company)	21
Southwestern Illinois Coal Corporation	10, 11
Stephens & Myers	18
Stevens Coal Company	18
Streamline Mine	10
Tangen Mine	24
Wahlman (George)	25
Walker (J. M.) & Sons	24
Willis Coal & Mining Company, No. 1 Mine	9
Willis Coal Mining Company, No. 8 Mine	23

